

# Invitation to Comment

## DEQ Reopens Comment Period

### For Air Quality permitting, Heat Smart, and gasoline dispensing facility updates

DEQ invites input on proposed permanent rule amendments, adoption and repeal to chapter 340 of the Oregon Administrative Rules.

#### Update to DEQ proposal

DEQ received a request from the U.S. Forest Service and Friends of the Columbia Gorge to extend the public comment period for the proposed air quality permitting, Heat Smart, and gasoline dispensing facility updates, which closed Aug. 28, 2014. DEQ reopened the public comment period for this rulemaking until Monday, Sept. 15, 2014 at 5:00 p.m. to provide additional time for comment. This is DEQ's fourth update to its initial proposal issued June 16, 2014.

#### DEQ proposal

DEQ proposes the following changes to OAR 340 division numbers 200, 202, 204, 206, 208, 209, 210, 212, 214, 216, 218, 220, 222, 224, 225, 226, 228, 232, 234, 236, 240, 242, 244, 246, 262, 264, and 268. See far right column to learn how to comment on this proposal.

The rulemaking proposal would revise air quality permitting, Heat Smart, and gasoline dispensing facility rules including:

- Clarify and update air quality rules
- Update particulate matter emission standards
- Change permitting requirements for emergency generators and small natural gas or oil-fired equipment
- Establish two new state air quality area designations, "sustainment" and "reattainment," to help areas avoid and more quickly end a federal nonattainment designation
- Designate Lakeview as a state sustainment area while retaining its federal attainment designation
- Change the New Source Review preconstruction permitting program
- Modernize methods allowed for holding public hearings and meetings
- Re-establish the Heat Smart woodstove replacement program exemption for small commercial solid fuel boilers regulated under the permitting program

- Remove annual reporting requirements for small gasoline dispensing facilities

#### U.S. Supreme Court action

Considering recent action by the U.S. Supreme Court, DEQ requests public comment on the applicability of Oregon's Prevention of Significant Deterioration requirements and Title V operating permit program requirements for greenhouse gases. DEQ requests public comment on whether Oregon's rules should be retained as they are, revised to agree with the court's ruling, or revised in other ways.

In 2011, the Oregon Environmental Quality Commission adopted Oregon rules equivalent to the U.S. Environmental Protection Agency's greenhouse gas regulations known as the Tailoring Rule. On June 23, 2014, the U.S. Supreme Court invalidated portions of the federal Tailoring Rule. As a result of the court's ruling, industrial sources of air pollution are no longer subject to federal air quality requirements known as Prevention of Significant Deterioration for greenhouse gases alone. In addition, as a result of the court's ruling, industrial sources are no longer subject to federal Title V permitting requirements for greenhouse gases alone. The ruling retains the requirement that industrial sources triggering Prevention of Significant Deterioration for other pollutants and which also emit greenhouse gases are required to perform Best Available Control Technology analysis for greenhouse gases under specific conditions. The court's action does not invalidate any part of Oregon's rules and those rules remain in effect in Oregon.

#### Rulemaking goal

The goal of this rulemaking is to ensure DEQ's air quality permitting programs are efficient and effective. This rulemaking would modify DEQ rules to ensure Oregon regulations are up to date and that they address air quality problems. DEQ expects to see improved air quality and a reduction in the number of business that have difficulty interpreting the rules.

DEQ requests public comment on whether to consider other options for achieving these rule's substantive goals while reducing negative economic impact of the rule on business. DEQ's Statement of fiscal and economic impact is in the Notice online at



State of Oregon  
Department of  
Environmental  
Quality

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800-452-4011  
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[www.oregon.gov/DEQ](http://www.oregon.gov/DEQ)

*DEQ is a leader in  
restoring, maintaining  
and enhancing the  
quality of Oregon's air,  
land and water.*

#### How to submit written comments

**Online**  
[Comment form](#)

**By mail**  
Oregon DEQ  
Attn: Jill Inahara  
811 SW 6<sup>th</sup>  
Avenue  
Portland, OR  
97204

**By fax**  
503-229-5675  
Attn: Jill Inahara

**Hearings have  
already occurred**  
See Public  
Hearings

**Issued** 09/2/14  
Jill Inahara  
503-229-5001

<http://www.oregon.gov/deq/RulesandRegulations/Pages/2014/AQPerm.aspx>.

DEQ requests public comment on the ability of owners and operators of equipment to meet the proposed particulate standards, specifically the proposed grain loading and opacity standards.

DEQ also requests public comment on whether Lane Regional Air Protection Agency rules are as stringent as DEQ's proposed rules.

### **Who does this affect?**

Parties affected by this proposal include:

- All businesses currently holding air quality permits;
- Businesses required to submit construction approval notices
- Businesses that sell small solid fuel boilers
- Businesses that dispense less than 10,000 gallons of gasoline a month

### **Public hearings**

DEQ held the following public hearings for the proposed rules. DEQ accepted public comment at the hearings.

#### **Portland, Bend, Medford, Springfield and Pendleton 6 p.m., July 16, 2014**

##### **Portland**

DEQ Headquarters Building, Room EQC A  
on the 10th Floor, 811 SW Sixth Ave.,  
Portland, OR, 97204

##### **Bend**

DEQ - Bend Regional Office  
Conference Room  
475 NE Bellevue Dr., Suite 110  
Bend, OR 97701

##### **Medford**

DEQ - Medford Regional Office  
Conference Room  
221 Stewart Ave., Suite 201  
Medford, OR 97501

##### **Springfield**

Lane Regional Air Protection Agency  
1010 Main Street  
Springfield, OR 97477

##### **Pendleton**

DEQ - Pendleton Regional Office  
800 SE Emigrant, #330  
Pendleton, OR 97801

The Presiding Officer for all hearings was DEQ staff.

### **More information**

The Rule Proposal and Notice for this rulemaking are on DEQ's website:  
<http://www.oregon.gov/deq/RulesandRegulations/Pages/2014/AQPerm.aspx>

### **Comment deadline**

To consider comments on the proposed rules, DEQ must receive the comment by  
**5 p.m. Monday, Sept. 15, 2014.**

### **Sign up for rulemaking notices**

Get email updates about future DEQ proposed rule by signing up at:  
<http://www.oregon.gov/deq/RulesandRegulations/Pages/proposedrule.aspx>

### **What has happened so far?**

#### **Advisory committee and stakeholder meetings**

DEQ held stakeholder meetings around the state in Aug. 2013 to receive input and expertise on ideas for preliminary rules. DEQ held a fiscal advisory committee meeting Jan. 23, 2014 to gather recommendations on the adequacy of the draft fiscal impact statement. To comply with ORS 183.333, DEQ asked for the committee's recommendations on whether the proposed rules would have a fiscal impact, the extent of the impact, and whether the proposed rules would have a significant impact on small businesses and complies with ORS 183.540. DEQ also sought input on the fiscal impact statement from its standing Small Business Compliance Advisory Panel. DEQ incorporated information from industry experts and other stakeholders into the proposed rules.

#### **Documents used to develop proposal**

DEQ relied on Oregon Administrative Rules and EPA rules and guidance when considering the need for the proposed rule and to prepare the rulemaking documents.

### **What will happen next?**

#### **We will review all comments**

DEQ will prepare a written response to each comment or summary of similar comments received by the comment deadline. DEQ may modify the rule proposal based on the comments.

Comments or summary of comments and responses will become part of the DEQ staff

report that will go to the Oregon [Environmental Quality Commission](#) for final decision.

### **Present proposal to the EQC**

The Environmental Quality Commission is the board that reviews all proposed changes to division 340 of the Oregon Administrative Rules. The commission adopts, rejects, or adopts with changes, any proposed rule.

DEQ plans to take the completed draft proposal, including any modifications made in response to public comment, to the commission for final decision at its January 2015 meeting.

If EQC approves the proposed rules and incorporating the amendments into the Oregon Clean Air Act State Implementation Plan under OAR 340-200-0040, DEQ will submit the rules to EPA for approval as a revision to the plan as required by the Clean Air Act.

### **Accessibility information**

You may review copies of all websites and documents referenced in this announcement at:

Oregon DEQ Headquarters  
811 SW Sixth Ave.  
Portland, OR 97204

To schedule a review, call Jill Inahara at 503-229-5001. In Lane County, contact Max Hueftle at 541-736-1056 or [max@lrpa.org](mailto:max@lrpa.org).

Please notify DEQ of any special physical or language accommodations or if you need information in large print, Braille or another format. To make these arrangements, contact DEQ Communications and Outreach at 503-229-5696 or call toll-free in Oregon at 1-800-452-4011; fax to 503-229-6762; or email to [deqinfo@deq.state.or.us](mailto:deqinfo@deq.state.or.us). Hearing impaired persons may call 711.



## Proposed Rules Cover Page

DEQ's proposed rules are provided in the following sections:

A. Oregon Administrative Rules

Note: DEQ's proposed changes are indicated in redline strikeout

B. Continuous Monitoring Manual

B1. Continuous Monitoring Manual (1992 Edition)

B2. Continuous Monitoring Manual (2014 Edition)

Note: DEQ proposes extensive changes to the Continuous Monitoring Manual as described in the Notice. The manual does not contain redline strikeout because the extensive changes would be difficult to understand. The proposed rules include the 1992 Edition and the proposed 2014 Edition of the manual. The 1992 Edition would be deleted and replaced by the 2014 Edition.

C. Source Sampling Manual Volume I

C1. Source Sampling Manual Volume I (1992 Edition)

C2. Source Sampling Manual Volume I (2014 Edition)

Note: DEQ proposes extensive changes to the Source Sampling Manual Volume I as described in the Notice. The manual does not contain redline strikeout because the extensive changes would be difficult to understand. The proposed rules include the 1992 Edition and the proposed 2014 Edition of the manual. The 1992 Edition would be deleted and replaced by the 2014 Edition.

D. Source Sampling Manual Volume II

Note: DEQ's proposed changes are indicated in redline strikeout



## DIVISION 200

### GENERAL AIR POLLUTION PROCEDURES AND DEFINITIONS

#### General

##### 340-200-0010

##### Purpose and Application

(1) This division provides general air pollution procedures and definitions that apply to all air quality rules in [OAR 340](#) divisions 200 through 268.

(2) Divisions 200 through 268 apply in addition to all other rules adopted by the ~~Environmental Quality Commission~~[EQC](#). In cases of apparent conflict between rules within these divisions, the most stringent rule applies unless otherwise expressly stated.

(3) ~~The Department~~[DEQ](#) administers divisions 200 through 268 in all areas of the State of Oregon except in Lane County where ~~Lane Regional Air Protection Agency~~[LRAPA](#) administers ~~the most~~ air pollution control regulations. Subject to and when provided in such rules, LRAPA is authorized by the EQC as the agency to implement the rules within its area of jurisdiction.

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

Stat. Auth.: ORS 468.020 & [468A](#)

Stats. Implemented: ORS 468 & 468A

Hist.: DEQ 14-1999, f. & cert. ef. 10-14-99; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2007, f. & cert. ef. 11-8-07

##### 340-200-0020

##### General Air Quality Definitions

As used in [OAR 340](#) divisions 200 through 268, unless specifically defined otherwise:

(1) "Act" or "FCAA" means the Federal Clean Air Act, 42 U.S.C.A. [§§](#) 7401 to 7671q.

(2) "Activity" means any process, operation, action, or reaction (e.g., chemical) at a source that emits a regulated pollutant.

(3) "Actual emissions" means the mass emissions of a [regulated](#) pollutant from an emissions source during a specified time period [as set forth in OAR 340 divisions 214, 220 and 222](#).

~~(a) For determining actual emissions as of the baseline period:~~

~~(A) Except as provided in paragraphs (B) and (C) of this subsection and subsection (b) of this section, actual emissions equal the average rate at which the source actually emitted the pollutant during an applicable baseline period and that represents normal source operation;~~

~~(B) DEQ presumes that the source-specific mass emissions limit included in a source's permit that was effective on September 8, 1981 is equivalent to the source's actual emissions during the applicable baseline period if it is within 10% of the actual emissions calculated under paragraph (A) of this subsection;~~

~~(C) Actual emissions equal the potential to emit of the source for the sources listed in paragraphs (i) through (iii) of this paragraph. The actual emissions will be reset if required in accordance with subsection (c) of this section;~~

~~(i) Any source or part of a source that had not begun normal operations during the applicable baseline period but was approved to construct and operate before or during the baseline period in accordance with OAR 340 division 210, or~~

~~(ii) Any source or part of a source of greenhouse gases that had not begun normal operations prior to January 1, 2010, but was approved to construct and operate prior to January 1, 2011 in accordance with OAR 340 division 210, or~~

~~(iii) Any source or part of a source that had not begun normal operations during the applicable baseline period and was not required to obtain approval to construct and operate before or during the applicable baseline period;~~

~~(b) For any source or part of a source that had not begun normal operations during the applicable baseline period, but was approved to construct and operate in accordance with OAR 340 division 224, actual emissions on the date the permit is issued equal the potential to emit of the source. The actual emissions will be reset if required in accordance with subsection (c) of this section;~~

~~(c) Where actual emissions equal potential to emit under paragraph (a)(C) or subsection (b) of this section, the potential emissions will be reset to actual emissions as follows:~~

~~(A) Paragraphs (A) through (D) of this subsection apply to sources whose actual emissions of greenhouse gases were determined pursuant paragraph (3)(a)(C), and to all other sources of all other regulated pollutants that are permitted in accordance with OAR division 224 on or after May 1, 2011;~~

~~(B) Except as provided in paragraph (D) of this subsection, ten years from the end of the applicable baseline period under paragraph (a)(C) or ten years from the date the permit is issued under subsection (b), or an earlier time if requested by the source in a permit application involving public notice, DEQ will reset actual emissions to equal the highest actual emission rate during any consecutive 12-month period during the ten-year period or any shorter period if requested by the source;~~

~~(C) Any emission reductions achieved due to enforceable permit conditions based on OAR 340-226-0110 and 0120 (highest and best practicable treatment and control) are not included in the reset calculation required in paragraph (B) of this subsection;~~

~~(D) DEQ may extend the date of resetting by five additional years upon satisfactory demonstration by the source that construction is ongoing or normal operation has not yet been achieved;~~

~~(d) For determining actual emissions for Emission Statements under OAR 340-214-0200 through 340-214-0220 and Oregon Title V Operating Permit Fees under OAR 340 division 220, actual emissions include, but are not limited to, routine process emissions, fugitive emissions, excess emissions from maintenance, startups and shutdowns, equipment malfunction, and other activities, except categorically insignificant activities and secondary emissions.~~

~~(e) For Oregon Title V Operating Permit Fees under OAR 340 division 220, actual emissions must be directly measured with a continuous monitoring system or calculated using a material balance or verified emission factor determined in accordance with division 220 in combination with the source's actual operating hours, production rates, or types of materials processed, stored, or combusted during the specified time period.~~

(4) "Adjacent" means interdependent facilities that are nearby to each other.

(5) "Affected source" means a source that includes one or more affected units that are subject to emission reduction requirements or limitations under Title IV of the FCAA.

(6) "Affected states" means all states:

(a) Whose air quality may be affected by a proposed permit, permit modification, or permit renewal and that are contiguous to Oregon; or

(b) That are within 50 miles of the permitted source.

(7) "Aggregate insignificant emissions" means the annual actual emissions of any regulated ~~air~~ pollutant from one or more designated activities at a source that are less than or equal to the lowest applicable level specified in this section. The total emissions from each designated activity and the aggregate emissions from all designated activities must be less than or equal to the lowest applicable level specified:

(a) One ton for total reduced sulfur, hydrogen sulfide, sulfuric acid mist, any Class I or II substance subject to a standard promulgated under or established by Title VI of the ~~FCAA Act~~, and each criteria pollutant, except lead;

(b) 120 pounds for lead;

(c) 600 pounds for fluorides;

(d) 500 pounds for PM<sub>10</sub> in a PM<sub>10</sub> nonattainment area;

(e) 500 pounds for direct PM<sub>2.5</sub> in a PM<sub>2.5</sub> nonattainment area;

(f) The lesser of the amount established in 40 CFR 68.130 or 1,000 pounds;

(g) An aggregate of 5,000 pounds for all ~~H~~azardous ~~A~~ir ~~P~~ollutants;

(h) 2,756 tons CO<sub>2</sub>e for greenhouse gases.

(8) "Air ~~E~~contaminant" means a dust, fume, gas, mist, odor, smoke, vapor, pollen, soot, carbon, acid, ~~or~~ particulate matter, regulated pollutant, or any combination thereof.

(9) "Air Contaminant Discharge Permit" or "ACDP" means a written ~~permit~~ authorization issued, renewed, amended, or revised by DEQ, pursuant to OAR 340 division 216.

(10) "Alternative method" means any method of sampling and analyzing for an air pollutant ~~that~~ which is not a reference or equivalent method but which has been demonstrated to DEQ's satisfaction to, in specific cases, produce results adequate for determination of compliance. The alternative method must comply with the intent of the rules, is at least equivalent in objectivity and reliability to the uniform recognized procedures, and is demonstrated to be reproducible, selective, sensitive, accurate, and applicable to the program. An alternative method used to meet an applicable federal requirement for which a reference method is specified must be approved by EPA unless EPA has delegated authority for the approval to DEQ.

(11) "Ambient ~~A~~air" means that portion of the atmosphere, external to buildings, to which the general public has access.

(12) "Applicable requirement" means all of the following as they apply to emissions units in an Oregon Title V Operating Permit program source or ACDP program source, including requirements that have been promulgated or approved by the EPA through rule making at the time of issuance but have future-effective compliance dates:

(a) Any standard or other requirement provided for in the applicable implementation plan approved or promulgated by the EPA through rulemaking under Title I of the ~~Act~~ FCAA that implements the relevant requirements of the FCAA~~Act~~, including any revisions to that plan promulgated in 40 CFR Part 52;

(b) Any standard or other requirement adopted under OAR 340-200-0040 of the State of Oregon Clean Air Act Implementation Plan that is more stringent than the federal standard or requirement which has not yet been approved by the EPA, and other state-only enforceable air pollution control requirements;

(c) Any term or condition in an ACDP, OAR 340 division 216, including any term or condition of any preconstruction permits issued pursuant to OAR 340 division 224, New Source Review, until or unless DEQ revokes or modifies the term or condition by a permit modification;

(d) Any term or condition in a Notice of Construction and Approval of Plans, OAR 340-210-0205 through 340-210-0240, until or unless DEQ revokes or modifies the term or condition by a Notice of Construction and Approval of Plans or a permit modification;

(e) Any term or condition in a Notice of Approval, OAR 340-218-0190, issued before July 1, 2001, until or unless DEQ revokes or modifies the term or condition by a Notice of Approval or a permit modification;

(f) Any term or condition of a PSD permit issued by the EPA until or unless the EPA revokes or modifies the term or condition by a permit modification;

(g) Any standard or other requirement under section 111 of the FCAA~~Act~~, including section 111(d);

(h) Any standard or other requirement under section 112 of the FCAA~~Act~~, including any requirement concerning accident prevention under section 112(r)(7) of the FCAA~~Act~~;

(i) Any standard or other requirement of the acid rain program under Title IV of the ~~Act~~ FCAA or the regulations promulgated thereunder;

(j) Any requirements established pursuant to section 504(b) or section 114(a)(3) of the ~~Act~~FCAA;

(k) Any standard or other requirement under section 126(a)(1) and(c) of the FCAA~~Act~~;

- (l) Any standard or other requirement governing solid waste incineration, under section 129 of the ~~Act~~[FCAA](#);
- (m) Any standard or other requirement for consumer and commercial products, under section 183(e) of the ~~Act~~[FCAA](#);
- (n) Any standard or other requirement for tank vessels, under section 183(f) of the ~~Act~~[FCAA](#);
- (o) Any standard or other requirement of the program to control air pollution from outer continental shelf sources, under section 328 of the ~~Act~~[FCAA](#);
- (p) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the ~~Act~~[FCAA](#), unless the Administrator has determined that such requirements need not be contained in an Oregon Title V Operating Permit; and
- (q) Any national ambient air quality standard or increment or visibility requirement under part C of Title I of the ~~FCAA~~[Act](#), but only as it would apply to temporary sources permitted pursuant to section 504(e) of the ~~Act~~[FCAA](#).

(13) “Attainment area” or “unclassified area” means an area that has not otherwise been designated by EPA as nonattainment with ambient air quality standards for a particular regulated pollutant. Attainment areas or unclassified areas may also be referred to as sustainment or maintenance areas as designated in OAR 340 division 204. Any particular location may be part of an attainment area or unclassified area for one regulated pollutant while also being in a different type of designated area for another regulated pollutant.

(14) “Attainment pollutant” means a pollutant for which an area is designated an attainment or unclassified area.

~~(15) “Baseline Emission Rate” means the actual emission rate during a baseline period as determined under OAR 340 division 222. Baseline emission rate does not include increases due to voluntary fuel switches or increased hours of operation that occurred after that baseline period.~~

~~(a) A baseline emission rate will be established only for regulated pollutants subject to OAR 340 division 224 as specified in the definition of regulated pollutant. A baseline emission rate will not be established for PM2.5.~~

~~(b) The baseline emission rate for greenhouse gases, on a CO<sub>2</sub>e basis, will be established with the first permitting action issued after July 1, 2011, provided the permitting action involved a public notice period that began after July 1, 2011.~~

~~(c) For a pollutant that becomes a regulated pollutant subject to OAR 340 division 224 after May 1, 2011, the initial baseline emission rate is the actual emissions of that pollutant during any consecutive 12-month period within the 24 months immediately preceding its designation as a regulated pollutant if a baseline period has not been defined for the pollutant.~~

~~(d) The baseline emission rate will be recalculated if actual emissions are reset in accordance with the definition of actual emissions.~~

~~(e) Once the baseline emission rate has been established or recalculated in accordance with subsection (d) of this section, the production basis for the baseline emission rate may only be changed if a material mistake or an inaccurate statement was made in establishing the production basis for baseline emission rate.~~

(164) "Baseline ~~P~~period" means the period used to determine the baseline emission rate for each regulated pollutant under OAR 340 division 222:

~~(a) Any consecutive 12-calendar month period during the calendar years 1977 or 1978 for any regulated pollutant other than greenhouse gases. DEQ may allow the use of a prior time period upon a determination that it is more representative of normal source operation.~~

~~(b) Any consecutive 12-calendar month period during the calendar years 2000 through 2010 for greenhouse gases.~~

(175) "Best Available Control Technology" or "BACT" means an emission limitation, including, but not limited to, a visible emission standard, based on the maximum degree of reduction of each air contaminant subject to regulation under the ~~Act~~ FCAA which would be emitted from any proposed major source or major modification which, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such air contaminant. In no event may the application of BACT result in emissions of any air contaminant that would exceed the emissions allowed by any applicable new source performance standard or any standard for hazardous air pollutant. If an emission limitation is not feasible, a design, equipment, work practice, or operational standard, or combination thereof, may be required. Such standard must, to the degree possible, set forth the emission reduction achievable and provide for compliance by prescribing appropriate permit conditions.

(186) "Biomass" means non-fossilized and biodegradable organic material originating from plants, animals, and micro-organisms, including products, byproducts, residues and waste from agriculture, forestry, and related industries as well as the non-fossilized and biodegradable organic fractions of industrial and municipal wastes, including gases and liquids recovered from the decomposition of non-fossilized and biodegradable organic matter.

(197) "Capacity" means the maximum regulated pollutant emissions from a stationary source under its physical and operational design.

(20) "Capture efficiency" means the amount of regulated pollutant collected and routed to an air pollution control device divided by the amount of total emissions generated by the process being controlled.

(2148) "Capture system" means the equipment (including but not limited to hoods, ducts, fans, and booths) used to contain, capture and transport a regulated pollutant to a control device.

(2249) "Carbon dioxide equivalent" or "CO<sub>2</sub>e" means an amount of a greenhouse gas or gases expressed as the equivalent amount of carbon dioxide, and ~~shall~~ is be computed by multiplying the mass of each of the greenhouse gases by the global warming potential published for each gas at 40 CFR Part 98, subpart A, Table A-1—Global Warming Potentials, and adding the resulting value for each greenhouse gas to compute the total equivalent amount of carbon dioxide.

(230) "Categorically insignificant activity" means any of the following listed regulated pollutant emitting activities principally supporting the source or the major industrial group. Categorically insignificant activities must comply with all applicable requirements.

(a) Constituents of a chemical mixture present at less than ~~1% percent~~ by weight of any chemical or compound regulated under divisions 200 through 268 excluding divisions 248 and 262 of this chapter, or less than ~~0.1% percent~~ by weight of any carcinogen listed in the U.S. Department of Health and Human Service's Annual Report on Carcinogens when usage of the chemical mixture is less than 100,000 pounds/year;

(b) Evaporative and tail-pipe emissions from on-site motor vehicle operation;

(c) Distillate oil, kerosene, ~~and-or~~ gasoline fuel burning equipment ~~rated at less than or equal to 0.4 million Btu/hr~~; unless one or both of the following conditions is met, then all of this equipment is no longer categorically insignificant:

(A) The aggregate emissions are greater than the de minimis level for any regulated pollutant; or

(B) Any individual equipment is rated at greater than 0.4 million BTU/hour;

(d) Natural gas ~~and-or~~ propane burning equipment ~~rated at less than or equal to 2.0 million Btu/hr~~; unless one or both of the following conditions is met, then all of this equipment is no longer categorically insignificant:

(A) The aggregate emissions are greater than the de minimis level for any regulated pollutant; or

(B) Any individual equipment is rated at greater than 2.0 million Btu/hour;

(e) Office activities;

(f) Food service activities;

(g) Janitorial activities;

(h) Personal care activities;

(i) Groundskeeping activities including, but not limited to building painting and road and parking lot maintenance;

(j) On-site laundry activities;

(k) On-site recreation facilities;

(l) Instrument calibration;

(m) Maintenance and repair shop;

(n) Automotive repair shops or storage garages;

(o) Air cooling or ventilating equipment not designed to remove air contaminants generated by or released from associated equipment;

(p) Refrigeration systems with less than 50 pounds of charge of ozone depleting substances regulated under Title VI, including pressure tanks used in refrigeration systems but excluding any combustion equipment associated with such systems;



(q) Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including associated vacuum producing devices but excluding research and development facilities;

(r) Temporary construction activities;

(s) Warehouse activities;

(t) Accidental fires;

(u) Air vents from air compressors;

(v) Air purification systems;

(w) Continuous emissions monitoring vent lines;

(x) Demineralized water tanks;

(y) Pre-treatment of municipal water, including use of deionized water purification systems;

(z) Electrical charging stations;

(aa) Fire brigade training;

(bb) Instrument air dryers and distribution;

(cc) Process raw water filtration systems;

(dd) Pharmaceutical packaging;

(ee) Fire suppression;

(ff) Blueprint making;

(gg) Routine maintenance, repair, and replacement such as anticipated activities most often associated with and performed during regularly scheduled equipment outages to maintain a plant and its equipment in good operating condition, including but not limited to steam cleaning, abrasive use, and woodworking;

(hh) Electric motors;

(ii) Storage tanks, reservoirs, transfer and lubricating equipment used for ASTM grade distillate or residual fuels, lubricants, and hydraulic fluids;

(jj) On-site storage tanks not subject to any New Source Performance Standards (NSPS), including underground storage tanks (UST), storing gasoline or diesel used exclusively for fueling of the facility's fleet of vehicles;

(kk) Natural gas, propane, and liquefied petroleum gas (LPG) storage tanks and transfer equipment;

(ll) Pressurized tanks containing gaseous compounds;

(mm) Vacuum sheet stacker vents;

(nn) Emissions from wastewater discharges to publicly owned treatment works (POTW) provided the source is authorized to discharge to the POTW, not including on-site wastewater treatment and/or holding facilities;

(oo) Log ponds;

(pp) Storm-water settling basins;

(qq) Fire suppression and training;

(rr) Paved roads and paved parking lots within an urban growth boundary;

(ss) Hazardous air pollutant emissions ~~of~~<sup>in</sup> fugitive dust from paved and unpaved roads except for those sources that have processes or activities that contribute to the deposition and entrainment of hazardous air pollutants from surface soils;

(tt) Health, safety, and emergency response activities;

(uu) ~~Stationary E~~mergency generators and pumps used only during loss of primary equipment or utility service due to circumstances beyond the reasonable control of the owner or operator, or to address a power emergency; ~~as determined by DEQ unless one or both of the following conditions is met, then all of this equipment is no longer categorically insignificant:~~

(A) The aggregate emissions from stationary emergency generators and pumps are greater than the de minimis level for any regulated pollutant based on the readiness and testing hours of operation allowed by NSPS or NESHAP requirements or some other hours of operation specified in a permit; or

(B) Any individual stationary emergency generator or pump is rated at 500 horsepower or more;

(vv) Non-contact steam vents and leaks and safety and relief valves for boiler steam distribution systems;

(ww) Non-contact steam condensate flash tanks;

(xx) Non-contact steam vents on condensate receivers, deaerators and similar equipment;

(yy) Boiler blowdown tanks;

(zz) Industrial cooling towers that do not use chromium-based water treatment chemicals;

(aaa) Ash piles maintained in a wetted condition and associated handling systems and activities;

(bbb) ~~Uncontrolled O~~il/water separators in effluent treatment systems with a throughput of less than 400,000 gallons per year;

(ccc) Combustion source flame safety purging on startup;

(ddd) Broke beaters, pulp and repulping tanks, stock chests and pulp handling equipment, excluding thickening equipment and repulpers;

(eee) Stock cleaning and pressurized pulp washing, excluding open stock washing systems; and

(fff) White water storage tanks.

(24~~4~~) "Certifying individual" means the responsible person or official authorized by the owner or operator of a source who certifies the accuracy of the emission statement.

~~(22) "CFR" means Code of Federal Regulations.~~

(25~~3~~) "Class I area" or "PSD Class I area" means any Federal, State or Indian reservation land which is classified or reclassified as a Class I area.~~Class I areas are identified in~~ under OAR 340-204-0050 and 340-204-0060.

(26) "Class II area" or "PSD Class II area" means any land which is classified or reclassified as a Class II area under OAR 340-204-0050 and 340-204-0060.

(27) "Class III area" or "PSD Class III area" means any land which is reclassified as a Class III area under OAR 340-204-0060.

(28~~4~~) "Commence" or "commencement" means that the owner or operator has obtained all necessary preconstruction approvals required by the ~~Act~~ FCAA and either has:

- (a) Begun, or caused to begin, a continuous program of actual on-site construction of the source to be completed in a reasonable time; or
- (b) Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of construction of the source to be completed in a reasonable time.

(29~~5~~) "Commission" or "EQC" means Environmental Quality Commission.

(30~~26~~) "Constant ~~P~~rocess ~~R~~ate" means the average variation in process rate for the calendar year is not greater than plus or minus ten percent of the average process rate.

(31~~27~~) "Construction":

- (a) Except as provided in subsection (b) ~~of this section~~ means any physical change including, but not limited to, fabrication, erection, installation, demolition, or modification of a source or part of a source;
- (b) As used in OAR 340 division 224 means any physical change including, but not limited to, fabrication, erection, installation, demolition, or modification of an emissions unit, or change in the method of operation of a source which would result in a change in actual emissions.

(32~~28~~) "Continuous compliance determination method" means a method, specified by the applicable standard or an applicable permit condition, which:

- (a) Is used to determine compliance with an emission limitation or standard on a continuous basis, consistent with the averaging period established for the emission limitation or standard; and
- (b) Provides data either in units of the standard or correlated directly with the compliance limit.

(33~~29~~) "Continuous ~~M~~onitoring ~~S~~ystems" means sampling and analysis, in a timed sequence, using techniques which will adequately reflect actual emissions or concentrations on a continuing basis as specified in accordance with the DEQ's Continuous Monitoring Manual, and includes continuous emission monitoring systems, continuous opacity monitoring system (COMS) and continuous parameter monitoring systems.

(349) “Control device” means equipment, other than inherent process equipment that is used to destroy or remove ~~air~~ a regulated pollutant~~(s)~~ prior to discharge to the atmosphere. The types of equipment that may commonly be used as control devices include, but are not limited to, fabric filters, mechanical collectors, electrostatic precipitators, inertial separators, afterburners, thermal or catalytic incinerators, adsorption devices (such as carbon beds), condensers, scrubbers (such as wet collection and gas absorption devices), selective catalytic or non-catalytic reduction systems, flue gas recirculation systems, spray dryers, spray towers, mist eliminators, acid plants, sulfur recovery plants, injection systems (such as water, steam, ammonia, sorbent or limestone injection), and combustion devices independent of the particular process being conducted at an emissions unit (e.g., the destruction of emissions achieved by venting process emission streams to flares, boilers or process heaters). For purposes of OAR 340-212-0200 through 340-212-0280, a control device does not include passive control measures that act to prevent regulated pollutants from forming, such as the use of seals, lids, or roofs to prevent the release of regulated pollutants, use of low-polluting fuel or feedstocks, or the use of combustion or other process design features or characteristics. If an applicable requirement establishes that particular equipment which otherwise meets this definition of a control device does not constitute a control device as applied to a particular regulated pollutant-specific emissions unit, then that definition will be binding for purposes of OAR 340-212-0200 through 340-212-0280.

(35) “Control efficiency” means the product of the capture and removal efficiencies .

(364) "Criteria ~~P~~pollutant" means any of the following regulated pollutants: nitrogen oxides, volatile organic compounds, particulate matter, PM10, PM2.5, sulfur dioxide, carbon monoxide, ~~or~~and lead.

(372) "Data" means the results of any type of monitoring or method, including the results of instrumental or non-instrumental monitoring, emission calculations, manual sampling procedures, recordkeeping procedures, or any other form of information collection procedure used in connection with any type of monitoring or method.

(38) “Day” means a 24-hour period beginning at 12:00 a.m. midnight.

(393) "De minimis emission levels" mean the levels for the regulated pollutants listed ~~in Table 4.~~below:

(a) Greenhouse Gases (CO<sub>2</sub>e) = 2,756 tons per year

(b) CO = 1 ton per year

(c) NO<sub>x</sub> = 1 ton per year

(d) SO<sub>2</sub> = 1 ton per year

(e) VOC = 1 ton per year

(f) PM = 1 ton per year

(g) PM<sub>10</sub> (except Medford AQMA) = 1 ton per year

(h) PM<sub>10</sub> (Medford AQMA) = 0.5 ton per year and 5.0 pounds/day

(i) Direct PM<sub>2.5</sub> = 1 ton per year

(j) Lead = 0.1 ton per year

(k) Fluorides = 0.3 ton per year

(l) Sulfuric Acid Mist = 0.7 ton per year

(m) Hydrogen Sulfide = 1 ton per year

(n) Total Reduced Sulfur (including hydrogen sulfide) = 1 ton per year

(o) Reduced Sulfur = 1 ton per year

(p) Municipal waste combustor organics (dioxin and furans) = 0.0000005 ton per year

(q) Municipal waste combustor metals = 1 ton per year

(r) Municipal waste combustor acid gases = 1 ton per year

(s) Municipal solid waste landfill gases = 1 ton per year

(t) Single HAP = 1 ton per year

(u) Combined HAP (aggregate) = 1 ton per year

~~NOTE: De minimis is compared to all increases that are not included in the PSEL.~~

~~(4034)~~ "Department" or "DEQ":

(a) Means Department of Environmental Quality; except

(b) As used in OAR 340 divisions 218 and 220 means Department of Environmental Quality, or in the case of Lane County, ~~Lane Regional Air Protection Agency~~LRAPA.

(41) "DEQ method [#]" means the sampling method and protocols for measuring a regulated pollutant as described in the DEQ Source Sampling Manual.

(42) "Designated area" means an area that has been designated as an attainment, unclassified, sustainment, nonattainment, reattainment, or maintenance area under OAR 340 division 204 or applicable provisions of the FCAA.

(43) "Destruction efficiency" means removal efficiency.

~~(4435)~~ "Device" means any machine, equipment, raw material, product, or byproduct at a source that produces or emits a regulated pollutant.

~~(4536)~~ "Direct PM2.5" has the meaning provided in the definition of PM2.5.

~~(4637)~~ "Director" means the Director of DEQ or the Director's designee.

~~(4738)~~ "Draft permit" means the version of an Oregon Title V Operating Permit for which DEQ or ~~Lane Regional Air Protection Agency~~LRAPA offers public participation under OAR 340-218-0210 or the EPA and affected State review under 340-218-0230.

(48) "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.

~~(4939)~~ "Effective date of the program" means the date that the EPA approves the Oregon Title V Operating Permit program submitted by DEQ on a full or interim basis. In case of a partial approval, the "effective date of the program" for each portion of the program is the date of the EPA approval of that portion.

~~(5040)~~ "Emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency does not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

~~(5144)~~ "Emission" means a release into the atmosphere of any regulated pollutant or any air contaminant.

~~(5242)~~ "Emission ~~E~~estimate ~~A~~adjustment ~~F~~factor" or "EEAF" means an adjustment applied to an emission factor to account for the relative inaccuracy of the emission factor.

~~(5343)~~ "Emission ~~F~~factor" means an estimate of the rate at which a regulated pollutant is released into the atmosphere, as the result of some activity, divided by the rate of that activity (e.g., production or process rate).

~~(5444)~~ "Emission limitation" or "Emission standard" or "Emission limitation or standard" means:

(a) Except as provided in subsection (b) ~~-of this section, "Emission Limitation" and "Emission Standard" mean~~ a requirement established by a Sstate, local government, or the EPA which limits the quantity, rate, or concentration of emissions of regulated ~~air~~-pollutants on a continuous basis, including any requirements which limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for a source to assure continuous emission reduction.

(b) As used in OAR 340-212-0200 through 340-212-0280, ~~"Emission limitation or standard" means~~ any applicable requirement that constitutes an emission limitation, emission standard, standard of performance or means of emission limitation as defined under the FCAA ~~Act~~. An emission limitation or standard may be expressed in terms of the pollutant, expressed either as a specific quantity, rate or concentration of emissions (e.g., pounds of SO<sub>2</sub> per hour, pounds of SO<sub>2</sub> per million British thermal units of fuel input, kilograms of VOC per liter of applied coating solids, or parts per million by volume of SO<sub>2</sub>) or as the relationship of uncontrolled to controlled emissions (e.g., percentage capture and destruction efficiency of VOC or percentage reduction of SO<sub>2</sub>). An emission limitation or standard may also be expressed either as a work practice, process or control device parameter, or other form of specific design, equipment, operational, or operation and maintenance requirement. For purposes of OAR 340-212-0200 through 340-212-0280, an emission limitation or standard does not include general operation requirements that an owner or operator may be required to meet, such as requirements to obtain a permit, ~~to~~-operate and maintain sources ~~in accordance with~~ using good air pollution control practices, ~~to~~-develop and maintain a malfunction abatement plan, ~~to~~-keep records, submit reports, or conduct monitoring.

(5545) "Emission ~~R~~Reduction ~~C~~Credit ~~B~~Banking" means to presently reserve, subject to requirements of OAR 340 division 268, Emission Reduction Credits, emission reductions for use by the reserver or assignee for future compliance with air pollution reduction requirements.

(5646) "Emission ~~R~~eporting ~~F~~orm" means a paper or electronic form developed by DEQ that must be completed by the permittee to report calculated emissions, actual emissions, or permitted emissions for interim emission fee assessment purposes.

(5747) "Emissions unit" means any part or activity of a source that emits or has the potential to emit any regulated ~~air~~ pollutant.

(a) A part of a source is any machine, equipment, raw material, product, or byproduct that produces or emits regulated ~~air~~ pollutants. An activity is any process, operation, action, or reaction (e.g., chemical) at a stationary source that emits regulated ~~air~~ pollutants. Except as described in subsection (d) ~~of this section~~, parts and activities may be grouped for purposes of defining an emissions unit if the following conditions are met:

(A) The group used to define the emissions unit may not include discrete parts or activities to which a distinct emissions standard applies or for which different compliance demonstration requirements apply; and

(B) The emissions from the emissions unit are quantifiable.

(b) Emissions units may be defined on a regulated pollutant by regulated pollutant basis where applicable.

(c) The term emissions unit is not meant to alter or affect the definition of the term "unit" under Title IV of the FCAA.

(d) Parts and activities cannot be grouped for determining emissions increases from an emissions unit under OAR 340 divisions 210 and 224~~340-224-0050 through 340-224-0070, or 340 division 210~~, or for determining the applicability of any New Source Performance Standard (NSPS).

(5848) "EPA" or "Administrator" means the Administrator of the United States Environmental Protection Agency or the Administrator's designee.

(59) "EPA Method 9" means the method for Visual Determination of the Opacity of Emissions From Stationary Sources described in 40 CFR Part 60, Appendix A-4.

(6049) "Equivalent method" means any method of sampling and analyzing for an ~~air~~ regulated pollutant that has been demonstrated to DEQ's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions. An equivalent method used to meet an applicable federal requirement for which a reference method is specified must be approved by EPA unless EPA has delegated authority for the approval to DEQ.

(6150) "Event" means excess emissions that arise from the same condition and occur during a single calendar day or continue into subsequent calendar days.

(6254) "Exceedance" means a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.



(6352) "Excess emissions" means emissions in excess of a permit limit or any applicable air quality rule.

(6453) "Excursion" means a departure from an indicator range established for monitoring under OAR 340-212-0200 through 340-212-0280 and 340-218-0050(3)(a), consistent with any averaging period specified for averaging the results of the monitoring.

(6554) "Federal Land Manager" means with respect to any lands in the United States, the Secretary of the federal department with authority over such lands.

(6655) "Federal ~~M~~major ~~S~~source" means any source listed in subsections (a), (b), (c) or (f) below:

(a) A source located in a nonattainment, reattainment, or maintenance area with potential to emit 100 tons per year or more of the regulated pollutant for which the area is designated nonattainment, reattainment or maintenance.

(b) ~~a~~A source located in an attainment, unclassified, or sustainment area with potential to emit 100 tons per year or more of any individual regulated pollutant, excluding hazardous air pollutants listed in OAR 340 division 244 if in a source category listed in subsection (e), or with potential to emit 250 tons per year or more of any individual regulated pollutant, excluding hazardous air pollutants listed in OAR 340 division 244, if not in a source category listed in subsection (e) greater than or equal to 100 tons per year if in a source category listed below, or 250 tons per year if not in a source category listed.

(c) ~~In addition, f~~For greenhouse gases, a ~~federal major~~ source ~~must also have with~~ the potential to emit ~~CO2e greater than or equal to~~ 100,000 tons per year or more of CO2e.

(d) Calculations for determining a source's potential to emit for purposes of subsections (a) through (c) must include the following:

(A) ~~The f~~Fugitive emissions and insignificant activity emissions; ~~and of a stationary source are considered in determining whether it is a federal major source.~~

(B) ~~Potential to emit calculations must include emission i~~Increases or decreases due to a new or modified source ~~and may include emission decreases.~~

(e) Source categories:

(Aa) Fossil fuel-fired steam electric plants of more than 250 million BTU/hour heat input;

(Bb) Coal cleaning plants with thermal dryers;

(Ce) Kraft pulp mills;

(Dd) Portland cement plants;

(Ee) Primary ~~Z~~zinc ~~S~~smelters;

(Ff) Iron and ~~S~~steel ~~M~~mill ~~P~~plants;

(Gg) Primary aluminum ore reduction plants;

(Hh) Primary copper smelters;

- (~~I~~i) Municipal ~~I~~ncinerators capable of charging more than 50 tons of refuse per day;
  - (~~J~~j) Hydrofluoric acid plants;
  - (~~K~~k) Sulfuric acid plants;
  - (~~L~~l) Nitric acid plants;
  - (~~M~~m) Petroleum ~~R~~efineries;
  - (~~N~~n) Lime plants;
  - (~~O~~e) Phosphate rock processing plants;
  - (~~P~~p) Coke oven batteries;
  - (~~Q~~q) Sulfur recovery plants;
  - (~~R~~r) Carbon black plants, furnace process;
  - (~~S~~s) Primary lead smelters;
  - (~~T~~t) Fuel conversion plants;
  - (~~U~~u) Sintering plants;
  - (~~V~~v) Secondary metal production plants;
  - (~~W~~w) Chemical process plants, excluding ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140;
  - (~~X~~x) Fossil fuel fired boilers, or combinations thereof, totaling more than 250 million BTU per hour heat input;
  - (~~Y~~y) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
  - (~~Z~~z) Taconite ore processing plants;
  - (~~AA~~aa) Glass fiber processing plants;
  - (~~BB~~bb) Charcoal production plants.
- (f) A major stationary source as defined in part D of Title I of the FCAA, including:
- (A) For ozone nonattainment areas, sources with the potential to emit 100 tons per year or more of VOCs or oxides of nitrogen in areas classified as "marginal" or "moderate," 50 tons per year or more in areas classified as "serious," 25 tons per year or more in areas classified as "severe," and 10 tons per year or more in areas classified as "extreme"; except that the references in this paragraph to 100, 50, 25, and 10 tons per year of nitrogen oxides do not apply with respect to any source for which the Administrator has made a finding, under section 182(f)(1) or (2) of the FCAA, that requirements under section 182(f) of the FCAA do not apply;
- (B) For ozone transport regions established pursuant to section 184 of the FCAA, sources with the potential to emit 50 tons per year or more of VOCs;

(C) For carbon monoxide nonattainment areas that are classified as "serious" and in which stationary sources contribute significantly to carbon monoxide levels as determined under rules issued by the Administrator, sources with the potential to emit 50 tons per year or more of carbon monoxide.

(D) For PM<sub>10</sub> nonattainment areas classified as "serious," sources with the potential to emit 70 tons per year or more of PM<sub>10</sub>.

(6756) "Final permit" means the version of an Oregon Title V Operating Permit issued by DEQ or ~~Lane Regional Air Protection Agency~~ LRAPA that has completed all review procedures required by OAR 340-218-0120 through 340-218-0240.

(6857) "Form" means a paper or electronic form developed by DEQ.

(69) "Fuel burning equipment" means any type of equipment that burns fuel, except internal combustion engines, and includes but is not limited to boilers, dryers, and process heaters.

(7058) "Fugitive ~~E~~missions":

(a) Except as used in subsection (b) ~~-of this section~~, means emissions of any air contaminant which escape to the atmosphere from any point or area that is not identifiable as a stack, vent, duct, or equivalent opening.

(b) As used to define a major Oregon Title V Operating Permit program source, means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(7159) "General permit":

(a) Except as provided in subsection (b) ~~-of this section~~, means an Oregon Air Contaminant Discharge Permit established under OAR 340-216-0060;

(b) As used in OAR 340 division 218 means an Oregon Title V Operating Permit established under OAR 340-218-0090.

(7260) "Generic PSEL" means the levels for the regulated pollutants listed ~~in Table 5~~ below:

(a) Greenhouse Gases (CO<sub>2</sub>e) = 74,000 tons per year

(b) CO = 99 tons per year

(c) NO<sub>x</sub> = 39 tons per year

(d) SO<sub>2</sub> = 39 tons per year

(e) VOC = 39 tons per year

(f) PM = 24 tons per year

(g) PM<sub>10</sub> (except Medford AQMA) = 14 tons per year

(h) PM<sub>10</sub>/~~PM<sub>2.5</sub>~~ (Medford AQMA) = 4.5 tons per year and 49 pounds per day

(i) ~~Direct~~ PM<sub>2.5</sub> = 9 tons per year

(j) Lead = 0.5 tons per year

(k) Fluorides = 2 tons per year

(l) Sulfuric Acid Mist = 6 tons per year

(m) Hydrogen Sulfide = 9 tons per year

(n) Total Reduced Sulfur (including hydrogen sulfide) = 9 tons per year

(o) Reduced Sulfur = 9 tons per year

(p) Municipal waste combustor organics (Dioxin and furans) = 0.0000030 tons per year

(q) Municipal waste combustor metals = 14 tons per year

(r) Municipal waste combustor acid gases = 39 tons per year

(s) Municipal solid waste landfill gases = 49 tons per year

(t) Single HAP = 9 tons per year

(u) Combined HAPs (aggregate) = 24 tons per year

~~**NOTE:** Sources are eligible for a generic PSEL if expected emissions are less than or equal to the levels listed in Table 5 under this rule. Baseline emission rate and netting basis do not apply to pollutants at sources using generic PSELs.~~

~~(7364)~~(a) "Greenhouse ~~G~~gases" or "GHGs" means the aggregate group of the following six ~~greenhouse~~ gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Each gas is also individually a greenhouse gas.

(b) From May 1, 2011 through July 20, 2014, ~~T~~the definition of greenhouse gases in subsection (a) ~~of this section does~~ not include, for purposes of division 216, 218, and 224, carbon dioxide emissions from the combustion or decomposition of biomass ~~except to the extent required by federal law~~. As a result, carbon dioxide emissions from the combustion or decomposition of biomass was not a regulated air pollutant and was not subject to division 216, 218, and 224 during that time period.

~~(7462)~~ "Growth ~~A~~allowance" means an allocation of some part of an airshed's capacity to accommodate future proposed ~~major~~ sources and ~~major~~ modifications of sources.

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

(76) "Hazardous Air Pollutant" or "HAP" means an air contaminant listed by the EPA pursuant to section 112(b) of the FCAA or determined by the EQC to cause, or reasonably be anticipated to cause, adverse effects to human health or the environment.

~~(7763)~~ "Immediately" means as soon as possible but in no case more than one hour after a source knew or should have known of an excess emission period.

(78) "Indian governing body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.

(79) "Indian reservation" means any federally recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.

(80~~64~~) "Inherent process equipment" means equipment that is necessary for the proper or safe functioning of the process, or material recovery equipment that the owner or operator documents is installed and operated primarily for purposes other than compliance with air pollution regulations. Equipment that must be operated at an efficiency higher than that achieved during normal process operations in order to comply with the applicable emission limitation or standard is not inherent process equipment. For the purposes of OAR 340-212-0200 through 340-212-0280, inherent process equipment is not considered a control device.

(81~~65~~) "Insignificant ~~A~~activity" means an activity or emission that DEQ has designated as categorically insignificant, or that meets the criteria of aggregate insignificant emissions.

(82~~66~~) "Insignificant ~~E~~change" means an off-permit change defined under OAR 340-218-0140(2)(a) to either a significant or an insignificant activity which:

(a) Does not result in a re-designation from an insignificant to a significant activity;

(b) Does not invoke an applicable requirement not included in the permit; and

(c) Does not result in emission of regulated ~~air~~ pollutants not regulated by the source's permit.

(83) "Internal combustion engine" means stationary gas turbines and reciprocating internal combustion engines.

(84~~67~~) "Late ~~P~~ayment" means a fee payment which is postmarked after the due date.

(85) "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."

(86~~68~~) "Lowest Achievable Emission Rate" or "LAER" means that rate of emissions which reflects: the most stringent emission limitation which is contained in the implementation plan of any state for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable; or the most stringent emission limitation which is achieved in practice by such class or category of source, whichever is more stringent. The application of this term cannot permit a proposed new or modified source to emit any air contaminant in excess of the amount allowable under applicable New Source Performance Standards (NSPS) or standards for hazardous air pollutants.

(87~~69~~) "Maintenance ~~A~~area" means ~~a geographical area of the State that was designated as a nonattainment area, redesignated as an attainment area by EPA, and redesignated as a maintenance area by the Environmental Quality Commission in OAR 340, division 204, any area that was formerly nonattainment for a criteria pollutant but has since met the ambient air quality standard, and EPA has approved a maintenance plan to comply the standards pursuant to 40 CFR 51.110.~~

(88~~70~~) "Maintenance ~~P~~ollutant" means a regulated pollutant for which a maintenance area was formerly designated a nonattainment area.

~~(8974)~~ "Major ~~M~~modification" means any physical change or change in the method of operation of a source as defined in OAR division 224. ~~of a source that results in satisfying the requirements of both subsections (a) and (b) of this section, or of subsection (c) of this section for any regulated air pollutant. Major modifications for ozone precursors or PM2.5 precursors also constitute major modifications for ozone and PM2.5, respectively.~~

~~(a) Except as provided in subsection (d) of this section, a PSEL that exceeds the netting basis by an amount that is equal to or greater than the significant emission rate.~~

~~(b) The accumulation of emission increases due to physical changes and changes in the method of operation as determined in accordance with paragraphs (A) and (B) of this subsection is equal to or greater than the significant emission rate.~~

~~(A) Calculations of emission increases in subsection (b) of this section must account for all accumulated increases in actual emissions due to physical changes and changes in the method of operation occurring at the source since the applicable baseline period, or since the time of the last construction approval issued for the source pursuant to the New Source Review Regulations in OAR 340 division 224 for that pollutant, whichever time is more recent. These include fugitive emissions and emissions from insignificant activities.~~

~~(B) Emission increases due solely to increased use of equipment or facilities that existed or were permitted or approved to construct in accordance with OAR 340 division 210 during the applicable baseline period are not included, except if the increased use is to support a physical change or change in the method of operation.~~

~~(c) Any change at a source, including production increases, that would result in a Plant Site Emission Limit increase of 1 ton or more for any regulated pollutant for which the source is a major source in nonattainment or maintenance areas or a federal major source in attainment or unclassified areas, if the source obtained permits to construct and operate after the applicable baseline period but has not undergone New Source Review.~~

~~(A) Subsection (c) of this section does not apply to PM2.5 and greenhouse gases.~~

~~(B) Changes to the PSEL solely due to the availability of better emissions information are exempt from being considered an increase.~~

~~(d) If a portion of the netting basis or PSEL (or both) was set based on PTE because the source had not begun normal operations but was permitted or approved to construct and operate, that portion of the netting basis or PSEL (or both) must be excluded from the tests in subsections (a) and (b) of this section until the netting basis is reset as specified in the definitions of baseline emission rate and netting basis.~~

~~(e) The following are not considered major modifications:~~

~~(A) Except as provided in subsection (c) of this section, proposed increases in hours of operation or production rates that would cause emission increases above the levels allowed in a permit and would not involve a physical change or change in method of operation in the source;~~

~~(B) Routine maintenance, repair, and replacement of components;~~

~~(C) Temporary equipment installed for maintenance of the permanent equipment if the temporary equipment is in place for less than six months and operated within the permanent equipment's existing PSEL;~~

~~(D) Use of alternate fuel or raw materials, that were available and the source was capable of accommodating in the baseline period.~~

(90) "Major New Source Review" or "Major NSR" means the new source review process and requirements for federal major sources under OAR 340-224-0010 through 340-224-0070 based on the location and regulated pollutants emitted.

~~(9172)~~ "Major ~~S~~source":

(a) Except as provided in subsection (b) of this section, means a source that emits, or has the potential to emit, any regulated air pollutant at a Significant Emission Rate. The fugitive emissions and insignificant activity emissions of a stationary source are considered in determining whether it is a major source. Potential to emit calculations must include emission increases due to a new or modified source and may include emission decreases.

(b) As used in OAR 340 division 210, Stationary Source Notification Requirements, OAR 340 division 218, ~~rules applicable to sources required to have~~ Oregon Title V Operating Permits, OAR 340 division 220, Oregon Title V Operating Permit Fees, ~~and~~ OAR 340-216-0066, Standard ACDPs, and OAR 340 division 236, Emission Standards for Specific Industries, means any stationary source ~~(or any group of stationary sources that are located on one or more contiguous or adjacent properties and are under common control of the same person (or persons under common control))~~ belonging to a single major industrial grouping or supporting the major industrial group and that is described in paragraphs (A), (B), or (C) ~~or (D) of this subsection~~. For the purposes of this subsection, a stationary source or group of stationary sources is considered part of a single industrial grouping if all of the regulated pollutant emitting activities at such source or group of sources on contiguous or adjacent properties belong to the same ~~M~~major ~~G~~group (i.e., all have the same two-digit code) as described in the Standard Industrial Classification Manual (U.S. Office of Management and Budget, 1987) or support the major industrial group.

(A) A major source of hazardous air pollutants, which means:

(i) For hazardous air pollutants other than radionuclides, any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, in the aggregate, 10 tons per year ~~(tpy)~~ or more of any hazardous air pollutants that has been listed pursuant to OAR 340-244-0040; 25 tons per year or more of any combination of such hazardous air pollutants, or such lesser quantity as the Administrator may establish by rule. Emissions from any oil or gas exploration or production well, along with its associated equipment, and emissions from any pipeline compressor or pump station will not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources; or

(ii) For radionuclides, "major source" will have the meaning specified by the Administrator by rule.

(B) A major stationary source of ~~air~~ regulated pollutants, as defined in section 302 of the ~~FCAA~~ Aet, that directly emits or has the potential to emit 100 tons per year or more of any regulated ~~air~~ pollutant, except greenhouse gases, including any major source of fugitive emissions of any such regulated pollutant. The fugitive emissions of a stationary source are not considered in determining whether it is a major stationary source for the purposes of section 302(j) of the ~~FCAA~~ Aet, unless the source belongs to one of the following categories of stationary sources:

- (i) Coal cleaning plants (with thermal dryers);
- (ii) Kraft pulp mills;
- (iii) Portland cement plants;
- (iv) Primary zinc smelters;
- (v) Iron and steel mills;
- (vi) Primary aluminum ore reduction plants;
- (vii) Primary copper smelters;
- (viii) Municipal incinerators capable of charging more than 50 tons of refuse per day;
- (ix) Hydrofluoric, sulfuric, or nitric acid plants;
- (x) Petroleum refineries;
- (xi) Lime plants;
- (xii) Phosphate rock processing plants;
- (xiii) Coke oven batteries;
- (xiv) Sulfur recovery plants;
- (xv) Carbon black plants (furnace process);
- (xvi) Primary lead smelters;
- (xvii) Fuel conversion plants;
- (xviii) Sintering plants;
- (xix) Secondary metal production plants;
- (xx) Chemical process plants, [excluding ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140](#);
- (xxi) Fossil-fuel boilers, or combination thereof, totaling more than 250 million British thermal units per hour heat input;
- (xxii) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- (xxiii) Taconite ore processing plants;
- (xxiv) Glass fiber processing plants;
- (xxv) Charcoal production plants;



(xxvi) Fossil-fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input; or

(xxvii) Any other stationary source category, that as of August 7, 1980 is being regulated under section 111 or 112 of the [FCAA](#)~~Act~~.

(C) Beginning July 1, 2011, a major stationary source of ~~air~~[regulated](#) pollutants, as defined by Section 302 of the ~~Act~~[FCAA](#), that directly emits or has the potential to emit 100 [tons per year](#) or more of greenhouse gases and directly emits or has the potential to emit 100,000 [tons per year](#) or more CO<sub>2</sub>e, including fugitive emissions.

~~(D) A major stationary source as defined in part D of Title I of the Act, including:~~

~~(i) For ozone nonattainment areas, sources with the potential to emit 100 tpy or more of VOCs or oxides of nitrogen in areas classified as "marginal" or "moderate," 50 tpy or more in areas classified as "serious," 25 tpy or more in areas classified as "severe," and 10 tpy or more in areas classified as "extreme"; except that the references in this paragraph of this subsection to 100, 50, 25, and 10 tpy of nitrogen oxides do not apply with respect to any source for which the Administrator has made a finding, under section 182(f)(1) or (2) of the Act, that requirements under section 182(f) of the Act do not apply;~~

~~(ii) For ozone transport regions established pursuant to section 184 of the Act, sources with the potential to emit 50 tpy or more of VOCs;~~

~~(iii) For carbon monoxide nonattainment areas:~~

~~(I) That are classified as "serious"; and~~

~~(II) In which stationary sources contribute significantly to carbon monoxide levels as determined under rules issued by the Administrator, sources with the potential to emit 50 tpy or more of carbon monoxide.~~

~~(iv) For particulate matter (PM<sub>10</sub>) nonattainment areas classified as "serious," sources with the potential to emit 70 tpy or more of PM<sub>10</sub>.~~

~~(9273)~~ "Material ~~B~~[b](#)alance" means a procedure for determining emissions based on the difference in the amount of material added to a process and the amount consumed and/or recovered from a process.

~~(9374)~~ "Modification," except as used in the terms "major modification," "[permit modification](#)" and "[Title I modification](#)," means any physical change to, or change in the method of operation of, a ~~stationary~~[source or part of a source](#) that results in an increase in the ~~stationary source or part of the~~[source's potential to emit any regulated](#) ~~air~~[pollutant](#) on an hourly basis. Modifications do not include the following:

(a) Increases in hours of operation or production rates that do not involve a physical change or change in the method of operation;

(b) Changes in the method of operation due to using an alternative fuel or raw material that the ~~stationary~~[source or part of a source](#) was physically capable of accommodating during the baseline period; and

(c) Routine maintenance, repair and like-for-like replacement of components unless they increase the expected life of the ~~stationary~~[source or part of a source](#) by using component upgrades that would not otherwise be necessary for the ~~stationary~~[source or part of a source](#) to function.

(9475) "Monitoring" means any form of collecting data on a routine basis to determine or otherwise assess compliance with emission limitations or standards. Monitoring may include record keeping if the records are used to determine or assess compliance with an emission limitation or standard (such as records of raw material content and usage, or records documenting compliance with work practice requirements). Monitoring may include conducting compliance method tests, such as the procedures in appendix A to 40 CFR part 60, on a routine periodic basis. Requirements to conduct such tests on a one-time basis, or at such times as a regulatory authority may require on a non-regular basis, are not considered monitoring requirements for purposes of this definition. Monitoring may include one or more than one of the following data collection techniques as appropriate for a particular circumstance:

- (a) Continuous emission or opacity monitoring systems.
- (b) Continuous process, capture system, control device or other relevant parameter monitoring systems or procedures, including a predictive emission monitoring system.
- (c) Emission estimation and calculation procedures (e.g., mass balance or stoichiometric calculations).
- (d) Maintaining and analyzing records of fuel or raw materials usage.
- (e) Recording results of a program or protocol to conduct specific operation and maintenance procedures.
- (f) Verifying emissions, process parameters, capture system parameters, or control device parameters using portable or in situ measurement devices.
- (g) Visible emission observations and recording.
- (h) Any other form of measuring, recording, or verifying on a routine basis emissions, process parameters, capture system parameters, control device parameters or other factors relevant to assessing compliance with emission limitations or standards.

(95) "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.

(9676) "Netting ~~B~~basis" means ~~the baseline~~ emission rate determined as specified in OAR 340-222-0046 ~~MINUS any emission reductions required by rule, orders, or permit conditions required by the SIP or used to avoid SIP requirements, MINUS any unassigned emissions that are reduced from allowable under OAR 340-222-0045, MINUS any emission reduction credits transferred off-site, PLUS any emission increases approved through the New Source Review regulations in OAR 340 division 224 MINUS any emissions reductions required by subsection (g) of this section.~~

~~(a) A netting basis will only be established for regulated pollutants subject to OAR 340 division 224 as specified in the definition of regulated pollutant.~~

~~(b) The initial PM<sub>2.5</sub> netting basis and PSEL for a source that was permitted prior to May 1, 2011 will be established with the first permitting action issued after July 1, 2011, provided the permitting action involved a public notice period that began after July 1, 2011.~~

~~(A) The initial netting basis is the PM<sub>2.5</sub> fraction of the PM<sub>10</sub> netting basis in effect on May 1, 2011. DEQ may increase the initial PM<sub>2.5</sub> netting basis by up to 5 tons if necessary to avoid exceedance of the PM<sub>2.5</sub> significant emission rate as of May 1, 2011.~~

~~(B) Notwithstanding OAR 340-222-0041(2), the initial source-specific PSEL for a source with PTE greater than or equal to the SER will be set equal to the PM<sub>2.5</sub> fraction of the PM<sub>10</sub> PSEL.~~

~~(c) The initial greenhouse gas netting basis and PSEL for a source will be established with the first permitting action issued after July 1, 2011, provided the permitting action involved a public notice period that began after July 1, 2011.~~

~~(d) Netting basis is zero for:~~

~~(A) Any regulated pollutant emitted from a source that first obtained permits to construct and operate after the applicable baseline period for that regulated pollutant, and has not undergone New Source Review for that pollutant;~~

~~(B) Any pollutant that has a generic PSEL in a permit;~~

~~(C) Any source permitted as portable; or~~

~~(D) Any source with a netting basis calculation resulting in a negative number.~~

~~(e) If a source relocates to an adjacent site, and the time between operation at the old and new sites is less than six months, the source may retain the netting basis from the old site.~~

~~(f) Emission reductions required by rule, order, or permit condition affect the netting basis if the source currently has devices or emissions units that are subject to the rules, order, or permit condition. The baseline emission rate is not affected. The netting basis reduction will be effective on the effective date of the rule, order, or permit condition requiring the reduction. The PSEL reduction will be effective on the compliance date of the rule, order, or permit condition.~~

~~(g) For permits issued after May 1, 2011 under New Source Review regulations in OAR 340 division 224, and where the netting basis initially equaled the potential to emit for a new or modified source, the netting basis will be reduced in accordance with the definition of actual emissions. Notwithstanding OAR 340-222-0041(2), this adjustment does not require a reduction in the PSEL.~~

~~(h) Emission reductions required by rule do not include emissions reductions achieved under OAR 340-226-0110 and 0120.~~

~~(i) Netting basis for a pollutant with a revised definition will be adjusted if the source is emitting the pollutant at the time of redefining and the pollutant is included in the permit's netting basis.~~

~~(j) Where EPA requires an attainment demonstration based on dispersion modeling, the netting basis will be established at no more than the level used in the dispersion modeling to demonstrate attainment with the ambient air quality standard (i.e., the attainment demonstration is an emission reduction required by rule).~~

~~(9777) "Nitrogen Oxides" or "NOx" means all oxides of nitrogen except nitrous oxide.~~

(9878) "Nonattainment ~~A~~area" means a geographical area of the ~~S~~state, as designated by the EQC Environmental Quality Commission or the EPA, that exceeds any state or federal primary or secondary ambient air quality standard.

(9979) "Nonattainment ~~P~~pollutant" means a regulated pollutant for which an area is designated a nonattainment area.

(10080) "Normal ~~S~~source ~~O~~operation" means operations ~~s-which do~~ that does not include such conditions as forced fuel substitution, equipment malfunction, or highly abnormal market conditions.

(101) "Odor" means that property of an air contaminant that affects the sense of smell.

(10284) "Offset" means an equivalent or greater emission reduction that is required before allowing an emission increase from a proposed major source or major modification of an existing source.

(10382) "Opacity" means the degree to which ~~an~~ emissions, excluding uncombined water, reduces ~~the~~ transmission of light and obscures the view of an object in the background as measured by EPA Method 9 or other method, as specified in each applicable rule. ~~as measured in accordance with OAR 340-212-0120 and 212-0140. Unless otherwise specified by rule, opacity shall be measured in accordance with EPA Method 9 or a continuous opacity monitoring system (COMS) installed and operated in accordance with DEQ's Continuous Monitoring Manual. For all standards, the minimum observation period shall 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 equal or exceed the opacity percentage in the standard, whether or not the readings are consecutive.~~

(10483) "Oregon Title V ~~O~~operating ~~P~~permit" or "Title V permit" means any written permit authorization covering an Oregon Title V Operating Permit source that is issued, renewed, amended, or revised pursuant to OAR 340 division 218.

(10584) "Oregon Title V ~~O~~operating ~~P~~permit program" or "Title V program" means ~~a~~ the Oregon program described in OAR 340 division 218 and approved by the Administrator under 40 CFR Part 70.

(10685) "Oregon Title V ~~O~~operating ~~P~~permit program source" or "Title V source" means any source subject to the permitting requirements, OAR 340 division 218.

(10786) "Ozone ~~P~~precursor" means nitrogen oxides and volatile organic compounds ~~as measured by an applicable reference method in accordance with DEQ's Source Sampling Manual (January, 1992) or as measured by an EPA reference method in 40 CFR Part 60, appendix A or as measured by a material balance calculation for VOC as appropriate.~~

(10887) "Ozone ~~S~~season" means the contiguous 3 month period during which ozone exceedances typically occur (i.e., June, July, and August).

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

(11088) "Particulate ~~M~~matter" means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by the test method specified in each applicable rule, or where not specified by rule, in the permit. ~~When used in emission standards, particulate matter is defined by the method~~

~~specified within the standard or by an applicable reference method in accordance with OAR 340-212-0120 and 340-212-0140. Unless otherwise specified, sources with exhaust gases at or near ambient conditions may be tested with DEQ Method 5 or DEQ Method 8, as approved by DEQ. 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.~~

(~~111~~<sup>89</sup>) "Permit" means an Air Contaminant Discharge Permit or an Oregon Title V Operating Permit.

(~~112~~<sup>90</sup>) "Permit modification" means a permit revision that meets the applicable requirements of OAR 340 division 216, [OAR](#) 340 division 224, or [OAR](#) 340-218-0160 through 340-218-0180.

(~~113~~<sup>91</sup>) "Permit revision" means any permit modification or administrative permit amendment.

(~~114~~<sup>92</sup>) "Permitted ~~E~~missions" as used in OAR [340](#) division 220 means each regulated pollutant portion of the PSEL, as identified in an ACDP, Oregon Title V Operating Permit, review report, or by DEQ pursuant to OAR 340-220-0090.

(~~115~~<sup>93</sup>) "Permittee" means the owner or operator of ~~the facility~~<sup>a source</sup>, authorized [to emit regulated pollutants under by thean](#) ACDP or ~~the~~ Oregon Title V Operating Permit ~~to operate the source~~.

(~~116~~<sup>94</sup>) "Person" means individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, the State of Oregon and any agencies thereof, and the federal government and any agencies thereof.

(~~117~~<sup>95</sup>) "Plant Site Emission Limit" or "PSEL" means the total mass emissions per unit time of an individual [regulated air](#) pollutant specified in a permit for a source. The PSEL for a major source may consist of more than one permitted emission [for purposes of Oregon Title V Operating Permit Fees in OAR 340 division 220](#).

[\(118\) "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.](#)

(~~119~~<sup>96</sup>) "PM10":

(a) When used in the context of emissions, means finely divided solid or liquid material, including condensable particulate, other than uncombined water, with an aerodynamic diameter less than or equal to a nominal 10 micrometers, emitted to the ambient air as measured by ~~an applicable the reference~~<sup>test</sup> method [specified in each applicable rule or, where not specified by rule, in each individual permit](#)~~in accordance with DEQ's Source Sampling Manual(January, 1992);~~

(b) When used in the context of ambient concentration, means airborne finely divided solid or liquid material with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured ~~in accordance with~~ [under 40 CFR Part 50, Appendix J or an equivalent method designated under 40 CFR Part 53.](#)

(~~120~~<sup>97</sup>) "PM2.5":

(a) When used in the context of direct PM2.5 emissions, means finely divided solid or liquid material, including condensable particulate, other than uncombined water, with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers, emitted to the ambient air as measured by [the test method specified in each applicable](#)

rule or, where not specified by rule, in each individual permit~~EPA reference methods 201A and 202 in 40 CFR Part 51, appendix M.~~

(b) When used in the context of PM<sub>2.5</sub> precursor emissions, means sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) emitted to the ambient air as measured by the test method specified in each applicable rule or, where not specified by rule, in each individual permit~~EPA reference methods in 40 CFR Part 60, appendix A.~~

(c) When used in the context of ambient concentration, means airborne finely divided solid or liquid material~~particles~~ with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured under by a reference method based on 40 CFR Part 50, Appendix L, or an equivalent method designated ~~in accordance with~~ under 40 CFR Part 53.

~~(12198)~~ "PM<sub>2.5</sub> fraction" means the fraction of PM<sub>2.5</sub> in relation to PM<sub>10</sub> for each emissions unit that is included in the netting basis and PSEL.

~~(12299)~~ "Pollutant-specific emissions unit" means an emissions unit considered separately with respect to each regulated ~~air~~ pollutant.

~~(12300)~~ "Potential to emit" or "PTE" means the lesser of:

(a) The regulated pollutant emissions capacity of a stationary source; or

(b) The maximum allowable regulated pollutant emissions taking into consideration any physical or operational limitation, including ~~air pollution control equipment~~ use of control devices and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, if the limitation is enforceable by the Administrator.

(c) This definition does not alter or affect the use of this term for any other purposes under the ~~Act~~ FCAA or the term "capacity factor" as used in Title IV of the ~~Act~~ FCAA and the regulations promulgated thereunder. Secondary emissions are not considered in determining the potential to emit.

(124) "ppm" means parts per million by volume unless otherwise specified in the applicable rule or an individual permit. It is a dimensionless unit of measurement for gases that expresses the ratio of the volume of one component gas to the volume of the entire sample mixture of gases.

~~(12504)~~ "Predictive emission monitoring system" or ("PEMS") means a system that uses process and other parameters as inputs to a computer program or other data reduction system to produce values in terms of the applicable emission limitation or standard.

(126) "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.

~~(12702)~~ "Process ~~U~~upset" means a failure or malfunction of a production process or system to operate in a normal and usual manner.

(12803) "Proposed permit" means the version of an Oregon Title V Operating Permit that DEQ or ~~a Regional Agency~~LRAPA proposes to issue and forwards to the Administrator for review in compliance with OAR 340-218-0230.

(129) "Reattainment area" means an area that is designated as nonattainment and has three consecutive years of monitoring data that shows the area is meeting the ambient air quality standard for the regulated pollutant for which the area was designated a nonattainment area, but a formal redesignation by EPA has not yet been approved.

(130) "Reattainment pollutant" means a regulated pollutant for which an area is designated a reattainment area.

(13104) "Reference method" means any method of sampling and analyzing for ~~an air~~ regulated pollutant as specified in 40 CFR Part 52, 60, 61 or 63.

(13205) "Regional ~~A~~agency" means Lane Regional Air Protection Agency.

(13306) "Regulated air pollutant" or "Regulated ~~P~~pollutant":

(a) Except as provided in subsections (b) and ~~(c)-of this section~~, means:

(A) Nitrogen oxides or any VOCs;

(B) Any pollutant for which ~~an national~~ ambient air quality standard has been promulgated, including any precursors to such pollutants;

(C) Any pollutant that is subject to any standard promulgated under section 111 of the ~~Act~~FCAA;

(D) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the FCAA~~Act~~;

(E) Any pollutant listed under OAR 340-244-0040 or 40 CFR 68.130; and

(F) Greenhouse ~~G~~gases.

(b) As used in OAR 340 division 220, Oregon Title V Operating Permit Fees, regulated pollutant means particulates matter, volatile organic compounds, oxides of nitrogen and sulfur dioxide.

(c) As used in OAR 340 division 222 Plant Site Emission Limits and division 224, New Source Review, regulated pollutant does not include any pollutant listed in OAR 340 divisions 244 and 246, ~~unless the pollutant is listed in Table 2 (significant emission rates).~~

(134) "Removal efficiency" means the performance of an air pollution control device in terms of the ratio of the amount of the regulated pollutant removed from the airstream to the total amount of regulated pollutant that enters the air pollution control device.

(13507) "Renewal" means the process by which a permit is reissued at the end of its term.

(13608) "Responsible official" means one of the following:

(a) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for



the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(A) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or

(B) The delegation of authority to such representative is approved in advance by DEQ or ~~Lane Regional Air Protection Agency~~ [LRAPA](#).

(b) For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

(c) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this division, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of ~~the agency~~ [EPA](#) (e.g., a Regional Administrator of the EPA); or

(d) For affected sources:

(A) The designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the ~~Act~~ [FCAA](#) or the regulations promulgated there under are concerned; and

(B) The designated representative for any other purposes under the Oregon Title V Operating Permit program.

(1~~37~~<sup>99</sup>) "Secondary ~~E~~missions" means emissions that are a result of the construction and/or operation of a source or modification, but that do not come from the source itself. Secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the source associated with the secondary emissions. Secondary emissions may include, but are not limited to:

(a) Emissions from ships and trains coming to or from a facility;

(b) Emissions from off-site support facilities that would be constructed or would otherwise increase emissions as a result of the construction or modification of a source.

(1~~38~~<sup>10</sup>) "Section 111" means section 111 of the FCAA, [42 U.S.C. A. § 7411](#), which includes Standards of Performance for New Stationary Sources (NSPS).

(1~~39~~<sup>11</sup>) "Section 111(d)" means subsection 111(d) of the FCAA, [42 U.S.C. A. § 7411\(d\)](#), which requires states to submit to the EPA plans that establish standards of performance for existing sources and provides for implementing and enforcing such standards.

(1~~40~~<sup>12</sup>) "Section 112" means section 112 of the FCAA, [42 U.S.C. A. § 7412](#), which contains regulations for Hazardous Air Pollutants ~~(HAP)~~.

(1~~41~~<sup>13</sup>) "Section 112(b)" means subsection 112(b) of the FCAA, [42 U.S.C. A. § 7412\(b\)](#), which includes the list of hazardous air pollutants to be regulated.

(1~~42~~<sup>14</sup>) "Section 112(d)" means subsection 112(d) of the FCAA, [42 U.S.C. A. § 7412\(d\)](#), which directs the EPA to establish emission standards for sources of hazardous air pollutants. This section also defines the criteria to be used by the EPA when establishing the emission standards.



- (1~~43~~<sup>45</sup>) "Section 112(e)" means subsection 112(e) of the FCAA, [42 U.S.C. A. § 7412\(e\)](#), which directs the EPA to establish and promulgate emissions standards for categories and subcategories of sources that emit hazardous air pollutants.
- (1~~44~~<sup>46</sup>) "Section 112(r)(7)" means subsection 112(r)(7) of the FCAA, [42 U.S.C. A. § 7412\(r\)\(7\)](#), which requires the EPA to promulgate regulations for the prevention of accidental releases and requires owners or operators to prepare risk management plans.
- (1~~45~~<sup>47</sup>) "Section 114(a)(3)" means subsection 114(a)(3) of the FCAA, [42 U.S.C. A. § 7414\(a\)\(3\)](#), which requires enhanced monitoring and submission of compliance certifications for major sources.
- (1~~46~~<sup>48</sup>) "Section 129" means section 129 of the FCAA, [42 U.S.C. A. § 7429](#), which requires the EPA to establish emission standards and other requirements for solid waste incineration units.
- (1~~47~~<sup>49</sup>) "Section 129(e)" means subsection 129(e) of the FCAA, [42 U.S.C. A. § 7429\(e\)](#), which requires solid waste incineration units to obtain Oregon Title V Operating Permits.
- (1~~48~~<sup>20</sup>) "Section 182(f)" means subsection 182(f) of the FCAA, [42 U.S.C. A. § 7511a\(f\)](#), which requires states to include plan provisions in the ~~State Implementation Plan~~ [SIP](#) for NOx in ozone nonattainment areas.
- (1~~49~~<sup>24</sup>) "Section 182(f)(1)" means subsection 182(f)(1) of the FCAA, [42 U.S.C. A. § 7511a\(f\)\(1\)](#), which requires states to apply those plan provisions developed for major VOC sources and major NOx sources in ozone nonattainment areas.
- (1~~50~~<sup>22</sup>) "Section 183(e)" means subsection 183(e) of the FCAA, [42 U.S.C. A. § 7511b\(e\)](#), which requires the EPA to study and develop regulations for the control of certain VOC sources under federal ozone measures.
- (1~~51~~<sup>23</sup>) "Section 183(f)" means subsection 18~~23~~<sup>23</sup>(f) of the FCAA, [42 U.S.C. A. § 7511b\(f\)](#), which requires the EPA to develop regulations pertaining to tank vessels under federal ozone measures.
- (1~~52~~<sup>24</sup>) "Section 184" means section 184 of the FCAA, [42 U.S.C. A. § 7511c](#), which contains regulations for the control of interstate ozone air pollution.
- (1~~53~~<sup>25</sup>) "Section 302" means section 302 of the FCAA, [42 U.S.C. A. § 7602](#), which contains definitions for general and administrative purposes in the [FCAA](#) ~~Act~~.
- (1~~54~~<sup>26</sup>) "Section 302(j)" means subsection 302(j) of the FCAA, [42 U.S.C. A. § 7602\(j\)](#), which contains definitions of "major stationary source" and "major emitting facility."
- (1~~55~~<sup>27</sup>) "Section 328" means section 328 of the FCAA, [42 U.S.C. A. § 7627](#), which contains regulations for air pollution from outer continental shelf activities.
- (1~~56~~<sup>28</sup>) "Section 408(a)" means subsection 408(a) of the FCAA, [42 U.S.C. A. § 7651g\(a\)](#), which contains regulations for the Title IV permit program.
- (1~~57~~<sup>29</sup>) "Section 502(b)(10) change" means a change which contravenes an express permit term but is not a change that:

(a) Would violate applicable requirements;

(b) Would contravene federally enforceable permit terms and conditions that are monitoring, recordkeeping, reporting, or compliance certification requirements; or

(c) Is a [FCAA](#) Title I modification.

(1~~5839~~) "Section 504(b)" means subsection 504(b) of the FCAA, [42 U.S.C. A. § 7661c\(b\)](#), which states that the EPA can prescribe by rule procedures and methods for determining compliance and for monitoring.

(1~~5934~~) "Section 504(e)" means subsection 504(e) of the FCAA, [42 U.S.C. A. § 761c\(e\)](#), which contains regulations for permit requirements for temporary sources.

(1~~6033~~) "Significant ~~E~~mission ~~R~~ate" or "SER," except as provided in subsections (v~~a~~) ~~through and~~ (w~~e~~)-of ~~this section~~, means an emission rate equal to or greater than the rates specified [for the regulated pollutants in Table 2 of this rule below](#):

[\(a\) Greenhouse gases \(CO<sub>2</sub>e\) = 75,000 tons per year](#)

[\(b\) Carbon monoxide = 100 tons per year except in a serious nonattainment area = 50 tons per year, provided DEQ has determined that stationary sources contribute significantly to carbon monoxide levels in that area.](#)

[\(c\) Nitrogen oxides \(NOX\) = 40 tons per year](#)

[\(d\) Particulate matter = 25 tons per year](#)

[\(e\) PM<sub>10</sub> = 15 tons per year](#)

[\(f\) Direct PM<sub>2.5</sub> = 10 tons per year](#)

[\(g\) PM<sub>2.5</sub> precursors \(SO<sub>2</sub> or NO<sub>x</sub>\) = 40 tons per year](#)

[\(h\) Sulfur dioxide \(SO<sub>2</sub>\) = 40 tons per year](#)

[\(i\) Ozone precursors \(VOC or NO<sub>x</sub>\) = 40 tons per year except ~~as provided below~~:](#)

[\(I\) In a serious or severe ozone nonattainment area = 25 tons per year](#)

[\(II\) In an extreme ozone nonattainment area = any emissions increase](#)

[\(j\) Lead = 0.6 tons per year](#)

[\(k\) Fluorides = 3 tons per year](#)

[\(l\) Sulfuric acid mist = 7 tons per year](#)

[\(m\) Hydrogen sulfide = 10 tons per year](#)

[\(n\) Total reduced sulfur \(including hydrogen sulfide\) = 10 tons per year](#)

[\(o\) Reduced sulfur compounds \(including hydrogen sulfide\) = 10 tons per year](#)

[\(p\) Municipal waste combustor organics \(measured as total tetra- through octa- chlorinated dibenzo-p-dioxins and dibenzofurans\) = 0.000035 tons per year](#)

(q) Municipal waste combustor metals (measured as particulate matter) = 15 tons per year

(r) Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride) = 40 tons per year

(s) Municipal solid waste landfill emissions (measured as nonmethane organic compounds) = 50 tons per year

(t) Ozone depleting substances in aggregate = 100 tons per year

(u) For the Medford-Ashland Air Quality Maintenance Area, the ~~Significant Emission Rate~~SER for PM<sub>10</sub> is defined ~~in Table 3~~as 5 tons per year on an annual basis and 50.0 pounds per day on a daily basis.

(v) For regulated ~~air~~ pollutants not listed ~~in Table 2 or 3 of this rule~~, in subsections (a) through (u), the ~~significant emission rate~~SER is zero unless ~~the Department~~DEQ determines the rate that constitutes a ~~significant emission rate~~SER.

(w) Any new source or modification with an emissions increase less than the rates specified ~~in Table 2 or 3 of this rule above and that is associated with a new source or modification which would construct~~located within 10 kilometers of a Class I area, and would have an impact on such area equal to or greater than 1 ug/m<sup>3</sup> (24 hour average) is emitting at a ~~significant emission rate~~SER. This ~~provision subsection~~ does not apply to greenhouse gas emissions.

(16132) "Significant ~~Air Quality Impact~~" or "Significant impact level" means an additional ambient air quality concentration equal to or greater than ~~in the concentrations listed below in Table 1 of this rule~~. The threshold concentrations listed ~~below in Table 1~~ are used for comparison against the ambient air quality standards and do not apply for protecting PSD Class I increments established under OAR 340 division 202, but do not apply for protecting or air quality related values (including visibility). For sources of VOC or NO<sub>x</sub>, a ~~major source or major modification~~ has a significant impact if it is located within the ~~Ozone Precursor impact D~~ distance defined in OAR 340- division 2245-0020.

(a) For Class I areas:

(A) PM<sub>2.5</sub>:

(i) annual = 0.06 µg/m<sup>3</sup>

(ii) 24-hour = 0.07 µg/m<sup>3</sup>

(B) PM<sub>10</sub>:

(i) annual = 0.20 µg/m<sup>3</sup>

(ii) 24-hour = 0.30 µg/m<sup>3</sup>

(C) Sulfur dioxide:

(i) annual = 0.10 µg/m<sup>3</sup>

(ii) 24-hour = 0.20 µg/m<sup>3</sup>

(iii) 3-hour = 1.0 µg/m<sup>3</sup>

(D) Nitrogen dioxide: annual = 0.10 µg/m<sup>3</sup>

(b) For Class II areas:

(A) PM<sub>2.5</sub>:

(i) annual = 0.3 µg/m<sup>3</sup>

(ii) 24-hour = 1.2 µg/m<sup>3</sup>

(B) PM<sub>10</sub>:

(i) annual = 0.20 µg/m<sup>3</sup>

(ii) 24-hour = 1.0 µg/m<sup>3</sup>

(C) Sulfur dioxide:

(i) annual = 1.0 µg/m<sup>3</sup>

(ii) 24-hour = 5.0 µg/m<sup>3</sup>

(iii) 3-hour = 25.0 µg/m<sup>3</sup>

(iv) 1-hour = 8.0 µg/m<sup>3</sup>

(D) Nitrogen dioxide:

(i) annual = 1.0 µg/m<sup>3</sup>

(ii) 1-hour = 8.0 µg/m<sup>3</sup>

(E) Carbon monoxide:

(i) 8-hour = 0.5 mg/m<sup>3</sup>

(ii) 1-hour = 2.0 mg/m<sup>3</sup>

(c) For Class III areas:

(A) PM<sub>2.5</sub>:

(i) annual = 0.3 µg/m<sup>3</sup>

(ii) 24-hour = 1.2 µg/m<sup>3</sup>

(B) PM<sub>10</sub>:

(i) annual = 0.20 µg/m<sup>3</sup>

(ii) 24-hour = 1.0 µg/m<sup>3</sup>

(C) Sulfur dioxide:

(i) annual = 1.0 µg/m<sup>3</sup>

(ii) 24-hour = 5.0 µg/m<sup>3</sup>

(iii) 3-hour = 25.0 µg/m<sup>3</sup>

(D) Nitrogen dioxide: annual = 1.0 µg/m<sup>3</sup>

(E) Carbon monoxide:

(i) 8-hour = 0.5 mg/m<sup>3</sup>

(ii) 1-hour = 2.0 mg/m<sup>3</sup>

~~(133) "Significant Emission Rate" or "SER," except as provided in subsections (a) through (c) of this section, means an emission rate equal to or greater than the rates specified in Table 2.~~

~~(a) For the Medford-Ashland Air Quality Maintenance Area, the Significant Emission Rate for PM<sub>10</sub> is defined in Table 3.~~

~~(b) For regulated air pollutants not listed in Table 2 or 3, the significant emission rate is zero unless DEQ determines the rate that constitutes a significant emission rate.~~

~~(c) Any new source or modification with an emissions increase less than the rates specified in Table 2 or 3 associated with a new source or modification which would construct within 10 kilometers of a Class I area, and would have an impact on such area equal to or greater than 1 µg/m<sup>3</sup> (24 hour average) is emitting at a significant emission rate. This provision does not apply to greenhouse gas emissions.~~

~~(16234)~~ "Significant ~~I~~mpairment" occurs when DEQ determines that visibility impairment interferes with the management, protection, preservation, or enjoyment of the visual experience within a Class I area. DEQ will make this determination on a case-by-case basis after considering the recommendations of the Federal Land

Manager and the geographic extent, intensity, duration, frequency, and time of visibility impairment. These factors will be considered along with visitor use of the Class I areas, and the frequency and occurrence of natural conditions that reduce visibility.

(16335) "Small scale local energy project" means:

- (a) A system, mechanism or series of mechanisms located primarily in Oregon that directly or indirectly uses or enables the use of, by the owner or operator, renewable resources including, but not limited to, solar, wind, geothermal, biomass, waste heat or water resources to produce energy, including heat, electricity and substitute fuels, to meet a local community or regional energy need in this state;
- (b) A system, mechanism or series of mechanisms located primarily in Oregon or providing substantial benefits to Oregon that directly or indirectly conserves energy or enables the conservation of energy by the owner or operator, including energy used in transportation;
- (c) A recycling project;
- (d) An alternative fuel project;
- (e) An improvement that increases the production or efficiency, or extends the operating life, of a system, mechanism, series of mechanisms or project otherwise described in this section of this rule, including but not limited to restarting a dormant project;
- (f) A system, mechanism or series of mechanisms installed in a facility or portions of a facility that directly or indirectly reduces the amount of energy needed for the construction and operation of the facility and that meets the sustainable building practices standard established by the State Department of Energy by rule; or
- (g) A project described in subsections (a) to (f) of this section, whether or not the existing project was originally financed under ORS 470, together with any refinancing necessary to remove prior liens or encumbrances against the existing project.
- (h) A project described in subsections (a) to (g) of this section that conserves energy or produces energy by generation or by processing or collection of a renewable resource.

(16436) "Source" means any building, structure, facility, installation or combination thereof that emits or is capable of emitting air contaminants to the atmosphere, 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. The term includes all ~~pollutant~~ air contaminant emitting activities that belong to a single major industrial group (i.e., that have the same two-digit code) as described in the Standard Industrial Classification Manual, (U.S. Office of Management and Budget, 1987) or that support the major industrial group.

(16537) "Source category":

- (a) Except as provided in subsection (b) ~~-of this section~~, means all the regulated pollutant emitting activities that belong to the same industrial grouping (i.e., that have the same two-digit code) as described in the Standard Industrial Classification Manual, (U.S. Office of Management and Budget, 1987).

(b) As used in OAR 340 division 220, Oregon Title V Operating Permit Fees, means a group of major sources that DEQ determines are using similar raw materials and have equivalent process controls and pollution control ~~equipment~~[device](#).

(166~~38~~) "Source ~~T~~est" means the average of at least three test runs conducted ~~in accordance with~~[under the](#) DEQ's Source Sampling Manual.

[\(167\) "Standard conditions" means a temperature of 68° Fahrenheit \(20° Celsius\) and a pressure of 14.7 pounds per square inch absolute \(1.03 Kilograms per square centimeter\).](#)

(168~~39~~) "Startup" and "shutdown" means that time during which ~~an air contaminant~~ source or ~~emission-control device~~ [equipment](#) is brought into normal operation or normal operation is terminated, respectively.

(169~~40~~) "State Implementation Plan" or "SIP" means the State of Oregon Clean Air Act Implementation Plan as adopted by the ~~Commission~~[EQC](#) under OAR 340-200-0040 and approved by EPA.

[\(170\) "State New Source Review" or "State NSR" means the new source review process and requirements applicable to sources that are not subject to Major NSR. The requirements for State NSR are provided in OAR 340-224-0010 and 340-224-0200 through 340-224-0270.](#)

(171~~41~~) "Stationary source" means any building, structure, facility, or installation at a source that emits or may emit any regulated ~~air~~ pollutant. [Stationary source includes portable sources that are required to have permits under OAR 340 division 216.](#)

(172~~42~~) "Substantial ~~U~~nderpayment" means the lesser of ~~ten~~[10](#) percent (~~10%~~) of the total interim emission fee for the major source or five hundred dollars.

[\(173\) "Sustainment area" means a geographical area of the state for which DEQ has ambient air quality monitoring data that shows an attainment or unclassified area could become a nonattainment area but a formal redesignation by EPA has not yet been approved. The presumptive geographic boundary of a sustainment area is the applicable urban growth boundary in effect on the date this rule was last approved by the EQC, unless superseded by rule.](#)

[\(174\) "Sustainment pollutant" means a regulated pollutant for which an area is designated a sustainment area.](#)

(175~~43~~) "Synthetic minor source" means a source that would be classified as a major source under OAR 340-200-0020, but for limits on its potential to emit [regulated](#) ~~air~~ pollutants contained in [an ACDP or Oregon Title V](#) permit issued by DEQ ~~under OAR 340-division 216 or 218~~.

(176~~44~~) "Title I modification" means one of the following modifications pursuant to Title I of the FCAA:

(a) A major modification subject to OAR 340-224-0050, Requirements for Sources in Nonattainment Areas [or OAR 340-224-0055, Requirements for Sources in Reattainment Areas](#);

(b) A major modification subject to OAR 340-224-0060, Requirements for Sources in Maintenance Areas;

(c) A major modification subject to OAR 340-224-0070, Prevention of Significant Deterioration Requirements for Sources in Attainment or Unclassified Areas [or OAR 340-224-0045 Requirements for Sources in Sustainment Areas](#);

- (d) A modification that is subject to a New Source Performance Standard under Section 111 of the FCAA; or
- (e) A modification under Section 112 of the FCAA.

(177~~45~~) "Total ~~R~~reduced ~~S~~sulfur" or "TRS" means the sum of the sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide, dimethyl disulfide, and any other organic sulfides present expressed as hydrogen sulfide (H<sub>2</sub>S).

(178) "Type A State NSR action" means a State NSR action that is the result of a major modification and requires a control technology (BACT or LAER) analysis.

(179) "Type B State NSR action" means a State NSR action that is not a Type A State NSR action.

(180~~46~~) "Typically Achievable Control Technology" or "TACT" means the emission limit established on a case-by-case basis for a criteria pollutant from a particular emissions unit ~~in accordance with~~ under OAR 340-226-0130. ~~For existing sources, the emission limit established will be typical of the emission level achieved by emissions units similar in type and size. For new and modified sources, the emission limit established will be typical of the emission level achieved by well-controlled new or modified emissions units similar in type and size that were recently installed. TACT determinations will be based on information known to DEQ while considering pollution prevention, impacts on other environmental media, energy impacts, capital and operating costs, cost effectiveness, and the age and remaining economic life of existing emission control equipment. DEQ may consider emission control technologies typically applied to other types of emissions units where such technologies could be readily applied to the emissions unit. If an emission limitation is not feasible, a design, equipment, work practice, operational standard, or combination thereof, may be required.~~

(181~~47~~) "Unassigned ~~E~~missions" means the amount of emissions that are in excess of the PSEL but less than the ~~N~~etting ~~B~~asis.

(182~~48~~) "Unavoidable" or "could not be avoided" means events that are not caused entirely or in part by ~~poor or inadequate~~ design, operation, maintenance, or any other preventable condition in either process or control ~~equipment~~ device.

(183) "Unclassified area" or "attainment area" means an area that has not otherwise been designated by EPA as nonattainment with ambient air quality standards for a particular regulated pollutant. Attainment areas or unclassified areas may also be referred to as sustainment or maintenance areas as designated in OAR 340 division 204. Any particular location may be part of an attainment area or unclassified area for one regulated pollutant while also being in a different type of designated area for another regulated pollutant.

(184~~9~~) "Upset" or "Breakdown" means any failure or malfunction of any pollution control ~~equipment~~ device or operating equipment that may cause excess emissions.

(185) "Veneer" means a single flat panel of wood not exceeding 1/4 inch in thickness formed by slicing or peeling from a log.

(186) "Veneer dryer" means equipment in which veneer is dried.

(187~~50~~) "Visibility ~~I~~mpairment" means any humanly perceptible change in visual range, contrast or coloration from that which existed under natural conditions. Natural conditions include fog, clouds, windblown dust, rain, sand, naturally ignited wildfires, and natural aerosols.

(18854) "Volatile ~~O~~rganic ~~C~~ompounds" or "VOC" means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, that participates in atmospheric photochemical reactions.

(a) This includes any such organic compound other than the following, which have been determined to have negligible photochemical reactivity:

(A) methane;

(B) ethane;

(C) methylene chloride (dichloromethane);

(D) 1,1,1-trichloroethane (methyl chloroform);

(E) 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113);

(F) trichlorofluoromethane (CFC-11);

(G) dichlorodifluoromethane (CFC-12);

(H) chlorodifluoromethane (HCFC-22);

(I) trifluoromethane (HFC-23);

(J) 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114);

(K) chloropentafluoroethane (CFC-115);

(L) 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123);

(M) 1,1,1,2-tetrafluoroethane (HFC-134a);

(N) 1,1-dichloro 1-fluoroethane (HCFC-141b);

(O) 1-chloro 1,1-difluoroethane (HCFC-142b);

(P) 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124);

(Q) pentafluoroethane (HFC-125);

(R) 1,1,2,2-tetrafluoroethane (HFC-134);

(S) 1,1,1-trifluoroethane (HFC-143a);

(T) 1,1-difluoroethane (HFC-152a);

(U) parachlorobenzotrifluoride (PCBTF);

(V) cyclic, branched, or linear completely methylated siloxanes;

(W) acetone;

(X) perchloroethylene (tetrachloroethylene);

(Y) 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca);

(Z) 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb);

(AA) 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee);

(BB) difluoromethane (HFC-32);

(CC) ethylfluoride (HFC-161);

(DD) 1,1,1,3,3,3-hexafluoropropane (HFC-236fa);

(EE) 1,1,2,2,3-pentafluoropropane (HFC-245ca);

(FF) 1,1,2,3,3-pentafluoropropane (HFC-245ea);

(GG) 1,1,1,2,3-pentafluoropropane (HFC-245eb);

(HH) 1,1,1,3,3-pentafluoropropane (HFC-245fa);

(II) 1,1,1,2,3,3-hexafluoropropane (HFC-236ea);

(JJ) 1,1,1,3,3-pentafluorobutane (HFC-365mfc);

(KK) chlorofluoromethane (HCFC-31);

(LL) 1 chloro-1-fluoroethane (HCFC-151a);



(MM) 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a);  
 (NN) 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane (C<sub>4</sub> F<sub>9</sub> OCH<sub>3</sub> or HFE-7100);  
 (OO) 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF<sub>3</sub>)<sub>2</sub> CFCF<sub>2</sub> OCH<sub>3</sub>);  
 (PP) 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C<sub>4</sub> F<sub>9</sub> OC<sub>2</sub> H<sub>5</sub> or HFE-7200);  
 (QQ) 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF<sub>3</sub>)<sub>2</sub> CFCF<sub>2</sub> OC<sub>2</sub> H<sub>5</sub>);  
 (RR) methyl acetate;  
 (SS) 1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (n-C<sub>3</sub>F<sub>7</sub>OCH<sub>3</sub>, HFE-7000);  
 (TT) 3-ethoxy- 1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane (HFE-7500);  
 (UU) 1,1,1,2,3,3,3-heptafluoropropane (HFC 227ea);  
 (VV) methyl formate (HCOOCH<sub>3</sub>);  
 (WW) 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300);  
 (XX) propylene carbonate;  
 (YY) dimethyl carbonate;  
 (ZZ) *trans* -1,3,3,3-tetrafluoropropene (also known as HFO-1234ze);  
 (AAA) HCF<sub>2</sub> OCF<sub>2</sub> H (HFE-134);  
 (BBB) HCF<sub>2</sub> OCF<sub>2</sub> OCF<sub>2</sub> H (HFE-236cal2);  
 (CCC) HCF<sub>2</sub> OCF<sub>2</sub> CF<sub>2</sub> OCF<sub>2</sub> H (HFE-338pcc13);  
 (DDD) HCF<sub>2</sub> OCF<sub>2</sub> OCF<sub>2</sub> CF<sub>2</sub> OCF<sub>2</sub> H (H-Galden 1040x or H-Galden ZT 130 (or 150 or 180));  
 (EEE) *trans* 1-chloro-3,3,3-trifluoroprop-1-ene (also known as Solstice<sup>TM</sup> 1233zd(E));  
 (FFF) 2,3,3,3-tetrafluoropropene (also known as HFO-1234yf);  
 (GGG) 2-amino-2-methyl-1-propanol; and  
 (HHH) perfluorocarbon compounds which fall into these classes: ~~This includes any such organic compound except the following, which have been determined to have negligible photochemical reactivity in the formation of tropospheric ozone: methane; ethane; methylene chloride(dichloromethane); dimethyl carbonate, propylene carbonate, 1,1,1 trichloroethane(methyl chloroform); 1,1,2 trichloro 1,2,2 trifluoroethane(CFC-113); trichlorofluoromethane(CFC-11); dichlorodifluoromethane(CFC-12); chlorodifluoromethane(HCFC-22); trifluoromethane(HFC-23); 1,2 dichloro 1,1,2,2 tetrafluoroethane (CFC-114); chloropentafluoroethane(CFC-115); 1,1,1 trifluoro 2,2 dichloroethane(HCFC-123); 1,1,1,2 tetrafluoroethane(HFC-134a); 1,1 dichloro 1-fluoroethane(HCFC-141b); 1-chloro 1,1-difluoroethane(HCFC-142b); 2-chloro 1,1,1,2-tetrafluoroethane(HCFC-124); pentafluoroethane(HFC-125); 1,1,2,2-tetrafluoroethane(HFC-134); 1,1,1-trifluoroethane(HFC-143a); 1,1-difluoroethane (HFC-152a); parachlorobenzotrifluoride(PCBTF); cyclic, branched, or linear completely methylated siloxanes; acetone; perchloroethylene(tetrachloroethylene); 3,3-dichloro-1,1,1,2,2-pentafluoropropane(HCFC-225ca); 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb); 1,1,1,2,3,4,4,5,5,5-decafluoropentane HFC-43-10mee); difluoromethane(HFC-32); ethylfluoride(HFC-161); 1,1,1,3,3,3-hexafluoropropane(HFC-236fa); 1,1,2,2,3-pentafluoropropane(HFC-245ca); 1,1,2,3,3-pentafluoropropane(HFC-245ea); 1,1,1,2,3-pentafluoropropane(HFC-245eb); 1,1,1,3,3-pentafluoropropane(HFC-245fa); 1,1,1,2,3,3-hexafluoropropane(HFC-236ea); 1,1,1,3,3-pentafluorobutane(HFC-365mfc); chlorofluoromethane (HCFC-31); 1-chloro-1-fluoroethane(HCFC-151a); 1,2-dichloro-1,1,2-trifluoroethane(HCFC-123a); 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane(C<sub>4</sub>F<sub>9</sub>OCH<sub>3</sub> or HFE-7100); 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane((CF<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OCH<sub>3</sub>); 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane(C<sub>4</sub>F<sub>9</sub>OC<sub>2</sub>H<sub>5</sub> or HFE-7200); 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OC<sub>2</sub>H<sub>5</sub>); methyl acetate; 1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane(n-C<sub>3</sub>F<sub>7</sub>OCH<sub>3</sub>, HFE-7000); 3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane(HFE-7500); 1,1,1,2,3,3,3-heptafluoropropane(HFC 227ea); methyl formate (HCOOCH<sub>3</sub>); (1) 1,1,1,2,2,3,4,5,5,5-~~

~~decafluoro-3-methoxy-4-trifluoromethyl-pentane(HFE-7300); and perfluorocarbon compounds that fall into these classes:~~

~~(iA)~~ Cyclic, branched, or linear, completely fluorinated alkanes;

~~(iiB)~~ Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;

~~(iiiC)~~ Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and

~~(ivD)~~ Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

(b) For purposes of determining compliance with emissions limits, VOC will be measured by an applicable reference method in ~~accordance with the~~ DEQ's Source Sampling Manual, ~~January, 1992~~. Where such a method also measures compounds with negligible photochemical reactivity, these negligibly-reactive compounds may be excluded as VOC if the amount of such compounds is accurately quantified, and DEQ approves the exclusion.

(c) DEQ may require an owner or operator to provide monitoring or testing methods and results demonstrating, to DEQ's satisfaction, the amount of negligibly-reactive compounds in the source's emissions.

(d) The following compound(s) are VOC for purposes of all recordkeeping, emissions reporting, photochemical dispersion modeling and inventory requirements which apply to VOC and must be uniquely identified in emission reports, but are not VOC for purposes of VOC emissions limitations or VOC content requirements: t-butyl acetate.

(189) "Wood fired veneer dryer" means a veneer dryer, that is directly heated by the products of combustion of wood fuel in addition to or exclusive of steam or natural gas or propane combustion.

(190) "Wood fuel-fired device" means a device or appliance designed for wood fuel combustion, including cordwood stoves, woodstoves and fireplace stove inserts, fireplaces, wood fuel-fired cook stoves, pellet stoves and combination fuel furnaces and boilers that burn wood fuels.

~~(19152)~~ "Year" means any consecutive 12 month period of time.

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

~~[ED. NOTE: Tables referenced are not included in rule text. Click here for PDF copy of table(s).]~~

Stat. Auth.: ORS 468.020, ~~& 468A.025, 468A.035, 468A.055 & 468A.070~~

Stats. Implemented: ORS 468A.025, ~~& 468A.035,~~ 468A.040, 468A.050, 468A.055, 468A.070, 468A.075, 468A.085, 468A.105, 468A.135, 468A.140, 468A.155, 468A.280, 468A.310, 468A.315, 468A.360, 468A.363, 468A.380, 468A.385, 468A.420, 468A.495, 468A.500, 468A.505, 468A.515, 468A.575, 468A.595, 468A.600, 468A.610, 468A.612, 468A.620, 468A.635, 468A.707, 468A.740, 468A.745, 468A.750, 468A.775, 468A.780, 468A.797, 468A.799, 468A.803, 468A.820, & Or. Laws 2009, chapter 754

Hist.: [DEQ 15-1978, f. & ef. 10-13-78; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-020-0033.04; DEQ 25-1981, f. & ef. 9-8-81; DEQ 5-1983, f. & ef. 4-18-83; DEQ 18-1984, f. & ef. 10-16-84; DEQ 8-1988, f. & cert. ef. 5-19-88 (and corrected 5-31-88); DEQ 14-1989, f. & cert. ef. 6-26-89; DEQ 42-1990, f. 12-13-90, cert. ef. 1-

2-91; DEQ 2-1992, f. & cert. ef. 1-30-92; DEQ 7-1992, f. & cert. ef. 3-30-92; DEQ 27-1992, f. & cert. ef. 11-12-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0145, 340-020-0225, 340-020-0305, 340-020-0355, 340-020-0460 & 340-020-0520; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 20-1993(Temp), f. & cert. ef. 11-4-93; DEQ 13-1994, f. & cert. ef. 5-19-94; DEQ 21-1994, f. & cert. ef. 10-14-94; DEQ 24-1994, f. & cert. ef. 10-28-94; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 12-1995, f. & cert. ef. 5-23-95; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 19-1996, f. & cert. ef. 9-24-96; DEQ 22-1996, f. & cert. ef. 10-22-96; DEQ 9-1997, f. & cert. ef. 5-9-97; DEQ 14-1998, f. & cert. ef. 9-14-98; DEQ 16-1998, f. & cert. ef. 9-23-98; DEQ 21-1998, f. & cert. ef. 10-14-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 6-1999, f. & cert. ef. 5-21-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-020-0205, 340-028-0110; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 2-2005, f. & cert. ef. 2-10-05; DEQ 2-2006, f. & cert. ef. 3-14-06; DEQ 6-2007(Temp), f. & cert. ef. 8-17-07 thru 2-12-08; DEQ 8-2007, f. & cert. ef. 11-8-07; DEQ 10-2008, f. & cert. ef. 8-25-08; DEQ 5-2010, f. & cert. ef. 5-21-10; DEQ 10-2010(Temp), f. 8-31-10, cert. ef. 9-1-10 thru 2-28-11; Administrative correction 3-29-11; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11; DEQ 7-2011(Temp), f. & cert. ef. 6-24-11 thru 12-19-11; Administrative correction, 2-6-12; DEQ 1-2012, f. & cert. ef. 5-17-12; DEQ 4-2013, f. & cert. ef. 3-27-13; DEQ 11-2013, f. & cert. ef. 11-7-13

## 340-200-0025

### Abbreviations and Acronyms

(1) ["AAQS" means ambient air quality standard.](#)

(24) "ACDP" means Air Contaminant Discharge Permit.

(32) "ACT" means Federal Clean Air Act.

(43) "AE" means Actual Emissions.

(54) "AICPA" means Association of Independent Certified Public Accountants.

(65) "AQCR" means Air Quality Control Region.

(7) ["AQRV" means Air Quality Related Value](#)

(86) "AQMA" means Air Quality Maintenance Area.

(97) "ASME" means American Society of Mechanical Engineers.

(108) "ASTM" means American Society for Testing & Materials.

(911) "ATETP" means Automotive Technician Emission Training Program.

(120) "AWD" means all wheel drive.

(134) "BACT" means Best Available Control Technology.

(14) ["BART" means Best Available Retrofit Technology.](#)

(152) "BLS" means black liquor solids.

(163) "CAA" means Clean Air Act

(174) "CAR" means control area responsible party.

(185) "CBD" means central business district.

(196) "CCTMP" means Central City Transportation Management Plan.

(2017) "CEM" means continuous emissions monitoring.

(218) "CEMS" means continuous emission monitoring system.

(2249) "CERCLA" means Comprehensive Environmental Response Compensation and Liability Act.

(239) "CFRMS" means continuous flow rate monitoring system.

(241) "CFR" means Code of Federal Regulations.

(252) "CMS" means continuous monitoring system.

(263) "CO" means carbon monoxide.

(274) "CO<sub>2</sub>e" means carbon dioxide equivalent.

(285) "COMS" means continuous opacity monitoring system.

(296) "CPMS" means continuous parameter monitoring system.

(3027) "DEQ" means Department of Environmental Quality.

(3128) "DOD" means Department of Defense.

(329) "EA" means environmental assessment.

(339) "ECO" means employee commute options.

(341) "EEAF" means emissions estimate adjustment factor.

(352) "EF" means emission factor.

(363) "EGR" means exhaust gas re-circulation.

(374) "EIS" means Environmental Impact Statement.

(385) "EPA" means Environmental Protection Agency.

(396) "EQC" means Environmental Quality Commission.

(4037) "ESP" means electrostatic precipitator.

(4138) "FCAA" means Federal Clean Air Act.

(4239) "FHWA" means Federal Highway Administration.

(439) "FONSI" means finding of no significant impact.

(441) "FTA" means Federal Transit Administration.

(452) "GFA" means gross floor area.

(463) "GHG" means greenhouse gases.

(474) "GLA" means gross leasable area.

(485) "GPM" means grams per mile.

(496) "gr/dscf" means grains per dry standard cubic foot.

(5047) "GTBA" means grade tertiary butyl alcohol.

(5148) "GVWR" means gross vehicle weight rating.

(5249) "HAP" means hazardous air pollutant.

(539) "HEPA" means high efficiency particulate air.

(541) "HMIWI" means hospital medical infectious waste incinerator.

(552) "I/M" means inspection and maintenance program.

(563) "IG" means inspection grade.

(574) "IRS" means Internal Revenue Service.

(585) "ISECP" means indirect source emission control program.

(596) "ISTEA" means Intermodal Surface Transportation Efficiency Act.

(6057) "LAER" means Lowest Achievable Emission Rate.

(6158) "LDT2" means light duty truck 2.

(6259) "LIDAR" means laser radar; light detection and ranging.

(639) "LPG" means liquefied petroleum gas.

(641) "LRAPA" means Lane Regional Air Protection Agency.

(652) "LUCS" means Land Use Compatibility Statement.

(663) "MACT" means Maximum Achievable Control Technology.

(674) "MPO" means Metropolitan Planning Organization.

(685) "MTBE" means methyl tertiary butyl ether.

(696) "MWC" means municipal waste combustor.

(70~~67~~) "NAAQS" means National Ambient Air Quality Standards.

(71) ["NAICS" means North American Industrial Classification System.](#)

(72~~68~~) "NEPA" means National Environmental Policy Act.

(73~~69~~) "NESHAP" means National Emissions Standard for Hazardous Air Pollutants.

(74~~70~~) "NIOSH" means National Institute of Occupational Safety & Health.

(75~~71~~) "NOx" means nitrogen oxides.

(76~~72~~) "NSPS" means New Source Performance Standards.

(77~~73~~) "NSR" means New Source Review.

(78~~74~~) "NSSC" means neutral sulfite semi-chemical.

(79~~75~~) "O3" means ozone.

(80~~76~~) "OAR" means Oregon Administrative Rules.

(81~~77~~) "ODOT" means Oregon Department of Transportation.

(82~~78~~) "ORS" means Oregon Revised Statutes.

(83~~79~~) "OSAC" means orifice spark advance control.

(84~~80~~) "OSHA" means Occupational Safety & Health Administration.

(85~~81~~) "PCDCE" means pollution control device collection efficiency.

(86~~82~~) "PEMS" means predictive emission monitoring system.

(87~~83~~) "PM" means particulate matter.

(88~~84~~) "PM10" means particulate matter less than 10 microns.

(89~~85~~) "PM2.5" means particulate matter less than 2.5 microns.

(90~~86~~) "POTW" means Publicly Owned Treatment Works.

(91~~87~~) "POV" means privately owned vehicle.

(92) ["ppm" means parts per million.](#)

(93~~88~~) "PSD" means Prevention of Significant Deterioration.

(94~~89~~) "PSEL" means Plant Site Emission Limit.

(95~~90~~) "QIP" means quality improvement plan.

(96~~91~~) "RACT" means Reasonably Available Control Technology.

(97) “ROI” means range of influence.

(98~~2~~) "RVCOG" means Rogue Valley Council of Governments.

(99~~3~~) "RWOC" means running weighted oxygen content.

~~(94) "SKATS" means Salem-Kaiser Area Transportation Study.~~

(100~~95~~) "scf" means standard cubic feet.

(101~~96~~) "SCS" means speed control switch.

(102~~97~~) "SD" means standard deviation.

(103) “SERP” means source emission reduction plan.

(104) “SIC” means Standard Industrial Classification from the Standard Industrial Classification Manual (U.S. Office of Management and Budget, 1987).

(105~~98~~) "SIP" means State Implementation Plan.

(106) "SKATS" means Salem-Kaiser Area Transportation Study.

(107) “SLAMS” means State or Local Air Monitoring Stations.

(108~~99~~) "SO2" means sulfur dioxide.

(109~~90~~) "SOCMI" means synthetic organic chemical manufacturing industry.

(110~~+~~) "SOS" means Secretary of State.

(111) “SPMs” means Special Purpose Monitors.

(112~~02~~) "TAC" means thermostatic air cleaner.

(113~~03~~) "TACT" means Typically Achievable Control Technology.

(114~~04~~) "TCM" means transportation control measures.

(115~~05~~) "TCS" means throttle control solenoid.

(116~~06~~) "TIP" means Transportation Improvement Program.

(117) “tpy” means tons per year.

(118~~07~~) "TRS" means total reduced sulfur.

(119~~08~~) "TSP" means total suspended particulate matter.

(120~~09~~) "UGA" means urban growth area.

(121~~0~~) "UGB" means urban growth boundary.

(122~~911~~) "US DOT" means United States Department of Transportation.

(12312) "UST" means underground storage tanks.

(12413) "UTM" means universal transverse mercator.

(12514) "VIN" means vehicle identification number.

(12615) "VMT" means vehicle miles traveled.

(12716) "VOC" means volatile organic compounds.

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

Stat. Auth.: ORS 468.020 [and 468A](#)

Stats. Implemented: ORS 468A

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 3-2007, f. & cert. ef. 4-12-07; DEQ 8-2007, f. & cert. ef. 11-8-07; DEQ 5-2010, f. & cert. ef. 5-21-10; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

| <div><div><div>State of Oregon<br/>Department of<br/>Environmental<br/>Quality</div><div><div>State of Oregon Department of Environmental Quality</div><div>Significant Air Quality Impact</div><div>Table 1 <del>OAR 340-200-0020</del></div></div></div></div> |                |                              |          |           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------|----------|-----------|
| Pollutant                                                                                                                                                                                                                                                                                                                                          | Averaging Time | Air Quality Area Designation |          |           |
|                                                                                                                                                                                                                                                                                                                                                    |                | Class I                      | Class II | Class III |
| SO <sub>2</sub> (µg/m <sup>3</sup> )*                                                                                                                                                                                                                                                                                                              | Annual         | 0.10                         | 1.0      | 1.0       |
|                                                                                                                                                                                                                                                                                                                                                    | 24-hour        | 0.20                         | 5.9      | 5.0       |
|                                                                                                                                                                                                                                                                                                                                                    | 3-hour         | 1.0                          | 25.0     | 25.0      |
| PM <sub>10</sub> (µg/m <sup>3</sup> )                                                                                                                                                                                                                                                                                                              | Annual         | 0.20                         | 0.20     | 0.20      |
|                                                                                                                                                                                                                                                                                                                                                    | 24-hour        | 0.30                         | 1.0      | 1.0       |
| PM <sub>2.5</sub> (µg/m <sup>3</sup> )                                                                                                                                                                                                                                                                                                             | Annual         | 0.06                         | 0.3      | 0.3       |
|                                                                                                                                                                                                                                                                                                                                                    | 24-hour        | 0.07                         | 1.2      | 1.2       |
| NO <sub>2</sub> (µg/m <sup>3</sup> )                                                                                                                                                                                                                                                                                                               | Annual         | 0.10                         | 1.0      | 1.0       |
| CO (mg/m <sup>3</sup> )**                                                                                                                                                                                                                                                                                                                          | 8-hour         | —                            | 0.5      | 0.5       |
|                                                                                                                                                                                                                                                                                                                                                    | 1-hour         | —                            | 2.0      | 2.0       |
| *micrograms/cubic meter                                                                                                                                                                                                                                                                                                                            |                |                              |          |           |
| **milligrams/cubic meter                                                                                                                                                                                                                                                                                                                           |                |                              |          |           |





State of Oregon  
Department of  
Environmental  
Quality

## State of Oregon Department of Environmental Quality Significant Emission Rates

Table 2 – OAR 340-200-0020

~~-20-8010)~~

| Pollutant                                                                                                                     | Emission Rate      |
|-------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Greenhouse Gases (CO <sub>2</sub> e)                                                                                          | 75,000 tons/year   |
| Carbon Monoxide                                                                                                               | 100 tons/year      |
| Nitrogen Oxides (NO <sub>x</sub> )                                                                                            | 40 tons/year       |
| Particulate Matter                                                                                                            | 25 tons/year       |
| PM10                                                                                                                          | 15 tons/year       |
| Direct PM2.5                                                                                                                  | 10 tons/year       |
| PM2.5 precursors (SO <sub>2</sub> or NO <sub>x</sub> )                                                                        | 40 tons/year       |
| Sulfur Dioxide (SO <sub>2</sub> )                                                                                             | 40 tons/year       |
| Volatile Organic Compounds (VOC)                                                                                              | 40 tons/year       |
| Ozone precursors (VOC or NO <sub>x</sub> )                                                                                    | 40 tons/year       |
| Lead                                                                                                                          | 0.6 ton/year       |
| Fluorides                                                                                                                     | 3 tons/year        |
| Sulfuric Acid Mist                                                                                                            | 7 tons/year        |
| Hydrogen Sulfide                                                                                                              | 10 tons/year       |
| Total Reduced Sulfur (including hydrogen sulfide)                                                                             | 10 tons/year       |
| Reduced sulfur compounds (including hydrogen sulfide)                                                                         | 10 tons/year       |
| Municipal waste combustor organics (measured as total tetra- through octa- chlorinated dibenzo- p- dioxins and dibenzofurans) | 0.0000035 ton/year |
| Municipal waste combustor metals (measured as particulate matter)                                                             | 15 tons/year       |
| Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride)                                       | 40 tons/year       |
| Municipal solid waste landfill emissions (measured as nonmethane organic compounds)                                           | 50 tons/year       |



**State of Oregon Department of Environmental Quality**  
**Significant Emission Rates for the Medford-Ashland Air**  
**Quality Maintenance Area**  
**Table 3 OAR 340-200-0020**

| Air Contaminant  | Emission Rate   |             |
|------------------|-----------------|-------------|
|                  | Annual          | Day         |
| PM <sub>10</sub> | (5.0 tons/year) | (50.0 lbs.) |



State of Oregon  
Department of  
Environmental  
Quality

## State of Oregon Department of Environmental Quality De Minimis Emission Levels

Table 4 OAR 340-200-0020(33)

| Pollutant                                              | De minimis (tons/year, except as noted) |
|--------------------------------------------------------|-----------------------------------------|
| Greenhouse Gases (CO <sub>2</sub> e)                   | 2,756                                   |
| CO                                                     | ±                                       |
| NO <sub>x</sub>                                        | ±                                       |
| SO <sub>2</sub>                                        | ±                                       |
| VOC                                                    | ±                                       |
| PM                                                     | ±                                       |
| PM <sub>10</sub> (except Medford AQMA)                 | ±                                       |
| PM <sub>10</sub> /PM <sub>2.5</sub> (Medford AQMA)     | 0.5 [5.0 lbs/day]                       |
| Direct PM <sub>2.5</sub>                               | ±                                       |
| Lead                                                   | 0.1                                     |
| Fluorides                                              | 0.3                                     |
| Sulfuric Acid Mist                                     | 0.7                                     |
| Hydrogen Sulfide                                       | ±                                       |
| Total Reduced Sulfur (including hydrogen sulfide)      | ±                                       |
| Reduced Sulfur                                         | ±                                       |
| Municipal waste combustor organics (Dioxin and furans) | 0.0000005                               |
| Municipal waste combustor metals                       | ±                                       |
| Municipal waste combustor acid gases                   | ±                                       |
| Municipal solid waste landfill gases                   | ±                                       |
| Single HAP                                             | ±                                       |
| Combined HAP (aggregate)                               | ±                                       |



# State of Oregon Department of Environmental Quality

## Generic PSEs

### Table 5 OAR 340-200-0020(60)

| Pollutant                                              | Generic PSEL<br>(tons/year, except as noted) |
|--------------------------------------------------------|----------------------------------------------|
| Greenhouse Gases (CO <sub>2</sub> e)                   | 74,000                                       |
| CO                                                     | 99                                           |
| NO <sub>x</sub>                                        | 39                                           |
| SO <sub>2</sub>                                        | 39                                           |
| VOC                                                    | 39                                           |
| PM                                                     | 24                                           |
| PM <sub>10</sub> (except Medford AQMA)                 | 14                                           |
| PM <sub>10</sub> /PM <sub>2.5</sub> (Medford AQMA)     | 4.5 [49 lbs/day]                             |
| PM <sub>2.5</sub>                                      | 9                                            |
| Lead                                                   | 0.5                                          |
| Fluorides                                              | 2                                            |
| Sulfuric Acid Mist                                     | 6                                            |
| Hydrogen Sulfide                                       | 9                                            |
| Total Reduced Sulfur (including hydrogen sulfide)      | 9                                            |
| Reduced Sulfur                                         | 9                                            |
| Municipal waste combustor organics (Dioxin and furans) | 0.0000030                                    |
| Municipal waste combustor metals                       | 14                                           |
| Municipal waste combustor acid gases                   | 39                                           |
| Municipal solid waste landfill gases                   | 49                                           |
| Single HAP                                             | 9                                            |
| Combined HAPs (aggregate)                              | 24                                           |

## Exceptions

(1) Except as provided in section (2) ~~of this rule~~, OAR Chapter 340, divisions 200 through 268 do not apply to:

(a) Agricultural operations, including but not limited to:

(A) Growing or harvesting crops;

(B) Raising fowl or animals;

(C) Clearing or grading agricultural land;

(D) Propagating and raising nursery stock;

(E) Propane flaming of mint stubble; and

(F) Stack or pile burning of residue from Christmas trees, as defined in ORS 571.505, during the period beginning October 1 and ending May 31 of the following year.

(b) Equipment used in agricultural operations, except boilers used in connection with propagating and raising nursery stock.

(c) Barbecue equipment used in connection with any residence.

(d) Heating equipment in or used in connection with residences used exclusively as dwellings for not more than four families, except woodstoves which shall be subject to regulation under ~~this section, ORS 468A.460 to 468A.480, 468A.490 and 468A.515.~~ [OAR 340 divisions 240 and 262, and as provided in ORS 468A.020\(1\)\(d\). Emissions from woodstoves can be used to create emission reduction credits in OAR 340 division 268.](#)

(e) Fires set or permitted by any public agency when such fire is set or permitted in the performance of its official duty for the purpose of weed abatement, prevention or elimination of a fire hazard, or instruction of employees in the methods of fire fighting, which in the opinion of the agency is necessary.

(f) Fires set pursuant to permit for the purpose of instruction of employees of private industrial concerns in methods of fire fighting, or for civil defense instruction.

(2) Section (1) ~~of this rule~~ does not apply to the extent:

(a) Otherwise provided in ORS 468A.555 to 468A.620, 468A.790, 468A.992, 476.380 and 478.960;

(b) Necessary to implement the federal Clean Air Act (P.L. 88-206 as amended) under ORS 468A.025, 468A.030, 468A.035, 468A.040, 468A.045 and 468A.300 to 468A.330; or

(c) Necessary for the ~~Environmental Quality Commission~~ [EQC](#), in the commission's discretion, to implement a recommendation of the Task Force on Dairy Air Quality created under section 3, chapter 799, Oregon Laws 2007, for the regulation of dairy air contaminant emissions.

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

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

Stat. Auth.: ORS 468.020 & 468A

Stats. Implemented: ORS 468A.020~~5~~

Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70; DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-020-0003; DEQ 12-2008, f. & cert. ef. 9-17-08

### 340-200-0035

#### Reference Materials

As used in divisions 200 through 268, the following materials refer to the versions listed below.

(1) "CFR" means Code of Federal Regulations and, unless otherwise expressly identified, refers to the July 1, 2014 edition.

(2) The DEQ Source Sampling Manual refers to the January 2015 edition.

(3) The DEQ Continuous Monitoring Manual refers to the January 2015 edition.

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

Stat. Auth.: ORS 468.020 & 468A

Stats. Implemented: ORS 468A

Hist.:

### **340-200-0040**

#### **State of Oregon Clean Air Act Implementation Plan**

(1) This implementation plan, consisting of Volumes 2 and 3 of the State of Oregon Air Quality Control Program, contains control strategies, rules and standards prepared by DEQ and is adopted as the ~~s~~State ~~i~~Implementation ~~p~~Plan (SIP) of the State of Oregon pursuant to the ~~federal Clean Air Act~~FCAA, 42 U.S.C.A 7401 to 7671q.

(2) Except as provided in section (3), revisions to the SIP will be made pursuant to the ~~Commission~~EQC's rulemaking procedures in OAR 340 division 11 of this chapter and any other requirements contained in the SIP and will be submitted to the ~~United States Environmental Protection Agency~~EPA for approval. The ~~State Implementation Plan~~SIP was last modified by the ~~Commission~~EQC on [INSERT SOS FILING DATE OF RULES].

(3) Notwithstanding any other requirement contained in the SIP, DEQ may:

(a) Submit to the ~~Environmental Protection Agency~~EPA any permit condition implementing a rule that is part of the federally-approved SIP as a source-specific SIP revision after DEQ has complied with the public hearings provisions of 40 CFR 51.102 ~~(July 1, 2002)~~; and

(b) Approve the standards submitted by ~~a regional authority~~LRAPA if ~~the regional authority~~LRAPA adopts verbatim, other than non-substantive differences, any standard that the ~~Commission~~EQC has adopted, and submit the standards to EPA for approval as a SIP revision.

**NOTE:**(4) Revisions to the State of Oregon Clean Air Act Implementation Plan become federally enforceable upon approval by the ~~United States Environmental Protection Agency~~EPA. If any provision of the federally approved State Implementation Plan conflicts with any provision adopted by the ~~Commission~~EQC, DEQ ~~shall~~must enforce the more stringent provision.

Stat. Auth.: ORS 468.020; ~~and 468A.035 & 468A.070~~

Stats. Implemented: ORS 468A.035 & 468A.135

Hist.: DEQ 35, f. 2-3-72, ef. 2-15-72; DEQ 54, f. 6-21-73, ef. 7-1-73; DEQ 19-1979, f. & ef. 6-25-79; DEQ 21-1979, f. & ef. 7-2-79; DEQ 22-1980, f. & ef. 9-26-80; DEQ 11-1981, f. & ef. 3-26-81; DEQ 14-1982, f. & ef. 7-21-82; DEQ 21-1982, f. & ef. 10-27-82; DEQ 1-1983, f. & ef. 1-21-83; DEQ 6-1983, f. & ef. 4-18-83; DEQ 18-1984, f. & ef. 10-16-84; DEQ 25-1984, f. & ef. 11-27-84; DEQ 3-1985, f. & ef. 2-1-85; DEQ 12-1985, f. & ef. 9-30-85; DEQ 5-1986, f. & ef. 2-21-86; DEQ 10-1986, f. & ef. 5-9-86; DEQ 20-1986, f. & ef. 11-7-86; DEQ 21-1986, f. & ef. 11-7-86; DEQ 4-1987, f. & ef. 3-2-87; DEQ 5-1987, f. & ef. 3-2-87; DEQ 8-1987, f. & ef. 4-23-87; DEQ 21-1987, f. & ef. 12-16-87; DEQ 31-1988, f. 12-20-88, cert. ef. 12-23-88; DEQ 2-1991, f. & cert. ef. 2-14-91; DEQ 19-1991, f. & cert. ef. 11-13-91; DEQ 20-1991, f. & cert. ef. 11-13-91; DEQ 21-1991, f. & cert. ef. 11-13-91; DEQ 22-1991, f. & cert. ef. 11-13-91; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 24-1991, f. & cert. ef. 11-13-91; DEQ 25-1991, f. & cert. ef. 11-13-91; DEQ 1-1992, f. & cert. ef. 2-4-92; DEQ 3-1992, f. & cert. ef. 2-4-92; DEQ 7-1992, f. & cert. ef. 3-30-92; DEQ 19-1992, f. & cert. ef. 8-11-92; DEQ 20-1992, f. & cert. ef. 8-11-92; DEQ 25-1992, f. 10-30-92, cert. ef. 11-1-92; DEQ 26-1992, f. & cert. ef. 11-2-92; DEQ 27-1992, f. & cert. ef. 11-12-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 8-1993, f. & cert. ef. 5-11-93; DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 15-1993, f. & cert. ef. 11-4-93; DEQ 16-1993, f. & cert. ef. 11-4-93; DEQ 17-1993, f. & cert. ef. 11-4-93; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 1-1994, f. & cert. ef. 1-3-94; DEQ 5-1994, f. & cert. ef. 3-21-94; DEQ 14-1994, f. & cert. ef. 5-31-94; DEQ 15-1994, f. 6-8-94, cert. ef. 7-1-94; DEQ 25-1994, f. & cert. ef. 11-2-94; DEQ 9-1995, f. & cert. ef. 5-1-95; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 17-1995, f. & cert. ef. 7-12-95; DEQ 19-1995, f. & cert. ef. 9-1-95; DEQ 20-1995 (Temp), f. & cert. ef. 9-14-95; DEQ 8-1996(Temp), f. & cert. ef. 6-3-96; DEQ 15-1996, f. & cert. ef. 8-14-96; DEQ 19-1996, f. & cert. ef. 9-24-96; DEQ 22-1996, f. & cert. ef. 10-22-96; DEQ 23-1996, f. & cert. ef. 11-4-96; DEQ 24-1996, f. & cert. ef. 11-26-96; DEQ 10-1998, f. & cert. ef. 6-22-98; DEQ 15-1998, f. & cert. ef. 9-23-98; DEQ 16-1998, f. & cert. ef. 9-23-98; DEQ 17-1998, f. & cert. ef. 9-23-98; DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 21-1998, f. & cert. ef. 10-12-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 5-1999, f. & cert. ef. 3-25-99; DEQ 6-1999, f. & cert. ef. 5-21-99; DEQ 10-1999, f. & cert. ef. 7-1-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-020-0047; DEQ 15-1999, f. & cert. ef. 10-22-99; DEQ 2-2000, f. 2-17-00, cert. ef. 6-1-01; DEQ 6-2000, f. & cert. ef. 5-22-00; DEQ 8-2000, f. & cert. ef. 6-6-00; DEQ 13-2000, f. & cert. ef. 7-28-00; DEQ 16-2000, f. & cert. ef. 10-25-00; DEQ 17-2000, f. & cert. ef. 10-25-00; DEQ 20-2000 f. & cert. ef. 12-15-00; DEQ 21-2000, f. & cert. ef. 12-15-00; DEQ 2-2001, f. & cert. ef. 2-5-01; DEQ 4-2001, f. & cert. ef. 3-27-01; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 15-2001, f. & cert. ef. 12-26-01; DEQ 16-2001, f. & cert. ef. 12-26-01; DEQ 17-2001, f. & cert. ef. 12-28-01; DEQ 4-2002, f. & cert. ef. 3-14-02; DEQ 5-2002, f. & cert. ef. 5-3-02; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 5-2003, f. & cert. ef. 2-6-03; DEQ 14-2003, f. & cert. ef. 10-24-03; DEQ 19-2003, f. & cert. ef. 12-12-03; DEQ 1-2004, f. & cert. ef. 4-14-04; DEQ 10-2004, f. & cert. ef. 12-15-04; DEQ 1-2005, f. & cert. ef. 1-4-05; DEQ 2-2005, f. & cert. ef. 2-10-05; DEQ 4-2005, f. 5-13-05, cert. ef. 6-1-05; DEQ 7-2005, f. & cert. ef. 7-12-05; DEQ 9-2005, f. & cert. ef. 9-9-05; DEQ 2-2006, f.

& cert. ef. 3-14-06; DEQ 4-2006, f. 3-29-06, cert. ef. 3-31-06; DEQ 3-2007, f. & cert. ef. 4-12-07; DEQ 4-2007, f. & cert. ef. 6-28-07; DEQ 8-2007, f. & cert. ef. 11-8-07; DEQ 5-2008, f. & cert. ef. 3-20-08; DEQ 11-2008, f. & cert. ef. 8-29-08; DEQ 12-2008, f. & cert. ef. 9-17-08; DEQ 14-2008, f. & cert. ef. 11-10-08; DEQ 15-2008, f. & cert. ef. 12-31-08; DEQ 3-2009, f. & cert. ef. 6-30-09; DEQ 8-2009, f. & cert. ef. 12-16-09; DEQ 2-2010, f. & cert. ef. 3-5-10; DEQ 5-2010, f. & cert. ef. 5-21-10; DEQ 14-2010, f. & cert. ef. 12-10-10; DEQ 1-2011, f. & cert. ef. 2-24-11; DEQ 2-2011, f. 3-10-11, cert. ef. 3-15-11; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11; DEQ 18-2011, f. & cert. ef. 12-21-11; DEQ 1-2012, f. & cert. ef. 5-17-12; DEQ 7-2012, f. & cert. ef. 12-10-12; DEQ 10-2012, f. & cert. ef. 12-11-12; DEQ 4-2013, f. & cert. ef. 3-27-13; DEQ 11-2013, f. & cert. ef. 11-7-13; DEQ 12-2013, f. & cert. ef. 12-19-13; DEQ 1-2014, f. & cert. ef. 1-6-14; DEQ 4-2014, f. & cert. ef. 3-31-14; DEQ 5-2014, f. & cert. ef. 3-31-14; DEQ 6-2014, f. & cert. ef. 3-31-14

### 340-200-0050

#### Compliance Schedules

(1) ~~The Department~~DEQ's goal is to encourage voluntary cooperation of all persons responsible for an air contamination source. To facilitate this cooperation and provide for a progressive program of air pollution control, ~~the Department~~DEQ may negotiate with such persons to establish a compliance schedule for meeting the requirements contained in the applicable air quality rules or statutes. The schedule will set forth the conditions with which the responsible person must comply.

(a) The schedule may be accepted in lieu of a hearing. It must be in writing and signed by the Director of ~~the Department~~DEQ or his designated officer and an authorized agent of the responsible person. After the schedule is executed by both parties, it must be confirmed by order of ~~the Department~~DEQ;

(b) Compliance schedules providing for final compliance at a date later than 18 months from the date of execution must contain requirements for periodic reporting and increments of progress toward compliance, at intervals of less than 18 months;

(c) No compliance schedule may allow emissions on a permanent basis in excess of applicable standards and rules.

(2) If a negotiated schedule of compliance cannot be established, ~~the Department~~DEQ may ~~set a show cause hearing~~commence enforcement proceedings as provided by ORS 468.090 ~~at a date and time designated as to why an order implementing a schedule proposed by the Department should not be adopted,~~ or take such other authorized action as may be warranted.

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

Stat. Auth.: ORS 468.020 & ~~ORS~~-468A

Stats. Implemented: ORS 468 & ~~ORS~~-468A

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0032; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-0700; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01



## Conflicts of Interest

### 340-200-0100

#### Purpose

The purpose of OAR 340-200-0100 through 340-200-0120 is to comply with the requirements of Section 128 of the ~~federal Clean Air Act~~[FCAA](#) regarding public interest representation by a majority of the members of the ~~Commission~~[EQC](#) and by the Director and disclosure by them of potential conflicts of interest.

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

Stat. Auth.: ORS 468.[020](#) & ~~ORS~~-468A

Stats. Implemented: ORS [468A.035](#) & 468A.310

Hist.: DEQ 15-1978, f. & ef. 10-13-78; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-020-0200; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-200-0110

#### Public Interest Representation

At least a majority of the members of the ~~Commission~~[EQC](#) and the Director must represent the public interest and may not derive any significant portion of their respective incomes directly from persons subject in Oregon to permits or enforcement orders under the ~~Clean Air Act~~[FCAA](#).

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

Stat. Auth.: ORS 468.[020](#) & ~~ORS~~-468A

Stats. Implemented: [468A.035](#) & ~~ORS~~-468A.310

Hist.: DEQ 15-1978, f. & ef. 10-13-78; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-020-0210; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-200-0120

#### Disclosure of Potential Conflicts of Interest

Each member of the ~~Commission~~[EQC](#) and the Director must disclose any potential conflict of interest.

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

Stat. Auth.: ORS 468.[020](#) & ~~ORS~~-468A

Stats. Implemented: ORS [468A.035](#) & 468A.310

Hist.: DEQ 15-1978, f. & ef. 10-13-78; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-020-0215; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## DIVISION 202

### AMBIENT AIR QUALITY STANDARDS AND PSD INCREMENTS

#### 340-202-0010

##### 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) "Ambient Air" means that portion of the atmosphere external to buildings, to which the general public has access.~~

~~(2) "Ambient Air Monitoring Site Criteria" means the general probe siting specifications as set forth in Appendix E of 40 CFR 58.~~

~~(13) "Approved Method" means an analytical method for measuring air contaminant concentrations described or referenced in 40 CFR 50 and Appendices. These methods are approved by the Department of Environmental Quality.~~

~~(4) "Baseline Concentration" means:~~

~~(a) Except as provided in subsection (c), the ambient concentration level for sulfur dioxide and PM10 that existed in an area during the calendar year 1978. Actual emission increases or decreases occurring before January 1, 1978 must be included in the baseline calculation, except that actual emission increases from any source or modification on which construction commenced after January 6, 1975 must not be included in the baseline calculation;~~

~~(b) The ambient concentration level for nitrogen oxides that existed in an area during the calendar year 1988.~~

~~(c) For the area of northeastern Oregon within the boundaries of the Umatilla, Wallowa-Whitman, Ochoco, and Malheur National Forests, the ambient concentration level for PM10 that existed during the calendar year 1993. The Department allows the use of a prior time period if the Department determines that it is more representative of normal emissions.~~

~~(d) For PM10 in the Medford-Ashland AQMA: the ambient PM10 concentration levels that existed during the year that EPA redesignates the AQMA to attainment for PM10.~~

~~(e) The ambient concentration level for PM2.5 that existed in an area during the calendar year 2007.~~

~~(f) If no ambient air quality data is available in an area, the baseline concentration may be estimated using modeling based on actual emissions for the years specified in subsections (a) through (e) of this section.~~

~~(5) "Indian Governing Body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.~~

~~(6) "Indian Reservation" means any federally recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.~~

~~(27) "Oregon Standard Method" means any method of sampling and analyzing for an air contaminant approved by the Department DEQ. Oregon standard methods are kept on file by the Department DEQ and include all methods described in the DEQ Source Sampling Manual and the DEQ Continuous Monitoring Manual referenced in OAR 340-200-0035(2) and (3), respectively.~~

~~(8) "PPM" means parts per million by volume. It is a dimensionless unit of measurement for gases that expresses the ratio of the volume of one component gas to the volume of the entire sample mixture of gases.~~

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

Stat. Auth.: ORS 468.020 & 468A.025

Stats. Implemented: ORS 468A.025 & 468A.035

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 18-1979, f. & ef. 6-22-79; DEQ 25-1981, f. & ef. 9-8-81; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88); DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 19-1993, f. & cert. ef. 11-4-93, Renumbered from 340-031-0105; DEQ 17-1995, f. & cert. ef. 7-12-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0005; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

## **340-202-0020**

### **Applicability**

Subject to the requirements in this division and ORS 468A.100 through 468A.180, ~~the Lane Regional Air Protection Agency LRAPA~~ is designated by the ~~Environmental Quality Commission EQC~~ as the Agency to implement this division within its area of jurisdiction. The requirements and procedures contained in this division must be used by ~~the Regional Agency LRAPA~~ to implement this division unless ~~the Regional Agency LRAPA~~ has adopted or adopts rules that are at least as strict as this division.

Stat. Auth.: ORS 468.020, ~~&~~ 468A.025 & 468A.035

Stat. Implemented: ORS 468A.025, 468A.035 & 468A.135

Hist.: DEQ 11-2013, f. & cert. ef. 11-7-13

## **Ambient Air Quality Standards**

### **340-202-0050**

#### **Purpose and Scope of Ambient Air Quality Standards**

(1) An ambient air quality standard is an established concentration, exposure time, and frequency of occurrence of an air contaminant or multiple contaminants in the ambient air that must not be exceeded. The ambient air

quality standards set forth in OAR 340-202-0050 through 340-202-0130 were established to protect both public health and public welfare.

(2) Ambient air quality standards are not generally used to determine the acceptability or unacceptability of emissions from a specific source of air contamination. More commonly, the measured ambient air quality is compared with the ambient air quality standards to determine the adequacy or effectiveness of emission standards for all sources in a general area. However, if a source or combination of sources are singularly responsible for a violation of ambient air quality standards in a particular area, it may be appropriate to impose emission standards that are more stringent than those otherwise applied to the class of sources involved. Similarly, proposed construction of new sources or expansions of existing sources, that may prevent or interfere with the attainment and maintenance of ambient air quality standards are grounds for issuing an order prohibiting such proposed construction as authorized by ORS 468A.055 and pursuant to OAR 340-210-0205~~0~~ through 340-210-025~~20~~, and OAR 340-218-0190. No source may cause or contribute to a new violation of an ambient air quality standard or PSD increment even if the single source impact is less than the significant impact level.

(3) In adopting the ambient air quality standards in this division, the ~~Environmental Quality Commission~~EQC recognizes that one or more of the standards are currently being exceeded in certain parts of the state. It is hereby declared to be the policy of the ~~Environmental Quality Commission~~EQC to achieve, by application of a timely but orderly program of pollution abatement, full compliance with ambient air quality standards throughout the state at the earliest possible date.

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

Stat. Auth.: ORS 468.020 & ~~ORS~~-468A

Stats. Implemented: ORS 468A.025& 468A.035

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0010; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## 340-202-0070

### Sulfur Dioxide

Concentrations of sulfur dioxide in ambient air as measured by an approved method must not exceed:

(1) 0.02 ppm as an annual arithmetic mean for any calendar year at any site as measured by the reference method described in appendix A of 40 CFR part 50 (~~effective upon EQC adoption October 16, 2013~~) or by an equivalent method designated in accordance with 40 CFR part 53 (~~effective upon EQC adoption October 16, 2013~~).

(2) 0.10 ppm as a 24-hour average concentration more than once per calendar year at any site as measured by the reference method described in appendix A of 40 CFR part 50 (~~effective upon EQC adoption October 16, 2013~~) or by an equivalent method designated in accordance with 40 CFR part 53 (~~effective upon EQC adoption October 16, 2013~~).

(3) 0.50 ppm as a three-hour average concentration more than once per calendar year at any site as measured by the reference method described in appendix A of 40 CFR part 50 ~~(effective upon EQC adoption October 16, 2013)~~.

(4) 0.075 ppm as a three-year average of the annual 99th percentile of the daily maximum 1-hour average concentration recorded at any monitoring site as determined by appendix T of 40 CFR part 50 ~~(effective upon EQC adoption October 16, 2013)~~ as measured by a reference method based on appendix A or A-1 of 40 CFR part 50 ~~(as of (effective upon EQC adoption October 16, 2013))~~, or by a Federal Equivalent Method (FEM) designated in accordance with 40 CFR part 53 ~~(effective upon EQC adoption October 16, 2013)~~.

Stat. Auth.: ORS 468.[020](#) & 468A

Stats. Implemented: ORS 468A.025 & [468A.035](#)

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88); DEQ 24-1991, 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 340-031-0020; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 11-2013, f. & cert. ef. 11-7-13

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

## **340-202-0100**

### **Nitrogen Dioxide**

Concentrations of nitrogen dioxide in ambient air as measured by a reference method based on appendix F to 40 CFR part 50 ~~(effective upon EQC adoption October 16, 2013)~~ or by a Federal equivalent method (FEM) designated in accordance with 40 CFR part 53 ~~(effective upon EQC adoption October 16, 2013)~~ must not exceed:

(1) 0.053 ppm as an annual average concentration for any calendar year at any site. The standard is met when the annual average concentration in a calendar year is less than or equal to 0.053 ppm, as determined in accordance with appendix S of 40 CFR part 50 ~~(effective upon EQC adoption October 16, 2013)~~ for the annual standard.

(2) 0.100 ppm as a 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations recorded at any monitoring site. The standards is met when the three-year average of the annual 98th percentile of the daily maximum 1-hour average concentration is less than or equal to 0.100 ppm, as determined in accordance with appendix S of 40 CFR Part 50 ~~(effective upon EQC adoption October 16, 2013)~~ for the 1-hour standard.

(3) 0.053 ppm as an annual arithmetic mean concentration as determined in accordance with Appendix S of 40 CFR Part 50 ~~(effective upon EQC adoption October 16, 2013)~~. The secondary standard is attained when the annual arithmetic mean concentration in a calendar year is less than or equal to 0.053 ppm, rounded to three decimal places (fractional parts equal to or greater than 0.0005 ppm must be rounded up). To demonstrate attainment, an annual mean must be based upon hourly data that are at least 75 percent complete or upon data derived from manual methods that are at least 75 percent complete for the scheduled sampling days in each calendar quarter.

Stat. Auth.: ORS 468.[020](#) & 468A

Stats. Implemented: ORS 468A.025 & [468A.035](#)

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88); DEQ 24-1991, 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 340-031-0040; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 11-2013, f. & cert. ef. 11-7-13

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

### **340-202-0110**

#### **Particle Fallout**

The particle fallout rate as measured by an Oregon standard method at a location approved by ~~the Department of Environmental Quality~~[DEQ](#) must not exceed:

- (1) 10 grams per square meter per month in an industrial area.
- (2) 5.0 grams per square meter per month in an industrial area if visual observations show a presence of wood waste or soot and the volatile fraction of the sample exceeds 70 percent.
- (3) 5.0 grams per square meter per month in residential and commercial areas.
- (4) 3.5 grams per square meter per month in residential and commercial areas if visual observations show the presence of wood waste or soot and the volatile fraction of the sample exceeds 70 percent.

Stat. Auth.: ORS 468.[020](#) & ~~ORS~~ 468A

Stats. Implemented: ORS 468A.025 & [468A.035](#)

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88); DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0045; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### **340-202-0130**

#### **Ambient Air Quality Standard for Lead**

The concentration of lead and its compounds in ambient air must not exceed:

- (1) 0.15 micrograms per cubic meter as a maximum arithmetic mean averaged over a calendar quarter, as measured by a reference method based on appendix G of 40 CFR Part 53 (~~effective upon EQC adoption October 16, 2013~~) or an equivalent method designated in accordance with 40 CFR Part 53 (~~effective upon EQC adoption October 16, 2013~~).
- (2) The standard is met when the maximum arithmetic 3-month mean concentration for a 3-year period, as determined in accordance with appendix R of 40 CFR Part (~~effective upon EQC adoption October 16, 2013~~), is less than or equal to 0.15 micrograms per cubic meter.

Stat. Auth.: ORS 468.[020](#) & 468A

Stats. Implemented: ORS 468A.025 & [468A.035](#)

Hist.: DEQ 85, f. 1-29-75, ef. 2-25-75; DEQ 1-1983, f. & ef. 1-21-83; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88); DEQ 24-1991, 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 340-031-0055; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 5-2010, f. & cert. ef. 5-21-10; DEQ 11-2013, f. & cert. ef. 11-7-13

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

## Prevention of Significant Deterioration Increments

### 340-202-0200

#### General

(1) The purpose of OAR 340-202-0200 through 340-202-0220 is to implement a program to prevent significant deterioration of air quality in the State of Oregon as required by the ~~federal Clean Air Act~~[FCAA](#) Amendments of 1977.

(2) ~~The Department~~[DEQ](#) will review the adequacy of the ~~State Implementation Plan~~[SIP](#) on a periodic basis and within 60 days of such time as information becomes available that an applicable increment is being violated. Any ~~Plan~~[SIP](#) revision resulting from the reviews will be subject to the opportunity for public hearing in accordance with procedures established in the ~~Plan~~[SIP](#).

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

Stat. Auth.: ORS 468.[020](#) & ~~ORS~~ 468A

Stats. Implemented: ORS 468A.025 & [468A.035](#)

Hist.: DEQ 18-1979, f. & ef. 6-22-79; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0100

### 340-202-0210

#### Ambient Air [PSD](#) Increments

(1) This rule defines significant deterioration. In areas designated as Class I, II or III, emissions from new or modified sources must be limited such that [aggregate](#) increases in [regulated](#) pollutant concentration over the baseline concentration, [as defined in OAR 340-225-0020, are less than the following PSD increments or maximum allowable increases:](#) ~~must be limited to those set out in Table 1.~~

[\(a\) For Class I areas:](#)

[\(A\) <sup>1</sup>PM<sub>2.5</sub>:](#)



(i) annual arithmetic mean = 1 microgram per cubic meter

(ii) 24-hour maximum = 2 micrograms per cubic meter

(B) PM10:

(i) annual arithmetic mean = 4 micrograms per cubic meter

(ii) 24-hour maximum = 8 micrograms per cubic meter

(C) Sulfur dioxide:

(i) annual arithmetic mean = 2 micrograms per cubic meter

(ii) 24-hour maximum = 5 micrograms per cubic meter

(iii) 3-hour maximum = 25 micrograms per cubic meter

(D) Nitrogen dioxide:

(i) annual arithmetic mean = 2.5 micrograms per cubic meter

(b) For Class II areas:

(A) <sup>1</sup>PM2.5:

(i) annual arithmetic mean = 4 micrograms per cubic meter

(ii) 24-hour maximum = 9 micrograms per cubic meter

(B) PM10:

(i) annual arithmetic mean = 17 micrograms per cubic meter

(ii) 24-hour maximum = 30 micrograms per cubic meter

(C) Sulfur dioxide:

(i) annual arithmetic mean = 20 micrograms per cubic meter

(ii) 24-hour maximum = 91 micrograms per cubic meter

(iii) 3-hour maximum = 512 micrograms per cubic meter

(D) Nitrogen dioxide:

(i) annual arithmetic mean = 25 micrograms per cubic meter

(c) For Class III areas:

(A) <sup>1</sup>PM2.5:

(i) annual arithmetic mean = 8 micrograms per cubic meter

(ii) 24-hour maximum = 18 micrograms per cubic meter

(B) PM10:

(i) annual arithmetic mean = 34 micrograms per cubic meter

(ii) 24-hour maximum = 60 micrograms per cubic meter

(C) Sulfur dioxide:

(i) annual arithmetic mean = 40 micrograms per cubic meter

(ii) 24-hour maximum = 182 micrograms per cubic meter

(iii) 3-hour maximum = 700 micrograms per cubic meter

(D) Nitrogen dioxide:

(i) annual arithmetic mean = 50 micrograms per cubic meter

~~<sup>+</sup>PM2.5 Increments will become effective on October 20, 2011.~~

(2) For any period other than an annual period, the applicable maximum allowable increase or PSD increment may be exceeded during one such period per year at any one location.

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

~~[ED. NOTE: Tables referenced are not included in rule text. Click here for PDF copy of table(s).]~~

Stat. Auth.: ORS 468.020 & 468A

Stats. Implemented: ORS 468A.025 & 468A.035

Hist.: DEQ 18-1979, f. & ef. 6-22-79; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88); DEQ 7-1992, f. & cert. ef. 3-30-92; DEQ 17-1995, f. & cert. ef. 7-12-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0110; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 10-2010(Temp), f. 8-31-10, cert. ef. 9-1-10 thru 2-28-11; Administrative correction, 3-29-11; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

## **340-202-0220**

### **Ambient Air Ceilings**

No concentration of a pollutant may exceed:

- (1) The concentration permitted under the national secondary ambient air quality standard; or
- (2) The concentration permitted under the national primary ambient air quality standard; or
- (3) The concentration permitted under the state ambient air quality standard, whichever concentration is lowest for the pollutant for a period of exposure.

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

Stat. Auth.: ORS 468.[020](#) & ~~ORS~~-468A

Stats. Implemented: ORS 468A.025 & [468A.035](#)

Hist.: DEQ 18-1979, f. & ef. 6-22-79; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0115; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## **340-202-0225**

### **Ambient Air Quality Limits for Maintenance Areas**

The following ambient air quality limits apply to the areas specified for the purpose of the air quality analysis in OAR 340-224-0060 and 340-224-0260, if required.

(1) In a carbon monoxide maintenance area, an air quality impact equal to or greater than 0.5 mg/m<sup>3</sup> (8 hour average) and 2 mg/m<sup>3</sup> (1-hour average).

(2) In a PM<sub>10</sub> maintenance area, an air quality impact less than or equal to:

(a) 120 ug/m<sup>3</sup> (24-hour average) in the Grants Pass PM<sub>10</sub> maintenance area;

(b) 140 ug/m<sup>3</sup> (24-hour average) in the Klamath Falls PM<sub>10</sub> maintenance area; or

(c) 140 ug/m<sup>3</sup> (24-hour average) in the Lakeview PM<sub>10</sub> maintenance area. In addition, a single source impact is limited to an increase of 5 ug/m<sup>3</sup> (24-hour average) in the Lakeview PM<sub>10</sub> maintenance area.

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

Stat. Auth.: ORS 468.020 & 468A

Stats. Implemented: ORS 468A.025 & 468A.035

Hist.: DEQ 26-1996, f. & cert. ef. 11-26-96; DEQ 15-1998, f. & cert. ef. 9-23-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1935; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 1-2005, f. & cert. ef. 1-4-05; DEQ 9-2005, f. & cert. ef. 9-9-05; DEQ 3-2007, f. & cert. ef. 4-12-07; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

**OAR 340-202-0210**

**Table 1**

**Maximum Allowable Increase  
micrograms per cubic meter**

| <b>Class I</b>                             |                                   |
|--------------------------------------------|-----------------------------------|
| <b>Pollutant</b>                           | <b>micrograms per cubic meter</b> |
| <b>Particulate Matter:</b>                 |                                   |
| <sup>1</sup> PM2.5, annual arithmetic mean | 1                                 |
| PM2.5, 24-hour maximum                     | 2                                 |
| PM10, annual arithmetic mean               | 4                                 |
| PM10, 24-hour maximum                      | 8                                 |
| <b>Sulfur dioxide:</b>                     |                                   |
| annual arithmetic mean                     | 2                                 |
| 24-hour maximum                            | 5                                 |
| 3-hour maximum                             | 25                                |
| <b>Nitrogen dioxide:</b>                   |                                   |
| annual arithmetic mean                     | 2.5                               |
| <b>Class II</b>                            |                                   |
| <b>Pollutant</b>                           | <b>micrograms per cubic meter</b> |
| <b>Particulate Matter:</b>                 |                                   |
| PM2.5, annual arithmetic mean              | 4                                 |
| PM2.5, 24-hour maximum                     | 9                                 |
| PM10, annual arithmetic mean               | 17                                |
| PM10, 24-hour maximum                      | 30                                |
| <b>Sulfur dioxide:</b>                     |                                   |
| annual arithmetic mean                     | 20                                |
| 24-hour maximum                            | 91                                |
| 3-hour maximum                             | 512                               |
| <b>Nitrogen dioxide:</b>                   |                                   |
| annual arithmetic mean                     | 25                                |
| <b>Class III</b>                           |                                   |
| <b>Pollutant</b>                           | <b>micrograms per cubic meter</b> |
| <b>Particulate Matter:</b>                 |                                   |
| PM2.5, annual arithmetic mean              | 8                                 |
| PM2.5, 24-hour maximum                     | 18                                |
| PM10, annual arithmetic mean               | 34                                |

<sup>1</sup> -PM2.5 Increments will become effective on October 20, 2011.

|                                   |                |
|-----------------------------------|----------------|
| <del>PM10, 24-hour maximum</del>  | <del>60</del>  |
| <del>Sulfur dioxide:</del>        |                |
| <del>annual arithmetic mean</del> | <del>40</del>  |
| <del>24-hour maximum</del>        | <del>182</del> |
| <del>3-hour maximum</del>         | <del>700</del> |
| <del>Nitrogen dioxide:</del>      |                |
| <del>annual arithmetic mean</del> | <del>50</del>  |

## DIVISION 204

### DESIGNATION OF AIR QUALITY AREAS

#### 340-204-0010

##### 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. Definitions of boundaries in this rule also apply to OAR 340 divisions [200 through 268](#) and throughout the State of Oregon Clean Air Act Implementation Plan adopted under 340-200-0040.

~~(1) "AQCR" means Air Quality Control Region.~~

~~(2) "AQMA" means Air Quality Maintenance Area.~~

~~(3) "CO" means Carbon Monoxide.~~

~~(4) "CBD" means Central Business District.~~

~~(5) "Criteria Pollutant" means any of the six pollutants set out by the Clean Air Act (sulfur oxides, particulate matter, ozone, carbon monoxide, nitrogen dioxide, and lead) for which the EPA has promulgated standards in 40 CFR 50.4 through 50.12 (July, 1993).~~

~~(16)~~ "Eugene-Springfield UGB" means the area within the bounds beginning at the Willamette River at a point due east from the intersection of East Beacon Road and River Loop No.1; thence southerly along the Willamette River to the intersection with Belt Line Road; thence easterly along Belt Line Road approximately one-half mile to the intersection with Delta Highway; thence northwesterly and then northerly along Delta Highway and on a line north from the Delta Highway to the intersection with the McKenzie River; thence generally southerly and easterly along the McKenzie River approximately eleven miles to the intersection with Marcola Road; thence southwesterly along Marcola Road to the intersection with 42nd Street; thence southerly along 42nd Street to the intersection with the northern branch of US Highway 126; thence easterly along US Highway 126 to the intersection with 52nd Street; thence north along 52nd Street to the intersection with High Banks Road; thence easterly along High Banks Road to the intersection with 58th Street; thence south along 58th Street to the intersection with Thurston Road; thence easterly along Thurston Road to the intersection with the western boundary of Section 36, T17S, R2W; thence south to the southwest corner of Section 36, T17S, R2W; thence west to the Springfield City Limits; thence following the Springfield City Limits southwesterly to the intersection with the western boundary of Section 2, T18S, R2W; thence on a line southwest to the Private Logging Road approximately one-half mile away; thence southeasterly along the Private Logging Road to the intersection with Wallace Creek; thence southwesterly along Wallace Creek to the confluence with the Middle Fork of the Willamette River; thence generally northwesterly along the Middle Fork of the Willamette River approximately seven and one-half miles to the intersection with the northern boundary of Section 11, T18S, R3W; thence west to the northwest corner of Section 10, T18S, R3W; thence south to the intersection with 30th Avenue; thence westerly along 30th Avenue to the intersection with the Eugene City Limits; thence following the Eugene City Limits first southerly then westerly then northerly and finally westerly to the intersection with

the northern boundary of Section 5, T18S, R4W; thence west to the intersection with Greenhill Road; thence north along Greenhill Road to the intersection with Barger Drive; thence east along Barger Drive to the intersection with the Eugene City Limits (Ohio Street); thence following the Eugene City Limits first north then east then north then east then south then east to the intersection with Jansen Drive; thence east along Jansen Drive to the intersection with Belt Line Road; thence northeasterly along Belt Line Road to the intersection with Highway 99; thence northwesterly along Highway 99 to the intersection with Clear Lake Road; thence west along Clear Lake Road to the intersection with the western boundary of Section 9, T17S, R4W; thence north to the intersection with Airport Road; thence east along Airport Road to the intersection with Highway 99; thence northwesterly along Highway 99 to the intersection East Enid Road; thence east along East Enid Road to the intersection with Prairie Road; thence southerly along Prairie Road to the intersection with Irvington Road; thence east along Irvington Road to the intersection with the Southern Pacific Railroad Line; thence southeasterly along the Southern Pacific Railroad Line to the intersection with Irving Road; thence east along Irving Road to the intersection with Kalmia Road; thence northerly along Kalmia Road to the intersection with Hyacinth Road; thence northerly along Hyacinth Road to the intersection with Irvington Road; thence east along Irvington Road to the intersection with Spring Creek; thence northerly along Spring Creek to the intersection with River Road; thence northerly along River Road to the intersection with East Beacon Drive; thence following East Beacon Drive first east then south then east to the intersection with River Loop No.1; thence on a line due east to the Willamette River and the point of beginning.

(27) “Grants Pass CBD” means the area within the City of Grants Pass enclosed by “B” Street on the north, 8th Street to the east, “M” Street on the south, and 5th Street to the west.

(38) Grants Pass Control Area means the area of the state beginning at the northeast corner of Section 35, T35S, R5W; thence south to the southeast corner of Section 11, T37S, R5W; thence west to the southwest corner of Section 9, T37S, R6W; thence north to the northwest corner of Section 33, T35S, R6W; thence east to the point of beginning.

(49) “Grants Pass UGB” as shown on the Plan and Zoning maps for the City of Grants Pass as of Feb. 1, 1988 is the area within the bounds beginning at the NW corner of Sec. 7, T36S, R5W; thence south to the SW corner of Sec. 7; thence west along the southern boundary of Sec. 12, T36S, R5W approx. 2000 feet; thence south approx. 100 feet to the northern right of way of the Southern Pacific Railroad Line (SPRR Line); thence southeasterly along said right of way approx. 800 feet; thence south approx. 400 feet; thence west approx. 1100 feet; thence south approx. 700 feet to the intersection with the Hillside Canal; thence west approx. 100 feet; thence south approx. 550 feet to the intersection with Upper River Road; thence southeasterly along Upper River Road and continuing east along Old Upper River Road approx. 700 feet; thence south approx. 1550 feet; thence west approx. 350 feet; thence south approx. 250 feet; thence west approx. 1000 feet; thence south approx. 600 feet to the north end of Roguela Lane; thence east approx. 400 feet; thence south approx. 1400 feet to the intersection with Lower River Road; thence west along Lower River Road approx. 1400 feet; thence south approx. 1350 feet; thence west approx. 25 feet; thence south approx. 1200 feet to the south bank of the Rogue River; thence northwesterly along said bank approx. 2800 feet; thence on a line southwesterly and parallel to Parkhill Place approx. 600 feet; thence northwesterly at a 90 degree angle approximately 300 feet to the intersection with Parkhill Place; thence southwesterly along Parkhill Place approx. 250 feet; thence on a line southeasterly forming a 90 degree angle approximately 300 feet to a point even with Leonard Road; thence west approx. 1500 feet along Leonard Road; thence north approx. 200 feet; thence west to the west side of Schroeder Lane; thence north approx. 150 feet; thence west approx. 200 feet; thence south to the intersection with Leonard Road; thence

west along Leonard Road approx. 450 feet; thence north approx. 300 feet; thence east approx. 150 feet; thence north approx. 400 feet; thence west approx. 500 feet; thence south approx. 300 feet; thence west to the intersection with Coutant Lane; thence south along Coutant Lane to the intersection with Leonard Road; thence west along Leonard Road to the intersection with Buena Vista Lane; thence north along the west side of Buena Vista Lane approx. 200 feet; thence west approx. 150 feet; thence north approx. 150 feet; thence west approx. 200 feet; thence north approx. 400 feet; thence west approx. 600 feet to the intersection with the western boundary of Sec. 23, T36S, R6W; thence south to the intersection with Leonard Road; thence west along Leonard Road approx. 300 feet; thence north approx. 600 feet to the intersection with Darneille Lane; thence northwesterly along Darneille Lane approx. 200 feet; thence west approx. 300 feet; thence south approx. 600 feet to the intersection with Leonard Road; thence west along Leonard Road approx. 700 feet; thence south approx. 1350 feet; thence east approx. 1400 feet to the intersection with Darneille Lane; thence south along Darneille Lane approx. 600 feet; thence west approx. 300 feet; thence south to the intersection with Redwood Avenue; thence east along Redwood Avenue to the intersection with Hubbard Lane and the western boundary of Sec. 23, T36S, R6W; thence south along Hubbard Lane approx. 1850 feet; thence west approx. 1350 feet ; thence south to the south side of U.S. Highway 199; thence westerly along U.S. 199 approx. 1600 feet to the intersection with the north-south midpoint of Sec. 27, T36S, R6W; thence south approx. 2200 feet; thence east approx. 1400 feet; thence north approx. 1000 feet; thence east approx. 300 feet; thence north approx. 250 feet to the intersection with the Highline Canal; thence northerly along the Highline Canal approx. 900 feet; thence east to the intersection with Hubbard Lane; thence north along Hubbard Lane approximately 600 feet; thence east approx. 200 feet; thence north approx. 400 feet to a point even with Canal Avenue; thence east approx. 550 feet; thence north to the south side of U.S. 199; thence easterly along the southern edge of U.S. 199 to the intersection with Willow Lane; thence south along Willow Lane to the intersection with Demaray Drive; thence easterly along Demaray Drive and continuing along the southern edge of U.S. 199 to the intersection with Dowell Road; thence south along Dowell Road approx. 550 feet; thence easterly approx. 750 feet; thence north to the intersection with the South Canal; thence easterly along the South Canal to the intersection with Schutzwahl Lane; thence south approx. 1300 feet to a point even with West Harbeck Road; thence east approx. 2000 feet to the intersection with Allen Creek; thence southerly along Allen Creek approx. 1400 feet to a point even with Denton Trail to the west; thence west to the intersection with Highline Canal; thence southerly along Highline Canal to the intersection with the southern boundary of Sec. 25, T36S, R6W; thence east to the intersection with Allen Creek; thence southerly along Allen Creek to the intersection with the western boundary of Sec. 31, T36S, R5W; thence south to the SW corner of Sec. 31; thence east to the intersection with Williams Highway; thence southeasterly along Williams Highway approx. 1300 feet; thence east approx. 200 feet; thence north approx. 400 feet; thence east approx. 700 feet; thence north to the intersection with Espey Road; thence west along Espey Road approx. 150 feet; thence north approx. 600 feet; thence east approx. 300 feet; thence north approx. 2000 feet; thence west approx. 2100 feet; thence north approx. 1350 feet; thence east approx. 800 feet; thence north approx. 2800 feet to the east-west midline of Sec. 30, T36S, R5W; thence on a line due NE approx. 600 feet; thence north approx. 100 feet; thence east approx. 600 feet; thence north approx. 100 feet to the intersection with Highline Canal; thence easterly along Highline Canal approx. 1300 feet; thence south approx. 100 feet; thence east to the intersection with Harbeck Road; thence north along Harbeck Road to the intersection with Highline Canal; thence easterly along Highline Canal to a point approx. 250 feet beyond Skyway Road; thence south to the intersection with Skyway Road; thence east to the intersection with Highline Canal; thence southeasterly along Highline Canal approx. 1200 feet; thence on a line due SW to the intersection with Bluebell Lane; thence southerly along Bluebell Lane approx. 150 feet; thence east to the intersection with Sky Crest Drive; thence southerly along Sky Crest Drive to the intersection with Harper Loop; thence



southeasterly along Harper Loop to the intersection with the east-west midline of Sec. 29, T36S, R5W; thence east approx. 400 feet; thence south approx. 1300 feet to a point even with Troll View Road to the east; thence east to the intersection with Hamilton Lane; thence north along Hamilton Lane to the intersection with the Highline Canal; thence northeasterly along the Highline Canal to the northern boundary of Sec. 28, T36S, R5W; thence east approx. 1350 feet to the transmission line; thence north to the intersection with Fruitdale Drive; thence southwesterly along Fruitdale Drive approx. 700 feet; thence north to the northern edge of U.S. 199; thence easterly along the northern edge of U.S. 199 approx. 50 feet; thence north to the north bank of the Rogue River; thence northeasterly along the north bank of the Rogue River approx. 2100 feet to a point even with Ament Road; thence north to Ament Road and following Ament Road to U.S. Interstate Highway 5 (U.S. I-5); thence continuing north to the 1200 foot contour line; thence following the 1200 foot contour line northwesterly approx. 7100 feet to the city limits and a point even with Savage Street to the west; thence north following the city limits approx. 400 feet; thence west to the intersection with Beacon Street; thence north along Beacon Street and the city limits approx. 250 feet; thence east along the city limits approx. 700 feet; thence north along the city limits approx. 2200 feet; thence southwesterly along the city limits approximately 800 feet to the intersection with the 1400 foot contour line; thence northerly and northwesterly along the 1400 foot contour line approx. 900 feet to the intersection with the northern boundary of Sec. 9, T36S, R5W; thence west along said boundary approx. 100 feet to the NW corner of Sec. 9; thence south along the western boundary of Sec. 9 approx. 700 feet; thence west approx. 1400 feet; thence north approx. 2400 feet; thence west approx. 1350 feet; thence north approx. 1100 feet to the city limits; thence following the city limits first west approx. 1550 feet, then south approx. 800 feet, then west approx. 200 feet, then south approx. 200 feet, then east approx. 200 feet, then south approx. 300 feet, and finally westerly approx. 1200 feet to the intersection with the western boundary of Sec. 5, T36S, R5W; thence south along said boundary to the northern side of Vine Avenue; thence northwesterly along the northern side of Vine Avenue approx. 3150 feet to the intersection with the west fork of Gilbert Creek; thence north to the intersection with the southern right of way of U.S. I-5; thence northwesterly along said right of way approx. 1600 feet; thence south to the intersection with Old Highland Avenue; thence northwesterly along Highland Avenue approx. 650 feet; thence west approx. 350 feet; thence south approx. 1400 feet; thence east approx. 700 feet; thence south approx. 1000 feet; thence on a line SW approx. 800 feet; thence south approx. 1400 feet to the intersection with the northern boundary of Sec. 7, T36S, R5W; thence west to the NW corner of Sec. 7, the point of beginning.

(549) “Klamath Falls ~~C~~ontrol ~~A~~area” means the area of the state beginning at the northeast corner of Section 8, T38S, R10E, thence south to the southeast corner of Section 5, T40S, R10E; thence west to the southwest corner of Section 3, T40S, R8E; thence north to the northwest corner of Section 10, T38S, R8E; thence east to the point of beginning.

(644) “Klamath Falls ~~N~~onattainment ~~A~~area” means the area of the state beginning at the northwest corner of Section 31, T37S, R9E; thence east approximately two miles to the northeast corner of Section 32; thence south approximately four miles to the southeast corner of Section 17, T38S, R9E; thence east approximately one mile to the southwest corner of Section 15; thence north approximately one mile to the northwest corner of Section 15; thence east approximately 2 miles to the northeast corner of Section 14; thence south approximately one mile to the northwest corner of section 24; thence east approximately one mile to the northeast corner of Section 24; thence south approximately three miles to the southeast corner of Section 36; thence east approximately four miles to the northeast corner of Section 3, T39S, R10E; thence south approximately three miles to the southeast corner of Section 15; thence west approximately two miles to the southwest corner of Section 16; thence south approximately two miles to the southeast corner of Section 29; thence west approximately five miles to the

southwest corner of Section 27, T39S, R9E; thence north approximately one mile to the northeast corner of Section 27; thence west approximately four miles to the southwest corner of Section 24, T39S R8E; thence north approximately two miles to the northeast corner of Section 13; thence west approximately one mile to the southwest corner of Section 11; thence north approximately four miles to the northwest corner of Section 26 T38S, R8E; thence west one mile to the southwest corner of Section 22; thence north approximately one mile to the northwest corner of Section 22; thence west approximately one mile to the southwest corner of Section 16; thence north approximately one mile to the northeast corner of Section 16; thence west approximately one mile to the southwest corner of Section 8; thence north approximately two miles to the northwest corner of Section 5; thence east to the northeast corner of Section 1; thence north approximately one mile to the point of beginning.

(742) “Klamath Falls UGB” means the area within the bounds beginning at the southeast corner of Section 36, Township 38 South, Range 9 East; thence northerly approximately 4500 feet; thence westerly approximately 1/4 mile; thence northerly approximately 3/4 mile into Section 25, T38S, R9E; thence westerly approximately 1/4 mile; thence northerly approximately 1/2 mile to the southern boundary of Section 24, T38S, R9E; thence westerly approximately 1/2 mile to the southeast corner of Section 23, T38S, R9E; thence northerly approximately 1/2 mile; thence westerly approximately 1/4 mile; thence northerly approximately 1/2 mile to the southern boundary of Section 14, T38S, R9E; thence generally northwesterly along the 5000 foot elevation contour line approximately 3/4 mile; thence westerly 1 mile; thence north to the intersection with the northern boundary of Section 15, T38S, R9E; thence west 1/4 mile along the northern boundary of Section 15, T38S, R9E; thence generally southeasterly following the 4800 foot elevation contour line around the old Oregon Institute of Technology Campus to meet with the westerly line of Old Fort Road in Section 22, T38S, R9E; thence southwesterly along the westerly line of Old Fort Road approximately 1 and 1/4 miles to Section 27, T38S, R9E; thence west approximately 1/4 mile; thence southwesterly approximately 1/2 mile to the intersection with Section 27, T38S, R9E; thence westerly approximately 1/2 mile to intersect with the Klamath Falls City Limits at the northerly line of Loma Linda Drive in Section 28, T38S, R9E; thence northwesterly along Loma Linda Drive approximately 1/4 mile; thence southwesterly approximately 1/8 mile to the Klamath Falls City Limits; thence northerly along the Klamath Falls City Limits approximately 1 mile into Section 21, T38S, R9E; thence westerly approximately 1/4 mile; thence northerly approximately 1 mile into Section 17, T38S, R9E; thence westerly approximately 3/4 mile into Section 17, T38S, R9E; thence northerly approximately 1/4 mile; thence westerly approximately 1 mile to the west boundary of Highway 97 in Section 18, T38S, R9E; thence southeasterly along the western boundary of Highway 97 approximately 1/2 mile; thence southwesterly away from Highway 97; thence southeasterly to the intersection with Klamath Falls City Limits at Front Street; thence westerly approximately 1/4 mile to the western boundary of Section 19, T38S, R9E; thence southerly approximately 1 and 1/4 miles along the western boundary of Section 19, T38S, R9E and the Klamath Falls City Limits to the south shore line of Klamath Lake; thence northwesterly along the south shore line of Klamath Lake approximately 1 and 1/4 miles across Section 25, T38S, R9E and Section 26, T38S, R9E; thence westerly approximately 1/2 mile along Section 26, T38S, R9E; thence southerly approximately 1/2 mile to Section 27, T38S, R9E to the intersection with eastern boundary of Orindale Draw, thence southerly along the eastern boundary of Orindale Draw approximately 1 and 1/4 miles into Section 35, T38S, R9E; thence southerly approximately 1/2 mile into Section 2, T39S, R8E; thence easterly approximately 1/4 mile; thence northerly approximately 1/4 mile to the southeast corner of Section 35, T38S, R8E and the Klamath Falls City Limits; thence easterly approximately 1/2 mile to the northern boundary of Section 1, T38S, R8E; thence southeasterly approximately 1/2 mile to Orindale Road; thence north 500 feet along the west side of an easement; thence easterly approximately 1 and 1/4 miles through Section 1, T38S, R8E to the western boundary

of Section 6, T39S, R9E; thence southerly approximately 3/4 mile to the southwest corner of Section 6, T39S, R9E; thence easterly approximately 1/8 mile to the western boundary of Highway 97; thence southwesterly along the Highway 97 right-of-way approximately 1/4 mile; thence westerly approximately 1/2 mile to Agate Street in Section 7, T39S, R8E; thence northerly approximately 1/4 mile; thence westerly approximately 3/4 mile to Orindale Road in Section 12, T39S, R8E; thence northerly approximately 1/4 mile into Section 1, T39S, R8E; thence westerly approximately 3/4 mile to the Section 2, T39S, R8E boundary line; thence southerly approximately 3/4 mile along the Section 2, T39S, R8E boundary line to the northwest corner of Section 12, T39S, R8E; thence westerly approximately 1/8 mile into Section 11, T39S, R8E; thence southerly approximately 1/8 mile; thence northeasterly approximately 3/4 mile to the southern boundary of Section 12, T39S, R8E at Balsam Drive; thence southerly approximately 1/4 mile into Section 12, T39S, R8E; thence easterly approximately 1/4 mile to Orindale Road; thence southeasterly approximately 500 feet to Highway 66; thence southwesterly approximately 1/2 mile along the boundary of Highway 66 to Holiday Road; thence southerly approximately 1/2 mile into Section 13, T39S, R8E; thence northeasterly approximately 1/4 mile to the eastern boundary of Section 13, T39S, R8E; thence northerly approximately 1/4 mile along the eastern boundary of Section 13, T39S, R8E; thence westerly approximately 1/4 mile to Weyerhaeuser Road; thence northerly approximately 1/8 mile; thence easterly approximately 1/8 mile; thence northerly approximately 1/8 mile; thence westerly approximately 1/8 mile to Farrier Avenue; thence northerly approximately 1/4 mile; thence easterly approximately 1/4 mile to the eastern boundary of Section 13, T39S, R8E; thence northerly approximately 1/8 mile along the eastern boundary of Section 13, T39S, R8E; thence easterly approximately 1/4 mile along the northern section line of Section 18, T39S, R8E; thence southerly approximately 1/4 mile; thence easterly approximately 1/2 mile to the boundary of Highway 97; thence southerly approximately 1/3 mile to the Burlington Northern Right-of-Way; thence northeasterly approximately 1 and 1/3 miles along the high water line of the Klamath River to the Southside Bypass in Section 8, T39S, R9E; thence southeasterly along the Southside Bypass to the Southern Pacific Right-of-Way in Section 9, T39S, R9E; thence southerly approximately 1/2 mile along the Southern Pacific Right-of-Way; thence southwesterly approximately 1/4 mile along the Midland Highway; thence southeasterly approximately 1/4 mile to the old railroad spur; thence easterly 1/4 mile along the old railroad spur; thence southerly approximately 1/4 mile in Section 16, T39S, R9E; thence westerly approximately 1/3 mile; thence southerly approximately 1/4 mile; thence easterly approximately 1/16 mile in Section 21, T39S, R9E; thence southerly approximately 1/8 mile to the Lost River Diversion Channel; thence southeasterly approximately 1/4 mile along the northern boundary of the Lost River Diversion Channel; thence easterly approximately 3/4 mile along Joe Wright Road into Section 22, T39S, R9E; thence southeasterly approximately 1/8 mile on the eastern boundary of the Southern Pacific Right-of-Way; thence southeasterly approximately 1 mile along the western boundary of the Southern Pacific Right-of-Way across Section 22, T39S, R9E and Section 27, T39S, R9E to a point 440 yards south of the northern boundary of Section 27, T39S, R9E; thence easterly to Kingsley Field; thence southeasterly approximately 3/4 mile to the southern boundary of Section 26, T39S, R9E; thence east approximately 1/2 mile along the southern boundary of Section 26, T39S, R9E to a pond; thence north-northwesterly for 1/2 mile following the Klamath Falls City Limits; thence north 840 feet; thence east 1155 feet to Homedale Road; thence north along Homedale Road to a point 1/4 mile north of the southern boundary of Section 23, T39S, R9E; thence west 1/4 mile; thence north 1 mile to the Southside Bypass in Section 14, T39S, R9E; thence east 1/2 mile along the Southside Bypass to the eastern boundary of Section 14, T39S, R9E; thence north 1/2 mile; thence east 900 feet into Section 13, T39S, R9E; thence north 1320 feet along the USBR 1-C 1-A to the southern boundary of Section 12, T39S, R9E; thence north 500 feet to the USBR A Canal; thence southeasterly 700 feet along the southern border of the USBR A Canal back into Section 13, T39S, R9E; thence southeast 1600 feet to the northwest parcel corner of

an easement for the Enterprise Irrigation District; thence east-northeast 2200 feet to the eastern boundary of Section 13, T39S, R9E; thence north to the southeast corner of Section 12, T39S, R9E; thence along the Enterprise Irrigation Canal approximately 1/2 mile to Booth Road; thence east 1/2 mile to Vale Road; thence north 1 mile to a point in Section 6, T39S, R10E that is approximately 1700 feet north of the southern boundary of Section 6, T39S, R10E; thence west approximately 500 feet; thence south approximately 850 feet; thence west approximately 200 feet; thence north approximately 900 feet; thence west approximately 1600 feet to the western boundary of Section 6, T39S, R10E; thence north approximately 1/2 mile to the southeast corner of Section 36, T38S, R9E, the point of beginning.

(843) “La Grande UGB” means the area within the bounds beginning at the point where U.S. Interstate 84 (I-84) intersects Section 31, Township 2 South, Range 38 East; thence east along I-84 to the Union County Fairgrounds; thence north and then east on a line encompassing the Union County Fairgrounds to the intersection with Cedar Street; thence further east approximately 500 feet, encompassing two (2) residential properties; thence on a line south to the intersection with the northern bank of the Grande Ronde River; thence westerly along the northern bank of the Grande Ronde River to the intersection with the western edge of Mount Glenn Road and Riverside Park; thence north along the western edge of Mount Glenn Road and Riverside Park to the intersection with Fruitdale Road; thence east along Fruitdale Road and the northern boundary of Riverside Park to the eastern boundary of Riverside Park; thence south along the eastern boundary of Riverside Park to the north bank of the Grande Ronde River; thence on a line southeast to the intersection with the northern edge of I-84; thence easterly along the northern edge of I-84 to May Street; thence easterly along May Street to the intersection with State Highway 82; thence northeasterly along State Highway 82 to a point approximately 1/4 mile from the eastern edge of Section 4, T3S, R38E; thence south to the intersection with Section 9, T3S, R38E, and the southern edge of Buchanan Avenue; thence west along the southern edge of Buchanan Avenue to the intersection with the northern edge of I-84; thence on a line south to the southern edge of I-84; thence southeasterly along the southern edge of I-84 approximately 2500 feet; thence on a line due west approximately 1400 feet; thence on a line due south to the intersection with the Union Pacific Railroad Line; thence southeasterly along the Union Pacific Railroad Line to the intersection with Gekeler Lane; thence west along Gekeler Lane to the intersection with U.S. Highway 30; thence southeast along U.S. Highway 30 to the intersection with the western boundary of Section 15, T3S, R38E; thence on a line west following existing property boundaries approximately 2900 feet; thence on a line north following existing property boundaries approximately 250 feet; thence on a line east following existing property boundaries approximately 650 feet; thence north on a line to the intersection with Gekeler Lane; thence west along Gekeler Lane to the intersection with 20th Avenue; thence south along 20th Avenue to the intersection with Foothill Road; thence southeasterly along Foothill Road approximately 2900 feet; thence on a line west following existing property boundaries approximately 1250 feet; thence on a line south following existing property boundaries approximately 1250 feet; thence on a line west following existing property boundaries approximately 1250 feet; thence on a line north following existing property boundaries approximately 450 feet to the intersection with the southernmost part of the La Grande City Limits; thence westerly and northwesterly along the southernmost part of the La Grande City Limits approximately 1100 feet to the intersection with the 3000 foot elevation contour line; thence westerly following the 3000 foot elevation contour line and existing property boundaries approximately 2200 feet; thence on a line north following existing property boundaries approximately 1900 feet; thence on a line west following existing property boundaries approximately 500 feet; thence on a line north to the La Grande City Limits; thence west along the La Grande City Limits and following existing property boundaries approximately 650 feet; thence on a line south following existing property boundaries approximately 900 feet;

thence on a line west following existing property boundaries approximately 1250 feet; thence on a line north to the intersection with the La Grande City Limits; thence west along the southern boundary of the La Grande City Limits to the intersection with the western boundary of the La Grande City Limits; thence north along the western boundary of the La Grande City Limits and following existing property lines approximately 500 feet; thence on a line west following existing property boundaries approximately 200 feet; thence on a line north following existing property boundaries approximately 700 feet; thence east to the first 3000 foot elevation contour line west of the La Grande City Limits; thence northerly following that 3000 foot elevation contour line to the intersection with Deal Canyon Road; thence easterly along Deal Canyon Road to the intersection with the western boundary of the La Grande City Limits; thence northerly along the western boundary of the La Grande City Limits to the intersection with U.S. Highway 30; thence northwesterly along U.S. Highway 30 and following existing property boundaries approximately 1400 feet; thence on a line west to the intersection with the western boundary of Section 6, T3S, R38E; thence north along the western boundaries of Section 6, T3S, R38E and Section 31, T2S, R38E to the point of beginning.

(914) “Lakeview UGB” means the area beginning at the corner common to sections 21, 22, 27, and 28, T39S, R20E; thence north on the section line between section 21 and 22 to the section corner common to section 15, 16, 21, and 22; thence west along the section line between section 21 and 16 to the section corner common to sections 16, 17, 20, and 21; thence north along the section line between section 16 and 17 approximately 3550 feet to the east branch of Thomas Creek; thence northwesterly along the east branch of Thomas Creek to the center line of Highway 140; thence east along the center line of Highway 140 to the section corner common to sections 8, 9, 16, and 17, T39S, R20E; thence north along the section line between sections 8 and 9 to the section corner common to sections 4, 5, 8, and 9, T39S, R20E; thence north along the section line between section 4 and 5 to the section corner common to section 4 and 5, T39S, R20E and sections 32 and 33, T38S, R20E; thence east along the section line between sections 4 and 33 to the section corner common to sections 3 and 4, T39S, R20E and sections 33 and 34, T38S, R20E; thence south along the eastern boundary of section 4 approximately 4,1318.6 feet; thence S 89 degrees, 11 minutes W 288.28 feet to the east right of way line of the old Paisley/Lakeview Highway; thence S 21 degrees, 53 minutes E along the eastern right of way of the old Paisley/Lakeview Highway 288.4 feet; thence S 78 degrees, 45 minutes W 1375 feet; thence S 3 degrees, 6 minutes, and 30 seconds W 200 feet; thence S 77 degrees, 45 minutes W 136 feet to the east right of way line of U.S. Highway 395; thence southeasterly along the east right of way line of U.S. Highway 395 53.5 feet; thence N 77 degrees, 45 minutes E 195.6 feet; thence S 38 degrees, 45 minutes E 56.8 feet; thence S 51 degrees, 15 minutes W 186.1 feet to the east right of way of U.S. Highway 395; thence southeast along the eastern right of way line of U.S. Highway 395 2310 feet; thence N 76 degrees, 19 minutes 544.7 feet; thence S 13 degrees, 23 minutes, 21 seconds E 400 feet; thence N 63 degrees, 13 minutes E 243.6 feet to the western line of the old American Forest Products Logging Road; thence southeast along the old American Forest Products Logging Road to the western line of the northeast quadrant of the northwest quadrant of section 10, T39S, R20E; thence southeast to a point on the south line of the northeast quadrant of the northwest quadrant of Section 10, T39S, R20E (this point also bears N 89 degrees, 33 minutes E 230 feet from the center line of U.S. Highway 395); thence south on a line parallel to the east right of way line of U.S. Highway 395 to the south line of the northwest quadrant of section 10, T39S, R20E; thence south 491 feet to the east right of way of U.S. Highway 395; thence southeasterly following the east right of way of U.S. Highway 395 255 feet to the south line of the northeast quadrant of the northeast quadrant of the southwest quadrant of section 10, T39S, R20E; thence east along that south line to the center line of section 10, T39S, R20E; thence continuing east along the same south line to the eastern boundary of section 10, T39S, R20E; thence south along the eastern boundary of section 10



to the section corner common to sections 10, 11, 14, and 15, T39S, R20E; thence south along the section line between section 14 and 15 to the section corner common to sections 14, 15, 22, and 23, T39S, R20E; thence west along the section line between sections 15 and 22 to the northwest corner of the northeast quadrant of the northeast quadrant of section 22, T39S, R20E; thence south along the eastern line of the western half of the eastern half of section 22 to the southern boundary of section 22, T39S, R20E; thence west along the southern boundary of section 22 to the point of beginning.

~~(15) “Maintenance Area” means any area that was formerly nonattainment for a criteria pollutant but has since met EPA promulgated standards and has had a maintenance plan to stay within the standards approved by the EPA pursuant to 40 CFR 51.110 (July, 1993).~~

(106) “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.

(117) “Medford-Ashland CBD” means the area beginning at the intersection of Crater Lake Highway (Highway 62) south on Biddle Road to the intersection of Fourth Street, west on Fourth Street to the intersection with Riverside Avenue (Highway 99), south on Riverside Avenue to the intersection with Tenth Street, west on Tenth Street to the intersection with Oakdale Avenue, north on Oakdale Avenue to the intersection with Fourth Street, east on Fourth Street to the intersection with Central Avenue, north on Central Avenue to the intersection with Court Street, north on Court Street to the intersection with Crater Lake Highway (Highway 62) and east on Crater Lake Highway to the point of beginning, with extensions along McAndrews Road east from Biddle Road to Crater Lake Avenue, and along Jackson Street east from Biddle Road to Crater Lake Avenue.

**NOTE:** This definition also marks the area where indirect sources are required to have indirect source construction permits in the Medford area. See OAR 340-254-0040.

(128) “Medford UGB” means the area beginning at the line separating Range 1 West and Range 2 West at a point approximately 1/4 mile south of the northwest corner of Section 31, T36S, R1W; thence west approximately 1/2 mile; thence south to the north bank of Bear Creek; thence west to the south bank of Bear Creek; thence south to the intersection with the Medford Corporate Boundary; thence following the Medford Corporate Boundary west and southwesterly to the intersection with Merriman Road; thence northwesterly along Merriman Road to the intersection with the eastern boundary of Section 10, T36S, R2W; thence south along said boundary line approximately 3/4 mile; thence west approximately 1/3 mile; thence south to the

intersection with the Hopkins Canal; thence east along the Hopkins Canal approximately 200 feet; thence south to Rossanely Drive; thence east along Rossanely Drive approximately 200 feet; thence south approximately 1200 feet; thence west approximately 700 feet; thence south approximately 1400 feet; thence east approximately 1400 feet; thence north approximately 100 feet; thence east approximately 700 feet; thence south to Finley Lane; thence west to the end of Finley Lane; thence approximately 1200 feet; thence west approximately 1300 feet; thence north approximately 150 feet; thence west approximately 500 feet; thence south to Highway 238; thence west along Highway 238 approximately 250 feet; thence south approximately 1250 feet to a point even with the end of Renault Avenue to the east; thence east approximately 2200 feet; thence south approximately 1100 feet to a point even with Sunset Court to the east; thence east to and along Sunset Court to the first (nameless) road to the south; thence approximately 850 feet; thence west approximately 600 feet; thence south to Stewart Avenue; thence west along Stewart Avenue approximately 750 feet; thence south approximately 1100 feet; thence west approximately 100 feet; thence south approximately 800 feet; thence east approximately 800 feet; thence south approximately 1000 feet; thence west approximately 350 feet to a point even with the north-south connector street between Sunset Drive and South Stage Road; thence south to and along said connecting road and continuing along South Stage Road to Fairlane Road; thence south to the end of Fairlane Road and extending beyond it approximately 250 feet; thence east approximately 250 feet; thence south approximately 250 feet to the intersection with Judy Way; thence east on Judy Way to Griffin Creek Road; thence north on Griffin Creek Road to South Stage Road; thence east on South Stage Road to Orchard Home Drive; thence north on Orchard Home Drive approximately 800 feet; thence east to Columbus Avenue; thence south along Columbus Avenue to South Stage Road; thence east along South Stage Road to the first road to the north after Sunnyview Lane; thence north approximately 300 feet; thence east approximately 300 feet; thence north approximately 700 feet; thence east to King's Highway; thence north along King's Highway to Experiment Station Road; thence east along Experiment Station Road to Marsh Lane; thence east along Marsh Lane to the northern boundary of Section 6, T38S, R1W; thence east along said boundary approximately 1100 feet; thence north approximately 1200 feet; thence east approximately 1/3 mile; thence north approximately 400 feet; thence east approximately 1000 feet to a drainage ditch; thence following the drainage ditch southeasterly approximately 500 feet; thence east to the eastern boundary of Section 31, T37S, R1W; thence south along said boundary approximately 1900 feet; thence east to and along the loop off of Rogue Valley Boulevard, following that loop to the Southern Pacific Railroad Line (SPRR); thence following SPRR approximately 500 feet; thence south to South Stage Road; thence east along South Stage Road to SPRR; thence southeasterly along SPRR to the intersection with the west fork of Bear Creek; thence northeasterly along the west fork of Bear Creek to the intersection with U.S. Highway 99; thence southeasterly along U.S. Highway 99 approximately 250 feet; thence east approximately 1600 feet; thence south to East Glenwood Road; thence east along East Glenwood Road approximately 1250 feet; thence north approximately 1/2 mile; thence west approximately 250 feet; thence north approximately 1/2 mile to the Medford City Limits; thence east along the city limits to Phoenix Road; thence south along Phoenix Road to Coal Mine Road; thence east along Coal Mine Road approximately 9/10 mile to the western boundary of Section 35, T37S, R1W; thence north to the midpoint of the western boundary of Section 35, T37S, R1W; thence west approximately 800 feet; thence north approximately 1700 feet to the intersection with Barnett Road; thence easterly along Barnett Road to the southeast corner of Section 27, T37S, R1W; thence north along the eastern boundary line of said section approximately 1/2 mile to the intersection with the 1800 foot contour line; thence east to the intersection with Cherry Lane; thence following Cherry Lane southeasterly and then northerly to the intersection with Hillcrest Road; thence east along Hillcrest Road to the southeast corner of Section 23, T37S, R1W; thence north to the northeast corner of Section 23, T37S, R1W; thence west to the midpoint of the northern boundary of Section 22;

T37S, R1W; thence north to the midpoint of Section 15, T37S, R1W; thence west to the midpoint of the western boundary of Section 15, T37S, R1W; thence south along said boundary approximately 600 feet; thence west approximately 1200 feet; thence north approximately 600 feet; thence west to Foothill Road; thence north along Foothill Road to a point approximately 500 feet north of Butte Road; thence west approximately 300 feet; thence south approximately 250 feet; thence west on a line parallel to and approximately 250 feet north of Butte Road to the eastern boundary of Section 8, T37S, R1W; thence north approximately 2200 feet; thence west approximately 1800 feet; thence north approximately 2000 feet; thence west approximately 500 feet; thence north to Coker Butte Road; thence east along Coker Butte Road approximately 550 feet; thence north approximately 1250 feet; thence west to U.S. Highway 62; thence north approximately 3000 feet; thence east approximately 400 feet to the 1340 foot contour line; thence north approximately 800 feet; thence west approximately 200 feet; thence north approximately 250 feet to East Vilas Road; thence east along East Vilas Road approximately 450 feet; thence north approximately 2000 feet to a point approximately 150 feet north of Swanson Creek; thence east approximately 600 feet; thence north approximately 850 feet; thence west approximately 750 feet; thence north approximately 650 feet; thence west approximately 2100 feet; thence on a line southeast approximately 600 feet; thence east approximately 450 feet; thence south approximately 1600 feet; thence west approximately 2000 feet to the continuance of the private logging road north of East Vilas Road; thence south along said logging road approximately 850 feet; thence west approximately 750 feet; thence south approximately 150 feet; thence west approximately 550 feet to Peace Lane; thence north along Peace Lane approximately 100 feet; thence west approximately 350 feet; thence north approximately 950 feet; thence west approximately 1000 feet to the western boundary of Section 31, T36S, R1W; thence north approximately 1300 feet along said boundary to the point of beginning.

~~(19) “Nonattainment Area” means any area that has been designated as not meeting the standards established by the U.S. Environmental Protection Agency (EPA) pursuant to 40 CFR 51.52 (July, 1993) for any criteria pollutant.~~

~~(20) “O3” means Ozone.~~

~~(1324)~~ “Oakridge UGB” means the area enclosed by the following: Beginning at the northwest corner of Section 17, T21S, R3E and the city limits; thence south along the western boundary of Section 17, T21S, R3E along the city limits approximately 800 feet; thence southwesterly following the city limits approximately 750 feet; thence west along the city limits approximately 450 feet; thence northwesterly along the city limits approximately 450 feet; thence on a line south along the city limits approximately 250 feet; thence on a line east along the city limits approximately 100 feet; thence southwesterly along the city limits approximately 200 feet; thence on a line east along the city limits approximately 400 feet; thence on a line south along the city limits to the channel of the Willamette River Middle Fork; thence south-easterly up the Willamette River Middle Fork along the city limits approximately 7200 feet; thence exiting the Willamette River Middle Fork with the city limits in a northerly manner and forming a rough semicircle with a diameter of approximately one-half mile before rejoining the Willamette River Middle Fork; thence diverging from the city limits upon rejoining the Willamette River Middle Fork and moving southeasterly approximately 5600 feet up the Willamette River Middle Fork to a point on the river even with the point where Salmon Creek Road intersects with U.S. Highway 58; thence on a line east from the channel of the Willamette River Middle Fork across the intersection of Salmon Creek Road and U.S. Highway 58 to the intersection with the Southern Pacific Railroad Line; thence northerly along the Southern Pacific Railroad Line to the intersection with the northern boundary of Section 22, T21S, R3E; thence west along the northern boundary of Section 22, T21S, R3E to the intersection with Salmon



Creek Road; thence on a line north to the intersection with the Southern Pacific Railroad Line; thence east along the Southern Pacific Railroad Line approximately 600 feet; thence on a line north to the intersection with High Prairie Road; thence on a line west approximately 400 feet; thence on a line north to the intersection with the northern boundary of Section 15, T21S, R3E; thence west along the northern boundary of Section 15, T21S, R3E to the intersection with the southeastern corner of Section 9, T21S, R3E; thence north along the eastern boundary of Section 9, T21S, R3E approximately 1300 feet; thence on a line west approximately 1100 feet; thence on a line south to the intersection with West Oak Road; thence northwesterly along West Oak Road approximately 2000 feet; thence on a line south to the intersection with the northern boundary line of the city limits; thence westerly and northwesterly approximately 8000 feet along the city limits to the point of beginning.

~~(22) “Particulate Matter” has the meaning given that term in OAR 340-200-0020(82).~~

~~(23) PM10: has the meaning given that term in OAR 340-200-0020(90).~~

~~(24) “PM2.5” has the meaning given that term in OAR 340-200-0020(91).~~

~~(1425)~~ “Portland AQMA” means the area within the bounds beginning at the point starting on the Oregon-Washington state line in the Columbia River at the confluence with the Willamette River, thence east up the Columbia River to the confluence with the Sandy River, thence southerly and easterly up the Sandy River to the point where the Sandy River intersects the Clackamas County-Multnomah County line, thence west along the Clackamas County-Multnomah County line to the point where the Clackamas County-Multnomah County line is intersected by H. Johnson Road (242nd), thence south along H. Johnson Road to the intersection with Kelso Road (Boring Highway), thence west along Kelso Road to the intersection with Deep Creek Road (232nd), thence south along Deep Creek Road to the point of intersection with Deep Creek, thence southeasterly along Deep Creek to the confluence with Clackamas River, thence easterly along the Clackamas River to the confluence with Clear Creek, thence southerly along Clear Creek to the point where Clear Creek intersects Springwater Road then to Forsythe Road, thence easterly along Forsythe Road to the intersection with Bradley Road, thence south along Bradley Road to the intersection with Redland Road, thence west along Redland Road to the intersection with Ferguson Road, thence south along Ferguson Road to the intersection with Thayler Road, thence west along Thayler Road to the intersection with Beaver Creek Road, thence southeast along Beaver Creek Road to the intersection with Henrici Road, thence west along Henrici Road to the intersection with State Highway 213 (Mollala Avenue), thence southeast along State Highway 213 to the point of intersection with Beaver Creek, thence westerly down Beaver Creek to the confluence with the Willamette River, thence southerly and westerly up the Willamette River to the point where the Willamette River intersects the Clackamas County-Yamhill County line, thence north along the Clackamas County-Yamhill County line to the point where it intersects the Washington County-Yamhill County line, thence west and north along the Washington County-Yamhill County line to the point where it is intersected by Mount Richmond Road, thence northeast along Mount Richmond Road to the intersection with Patton Valley Road, thence easterly and northerly along Patton Valley Road to the intersection with Tualatin Valley State Highway, thence northerly along Tualatin Valley State Highway to the intersection with State Highway 47, thence northerly along State Highway 47 to the intersection with Dilley Road, thence northwesterly and northerly along Dilley Road to the intersection with Stringtown Road, thence westerly and northwesterly along Stringtown Road to the intersection with Gales Creek Road, thence northwesterly along Gales Creek Road to the intersection with Timmmerman Road, thence northerly along Timmmerman Road to the intersection with Wilson River Highway, thence west and southwest along Wilson River Highway to the intersection with Narup Road, thence north along Narup

Road to the intersection with Cedar Canyon Road, thence westerly and northerly along Cedar Canyon Road to the intersection with Banks Road, thence west along Banks Road to the intersection with Hahn Road, thence northerly and westerly along Hahn Road to the intersection with Mountaindale Road, thence southeasterly along Mountaindale Road to the intersection with Glencoe Road, thence east-southeasterly along Glencoe Road to the intersection with Jackson Quarry Road, thence north-northeasterly along Jackson Quarry Road to the intersection with Helvetia Road, thence easterly and southerly along Helvetia Road to the intersection with Bishop Road, thence southerly along Bishop Road to the intersection with Phillips Road, thence easterly along Phillips Road to the intersection with the Burlington Northern Railroad Track, thence northeasterly along the Burlington Northern Railroad Line to the intersection with Rock Creek Road, thence east-southeasterly along Rock Creek Road to the intersection with Old Cornelius Pass Road, thence northeasterly along Old Cornelius Pass Road to the intersection with Skyline Boulevard, thence easterly and southerly along Skyline Boulevard to the intersection with Newberry Road, thence northeasterly along Newberry Road to the intersection with State Highway 30 (St. Helens Road), thence northeast on a line over land across State Highway 30 to the Multnomah Channel, thence east-southeasterly up the Multnomah Channel to the difffluence with the Willamette River, thence north-northeasterly down the Willamette River to the confluence with the Columbia River and the Oregon-Washington state line (the point of beginning).

(1526) “Portland ~~M~~etropolitan ~~S~~ervice ~~D~~istrict ~~B~~oundary” or “Portland Metro” means the boundary surrounding the urban growth boundaries of the cities within the Greater Portland Metropolitan Area. It is defined in the Oregon Revised Statutes (ORS) 268.125 (1989).

(1627) “Portland ~~V~~ehicle ~~I~~nspection ~~A~~rea” means the area of the state included within the following census tracts, block groups, and blocks as used in the 1990 Federal Census. In Multnomah County, the following tracts, block groups, and blocks are included: Tracts 1, 2, 3.01, 3.02, 4.01, 4.02, 5.01, 5.02, 6.01, 6.02, 7.01, 7.02, 8.01, 8.02, 9.01, 9.02, 10, 11.01, 11.02, 12.01, 12.02, 13.01, 13.02, 14, 15, 16.01, 16.02, 17.01, 17.02, 18.01, 18.02, 19, 20, 21, 22.01, 22.02, 23.01, 23.02, 24.01, 24.02, 25.01, 25.02, 26, 27.01, 27.02, 28.01, 28.02, 29.01, 29.02, 29.03, 30, 31, 32, 33.01, 33.02, 34.01, 34.02, 35.01, 35.02, 36.01, 36.02, 36.03, 37.01, 37.02, 38.01, 38.02, 38.03, 39.01, 39.02, 40.01, 40.02, 41.01, 41.02, 42, 43, 44, 45, 46.01, 46.02, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56 57, 58, 59, 60.01, 60.02, 61, 62, 63, 64.01, 64.02, 65.01, 65.02, 66.01, 66.02, 67.01, 67.02, 68.01, 68.02, 69, 70, 71, 72.01, 72.02, 73, 74, 75, 76, 77, 78, 79, 80.01, 80.02, 81, 82.01, 82.02, 83.01, 83.02, 84, 85, 86, 87, 88, 89, 90, 91, 92.01, 92.02, 93, 94, 95, 96.01, 96.02, 97.01, 97.02, 98.01, 98.02, 99.01, 99.02, 99.03, 100, 101, 102, 103.01, 103.02, 104.02, 104.04, 104. 05, 104.06, 104.07; Block Groups 1, 2 of Tract 105; Blocks 360, 361, 362 of Tract 105; that portion of Blocks 357, 399 of Tract 105 beginning at the intersection of the Oregon-Washington State Line (“State Line”) and the northeast corner of Block Group 1 of Tract 105, thence east along the State Line to the intersection of the State Line and the eastern edge of Section 26, Township 1 North, Range 4 East, thence south along the section line to the centerline of State Highway 100 to the intersection of State Highway 100 and the western edge of Block Group 2 of Tract 105. In Clackamas County, the following tracts, block groups, and blocks are included: Tracts 201, 202, 203.01, 203.02, 204.01, 204.02, 205.01, 205.02, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216.01, 216.02, 217, 218, 219, 220, 221.01, 221.02, 222.02, 223, 224, 225, 226, 227.01, 227.02, 228, 229, 230, 231, 232, 233, 234.01, 234.02, , 235, 236, 237; Block Groups 1, 2 of Tract 241; Block Groups 1, 2, 3, 4 of Tract 242; Block Groups 1, 2 of Tract 243.02. In Yamhill County, the following tract is included: Tract 301, except those areas in Tract 301 that lie within the Newberg City Limits defined as of July 12, 1996, and the following blocks within Tract 301: 102B, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121D, 122B, 122C, 123, 126, and 127B. In Washington County the following tracts, block groups, and blocks are included: Tracts 301, 302, 303, 304.01, 304.02, 305.01, 305.02,

306, 307, 308.01, 308.02, 309, 310.03, 310.04, 310.05, 310.06, 311, 312, 313, 314.01, 314.02, 315.01, 315.04, 315.05, 315.06, 315.07, 315.08, 316.03, 316.04, 316.05, 316.06, 316.07, 317.02, 317.03, 317.04, 318.01, 318.02, 318.03, 319.01, 319.03, 319.04, 320, 321.01, 321.02, 322, 323, 324.02, 324.03, 324.04, 325, 326.01, 326.02, 328, 329, 330, 331, 332, 333; Block Groups 1, 2 of Tract 327; Block Group 1 of Tract 334; Block Group 2 of Tract 335; Block Group 1 of Tract 336. In Columbia County the following tracts, block groups, and blocks are included: Tract 9710.98; Block Groups 2, 3 of Tract 9709.98; Blocks 146B, 148, 152 of Tract 9709.98.

(1728) “Rogue Basin” means the area bounded by the following line: Beginning at the NE corner of T32S, R2E, W.M., thence south along range line 2E to the SE corner of T39S; thence west along township line 39S to the NE corner of T40S, R7W; thence south to the SE corner of T40S, R7W; thence west to the SE corner of T40S, R9W; thence north on range line 9W to the NE corner of T39S, R9W; thence east to the NE corner of T39S, R8W; thence north on range line 8W to the SE corner of Section 1, T33S, R8W on the Josephine-Douglas County line; thence east on the Josephine-Douglas and Jackson-Douglas County lines to the NE corner of T32S, R1W; thence east along township line 32S to the NE corner of T32S, R2E to the point of beginning.

(1829) “Salem-Keizer Area Transportation Study” or “SKATS” means the area within the bounds beginning at the intersection of U.S. Interstate Highway 5 (I-5) with Battle Creek Road SE and Wiltsey Road, south along I-5 to the intersection with the western boundary of Section 24, T8S, R3W; thence due south on a line to the intersection with Delaney Road; thence easterly along Delaney Road to the intersection with Sunnyside Road; thence north along Sunnyside Road to the intersection with Hylo Road SE; thence west along Hylo Road SE to the intersection with Liberty Road; thence north along Liberty Road to the intersection with Cole Road; thence west along Cole Road to the intersection with Bates Road; thence northerly and easterly along Bates Road to the intersection with Jory Hill Road; thence west along Jory Hill Road to the intersection with Stone Hill Avenue; thence north along Stone Hill Avenue to the intersection with Vita Springs Road; thence westerly along Vita Springs Road to the Willamette River; thence northeasterly downstream the Willamette River to a point adjacent to where the western boundary of Section 30, T7S, R3W intersects the Southern Pacific Railroad Line; thence westerly along the Southern Pacific Railroad Line to the intersection with State Highway 51; thence northeasterly along State Highway 51 to the intersection with Oak Grove Road; thence northerly along Oak Grove Road to the intersection with State Highway 22; thence west on State Highway 22 to the intersection with Oak Grove Road; thence north along Oak Grove Road to the intersection with Orchard Heights Road; thence east and north along Orchard Heights Road to the intersection with Eagle Crest Drive; thence northerly along Eagle Crest Drive to the intersection with Hunt Road; thence north along Hunt Road to the intersection with Fourth Road; thence east along Fourth Road to the intersection with Spring Valley Road; thence north along Spring Valley to the intersection with Oak Knoll Road; thence east along Oak Knoll Road to the intersection with Wallace Road; thence south along Wallace Road to the intersection with Lincoln Road; thence east along Lincoln Road on a line to the intersection with the Willamette River; thence northeasterly downstream the Willamette River to a point adjacent to where Simon Street starts on the East Bank; thence east and south along Simon Street to the intersection with Salmon; thence east along Salmon to the intersection with Ravena Drive; thence southerly and easterly along Ravena Drive to the intersection with Wheatland Road; thence northerly along Wheatland Road to the intersection with Brooklake Road; thence southeast along Brooklake Road to the intersection with 65th Avenue; thence south along 65th Avenue to the intersection with Labish Road; thence east along Labish Road to the intersection with the West Branch of the Little Pudding River; thence southerly along the West Branch of the Little Pudding River to the intersection with Sunnyview Road; thence east along Sunnyview Road to the intersection with 63rd Avenue; thence south along 63rd Avenue

to the intersection with State Street; thence east along State Street to the intersection with 62nd Avenue; thence south along 62nd Avenue to the intersection with Deer Park Drive; thence southwest along Deer Park Drive to the intersection with Santiam Highway 22; thence southeast along Santiam Highway 22 to the point where it intersects the Salem Urban Growth Boundary (SUGB); thence following the southeast boundary of the SUGB generally southerly and westerly to the intersection with Wiltsey Road; thence west along Wiltsey Road to the intersection with I-5 (the point of beginning).

~~(30) “UGB” means Urban Growth Boundary.~~

~~(1934)~~ “Umpqua Basin” means the area bounded by the following line: Beginning at the SW corner of Section 2, T19S, R9W, on the Douglas-Lane County lines and extending due south to the SW corner of Section 14, T32S, R9W, on the Douglas-Curry County lines, thence easterly on the Douglas-Curry and Douglas-Josephine County lines to the intersection of the Douglas, Josephine, and Jackson County lines; thence easterly on the Douglas-Jackson County line to the intersection of the Umpqua National Forest boundary on the NW corner of Section 32, T32S, R3W; thence northerly on the Umpqua National Forest boundary to the NE corner of Section 36, T25S, R2W; thence west to the NW corner of Section 36, T25S, R4W; thence north to the Douglas-Lane County line; thence westerly on the Douglas-Lane County line to the starting point.

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

~~{Publications: Publications referenced are available from the agency.}~~

Stat. Auth.: ORS 468.020 [& 468A](#)

Stats. Implemented: ORS 468A.025 [& 468A.035](#)

Hist.: DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 18-1996, f. & cert. ef. 8-19-96; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0500; DEQ 1-2005, f. & cert. ef. 1-4-05; DEQ 3-2007, f. & cert. ef. 4-12-07; DEQ 5-2010, f. & cert. ef. 5-21-10; DEQ 18-2011, f. & cert. ef. 12-21-11; DEQ 10-2012, f. & cert. ef. 12-11-12

## **340-204-0020**

### **Designation of Air Quality Control Regions**

Oregon's thirty-six counties are divided into five AQCRs. The AQCR boundaries follow county lines, and there are no counties that belong to more than one AQCR. The five AQCRs are as follows:

(1) Portland Interstate AQCR, containing ten counties:

(a) Benton County;

(b) Clackamas County;

(c) Columbia County;

(d) Lane County;

(e) Linn County;

- (f) Marion County;
  - (g) Multnomah County;
  - (h) Polk County;
  - (i) Washington County;
  - (j) Yamhill County.
- (2) Northwest Oregon AQCR, containing three counties:
- (a) Clatsop County;
  - (b) Lincoln County;
  - (c) Tillamook County.
- (3) Southwest Oregon AQCR, containing five counties:
- (a) Coos County;
  - (b) Curry County;
  - (c) Douglas County;
  - (d) Jackson County;
  - (e) Josephine County.
- (4) Central Oregon AQCR, containing eight counties:
- (a) Crook County;
  - (b) Deschutes County;
  - (c) Hood River County;
  - (d) Jefferson County;
  - (e) Klamath County;
  - (f) Lake County;
  - (g) Sherman County;
  - (h) Wasco County.
- (5) Eastern Oregon AQCR, containing ten counties:
- (a) Baker County;
  - (b) Gilliam County;

- (c) Grant County;
- (d) Harney County;
- (e) Malheur County;
- (f) Morrow County;
- (g) Umatilla County;
- (h) Union County;
- (i) Wallowa County;
- (j) Wheeler County.

~~NOTE: The AQCRs should not be confused with the recent DEQ reorganization that split the state into three DEQ regions: Northwest, West and East.~~

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

Stat. Auth.: ORS 468.020 [& 468A](#)

Stats. Implemented: ORS 468A.025 [& 468A.035](#)

Hist.: DEQ 14-1995, f. & cert ef. 5-25-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0510

### 340-204-0030

#### Designation of Nonattainment Areas

The following areas are designated as Particulate Matter Nonattainment Areas:

(1) The Oakridge Nonattainment Area for PM10 is the Oakridge UGB as defined in OAR 340-204-0010.

~~(2) The Klamath Falls Nonattainment Area for PM2.5 is as follows: Townships and ranges defined by T37S R9E Sections 31-32, T38S R8E Sections 1-5, 8-16, 22-26, 35-36, T38S R9E Sections 5-8, 14-15, 17-36, T39S R8E Sections 1-2, 11-13, 24, T39S R9E Sections 1-27, T39S R10E Sections 3-10, 15-20, 29-30~~[The Klamath Falls Nonattainment Area defined in OAR 340-204-0010.](#)

(3) The Oakridge Nonattainment Area for PM2.5 is defined as a line from Township 21 South, Range 2 East, Section 11 (northwest corner), east to Township 21 South, Range 3 East, Section 11 (northeast corner), south to Township 21 South, Range 3 East, Section 23 (southeast corner), west to Township 21 South, Range 2 East, Section 23 (southwest corner) connecting back to Township 21 South, Range 2 East, Section 11 (northwest corner).

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

Stat. Auth.: ORS 468.020 [& 468A](#)

Stats. Implemented: ORS 468A.025 [& 468A.035](#)

Hist.: DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 18-1996, f. & cert. ef. 8-19-96; DEQ 15-1998, f. & cert. ef. 9-23-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0520; DEQ 15-1999, f. & cert. ef. 10-22-99; DEQ 16-2000, f. & cert. ef. 10-25-00; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 1-2005, f. & cert. ef. 1-4-05; DEQ 9-2005, f. & cert. ef. 9-9-05; DEQ 3-2007, f. & cert. ef. 4-12-07; DEQ 4-2007, f. & cert. ef. 6-28-07; DEQ 5-2010, f. & cert. ef. 5-21-10; DEQ 18-2011, f. & cert. ef. 12-21-11

## **340-204-0040**

### **Designation of Maintenance Areas**

The following areas are designated as Maintenance Areas:

#### **(1) Carbon Monoxide Maintenance Areas:**

(a) The Eugene Maintenance Area for Carbon Monoxide is the Eugene-Springfield AQMA as defined in OAR 340-204-0010;

(b) The Portland Maintenance Area for Carbon Monoxide is the Portland Metropolitan Service District as referenced in OAR 340-204-0010;

(c) The Medford Carbon Monoxide Maintenance Area is the Medford UGB as defined in OAR 340-204-0010;

~~NOTE: EPA maintenance plan approval and redesignation pending.~~

(d) The Grants Pass Carbon Monoxide Maintenance Area is the Grants Pass CBD as defined in OAR 340-204-0010;

(e) The Klamath Falls Carbon Monoxide Maintenance Area is the Klamath Falls UGB as defined in OAR 340-204-0010;

(f) The Salem Carbon Monoxide Maintenance Area is the Salem-Keizer Area Transportation Study as defined in OAR 340-204-0010.

#### **(2) Ozone Maintenance Areas:**

(a) The Medford Maintenance Area for Ozone is the Medford-Ashland AQMA as defined in OAR 340-204-0010;

(b) The Oregon portion of the Portland-Vancouver Interstate Maintenance Area for Ozone is the Portland AQMA, as defined in OAR 340-204-0010;

(c) The Salem Maintenance Area for Ozone is the Salem-Keizer Area Transportation Study as defined in OAR 340-204-0010.

#### **(3) PM10 Maintenance Areas:**



- (a) The Grants Pass PM10 Maintenance Area is the Grants Pass UGB as defined in OAR 340-204-0010;
- (b) The Klamath Falls PM10 Maintenance Area is the Klamath Falls UGB as defined in OAR 340-204-0010;
- (c) The Medford-Ashland PM10 Maintenance Area is the Medford-Ashland AQMA as defined in OAR 340-204-0010;

~~NOTE: EPA maintenance plan approval and redesignation pending.~~

- (d) The La Grande PM10 Maintenance Area is the La Grande UGB as defined in OAR 340-204-0010;

~~NOTE: EPA maintenance plan approval and redesignation pending.~~

- (e) The Lakeview PM10 Maintenance Area is the Lakeview UGB as defined in OAR 340-204-0010.

~~NOTE: EPA maintenance plan approval and redesignation pending.~~

- (f) The Eugene-Springfield PM10 Maintenance Area is the Eugene-Springfield UGB as defined in OAR 340-204-0010.

~~NOTE: EPA maintenance plan approval and redesignation pending.~~

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

Stat. Auth.: ORS 468.020 [& 468A](#)

Stats. Implemented: ORS 468A.025 [& 468A.035](#)

Hist.: DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 18-1996, f. & cert. ef. 8-19-96; DEQ 15-1998, f. & cert. ef. 9-23-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0530; DEQ 15-1999, f. & cert. ef. 10-22-99; DEQ 16-2000, f. & cert. ef. 10-25-00; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 1-2005, f. & cert. ef. 1-4-05; DEQ 9-2005, f. & cert. ef. 9-9-05; DEQ 3-2007, f. & cert. ef. 4-12-07; DEQ 4-2007, f. & cert. ef. 6-28-07; DEQ 18-2011, f. & cert. ef. 12-21-11

## 340-204-0050

### Designation of Prevention of Significant Deterioration Areas

(1) All of the following areas which were in existence on August 7, 1977, shall be Class I Areas and may not be redesignated:

- (a) Mt. Hood Wilderness, as established by Public Law 88-577;
- (b) Eagle Cap Wilderness, as established by Public Law 88-577;
- (c) Hells Canyon Wilderness, as established by Public Law 94-199;
- (d) Mt. Jefferson Wilderness, as established by Public Law 90-548;
- (e) Mt. Washington Wilderness, as established by Public Law 88-577;



- (f) Three Sisters Wilderness, as established by Public Law 88-577;
  - (g) Strawberry Mountain Wilderness, as established by Public Law 88-577;
  - (h) Diamond Peak Wilderness, as established by Public Law 88-577;
  - (i) Crater Lake National Park, as established by Public Law 88-577 and expanded in the 1990 Clean Air Act Amendments;
  - (j) Kalmiopsis Wilderness, as established by Public Law 88-577;
  - (k) Mountain Lake Wilderness, as established by Public Law 88-577;
  - (l) Gearhart Mountain Wilderness, as established by Public Law 88-577.
- (2) All other areas, in Oregon are initially designated Class II, but may be redesignated as provided in OAR 340-204-0060.
- (3) The following areas may be redesignated only as Class I or II:
- (a) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and
  - (b) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.
- (4) The extent of the areas referred to in section (1) and (3) ~~of this rule~~ shall conform to any changes in the boundaries of such areas which occurred between August 7, 1977, and November 15, 1990.

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

Stat. Auth.: ORS 468.020 & ~~ORS~~-468A

Stats. Implemented: ORS 468A.025 & 468A.035

Hist.: DEQ 18-1979, f. & ef. 6-22-79; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 17-1995, f. & cert. ef. 7-12-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0120

### **340-204-0060**

#### **Redesignation of Prevention of Significant Deterioration Areas**

- (1)(a) All areas in Oregon, except as otherwise provided under OAR 340-204-0050, are designated Class II as of December 5, 1974;
- (b) Redesignation, except as otherwise precluded by OAR 340-204-0050, may be proposed by ~~the Department~~DEQ ~~or Indian Governing Bodies~~, as provided below, subject to approval by the EPA Administrator as a revision to the ~~State Implementation Plan~~SIP.

(2) ~~The Department~~DEQ may submit to the EPA Administrator a proposal to redesignate areas of the state Class I or II provided that:

(a) At least one public hearing has been held in accordance with procedures established in the ~~Plan~~SIP;

(b) Other ~~S~~states, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation were notified at least 30 days prior to the public hearing;

(c) A discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social and energy effects of the proposed redesignation, was prepared and made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion;

(d) Prior to the issuance of notice respecting the redesignation of an area that includes any ~~F~~federal lands, ~~the Department~~DEQ has provided written notice to the appropriate Federal Land Manager and afforded adequate opportunity, not in excess of 60 days to confer with ~~the Department~~DEQ respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any Federal Land Manager had submitted written comments and recommendations, ~~the Department~~DEQ ~~shall~~must have published a list of any inconsistency between such redesignation and such comments and recommendations together with the reasons for making such redesignation against the recommendation of the Federal Land Manager; and

(e) ~~The Department~~DEQ has proposed the redesignation after consultation with the elected leadership of local general purpose governments in the area covered by the proposed redesignation.

(3) Any area other than an area to which OAR 340-204-0050 refers may be redesignated as Class III if:

(a) The redesignation would meet the requirements of section (2) ~~of this rule~~;

(b) The redesignation, except any established by an Indian Governing Body, has been specifically approved by the Governor, after consultation with the appropriate committees of the legislature, if it is in session, or with the leadership of the legislature, if it is not in session, unless state law provides that the redesignation must be specifically approved by state legislation, and if general purpose units of local government representing a majority of the residents of the area to be redesignated enact legislation or pass resolutions concurring in the redesignation;

(c) The redesignation would not cause, or contribute to, a concentration of any ~~air~~regulated pollutant which would exceed any maximum allowable increase permitted under the classification of any other area or any ~~national~~ ambient air quality standard; and

(d) Any permit application for any major stationary source or major modification, subject to review under section (1) ~~of this rule~~, which could receive a permit under this section only if the area in question were redesignated as Class III, and any material submitted as part of that application, were available insofar as was practicable for public inspection prior to any public hearing on redesignation of the area as Class III.

(4) Lands within the exterior boundaries of Indian Reservations may be redesignated only by the appropriate Indian Governing Body. ~~The appropriate Indian Governing Body may submit to the EPA Administrator a proposal to redesignate areas Class I, II, or III; provided that:~~

~~(a) The Indian Governing Body has followed procedures equivalent to those required of the Department under section (2) and subsections (3)(c) and (d) of this rule; and~~

~~(b) Such redesignation is proposed after consultation with the state(s) in which the Indian Reservation is located and which border the Indian Reservation.~~

(5) The EPA Administrator ~~shall~~may disapprove, within 90 days of submission, a proposed redesignation of any area only if he finds, after notice and opportunity for public hearing, that such redesignation does not meet the procedural requirements of this paragraph or is inconsistent with OAR 340-204-0050. If any such disapproval occurs, the classification of the area ~~shall~~must be that which was in effect prior to the redesignation which was disapproved.

(6) If the EPA Administrator disapproves any proposed redesignation, ~~the Department~~DEQ ~~or Indian Governing Body, as appropriate,~~ may resubmit the proposal after correcting the deficiencies noted by the EPA Administrator.

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

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A

Stats. Implemented: ORS 468A.025 & 468A.035

Hist.: DEQ 18-1979, f. & ef. 6-22-79; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-031-0130

## **340-204-0070**

### **Special Control Areas**

The following areas are designated as Special Control Areas:

(1) The counties within the Willamette Valley, including Benton, Clackamas, Columbia, Lane, Linn, Marion, Multnomah, Polk, Washington and Yamhill Counties;

(2) Umpqua Basin;

(3) Rogue Basin;

(4) Within incorporated cities having a population of 4,000 or more, and within three miles of the corporate limits of any such city.

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

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A

Stats. Implemented: ORS 468A.025 & 468A.035

Hist.: DEQ 16, f. 6-12-70, ef. 7-11-70; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0010

## 340-204-0080

### Motor Vehicle Inspection Boundary Designations

In addition to the area specified in ORS 815.300, pursuant to 468A.390, the following geographical areas are designated as areas within which motor vehicles are subject to the requirement under 815.300 to have a Certificate of Compliance issued pursuant to 468A.380 to be registered or have the registration of the vehicle renewed.

- (1) Portland Vehicle Inspection Area;
- (2) Medford-Ashland AQMA.

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

Stat. Auth.: ORS 468.020 & [468A.390](#)

Stats. Implemented: ORS [468A.035](#) & 468A.390

Hist.: DEQ 11-1985, f. 9-30-85, ef. 1-1-86; DEQ 21-1988, f. & cert. ef. 9-12-88; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 1-1995, f. & cert. ef. 1-10-95; DEQ 13-1996, f. & cert. ef. 8-12-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-024-0301

## 340-204-0090

### Oxygenated Gasoline Control Areas

~~The following are oxygenated gasoline control areas until October 31, 2007: Clackamas, Multnomah, Washington and Yamhill Counties.~~[The EQC may adopt or amend a CO maintenance plan that includes contingency plan provisions that require use of oxygenated fuel.](#)

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

Stat. Auth.: ORS 468.[020](#) & 468A

Stats. Implemented: ORS [468A.035](#) & 468A.420

Hist.: DEQ 25-1992, f. 10-30-92, cert. ef. 11-1-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0470; DEQ 15-1999, f. & cert. ef. 10-22-99; DEQ 16-2000, f. & cert. ef. 10-25-00; DEQ 4-2001, f. & cert. ef. 3-27-01; DEQ 10-2004, f. & cert. ef. 12-15-04

### Designation of Areas

#### 340-204-0300

### Designation of Sustainment Areas

(1) The EQC may designate sustainment areas provided that DEQ submits a request for designation that includes the following information:

(a) Monitoring data showing that an area is exceeding or has the potential to exceed an ambient air quality standard;

(b) A description of the affected area based on the monitoring data;

(c) A discussion and identification of the priority sources contributing to the exceedance or potential exceedance of the ambient air quality standard; and

(d) A discussion of the reasons for the proposed designation.

(2) Designation of sustainment areas:

(a) The Lakeview UGB as defined in OAR 340-204-0010 is designated as a sustainment area for PM2.5.

(b) Reserved

(3) An area designated as a sustainment area under section (2) will automatically be reclassified immediately upon:

(a) The EPA officially designating the area as a nonattainment area; or

(b) The EQC rescinding the designation based on a request by DEQ. DEQ will consider the following information for rescinding the designation:

(A) Whether at least three consecutive years of monitoring data shows the area is meeting the ambient air quality standard; and

(B) A request by a local government.

**NOTE:** This rule, except sections (2) and (3), is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-200-0040.

Stat. Auth.: ORS 468.020 & 468A

Stats. Implemented: ORS 468A.025 & 468A.035

### **340-204-0310**

#### **Designation of Reattainment Areas**

(1) The EQC may designate reattainment areas provided that DEQ submits a request for designation that includes the following information:

(a) At least three consecutive years of monitoring data showing that an area that is currently designated by EPA as nonattainment is attaining an ambient air quality standard; and

(b) A discussion of the reasons for the proposed designation.

(2) Reserved for list of reattainment areas.

(3) An area designated as a reattainment area under section (2) will automatically be reclassified immediately upon:

(a) The EQC designating the area as a maintenance area and EPA officially designating the area as an attainment area; or

(b) The EQC rescinding the designation based on a request by DEQ. DEQ will consider the following information for rescinding the designation:

(A) Monitoring data that shows the area is not meeting the ambient air quality standard; and

(B) A request by a local government.

NOTE: This rule, except sections (2) and (3), is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-200-0040.

Stat. Auth.: ORS 468.020 & 468A

Stats. Implemented: ORS 468A.025& 468A.035

## **OAR 340-204-0320**

### **Priority Sources**

For the purposes of division 224, priority sources are identified as follows:

(1) In the Lakeview sustainment area, uncertified residential wood fuel-fired devices.

(2) In any other area, DEQ may identify priority sources during a specific permit action based on the sources addressed in the emission reduction strategies that were included in the attainment or maintenance plans for the area.

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

Stat. Auth.: ORS 468.020 & 468A

Stats. Implemented: ORS 468A.025 & 468A.035

## **DIVISION 206**

### **AIR POLLUTION EMERGENCIES**

#### **340-206-0010**

#### **Introduction**

OAR 340-206-0030, 340-206-0050 and 340-206-0060 are effective within priority I and II air quality control regions (AQCR) as defined in 40 CFR Part 51, subpart H (1995), when the AQCR contains a nonattainment area listed in 40 CFR Part 81. All other rules in this ~~D~~division are equally applicable to all areas of the state. Notwithstanding any other regulation or standard, this ~~D~~division is designed to prevent the excessive accumulation of air contaminants during periods of atmospheric stagnation or at any other time, which if allowed to continue to accumulate unchecked could result in concentrations of these contaminants reaching levels which could cause significant harm to the health of persons. This ~~D~~division establishes criteria for identifying and declaring air pollution episodes at levels below the level of significant harm and are adopted pursuant to the requirements of the ~~Federal Clean Air Act~~FCAA as amended and 40 CFR Part 51.151. Levels of significant harm for various regulated pollutants listed in 40 CFR Part 51.151 are:

- (1) For sulfur dioxide (SO<sub>2</sub>) - 1.0 ppm, 24-hour average.
- (2) For particulate matter
  - (a) PM<sub>10</sub> - 600 micrograms per cubic meter, 24-hour average.
  - (b) PM<sub>2.5</sub> -- 350.5 micrograms per cubic meter, 24-hour average.
- (3) For carbon monoxide (CO):
  - (a) 50 ppm, 8-hour average.
  - (b) 75 ppm, 4-hour average.
  - (c) 125 ppm, 1-hour average.
- (4) For ozone (O<sub>3</sub>) -- 0.6 ppm, 2-hour average.
- (5) For nitrogen dioxide (NO<sub>2</sub>):
  - (a) 2.0 ppm, 1-hour average.
  - (b) 0.5 ppm, 24-hour average.

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

Stat. Auth.: ORS 468.020 & 468A

Stats. Implemented: ORS 468A.025& 468A.035

Hist.: DEQ 37, f. 2-15-72, ef. 9-1-72; DEQ 18-1983, f. & ef. 10-24-83; DEQ 8-1988, f. & cert. ef. 5-19-88 (and corrected 5-31-88); DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 19-1996, f. & cert. ef. 9-24-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-027-0005; DEQ 5-2010, f. & cert. ef. 5-21-10

## 340-206-0020

### Definitions

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

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

Stat. Auth.: ORS 468.020 [& 468A](#)

Stats. Implemented: ORS 468A.025 [& 468A.035](#)

Hist.: DEQ 14-1999, f. & cert. ef. 10-14-99

### 340-206-0030

#### Episode Stage Criteria for Air Pollution Emergencies

Three stages of air pollution episode conditions and a pre-episode standby condition are established to inform the public of the general air pollution status and provide a management structure to require preplanned actions designed to prevent continued accumulation of ~~air~~[regulated](#) pollutants to the level of significant harm. The three episode stages are: Alert, Warning, and Emergency. ~~The Department~~[DEQ](#) ~~shall be~~[is](#) responsible to enforce the provisions of this ~~D~~[division](#) which requires actions to reduce and control emissions during air pollution episode conditions. An air pollution alert or air pollution warning ~~shall~~[must](#) be declared by the Director or appointed representative when the appropriate air pollution conditions are deemed to exist. When conditions exist which are appropriate to an air pollution emergency, ~~the Department~~[DEQ](#) ~~shall~~[must](#) notify the Governor and declare an air pollution emergency pursuant to ORS 468.115. The statement declaring an air pollution Alert, Warning or Emergency ~~shall~~[must](#) define the area affected by the air pollution episode where corrective actions are required. Conditions justifying the proclamation of an air pollution alert, air pollution warning, or air pollution emergency ~~shall~~[must](#) be deemed to exist whenever ~~the Department~~[DEQ](#) determines that the accumulation of air contaminants in any place is increasing or has increased to levels which could, if such increases are sustained or exceeded, lead to a threat to the health of the public. In making this determination, ~~the Department~~[DEQ](#) will be guided by the following criteria for each [regulated](#) pollutant and episode stage:

(1) "Pre-~~E~~[episode](#) ~~S~~[standby](#)" condition, indicates that ambient levels of ~~air~~[regulated](#) pollutants are within standards or only moderately exceed standards. In this condition, there is no imminent danger of any ambient [regulated](#) pollutant concentrations reaching levels of significant harm. ~~The Department~~[DEQ](#) ~~shall~~[must](#) maintain at least a normal monitoring schedule but may conduct additional monitoring. An air stagnation advisory issued by the National Weather Service, an equivalent local forecast of air stagnation or observed ambient air levels in excess of ambient air standards may be used to indicate the need for increased sampling frequency. The pre-episode standby condition is the lowest possible air pollution episode condition and may not be terminated.

(2) "Air ~~P~~[pollution](#) ~~A~~[alert](#)" condition indicates that air pollution levels are significantly above standards but there is no immediate danger of reaching the level of significant harm. Monitoring should be intensified and readiness to implement abatement actions should be reviewed. At the ~~A~~[air](#) ~~P~~[pollution](#) ~~A~~[alert](#) level the public is to be kept informed of the air pollution conditions and of potential activities to be curtailed should it be necessary to declare a warning or higher condition. An ~~A~~[air](#) ~~P~~[pollution](#) ~~A~~[alert](#) condition is a state of readiness. When the conditions in both subsections (a) and (b) ~~of this section~~ are met, an ~~A~~[air](#) ~~P~~[pollution](#) ~~A~~[alert](#) will be



declared and all appropriate actions described in ~~Tables 1 and 4~~[OAR 340-206-8010 and 340-206-8040](#) ~~shall~~must be implemented:

(a) Meteorological dispersion conditions are not expected to improve during the next 24 or more hours;

(b) Monitored regulated pollutant levels at any monitoring site exceed any of the following:

(A) Sulfur dioxide -- 0.3 ppm -- 24-hour average;

(B) Particulate matter:

(i) PM10 -- 350 micrograms per cubic meter (ug/m3) -- 24-hour average;

(ii) PM2.5 -- 140.5 micrograms per cubic meter (ug/m3) -- 24-hour average;

(C) Carbon monoxide -- 15 ppm -- 8-hour average;

(D) Ozone -- 0.2 ppm -- 1-hour average;

(E) Nitrogen dioxide:

(i) 0.6 ppm -- 1-hour average; or

(ii) 0.15 ppm -- 24-hour average.

(3) "Air ~~P~~pollution ~~W~~warning" condition indicates that pollution levels are very high and that abatement actions are necessary to prevent these levels from approaching the level of significant harm. At the ~~A~~air ~~P~~pollution ~~W~~warning level substantial restrictions may be required limiting motor vehicle use and industrial and commercial activities. When the conditions in both subsections (a) and (b) ~~of this section~~ are met, an ~~A~~air ~~P~~pollution ~~W~~warning will be declared by ~~the Department~~DEQ and all appropriate actions described in ~~Tables 2 and 4~~[OAR 340-206-8020 and 340-206-8040](#) ~~shall~~must be implemented:

(a) Meteorological dispersion conditions are not expected to improve during the next 24 or more hours;

(b) Monitored regulated pollutant levels at any monitoring site exceed any of the following:

(A) Sulfur dioxide -- 0.6 ppm -- 24-hour average;

(B) Particulate matter:

(i) PM10 -- 420 ug/m3 -- 24-hour average;

(ii) PM2.5 -- 210.5 ug/m3 -- 24-hour average;

(C) Carbon monoxide -- 30 ppm -- 8-hour average;

(D) Ozone -- 0.4 ppm -- 1-hour average;

(E) Nitrogen dioxide:

(i) 1.2 ppm -- 1-hour average; or

(ii) 0.3 ppm -- 24-hour average.

(4) "Air ~~P~~ollution ~~E~~mergency" condition indicates that ~~air~~regulated pollutants have reached an alarming level requiring the most stringent actions to prevent these levels from reaching the level of significant harm to the health of persons. At the ~~A~~ir ~~P~~ollution ~~E~~mergency level extreme measures may be necessary involving the closure of all manufacturing, business operations and vehicle traffic not directly related to emergency services. Pursuant to ORS 468.115, when the conditions in both subsections (a) and (b) ~~of this section~~ are met, an air pollution emergency will be declared by ~~the Department~~DEQ and all appropriate actions described in ~~Tables 3 and 4~~OAR 340-206-8030 and 340-206-8040 ~~shall~~must be implemented:

(a) Meteorological dispersion conditions are not expected to improve during the next 24 or more hours;

(b) Monitored regulated pollutant levels at any monitoring site exceed any of the following:

(A) Sulfur dioxide 0.8 ppm -- 24-hour average;

(B) Particulate matter:

(i) PM10 -- 500 ug/m3 -- 2-hour average;

(ii) PM2.5 -- 280.5 ug/m3 -- 2-hour average;

(C) Carbon monoxide 40 ppm -- 8-hour average;

(D) Ozone 0.5 ppm -- 1-hour average;

(E) Nitrogen dioxide:

(i) 1.6 ppm -- 1-hour average; or

(ii) 0.4 ppm -- 24-hour average.

(5) "Termination": Any air pollution episode condition (~~A~~ alert, ~~W~~arning or ~~E~~mergency) established by these criteria may be reduced to a lower condition when the elements required for establishing the higher conditions are no longer observed.

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

[ED. NOTE: Tables referenced are available from the agency. [Click here for PDF copy of tables.](#)]

Stat. Auth.: ORS 468.020 & 468A

Stats. Implemented: ORS 468A.025 & 468A.035

Hist.: DEQ 37, f. 2-15-72, ef. 9-1-72; DEQ 18-1983, f. & ef. 10-24-83; DEQ 8-1988, f. & cert. ef. 5-19-88 (and corrected 5-31-88); DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-027-0010; DEQ 5-2010, f. & cert. ef. 5-21-10

**340-206-0040**

**Special Conditions**

(1) ~~The Department~~ DEQ ~~shall~~ must issue an "~~O~~zone ~~A~~dvisory" to the public when monitored ozone values at any site exceed the ambient air quality standard of 0.12 ppm but are less than 0.2 ppm for a one hour average. The ozone advisory ~~shall~~ must clearly identify the area where the ozone values have exceeded the ambient air standard and ~~shall~~ must state that significant health effects are not expected at these levels, however, sensitive individuals may be affected by some symptoms.

(2) Where particulate is primarily soil from windblown dust or fallout from volcanic activity, episodes dealing with such conditions must be treated differently than particulate episodes caused by other controllable sources. In making a declaration of air pollution alert, warning, or emergency for such particulate, ~~the Department~~ DEQ ~~shall~~ must be guided by the following criteria:

(a) "Air ~~P~~ollution ~~A~~lert for ~~P~~articulate from ~~V~~olcanic ~~F~~allout or ~~W~~indblown ~~D~~ust" means ~~total suspended~~-particulate values are significantly above a standard but the source is a volcanic eruption or dust storm. In this condition there is no significant danger to public health but there may be a public nuisance created from the dusty conditions. It may be advisable under these circumstances to voluntarily restrict traffic volume and/or speed limits on major thoroughfares and institute cleanup procedures. ~~The Department~~ DEQ will declare an air pollution alert for particulate from volcanic fallout or wind-blown dust when ~~total suspended~~-particulate values at any monitoring site exceed or are projected to exceed 800 ug/m<sup>3</sup> -- 24-hour average and the ~~suspended~~ particulate is primarily from volcanic activity or dust storms, meteorological conditions notwithstanding;

(b) "Air ~~P~~ollution ~~W~~arning for ~~P~~articulate from ~~V~~olcanic ~~F~~allout or ~~W~~indblown ~~D~~ust" means ~~total suspended~~-particulate values are very high but the source is volcanic eruption or dust storm. Prolonged exposure over several days at or above these levels may produce respiratory distress in sensitive individuals. Under these conditions staggered work hours in metropolitan areas, mandated traffic reduction, speed limits and cleanup procedures may be required. ~~The Department~~ DEQ will declare an air pollution warning for particulate from volcanic fallout or wind-blown dust when ~~total suspended~~-particulate values at any monitoring site exceed or are expected to exceed 2,000 ug/m<sup>3</sup> -- 24-hour average and the ~~suspended~~-particulate is primarily from volcanic activity or dust storms, meteorological conditions notwithstanding;

(c) "Air ~~P~~ollution ~~E~~mergency for ~~P~~articulate from ~~V~~olcanic ~~F~~allout or ~~W~~indblown ~~D~~ust" means ~~total suspended~~-particulate values are extremely high but the source is volcanic eruption or dust storm. Prolonged exposure over several days at or above these levels may produce respiratory distress in a significant number of people. Under these conditions cleaning procedures must be accomplished before normal traffic can be permitted. An air pollution emergency for particulate from volcanic fallout or wind-blown dust will be declared by the Director, who ~~shall~~ must keep the Governor advised of the situation, when ~~total suspended~~-particulate values at any monitoring site exceed or are expected to exceed 5,000 ug/m<sup>3</sup> -- 24-hour average and the ~~suspended~~-particulate is primarily from volcanic activity or dust storms, meteorological conditions notwithstanding.

(3) Termination: Any air pollution condition for particulate established by these criteria may be reduced to a lower condition when the criteria for establishing the higher condition are no longer observed.

(4) Action: Municipal and county governments or other governmental agency having jurisdiction in areas affected by an air pollution ~~A~~lert, ~~W~~arning or ~~E~~mergency for particulate from volcanic fallout or windblown dust ~~shall~~ must place into effect the actions pertaining to such episodes which are described in Table 4OAR 340-206-8040.

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

Stat. Auth.: ORS 468.020 & ORS 468A

Stats. Implemented: ORS 468A.025 & 468A.035

Hist.: DEQ 18-1983, f. & ef. 10-24-83; DEQ 8-1988, f. & cert. ef. 5-19-88 (and corrected 5-31-88); DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-027-0012

## 340-206-0050

### Source Emission Reduction Plans

(1) ~~Tables 1, 2, and 3 of this Division~~ OAR 340-206-8010 through 340-206-8030 set forth specific emission reduction measures which ~~shall~~ must be taken upon the declaration of an air pollution alert, air pollution warning, or air pollution emergency. Any person responsible for a source of air contamination within a Priority I AQCR ~~shall~~ must, upon declaration of any air pollution episode condition affecting the locality of the air contamination source, take all appropriate actions specified in the applicable ~~table rule~~ and ~~shall~~ must take appropriate actions specified in an approved source emission reduction plan which has been submitted and is on file with ~~the Department~~ DEQ.

(2) Any person responsible for the operation of any point source of air pollution which is located in a Priority I AQCR, located within an ~~Air Quality Maintenance Area (AQMA)~~ or located within a nonattainment area listed in 40 CFR, Part 81, and ~~E~~ emits 100 tons or more of any ~~air~~ regulated pollutant specified by subsection (a) or (b) ~~of this section shall~~ must file a Source Emission Reduction Plan (SERP) with ~~the Department~~ DEQ in accordance with the schedule described in section (4) ~~of this rule~~. Persons responsible for other point sources of air pollution located in a Priority I AQCR may optionally file a SERP with ~~the Department~~ DEQ for approval. Such plans ~~shall~~ must specify procedures to implement the actions required by ~~Tables 1, 2, and 3 of this Division~~ OAR 340-206-8010 through 340-206-8030 and ~~shall~~ must be consistent with good engineering practice and safe operating procedures. Source emission reduction plans specified by this section are mandatory only for those sources which:

(a) Emit 100 tons per year or more of any ~~regulated~~ pollutant for which the nonattainment area, AQMA, or any portion of the AQMA is designated nonattainment; or

(b) Emit 100 tons per year or more of volatile organic compounds when the nonattainment area, AQMA or any portion of the AQMA is designated nonattainment for ozone.

(3) Municipal and county governments or other governmental body having jurisdiction in nonattainment areas where ambient levels of carbon monoxide, ozone or nitrogen dioxide qualify for Priority I ACQR classification, ~~shall~~ must cooperate with ~~the Department~~ DEQ in developing a traffic control plan to be implemented during air pollution episodes of motor vehicle related emissions. Such plans ~~shall~~ must implement the actions required by ~~Tables 1, 2 and 3 of this Division~~ OAR 340-206-8010 through 340-206-8030 and ~~shall~~ must be consistent with good traffic management practice and public safety.

(4) ~~The Department~~ DEQ ~~shall~~ must periodically review the source emission reduction plans to assure that they meet the requirements of this ~~D~~ division. If deficiencies are found, ~~the Department~~ DEQ ~~shall~~ must notify the

persons responsible for the source. Within 60 days of such notice the person responsible for the source ~~shall~~must prepare a corrected plan for approval by ~~the Department~~DEQ. Source emission reduction plans ~~shall~~must not be effective until approved by ~~the Department~~DEQ.

(5) During an air pollution alert, warning or emergency episode, source emission reduction plans required by this rule ~~shall~~must be available on the source premises for inspection by any person authorized to enforce the provisions of this ~~D~~division.

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

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

Stat. Auth.: ORS 468.020 & ~~ORS~~-468A

Stats. Implemented: ORS 468A.025 & 468A.035

Hist.: DEQ 37, f. 2-15-72, ef. 9-1-72; DEQ 18-1983, f. & ef. 10-24-83; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-027-0015

## 340-206-0060

### Regional Air Pollution Authorities

(1) ~~The Department of Environmental Quality~~DEQ and ~~the regional air pollution authorities shall~~LRAPA must cooperate to the fullest extent possible to insure uniformity of enforcement and administrative action necessary to implement this ~~D~~division. With the exception of sources of air contamination where jurisdiction has been retained by ~~the Department of Environmental Quality~~DEQ, all persons within the territorial jurisdiction of ~~a regional air pollution authority shall~~LRAPA must submit the source emission reduction plans prescribed in OAR 340-206-0050 to the regional air pollution authority. ~~The regional air pollution authority shall~~LRAPA must submit copies of approved source emission reduction plans to ~~the Department of Environmental Quality~~DEQ.

(2) Declarations of air pollution alert, air pollution warning, and air pollution emergency ~~shall~~must be made by ~~the appropriate regional authority~~LRAPA. In the event such a declaration is not made by ~~the regional authority~~LRAPA, the ~~Department of Environmental Quality~~DEQ ~~shall~~must issue the declaration and ~~the regional authority shall~~LRAPA must take appropriate remedial actions as set forth in this ~~D~~division.

(3) Additional responsibilities of ~~the regional authorities shall~~LRAPA include, but are not limited to:

(a) Securing acceptable source emission reduction plans;

(b) Measurement and reporting of air quality data to ~~the Department of Environmental Quality~~DEQ;

(c) Informing the public, news media, and persons responsible for air contaminant sources of the various levels set forth in this ~~D~~division and required actions to be taken to maintain air quality and the public health;

(d) Surveillance and enforcement of source emission reduction plans.

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

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A

Stats. Implemented: ORS 468A.025 & 468A.035

Hist.: DEQ 37, f. 2-15-72, ef. 9-1-72; DEQ 18-1983, f. & ef. 10-24-83; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-027-0025

## 340-206-0070

### Operations Manual

The ~~Department~~DEQ ~~shall~~must maintain an operations manual to administer the provisions of this ~~D~~division. This manual ~~shall~~must be available to the Department Emergency Action office at all times. At a minimum the ~~O~~operations ~~M~~manual ~~shall~~must contain the following elements:

(1) A copy of this ~~D~~division.

(2) A chapter on communications which ~~shall~~must include:

(a) Telephone lists naming public officials, public health and safety agencies, local government agencies, emission sources, news media agencies and individuals who need to be informed about the episode status and information updates. These telephone lists ~~shall~~must be specific to episode conditions and will be used when declaring and cancelling episode conditions;

(b) Example and sample messages to be released to the news media for declaring or modifying an episode status.

(3) A chapter on data gathering and evaluation which ~~shall~~must include:

(a) A description of ambient air monitoring activities to be conducted at each episode stage including "~~S~~standby";

(b) Assignment of responsibilities and duties for ascertaining ambient air levels of specified regulated pollutants and notification when levels reach the predetermined episode levels;

(c) Assignment of responsibilities and duties for monitoring meteorological developments from teletype reports and National Weather Service contacts. Part of this responsibility ~~shall~~must be to evaluate the meteorological conditions for their potential to affect ambient ~~air~~regulated pollutant levels.

(4) A chapter defining responsibilities and duties for conducting appropriate source compliance inspections during episode stages requiring curtailment of regulated pollutant emissions.

(5) A chapter establishing the duties and responsibilities of the emergency action center personnel to assure coordinated operation during an air pollution episode established in accordance with this ~~D~~division.

(6) An appendix containing individual source emission reduction plans required by this ~~D~~division plus any approved voluntary plans.

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

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

Stat. Auth.: ORS 468.[020](#) & ~~ORS~~ 468A

Stats. Implemented: ORS 468A.025 & [468A.035](#)

Hist.: DEQ 18-1983, f. & ef. 10-24-83; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-027-0035



**Table 1** (~~340-206-80100030~~)

**Air Pollution Episode ALERT Conditions Source Emission Reduction Plan Emission Control Actions to be Taken as Appropriate in Alert Episode Area**

**Part A** - Pollution Episode Conditions for Particulate Matter (Except Particulate from Volcanic Activity or Windblown Dust.

- a. There shall be no open burning of any material in the designated area.
- b. Where appropriate and if air quality maintenance strategies have not already prohibited the use of woodstoves and fireplaces, the public is requested to refrain from using coal or wood in uncertified woodstoves and fireplaces for domestic space heating where other heating methods are available.
- c. Sources having Emission Reduction Plans, review plans and assure readiness to put them into effect if conditions worsen.

**Part B** - Pollution Episode Conditions for Carbon Monoxide, Ozone

- a. All persons operating motor vehicles voluntarily reduce or eliminate unnecessary operations within the designated alert area.
- b. Where appropriate, the public is requested to refrain from using coal or wood in uncertified woodstoves and fireplaces for domestic space heating where other heating methods are available.
- c. Governmental and other agencies, review actions to be taken in the event of an air pollution warning.





**Air Pollution Episode WARNING Conditions Emission Reduction Plan**

| <b>Part A - Pollution Episode Conditions for Particulate Matter (PM<sub>10</sub>)<br/>(Except Particulate from Volcanic Activity or Windblown Dust.)</b>                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Source                                                                                                                                                                                                             | Emission control action to be taken as appropriate in warning area                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| a. General (all sources and general public)                                                                                                                                                                        | <ul style="list-style-type: none"> <li>a. Continue alert procedures.</li> <li>b. Where legal authority exists, governmental agencies shall prohibit all use of woodstoves and fireplaces for domestic space heating except where such woodstoves and fireplaces provide the sole source of heat.</li> <li>c. The use of incinerators for disposal of solid or liquid waste is prohibited.</li> <li>d. Reduce emissions as much as possible consistent with safety to people and prevention of irreparable damage to equipment.</li> <li>e. Prepare for procedures to be followed if an emergency episode develops.</li> </ul> |
| b. Specific additional general requirements for coal, oil or wood-fired electric power or steam generating facility                                                                                                | <ul style="list-style-type: none"> <li>a. Effect a maximum reduction in emissions by switching to fuels having the lowest available ash and sulfur content.</li> <li>b. Switch to electric power sources located outside the Air Pollution Warning area or to noncombustion sources (hydro, thermonuclear).</li> <li>c. Cease operation of facilities not related to safety or protection of equipment or delivery of priority power.</li> </ul>                                                                                                                                                                              |
| c. Specific additional general requirements for manufacturing industries including: Petroleum, Refining, Chemical, Primary Metals, Glass, Paper and Allied Products, Mineral Processing, Grain and Wood Processing | <ul style="list-style-type: none"> <li>a. Reduce process heat load demand to the minimum possible consistent with safety and protection of equipment.</li> <li>b. Reduce emission of air contaminants from manufacturing by closing, postponing or deferring production to the maximum extent possible without causing injury to persons or damage to equipment. In so doing, assume reasonable economic hardships. Do not commence new cooks, batches or furnace changes in batch operation. Reduce continuous operations to minimum operating level where practicable.</li> </ul>                                           |

| Part A - Pollution Episode Conditions for Particulate Matter (PM <sub>10</sub> )<br>(Except Particulate from Volcanic Activity or Windblown Dust.) |                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Source                                                                                                                                             | Emission control action to be taken as appropriate in warning area                                           |
|                                                                                                                                                    | c. Defer trade waste disposal operations which emit solid particles, gases, vapors or malodorous substances. |

**Table 2—(continued)**

### **Air Pollution Episode WARNING Conditions Emission Reduction Plan**

**Part B** - Pollution Episode Conditions for Carbon Monoxide, Ozone: control actions to be taken as appropriate in warning area.

- a. All operators of motor vehicles continue alert procedures.
- b. Operation of motor vehicles carrying fewer than three persons shall be requested to avoid designated areas from 6 a.m. to 11 a.m., and 2 p.m. to 7 p.m. or other hours as-may be specified by the Department. Exempted from this request are:
  1. Emergency vehicles
  2. Public transportation
  3. Commercial vehicles
  4. Through traffic remaining on Interstate or primary highways
  5. Traffic controlled by a preplanned strategy
- c. In accordance with a traffic control plan prepared pursuant to OAR 340-206-0050, public transportation operators shall provide the additional service necessary to minimize the public inconvenience resulting from actions taken in accordance with paragraph b. above.
- d. For ozone episodes there shall be:
  1. No bulk transfer of gasoline without vapor recovery from 2 a.m. to 2 p.m.
  2. No service station pumping sales of gasoline from 2 a.m. to 2 p.m.
  3. No operation of paper coating plants from 2 a.m. to 2 p.m.
  4. No architectural painting or auto refinishing.
  5. No venting of dry cleaning solvents from 2 a.m. to 2 p.m. (except perchloroethylene).

- e. When appropriate for carbon monoxide episodes during the heating season and where legal authority exists, governmental agencies shall prohibit all use of woodstoves and fireplaces for domestic space heating except where such woodstoves and fireplaces provide the sole source of heat.



**Table 3:** ~~(340-206-8030, 340-206-0050)~~

| <b>Table 3: Air Pollution Episode EMERGENCY Conditions Emission Reduction Plan<br/>Pollution Episode Conditions for all Pollutants<br/>(Except Particulate from Volcanic Activity or Windblown Dust.)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Source                                                                                                                                                                                                    | Emission control actions to be taken as appropriate in emergency area                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| a. Requirements for all measures sources and general public.                                                                                                                                              | <p>a. Continue emission reduction taken under warning conditions.</p> <p>b. All places of employment, commerce, trade, public gatherings, government, industry, business, or manufacture shall immediately cease operations.</p> <p>c. Paragraph b. above does not apply to:</p> <ol style="list-style-type: none"><li>1. Police, fire, medical and other emergency services.</li><li>2. Utility and communication services.</li><li>3. Governmental functioning necessary for civil control and safety.</li><li>4. Operations necessary to prevent injury to persons or serious damage to equipment or property.</li><li>5. Food stores, drug stores and operations necessary for their supply .</li><li>6. Operations necessary for evacuation of persons leaving the area.</li><li>7. Operations conducted in accordance with an approved Source Emission Reduction Plan on file with the Department.</li></ol> <p>d. The operation of motor vehicles is prohibited except for the conduct of the functions exempted in paragraph c. above.</p> <p>e. Reduce heat and power loads to a minimum by maintaining heated occupied spaces no higher than 65° F and turning off heat to all other spaces.</p> |

**Table 3: Air Pollution Episode EMERGENCY Conditions Emission Reduction Plan**  
**Pollution Episode Conditions for all Pollutants**  
**(Except Particulate from Volcanic Activity or Windblown Dust.)**

| Source                                                                                                                                                                                                                                               | Emission control actions to be taken as appropriate in emergency area                                                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                      | f. Where legal authority exists, governmental agencies shall prohibit all use of woodstoves and fireplaces for domestic space heating.                                                                                   |
| b. Specific additional requirements for coal oil or wood-fired electric power generating facilities operating under an approved source emission reduction plan.                                                                                      | a. Maintain operation at the lowest level possible consistent with prevention of damage to equipment and power production no higher than is required to supply power which is obtained elsewhere for essential services. |
| c. Specific additional requirements for coal, oil or wood-fired steam generating facilities operating under an approved source emission reduction plan.                                                                                              | a. Reduce operation to lowest level possible consistent with preventing damage to equipment.                                                                                                                             |
| d. Specific additional requirements for industries operating under an approved source emission reduction plan including: Petroleum Refining; Chemical; Primary Metals; Glass; Paper and Allied Products; Mineral Processing; Grain; Wood Processing. | a. Cease all trade waste disposal operations.<br>b. If meteorological conditions are expected to persist for 24 hours or more, cease all operations not required for safety and protection of equipment.                 |



**Table 4 (340-206-80040)**

**Air pollution episode conditions due to Particulate which is primarily fallout from volcanic activity or windblown dust. Ambient Particulate control measures to be taken as appropriate in episode area.**

**Part A - ALERT Condition Actions**

1. Traffic reduction by voluntary route control in contaminated areas.
2. Voluntary motor vehicle speed limits in dusty or fallout areas.
3. Voluntary street sweeping.
4. Voluntary wash down of traffic area

**Part B - WARNING Condition Actions**

1. Continue and intensify alert procedures.
2. Mandated speed limits and route control in contaminated areas.
3. Mandate wash down of exposed horizontal surfaces where feasible.
4. Request businesses to stagger work hours where possible as a means of avoiding heavy traffic.

**Part C - EMERGENCY Condition Actions**

1. Continue warning level procedures, expanding applicable area if necessary.
2. Prohibit all except emergency traffic on major roads and thoroughfares until the area has been cleaned.
3. Other measures may be required at the discretion of the Governor.

## DIVISION 208

### VISIBLE EMISSIONS AND NUISANCE REQUIREMENTS

#### 340-208-0005

##### Applicability and Jurisdiction

(1) This division applies in all areas of the state; except rules OAR 340-208-0500 through 340-208-0610, which apply in all areas of Clackamas, Columbia, Multnomah and Washington counties.

(2) Subject to the requirements in this division, LRAPA is designated by the EQC to implement this division within its area of jurisdiction. The requirements and procedures contained in this division must be used by LRAPA unless LRAPA has adopted or adopts rules which are at least as strict as this division.

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

Stat. Auth.: ORS 468.020 & 468A

Stats. Implemented: ORS 468A.025& 468A.035

#### **340-208-0010**

##### **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) "Abate" means to eliminate the nuisance or suspected nuisance by reducing or managing the emissions using reasonably available practices. The degree of abatement will depend on an evaluation of all of the circumstances of each case and does not necessarily mean completely eliminating the emissions.

~~(2) "Air Contaminant" means a dust, fume, gas, mist, odor, smoke, pollen, vapor, soot, carbon, acid or particulate matter, or any combination thereof.~~

~~(3) "Emission" means a release into the outdoor atmosphere of air contaminants.~~

~~(4) "Fuel Burning Equipment" means a boiler or process heater that burns a solid, liquid, or gaseous fuel, the principal purpose of which is to produce heat or power by indirect heat transfer.~~

~~(5) "Fugitive Emissions" means emissions of any air contaminant that escape to the atmosphere from any point or area not identifiable as a stack, vent, duct, or equivalent opening.~~

~~(6) "New source" means, for purposes of OAR 340-208-0110, any air contaminant source installed, constructed, or modified after June 1, 1970.~~

~~(7)~~ (2) "Nuisance" means a substantial and unreasonable interference with another's use and enjoyment of real property, or the substantial and unreasonable invasion of a right common to members of the general public.

~~(8) "Odor" means that property of an air contaminant that affects the sense of smell.~~

(93) "Special ~~C~~ontrol ~~A~~rea" means an area designated in OAR 340-204-0070.

~~(12) "Standard conditions" means a temperature of 68° Fahrenheit and a pressure of 14.7 pounds per square inch absolute.~~

~~(13) "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, "standard cubic foot" also implies adjustment of gas volume to that which would result at a concentration of 12% carbon dioxide or 50% excess air.~~

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

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

Stat. Auth.: ORS 468.020 & 468A

Stats. Implemented: ORS ~~468.020 &~~ 468A.025 & 468A.035

Hist.: [DEQ 16, f. 6-12-70, ef. 7-11-70; DEQ 1-1984, f. & ef. 1-16-84; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 3-1996, f. & cert. ef. 1-29-96]; [DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 3-1996, f. & cert. ef. 1-29-96]; [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 340-021-0005, 340-021-0050, 340-030-0010; DEQ 2-2001, f. & cert. ef. 2-5-01; DEQ 8-2007, f. & cert. ef. 11-8-07

## Visible Emissions

### ~~340-208-0100~~

#### ~~Applicability~~

~~OAR 340-208-0100 through 340-208-0110 apply in all areas of the state.~~

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

~~Stat. Auth.: ORS 468 & ORS 468A~~

~~Stats. Implemented: ORS 468A.025~~

~~Hist.: DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0012~~

### 340-208-0110

#### Visible Air Contaminant Limitations

~~(1) Existing sources outside special control areas. No person may emit or allow to be emitted any air contaminant into the atmosphere from any existing air contaminant source located outside a special control area~~



~~for a period or periods aggregating more than three minutes in any one hour which is equal to or greater than 40% opacity.~~

~~(2) New sources in all areas and existing sources within special control areas: No person may emit or allow to be emitted any air contaminant into the atmosphere from any new air contaminant source, or from any existing source within a special control area, for a period or periods aggregating more than three minutes in any one hour which is equal to or greater than 20% opacity.~~

~~(3) Exceptions to sections (1) and (2) of this rule:~~

~~(a) Where the presence of uncombined water is the only reason for failure of any source to meet the requirement of sections (1) and (2) of this rule, such sections shall not apply;~~

~~(b) Existing fuel burning equipment installed on or before June 1, 1970 that has not been modified since June 1, 1970 utilizing wood wastes and located within special control areas shall comply with the emission limitations of section (1) of this rule in lieu of section (2) of this rule.~~

~~(4) Opacity is determined in accordance with the procedures specified in the definition of "opacity".~~

(1) The emissions standards in this rule do not apply to fugitive emissions from a source or part of a source.

(2) The visible emissions standards in this rule are based on a six minute average as measured by:

(a) EPA Method 9,

(b) A continuous opacity monitoring system (COMS) installed and operated in accordance with the DEQ Continuous Monitoring Manual or 40 CFR Part 60; or

(c) An alternative monitoring method approved by DEQ that is equivalent to EPA Method 9, such as EPA's ALT Method 082.

(3) For sources, other than wood-fired boilers, that existed prior to June 1, 1970 and have not been modified since May 31, 1970:

(a) If located outside a special control area, visible emissions must not equal or exceed:

(A) 40 percent opacity through December 31, 2019; and

(B) 20 percent opacity on and after January 1, 2020

(b) If located inside a special control area, visible emissions must not equal or exceed 20 percent opacity.

(4) For sources, other than wood-fired boilers, installed, constructed, or modified on or after June 1, 1970, visible emissions must not exceed 20 percent opacity.

(5) For wood-fired boilers that existed prior to June 1, 1970 and have not been modified since May 31, 1970, visible emissions must not equal or exceed:

(a) 40 percent opacity through December 31, 2019 with the exception that visible emissions may equal or exceed 40 percent opacity for up to 12 minutes in an hour, but may not equal or exceed 55 percent opacity during that 12 minute period, as the average of two six minute Method 9 observation periods.

(b) 20 percent opacity on or after January 1, 2020, with one or more of the following exceptions:

(A) Visible emissions may equal or exceed 20 percent opacity for up to 12 minutes in an hour, but may not equal or exceed 40 percent opacity during that 12 minute period, as the average of two six minute Method 9 observation periods.

(B) Visible emissions may equal or exceed 20 percent opacity but may not equal or exceed 40 percent opacity, as the average of all six minute Method 9 observation periods during grate cleaning operations provided the grate cleaning is performed in accordance with a grate cleaning plan approved by DEQ; and

(C) DEQ may approve, at the owner's or operator's request, a boiler specific limit greater than 20 percent opacity, but not to equal or exceed 40 percent opacity, based on the opacity measured during a source test that demonstrates compliance with OAR 340-228-0210(2)(a)(C) or 340-228-0210(2)(d), whichever is applicable. Opacity must be measured for at least 60 minutes during each compliance source test run. The boiler specific limit will be the average of at least 30 six minute Method 9 observations conducted during the compliance source test. The limit will include a higher limit for one six minute period during any hour based on the maximum six minute average measured during the compliance source test. Specific opacity limits will be included in the permit for each affected source as a minor permit modification (simple fee) for sources with an Oregon Title V Operating Permit or a Basic Technical Modification for sources with an Air Contaminant Discharge Permit. If an alternative limit is established in accordance with this paragraph, the exception provided in paragraph (A) does not apply.

(6) For wood-fired boilers installed, constructed, or modified after June 1, 1970 but before [INSERT SOS FILING DATE OF RULES], visible emissions must not equal or exceed 20 percent opacity with the exception that visible emissions may equal or exceed 20 percent opacity for up to 12 minutes in an hour, but may not equal or exceed 40 percent opacity during that 12 minute period, as the average of two six minute Method 9 observation periods.

(7) For all wood-fired boilers installed, constructed, or modified after [INSERT SOS FILING DATE OF RULES], emissions must not equal or exceed 20 percent opacity.

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

Stat. Auth.: ORS 468.020 & 468A

Stats. Implemented: ORS ~~468.020 &~~ 468A.025 & 468A.035

Hist.: DEQ 16, f. 6-12-70, ef. 7-11-70; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 3-1996, f. & cert. ef. 1-29-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0015; DEQ 2-2001, f. & cert. ef. 2-5-01; DEQ 8-2007, f. & cert. ef. 11-8-07

## **Fugitive Emission Requirements**

**~~340-208-0200~~**

### **~~Applicability~~**

**~~OAR 340-208-0200 through 340-208-0210 apply:~~**

~~(1) Within Special Control Areas, designated in OAR 340-204-0070; and~~

~~(2) In other areas when the department determines a nuisance exists and should be controlled, and the control measures are practicable.~~

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

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99; Renumbered from 340-021-0055; DEQ 2-2001, f. & cert. ef. 2-5-01

## 340-208-0210

### Requirements for Fugitive Emissions

~~(1) When fugitive emissions escape from a building or equipment in such a manner and amount as to create a nuisance or to violate any regulation, the department may order the owner or operator to abate the nuisance or to bring the facility into compliance. In addition to other means of obtaining compliance the department may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that air contaminants are controlled or removed before being emitted to the open air.~~

(2) No person may cause or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished; or any equipment to be operated, without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but not be limited to the following:

(a) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;

(b) Application of ~~asphalt, oil, water,~~ or other suitable chemicals on unpaved roads, materials stockpiles, and other surfaces which can create airborne dusts;

(c) Full or partial enclosure of materials stockpiles in cases where application of ~~oil, water,~~ or other suitable chemicals are not sufficient to prevent particulate matter from becoming airborne;

(d) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;

(e) Adequate containment during sandblasting or other similar operations;

(f) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;

(g) The prompt removal from paved streets of earth or other material that does or may become airborne.

(2) When fugitive emissions escape from an air contaminant source, DEQ may order the owner or operator to abate the emissions. In addition to other means, DEQ may order that a building or equipment in which

processing, handling and storage are done be tightly closed and ventilated in such a way that air contaminants are controlled or removed before being emitted to the open air.

(a) For purposes of this section, fugitive emissions are visible emissions that leave the property of a source for more than 18 seconds in a six minute period. The minimum observation time must be at least six minutes unless otherwise specified in a permit.

(b) Fugitive emissions are determined by EPA Method 22 at the downwind property boundary.

(3) If requested by DEQ, the owner or operator must develop a fugitive emission control plan, including but not limited to the work practices in section (1), that will prevent any visible emissions from leaving the property of a source for more than 18 seconds in a six-minute period following the procedures of EPA Method 22.

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

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A

Stats. Implemented: ORS 468A.025 & 468A.035

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0060; DEQ 2-2001, f. & cert. ef. 2-5-01

## Nuisance Control Requirements

### 340-208-0300

#### Nuisance Prohibited

(1) No person may cause or allow air contaminants from any source subject to regulation by ~~the department~~DEQ to cause a nuisance.

(2) Upon determining a nuisance may exist, ~~the department~~DEQ will provide written notice to the person creating the suspected nuisance. ~~The department~~DEQ will endeavor to resolve observed nuisances in keeping with the policy outlined in OAR 340-12-0026. If ~~the department~~DEQ subsequently determines a nuisance exists under 340-208-0310 and proceeds with a formal enforcement action, pursuant to ~~chapter~~OAR 340 division 12, the first day for determining penalties will be no earlier than the date of this notice.

Stat. Auth.: ORS 468.020, ~~ORS~~ 468A.010 & ~~ORS~~ 468A.025

Stats. Implemented: ORS 468A.010 & ~~ORS~~ 468A.025

Hist.: DEQ 2-2001, f. & cert. ef. 2-5-01

### 340-208-0310

#### Determining Whether A Nuisance Exists

(1) In determining a nuisance, ~~the department~~DEQ may consider factors including, but not limited to, the following:

- (a) Frequency of the emission;
- (b) Duration of the emission;
- (c) Strength or intensity of the emissions, odors or other offending properties;
- (d) Number of people impacted;
- (e) The suitability of each party's use to the character of the locality in which it is conducted;
- (f) Extent and character of the harm to complainants;
- (g) The source's ability to prevent or avoid harm.

(2) Compliance with a ~~B~~best ~~W~~work ~~P~~practices ~~A~~agreement that identifies and abates a suspected nuisance constitutes compliance with OAR 340-208-0300 for the identified nuisance. For sources subject to [OAR](#) 340-216-0020 or 340-218-0020, compliance with specific permit conditions that results in the abatement of a nuisance associated with an operation, process or other pollutant emitting activity constitutes compliance with 340-208-0300 for the identified nuisance. For purposes of this section, "permit condition" does not include the general condition prohibiting the creation of nuisances.

Stat. Auth.: ORS 468.[020](#), ~~ORS~~ 468A.010 & ~~ORS~~ 468A.025

Stats. Implemented: ORS 468A.010 & ~~ORS~~ 468A.025

Hist.: DEQ 2-2001, f. & cert. ef. 2-5-01

## 340-208-0320

### Best Work Practices Agreement

- (1) A person may voluntarily enter into an agreement with ~~the department~~[DEQ](#) to implement specific practices to abate the suspected nuisance. This agreement may be modified by mutual consent of both parties. This agreement will be an Order for the purposes of enforcement under OAR 340 division 12.
- (2) For any source subject to OAR 340-216-0020 or 340-218-0020, the conditions outlined in the ~~B~~best ~~W~~work ~~P~~practices ~~A~~agreement will be incorporated into the permit at the next permit renewal or modification.
- (3) This agreement will remain in effect unless or until ~~the department~~[DEQ](#) provides written notification to the person subject to the agreement that:
  - (a) The agreement is superseded by conditions and requirements established later in a permit;
  - (b) ~~The department~~[DEQ](#) determines the activities that were the subject of the agreement no longer occur; or
  - (c) ~~The department~~[DEQ](#) determines that further reasonably available practices are necessary to abate the suspected nuisance.
- (4) The agreement will include one or more specific practices to abate the suspected nuisance. The agreement may contain other requirements including, but not limited to:

- (a) Monitoring and tracking the emission of air contaminants;
- (b) Logging complaints and the source's response to the complaint;
- (c) Conducting a study to propose further refinements to best work practices.

(5) ~~The department~~ DEQ will consult, as appropriate, with complainants with standing in the matter throughout the development, preparation, implementation, modification and evaluation of a ~~B~~best ~~W~~work ~~P~~pactices ~~A~~agreement. ~~The department~~ DEQ will not require that complainants identify themselves to the source as part of the investigation and development of the ~~B~~best ~~W~~work ~~P~~pactices ~~A~~agreement.

Stat. Auth.: ORS 468.020, ~~ORS~~ 468A.010 & ~~ORS~~ 468A.025

Stats. Implemented: ORS 468A.010 & ~~ORS~~ 468A.025

Hist.: DEQ 2-2001, f. & cert. ef. 2-5-01

### 340-208-0450

#### Particle Fallout Limitation

(1) No person may cause or permit the ~~emission-deposition~~ of particulate matter larger than 250 microns in size ~~at sufficient duration or quantity as to that~~ creates an observable deposition upon the real property of another person ~~when notified by the department that the deposition exists and must be controlled.~~

(2) Upon determining that deposition has occurred, DEQ will notify the person creating the deposition that they are in violation of this rule. DEQ will endeavor to resolve observed deposition in keeping with the policy outlined in OAR 340-12-0026. If DEQ initiates a formal enforcement action, pursuant to OAR 340 division 12, for violation of this rule, then DEQ may not assess civil penalties for any such violation(s) that occurred prior to the date that DEQ sent the notice required under this section.

Stat. Auth.: ORS 468.020, ~~ORS~~ 468A.010 & ~~ORS~~ 468A.025

Stats. Implemented: ORS 468A.010 & ~~ORS~~ 468A.025

Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73; DEQ 4-1993, f. & cert. ef. 3-10-93; Renumbered from 340-028-0080; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0520; DEQ 2-2001, f. & cert. ef. 2-5-01, Renumbered from 340-208-0620

### Clackamas, Columbia, Multnomah, and Washington Counties

### 340-208-0600

#### ~~Visible Air Contaminant Standards~~

~~No person may allow any non-fuel burning equipment to discharge any air contaminant that is 20 percent opacity or greater into the atmosphere for a period of or periods totaling more than 30 seconds in any one hour.~~

~~Stat. Auth.: ORS 468 & ORS 468A.~~

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

~~Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73; DEQ 4 1993, f. & cert. ef. 3-10-93; Renumbered from 340-028-0070;~~

~~DEQ 3 1996, f. & cert. ef. 1-29-96; DEQ 14 1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0500;~~

~~DEQ 2 2001, f. & cert. ef. 2-5-01~~

**DIVISION 209**  
**PUBLIC PARTICIPATION**

**340-209-0010**

**Purpose**

The purpose of this ~~D~~division is to specify the requirements for notifying the public of certain permit actions and providing an opportunity for the public to participate in those permit actions.

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

Stat. Auth.: ORS 468.020, 468.065 & 468A.310

Stats. Implemented: ORS 468.065, 468A.035, 468A.040 & ORS 468A.310

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

**340-209-0020**

**Applicability**

This ~~D~~division applies to permit actions requiring public notice as specified in OAR 340, divisions 216 and 218.

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

Stat. Auth.: ORS 468.020, 468.065 & 468A.310

Stats. Implemented: ORS 468.065, 468A.035, 468A.040 & ORS 468A.310

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

**340-209-0030**

**Public Notice Categories and Timing**

(1) ~~The Department~~DEQ categorizes permit actions according to potential environmental and public health significance and the degree to which ~~the Department~~DEQ has discretion for implementing the applicable regulations. Category I is for permit actions with low environmental and public health significance so they have less public notice and opportunity for public participation. Category IV is for permit actions with potentially high environmental and public health significance so they have the greatest level of public notice and opportunity for participation.

(2) Permit actions are assigned to specific categories in OAR 340, divisions 216 and 218. If a permit action is uncategorized, the permit action will be processed under Category III.



(3) The following describes the public notice or participation requirements for each category:

- (a) Category I -- No prior public notice or opportunity for participation. However, ~~the Department~~ [DEQ](#) will maintain a list of all permit actions processed under Category I and make the list available for public review.
- (b) Category II -- ~~The Department~~ [DEQ](#) will provide public notice of the proposed permit action and a minimum of 30 days to submit written comments.
- (c) Category III -- ~~The Department~~ [DEQ](#) will provide [public](#) notice of the proposed permit action and a minimum of 35 days to submit written comments. ~~The Department~~ [DEQ](#) will provide a minimum of 30 days notice for a hearing, if one is scheduled. ~~The Department~~ [DEQ](#) will schedule a hearing to allow interested persons to submit oral or written comments if:
  - (A) ~~The Department~~ [DEQ](#) determines that a hearing is necessary; or
  - (B) Within 35 days of the mailing of the public notice, ~~the Department~~ [DEQ](#) receives written requests from ten persons, or from an organization representing at least ten persons, for a hearing.
- (d) Category IV -- Once an application is considered complete under OAR 340-216-0040, ~~the Department~~ [DEQ](#) will:

(A) Provide notice of the completed application and requested permit action;

(B) Schedule an informational meeting within the community where the facility will be or is located and provide public notice of the meeting. [DEQ will consider any information gathered in this process in its drafting of the proposed permit, but will not maintain an official record of the meeting and will not provide a written response to the comments;](#)

(C) Once a draft permit is completed, provide public notice of the proposed permit and a minimum of 40 days to submit written comments; and

(D) Schedule a public hearing to allow interested persons to submit oral or written comments and provide a minimum of 30 days public notice for the hearing.

(4) Except for ~~title V permit~~ actions [regarding Oregon Title V Operating Permits](#), ~~the Department~~ [DEQ](#) may move a permit action to a higher category under section (3) ~~of this rule~~-based on, but not limited to the following factors:

(a) Anticipated public interest in the facility;

(b) Compliance and enforcement history of the facility or owner; ~~or~~

(c) Potential for significant environmental or public harm due to location or type of facility; [or](#)

[\(d\) Federal requirements.](#)

**[NOTE:](#)** This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-200-0040.

Stat. Auth.: ORS 468.020, [468.065 & 468A.310](#)

Stats. Implemented: ORS 468.[065](#) & 468A.[035](#), [468A.040 & 468A.310](#)

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2009, f. & cert. ef. 12-16-09

### 340-209-0040

#### Public Notice Information

(1) The following information is required in public notices for all proposed ACDP and draft Oregon Title V Operating Permit actions, except for General Permit actions:

(a) Name of applicant and location of the facility;

(b) Type of facility, including a description of the facility's processes subject to the permit;

(c) Description of the air contaminant emissions including, the type of [regulated](#) pollutants, quantity of emissions, and any decreases or increases since the last permit action for the facility;

(d) Location and description of documents relied upon in preparing the draft permit;

(e) Other permits required by ~~the Department~~[DEQ](#);

(f) Date of previous permit actions;

(g) Opportunity for public comment and a brief description of the comment procedures, whether in writing or in person, including the procedures for requesting a hearing (unless a hearing has already been scheduled or is not an option for the public notice category);

(h) Compliance, enforcement, and complaint history along with resolution of the same;

(i) A summary of the discretionary decisions made by ~~the Department~~[DEQ](#) in drafting the permit;

(j) Type and duration of the proposed or draft permit action;

(k) Basis of need for the proposed or draft permit action;

(l) Any special conditions imposed in the proposed or draft permit action;

(m) Whether each proposed permitted emission is a criteria pollutant and whether the area in which the source is located is designated as attainment or non-attainment for that pollutant;

(n) If the proposed permit action is for a federal major source, whether the proposed permitted emission would have a significant impact on a Class I airshed;

(o) If the proposed permit action is for a major source for which dispersion modeling has been performed, an indication of what impact each proposed permitted emission would have on the ambient air quality standard and PSD increment consumption within an attainment area;

(p) Other available information relevant to the permitting action;

- (q) The name and address of ~~the Department~~[DEQ](#) office processing the permit;
  - (r) The name, address, and telephone number and e-mail address of a person from whom interested persons may obtain additional information, including copies of the permit draft, the application, all relevant supporting materials, including any compliance plan, permit, and monitoring and compliance certification report, except for information that is exempt from disclosure, and all other materials available to ~~the Department~~[DEQ](#) that are relevant to the permit decision; and
  - (s) If applicable, a statement that an enhanced ~~New Source Review~~[NSR](#) process under OAR 340 division 224, including the external review procedures required under OAR 340-218-0210 and 340-218-0230, is being used to allow for subsequent incorporation of the operating approval into an Oregon Title V Operating Permit as an administrative amendment.
- (2) General Permit Actions. The following information is required for General ACDP and General Oregon Title V Operating Permit actions:
- (a) The name and address of potential or actual facilities assigned to the General Permit;
  - (b) Type of facility, including a description of the facility's process subject to the permit;
  - (c) Description of the air contaminant emissions including, the type of [regulated](#) pollutants, quantity of emissions, and any decreases or increases since the last permit action for the potential or actual facilities assigned to the permit;
  - (d) Location and description of documents relied upon in preparing the draft permit;
  - (e) Other permits required by ~~the Department~~[DEQ](#);
  - (f) Date of previous permit actions;
  - (g) Opportunity for public comment and a brief description of the comment procedures, whether in writing or in person, including the procedures for requesting a hearing (unless a hearing has already been scheduled or is not an option for the Public Notice category);
  - (h) Compliance, enforcement, and complaint history along with resolution of the same;
  - (i) A summary of the discretionary decisions made by ~~the Department~~[DEQ](#) in drafting the permit;
  - (j) Type and duration of the proposed or draft permit action;
  - (k) Basis of need for the proposed or draft permit action;
  - (l) Any special conditions imposed in the proposed or draft permit action;
  - (m) Whether each proposed permitted emission is a criteria pollutant and whether the area in which the sources are located are designated as attainment or non-attainment for that pollutant;
  - (n) If the proposed permit action is for a federal major source, whether the proposed permitted emission would have a significant impact on a Class I airshed;
  - (o) Other available information relevant to the permitting action; and

(p) The name and address of ~~the Department~~[DEQ](#) office processing the permit;

(q) The name, address, and telephone number and e-mail address of a person from whom interested persons may obtain additional information, including copies of the permit draft, the application, all relevant supporting materials, including any compliance plan, permit, and monitoring and compliance certification report, except for information that is exempt from disclosure, and all other materials available to ~~the Department~~[DEQ](#) that are relevant to the permit decision.

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

Stat. Auth.: ORS 468.020, [468.065](#) & [468A.310](#)

Stats. Implemented: ORS 468.[065](#), & 468A.[035](#), [468A.040](#) & [468A.310](#)

Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76;

Renumbered from 340-020-0033; DEQ 13-1988, f. & cert. ef. 6-17-88; DEQ 34-1990, f. 8-20-90, cert. ef. 9-1-90; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0150; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1710; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01, Renumbered from 340-216-0050; DEQ 8-2007, f. & cert. ef. 11-8-07

## **340-209-0050**

### **Public Notice Procedures**

(1) All notices. ~~The Department~~[DEQ](#) will mail [or email](#) a notice of proposed permit actions to the persons identified in OAR 340-209-0060.

(2) ~~New Source Review~~[NSR](#), Oregon Title V Operating Permit and General ACDP actions. In addition to section (1) ~~of this rule~~, ~~the Department~~[DEQ](#) will provide notice of ~~New Source Review~~[NSR](#), Oregon Title V Operating Permit and General ACDP actions as follows:

(a) Advertisement in a newspaper of general circulation in the area where the source or sources are or will be located or a ~~Department~~[DEQ](#) publication designed to give general public notice; and

(b) Other means, if necessary, to assure adequate notice to the affected public.

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

Stat. Auth.: ORS 468.020, [468.065](#) & [468A.310](#)

Stats. Implemented: ORS 468.[065](#), & ~~ORS~~ 468A.[035](#), [468A.040](#) & [468A.310](#)

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## **340-209-0060**

### **Persons Required to Be Notified**

(1) All notices. For all types of public notice, ~~the Department~~[DEQ](#) will provide notice to the following persons:

(a) The applicant;

(b) Persons on a mailing list maintained by ~~the Department~~[DEQ](#), including those who request in writing to be notified of air quality permit actions;

(c) Local news media; and

(d) Interested state and federal agencies.

(2) General ACDP or General Oregon Title V Operating Permit actions. In addition to section (1) ~~of this rule~~, ~~the Department~~[DEQ](#) will notify the following:

(a) Potential applicants; and

(b) All existing permit holders in the source category in the case where a General Permit is being issued to a category of sources already permitted.

(3) Oregon Title V Operating Permit actions. ~~The Department~~[DEQ](#) will provide notice to affected states and the EPA in addition to the persons identified in sections (1) and (2) ~~of this rule~~.

(4) ~~New Source Review~~[NSR](#) actions. For ~~New Source Review~~[NSR](#) actions [excluding Type B State NSR actions](#) (OAR 340-~~division~~ 224), ~~the Department~~[DEQ](#) will provide notice to the following officials and agencies having jurisdiction over the location where the proposed construction would occur in addition to the persons identified in section (1) ~~of this rule~~:

(a) The chief executives of the city and county where the source or modification would be located;

(b) Any comprehensive regional land use planning agency;

(c) Any state, federal land manager, or Indian governing body whose land may be affected by emissions from the source or modification; and

(d) The EPA.

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

Stat. Auth.: ORS 468.020, [468.065](#) & [468A.310](#)

Stats. Implemented: ORS 468.[065](#), & ~~ORS~~ 468A.[035](#), [468A.040](#) & [468A.310](#)

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

**~~340-209-0070~~**

### **~~Hearing and Meeting Procedures~~**

~~(1) Informational Meeting. For category IV permit actions, the Department will provide an informational meeting at a reasonable place and time.~~

- ~~(a) The meeting will be held after a complete application is received and before the Department makes a preliminary decision on the application.~~
- ~~(b) Notice of the meeting will be provided at least 14 days before the meeting;~~
- ~~(c) During the meeting, the Department will:~~
- ~~(A) Describe the requested permit action; and~~
- ~~(B) Accept comments from the public.~~
- ~~(d) The Department will consider any information gathered during the meeting, but will not maintain an official record of the meeting and will not provide a written response to the comments.~~
- ~~(2) Public Hearing. When a public hearing is required or requested, the Department will provide the hearing at a reasonable place and time before taking the final permit action.~~
- ~~(a) Notice of the hearing may be given either in the notice accompanying the proposed or draft permit action or in such other manner as is reasonably calculated to inform interested persons. The Department will provide notice of the hearing at least 30 days before the hearing.~~
- ~~(b) Presiding Officer. A Presiding Officer will preside over the public hearing and ensure that proper procedures are followed to allow for the public to comment on the proposed permit action.~~
- ~~(A) Before accepting oral or written comments by members of the public, the Presiding Officer or Department representative will present a summary of the proposed permit action and the Department's preliminary decision. During this period, there will be an opportunity to ask questions about the proposed or draft permit action.~~
- ~~(B) The Presiding Officer will then provide an opportunity for interested persons to submit oral or written comments regarding the proposed permit action. Interested persons are encouraged to submit written comments because time constraints may be imposed, depending on the level of participation. While public comment is being accepted, discussion of the proposed or draft permit action will not be allowed.~~
- ~~(C) After the public hearing, the Presiding Officer will prepare a report of the hearing that includes the date and time of the hearing, the permit action, names of persons attending the hearing, written comments, and a summary of the oral comments. The Presiding Officer's report will be entered into the permit action record.~~

~~Stat. Auth.: ORS 468.020~~

~~Stats. Implemented: ORS 468 & 468A~~

~~Hist.: DEQ 78, f. 9-6-74, ef. 9-25-74; DEQ 122, f. & ef. 9-13-76; DEQ 7-1988, f. & cert. ef. 5-6-88 (and corrected 9-30-88); DEQ 34-1990, f. 8-20-90, cert. ef. 9-1-90; DEQ 9-1996, f. & cert. ef. 7-10-96; DEQ 15-2000, f. & cert. ef. 10-11-00, Renumbered from 340-011-0007; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01, Renumbered from 340-014-0022; DEQ 8-2007, f. & cert. ef. 11-8-07~~

**340-209-0080**

## Issuance or Denial of a Permit

- (1) Following the public comment period and public hearing, if one is held, ~~the Department~~ [DEQ](#) will take action upon the matter as expeditiously as possible. Before taking such action, ~~the Department~~ [DEQ](#) will prepare a written response to address each relevant, distinct issue raised during the comment period and during the hearing record.
- (2) ~~The Department~~ [DEQ](#) will make a record of the public comments, including the names and affiliation of persons who commented, and the issues raised during the public participation process. The public comment records may be in summary form rather than a verbatim transcript. The public comment records are available to the public ~~in the location(s) listed in OAR 340-209-0040~~ [at the DEQ office processing the permit](#).
- (3) The applicant may submit a written response to any comments submitted by the public within 10 working days after the close of the public comment period. ~~The Department~~ [DEQ](#) will consider the applicant's response in making a final decision.
- (4) After considering the comments, ~~the Department~~ [DEQ](#) may adopt or modify the provisions requested in the permit application.
- (5) Issuance of permit: ~~The Department~~ [DEQ](#) will promptly notify the applicant in writing of the final action as provided in OAR 340-011-0525 and will include a copy of the permit. If the permit conditions are different from those contained in the proposed permit, the notification will identify the affected conditions and include the reasons for the changes.
- (6) Denial of a permit: ~~The Department~~ [DEQ](#) will promptly notify the applicant in writing of the final action as provided in OAR 340-011-0525. If ~~the Department~~ [DEQ](#) denies a permit application, the notification will include the reasons for the denial.
- (7) ~~The Department~~ [DEQ](#)'s decision under (5) and (6) is effective 20 days from the date of service of the notice unless, within that time, ~~the Department~~ [DEQ](#) receives a request for a hearing from the applicant. The request for a hearing must be in writing and state the grounds for the request. The hearing will be conducted as a contested case hearing in accordance with ORS 183.413 through 183.470 and OAR 340 division 11.

**NOTE:** [This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-200-0040.](#)

Stat. Auth.: ORS ~~183.335 &~~ 468.020, [468.065 & 468A.310](#)

Stats. Implemented: ORS ~~183.341,~~ 183.413, 183.415, 468.[065,](#) & 468A.[035,](#) [468A.040 & 468A.310-](#)

Hist.: DEQ 42, f. 4-5-72, ef. 4-15-72; DEQ 13-1988, f. & cert. ef. 6-17-88; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01, Renumbered from 340-014-0025 & 340-014-0035; DEQ 8-2007, f. & cert. ef. 11-8-07

**DIVISION 210**  
**STATIONARY SOURCE NOTIFICATION REQUIREMENTS**

**340-210-0010**

**Applicability and Jurisdiction**

(1) This division applies to ~~all~~ air contaminant sources, to stationary sources, and to modifications of existing portable sources that are required to have permits under OAR 340 division 216 ~~in the state.~~

(2) Subject to the requirements in this division, LRAPA is designated by the EQC to implement this division within its area of jurisdiction. The requirements and procedures contained in this division must be used by LRAPA unless LRAPA has adopted or adopts rules which are at least as strict as this division.

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

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070 & 468A.310

Stats. Implemented: ORS 468.065, & ORS 468A.025, 468A.035 468A.040, 468A.050, 468A.070 & 468A.310

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-0200

**340-210-0020**

**Definitions**

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

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

Stat. Auth.: ORS 468.020, 468.065 & 468A

Stats. Implemented: ORS 468.065 & ~~468A.025~~

Hist.: DEQ 14-1999, f. & cert. ef. 10-14-99

**Registration**

**340-210-0100**

**Registration in General**



(1) Any air contaminant source not subject to Air Contaminant Discharge Permits, OAR 340 division 216, or Oregon Title V Operating Permits, OAR 340 division 218, must register with DEQ upon request pursuant to OAR 340-210-0110 through 340-210-0120.

(2) The owner or operator of an air contaminant source listed in subsection (2)(a) ~~of this rule~~ that is certified through a ~~Department~~ DEQ approved environmental certification program and subject to an Area Source NESHAP may register the source with DEQ pursuant to OAR 340-210-0110 through 340-210-0120 in lieu of obtaining a permit in accordance with OAR 340-216-0020, unless DEQ determines that the source has not complied with the requirements of the environmental certification program.

(a) The following ~~air contaminant~~ sources may be registered under this section:

(A) Motor vehicle surface coating operations.

(B) Dry cleaners using perchloroethylene.

(b) Approved environmental certification program. To be approved, the environmental certification program must, at a minimum, require certified ~~air contaminant~~ sources to comply with all applicable state and federal rules and regulations and require additional measures to increase environmental protection.

(c) Fees. In order to obtain and maintain registration, owners and operators of ~~air contaminant~~ sources registered pursuant to this section must pay the following annual fees by March 1 of each year:

(A) Motor vehicle surface coating operations - \$288.00.

(B) Dry cleaners using perchloroethylene - \$216.00.

(C) Late fees.

(i) 8-30 days late: 5% of annual fee.

(ii) 31-60 days late: 10% of annual fee.

(iii) 61 or more days late: 20% of annual fee.

(D) Failure to pay fees. Registration is automatically terminated upon failure to pay annual fees within 90 days of invoice by DEQ, unless prior arrangements for payment have been approved in writing by DEQ.

(d) Recordkeeping. In order to maintain registration, owners and operators of ~~air contaminant~~ sources registered pursuant to this section must maintain records required by the approved environmental performance program under subsection (2)(b) ~~of this rule~~. The records must be kept on site and in a form suitable and readily available for expeditious inspection and review.

(3) The owner or operator of an air contaminant source that is subject to a federal NSPS or NESHAP in 40 CFR Part 60 or 40 CFR Part 63 and that is not located at a source that is required to obtain a permit under OAR ~~chapter 340,~~ division 216 (Air Contaminant Discharge Permits) or OAR ~~chapter 340,~~ division 218 (Oregon Title V Operating Permits), must register and maintain registration with DEQ pursuant to OAR 340-210-0110 through 340-210-0120 if requested in writing by DEQ (or by EPA at DEQ's request).

(4) Revocation. DEQ may revoke a registration if a source fails to meet any requirement in OAR 340-210-0110.

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

Stat. Auth.: ORS 468.020, 468A.025, ~~468A.035~~, 468A.050, 468A.070 & 468A.310

Stats. Implemented: ORS 468A.025, ~~468A.035~~, 468A.050, ~~&~~ 468A.070 & 468A.310

Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0005; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-0500; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2009, f. & cert. ef. 12-16-09; DEQ 7-2011(Temp), f. & cert. ef. 6-24-11 thru 12-19-11; Administrative correction, 2-6-12; DEQ 1-2012, f. & cert. ef. 5-17-12; DEQ 4-2013, f. & cert. ef. 3-27-13; DEQ 9-2013(Temp), f. & cert. ef. 10-24-13 thru 4-22-14

### **340-210-0110**

#### **Registration Requirements**

- (1) Registration pursuant to OAR 340-210-0100(1) or (3) must be completed within 30 days following the mailing date of the request by ~~the Department~~DEQ.
- (2) Registration must be completed by the owner, lessee of the source, or agent on forms made available by ~~the Department~~DEQ. If a form is not available from ~~the Department~~DEQ, the registrant may provide the information using a format approved by ~~the Department~~DEQ.
- (3) In order to obtain registration pursuant to OAR 340-210-0100(1), the following information must be reported by registrants:
  - (a) Name, address, and nature of business;
  - (b) Name of local person responsible for compliance with these rules;
  - (c) Name of person authorized to receive requests for data and information;
  - (d) A description of the production processes and a related flow chart;
  - (e) A plot plan showing the location and height of all air contaminant sources. The plot plan must also indicate the nearest residential or commercial property;
  - (f) Type and quantity of fuels used;
  - (g) Amount, nature, and duration of air contaminant emissions;
  - (h) Estimated efficiency of air pollution control ~~equipment~~devices under present or anticipated operating conditions;
  - (i) Any other information requested by ~~the Department~~DEQ.

(4) In order to obtain registration pursuant to OAR 340-210-0100(2), the following information must be submitted by a registrant ~~must submit the information in section (3)(a), (b), (c), and (i) of this rule and the following:~~

(a) Name, address, and nature of business;

(b) Name of local person responsible for compliance with these rules;

(c) Name of person authorized to receive requests for data and information;

~~(d)~~ Information demonstrating that the air contaminant source is operating in compliance with all applicable state and federal rules and regulations, as requested by ~~the Department~~ DEQ.

~~(e)~~ Information demonstrating that the source is certified through an approved environmental certification program.

~~(f)~~ A signed statement that the submitted information is true, accurate, and complete. This signed statement ~~shall~~ must state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(g) Any other information requested by DEQ.

~~(5)~~ In order to obtain registration pursuant to OAR 340-210-0100(3), the following information must be submitted by a registrant:

(a) Name, address and nature of business or institution;

(b) Name of local person responsible for compliance with these rules;

(c) Name of person authorized to receive requests for data and information;

(d) A description of the air contaminant source subject to regulation;

(e) Identification of the applicable regulation~~(s)~~;

(f) Confirmation that approval to construct and operate the air contaminant source was obtained in accordance with OAR 340-210-0205 through 340-0210-0250;

(g) Confirmation that the air contaminant source is operating in compliance with all applicable state rules and regulations, including but not limited to OAR 340-208-0110 (visible air contaminant limitations) and 340-226-0210 or 340-228-0210 (grain loading standards);

(h) Confirmation that the air contaminant source is operating in compliance with all applicable federal rules and regulations, including but not limited to 40 CFR Part 60 and Part 63 standards and work practice requirements, such as routine tune-up for boilers; and

(i) Any other information requested by ~~the Department~~ DEQ.

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

Stat. Auth.: ORS 468.020, 468A.025, ~~468A.035~~, 468A.050, ~~468A.055~~, 468A.070 & 468A.310

Stats. Implemented: ORS ~~468 &~~ 468A.025, 468A.035, 468A.050, 468A.070 & 468A.310

Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0010; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-0510; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2009, f. & cert. ef. 12-16-09; DEQ 7-2011(Temp), f. & cert. ef. 6-24-11 thru 12-19-11; Administrative correction, 2-6-12; DEQ 1-2012, f. & cert. ef. 5-17-12

## 340-210-0120

### Re-Registration and Maintaining Registration

(1) In order to re-register or maintain registration pursuant to OAR 340-210-0100, a person responsible for an air contaminant source must reaffirm in writing, by March 1 of each year, the correctness and current status of the information furnished to ~~the Department~~ [DEQ](#).

(2) In order to re-register or maintain registration pursuant to OAR 340-210-0100(3):

(a) The registrant must report any change in any of the factual information reported under OAR 340-210-0110 to ~~the Department~~ [DEQ](#) on a form made available by ~~the Department~~ [DEQ](#); and

(b) The registrant must confirm the compliance status of the air contaminant source, including but not limited to compliance with any work practice requirements such as routine tune-ups. Confirmation must be made in writing on a form furnished by ~~the Department~~ [DEQ](#).

(3) In order to re-register, or maintain registration, a person must not have had their registration terminated or revoked within the last 3 years, unless the air contaminant source has changed ownership since termination or revocation, in which case the person must not have had their registration terminated or revoked since the change in ownership.

(4) If a registered air contaminant source is sold or transferred, the sale or transfer must be reported to ~~the Department~~ [DEQ](#) by either the former owner or the new owner within 30 days of the date of sale or transfer. The new owner of the registered air contaminant source must register the air contaminant source within 30 days of the date of sale or transfer in accordance with OAR 340-210-0110(2) and (5).

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.050, [468A.070](#) & 468A.310

Stats. Implemented: ORS ~~468 &~~ 468A.025, 468A.035, 468A.050, 468A.070 & 468A.310

Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0015; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-0520; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2009, f. & cert. ef. 12-16-09; DEQ 7-2011(Temp), f. & cert. ef. 6-24-11 thru 12-19-11; Administrative correction, 2-6-12; DEQ 1-2012, f. & cert. ef. 5-17-12

## Notice of Construction and Approval of Plans

### 340-210-0205

#### Applicability

(1) Except as provided in section (2) ~~of this rule~~, OAR 340-210-0200 through 340-210-0250 apply to [the following](#):

(a) All ~~new stationary~~ sources [not otherwise required to obtain a permit under OAR 340, division 216 or 218. Sources that are required to submit a permit application under OAR 340, division 216 or 218 are not required to submit a Notice of Construction application under this rule](#);

[\(b\) Modifications at existing sources, including sources that have permits under OAR 340 division 216 or 218;](#)  
and

~~(c)~~ All [sources that use](#) air pollution control ~~equipment devices used~~ to comply with emissions limits, or ~~used~~ to avoid [the requirement to obtain an](#) Oregon Title V Operating Permits (OAR 340 division 218) or New Source Review (OAR 340 division 224) requirements, or MACT standards (OAR 340 division 244).

(2) OAR 340-210-0205~~0~~ through 340-210-0250 do not apply to the following ~~stationary~~ sources:

(a) Agricultural operations or equipment that is exempted by OAR 340-200-0030;

(b) Heating equipment in or used in connection with residences used exclusively as dwellings for not more than four families;

(c) Other activities associated with residences used exclusively as dwellings for not more than four families, including, but not limited [ed](#) to barbecues, house painting, maintenance, and groundskeeping; ~~and~~

[\(d\) Portable sources, except modifications of portable sources that have permits under OAR 340 division 216 or 218; and](#)

~~(e)~~ Categorically insignificant activities as defined in OAR 340-200-0020 [unless they](#) ~~that~~ are ~~not~~ subject to NESHAP or NSPS requirements. This exemption applies to all categorically insignificant activities whether or not they are located at major or non-major sources.

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

Stat. Auth.: ORS 468.020, ~~&~~ 468A.025 & 468A.055

Stats. Implemented: ORS ~~468 &~~ 468A.025, 468A.035 & 468A.055

Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70; DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0025; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-0810; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01, Renumbered from 340-210-0210; DEQ 12-2008, f. & cert. ef. 9-17-08

### 340-210-0215

## Requirement

- (1) New ~~Stationary~~ Sources. No person is allowed to construct, install, or establish a new ~~stationary~~ source that will cause an increase in any regulated pollutant emissions without first notifying ~~the Department~~ DEQ in writing.
- (2) Modifications to existing Stationary Ssources. No person is allowed to make a physical change or change in operation of an existing ~~stationary~~ source that will cause an increase, on an hourly basis at full production, in any regulated pollutant emissions without first notifying ~~the Department~~ DEQ in writing.
- (3) Air Pollution Control ~~Equipment~~ Devices. No person is allowed to construct or modify any air pollution control ~~equipment~~ device without first notifying ~~the Department~~ DEQ in writing.

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

Stat. Auth.: ORS 468.020, ~~& ORS~~ 468A.025 & 468A.055

Stats. Implemented: ORS ~~468 & ORS~~ 468A.025, 468A.035 & 468A.055

Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0020; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-0800; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01, Renumbered from 340-210-0200

## 340-210-0225

### Types of Construction/Modification Changes

For the purpose of OAR 340-210-0200 through 340-210-0250, changes that involve new construction or modifications of ~~stationary~~ sources or air pollution control ~~equipment~~ devices are divided into the following Types:

- (1) Type 1 changes include construction or modification of ~~stationary~~ sources or air pollution control ~~equipment~~ devices where such a change meets the criteria in subsections (a) through (f):
  - (a) Would not increase emissions from the source above the ~~Plant Site Emission Limit~~ PSEL by more than the de minimis emission levels defined in OAR 340-200-0020 for sources required to have a permit;
  - (b) Would not increase emissions from the source above the netting basis by more than or equal to the ~~significant emissions rate~~ SER;
  - (c) Would not increase emissions from any new, modified, or replaced device, activity or process, or any combination of devices, activities or processes at the ~~stationary source or combination of stationary sources~~ by more than the de minimis levels defined in OAR 340-200-0020;
  - (d) Would not be used to establish a federally enforceable limit on the potential to emit; and
  - (e) Would not require a TACT determination under OAR 340-226-0130 or a MACT determination under OAR 340-244-0200; and

(f) Is not required to obtain a permit under OAR 340 division 216.

(2) Type 2 changes include construction or modification of ~~stationary~~ sources or air pollution control ~~equipment devices~~ where such a change meets the criteria in subsections (a) through (f):

(a) ~~Would meet the criteria of subsections (1)(a), (1)(b), (1)(d), and (1)(e) of this rule; and~~ Would not increase emissions from the source above the PSEL by more than the de minimis level defined in OAR 340-200-0020 for sources required to have a permit;

(b) Would not increase emissions from the source above the netting basis by more than or equal to the SER;

~~(c)~~ Would not increase emissions from any new, modified, or replaced device, activity or process, or any combination of devices, activities or processes at the stationary source or combination of stationary sources by more than or equal to the SER~~significant emission rate~~;

(d) Would not be used to establish a federally enforceable limit on the potential to emit;

(e) Would not require a TACT determination under OAR 340-226-0130 or a MACT determination under OAR 340-244-0200; and

(f) Is not required to obtain a permit under OAR 340 division 216.

(3) Type 3 changes include construction or modification of ~~stationary~~ sources or air pollution control ~~equipment devices~~ where such a change does not qualify as a Type 4 change under section (4) and:

(a) Would increase emissions from the source above the ~~Plant Site Emission Limit~~PSEL by more than the de minimis ~~emission~~ levels defined in OAR 340-200-0020 before applying unassigned emissions or emissions reduction credits available to the source but less than the ~~significant emission rate~~SER after applying unassigned emissions or emissions reduction credits available to the source for sources required to have a permit;

(b) Would increase emissions from any new, modified, or replaced device, activity or process, or any combination of devices, activities or processes at the stationary source or combination of stationary sources by more than the ~~SER~~significant emission rate but are not subject to OAR 340-222-0041~~(34)(b) or OAR 340, division 224 (NSR rules)~~;

(c) Would be used to establish a federally enforceable limit on the potential to emit; or

(d) Would require a TACT determination under OAR 340-226-0130 or a MACT determination under 340-244-0200.

(4) Type 4 changes include construction or modification of ~~stationary~~ sources or air pollution control ~~equipment devices~~ where such a change or changes would increase emissions from the source above the PSEL, after applying unassigned emissions or emissions reduction credits available to the source, or ~~Netting B~~ basis of the source by more than the ~~significant emission rate~~SER.

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



Stat. Auth.: ORS 468.~~020, & ORS~~ 468A.025, 468A.040, 468A.050, ORS 468A.055, 468A.070 & 468A.310  
Stats. Implemented: ORS ~~468 & ORS~~ 468A.025, 468A.035, 468A.040, 468A.050, 468A.055, 468A.070 & 468A.310

Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70; DEQ 5-1989, f. 4-24-89, cert. ef. 5-1-89; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0030; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-0820; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01, Renumbered from 340-210-0220

## 340-210-0230

### Notice to Construct

(1) Any person proposing a Type 1 or 2 change must provide notice to ~~the Department~~DEQ before constructing or modifying a stationary source or air pollution control ~~equipment~~device. The notice must be in writing on a form supplied by ~~the Department~~DEQ and include the following information as applicable:

- (a) Name, address, and nature of business;
- (b) Name of local person responsible for compliance with these rules;
- (c) Name of person authorized to receive requests for data and information;
- (d) The type of construction or modification as defined in OAR 340-210-0220;
- (e) A description of the constructed or modified source;
- (f) A description of the production processes and a related flow chart for the constructed or modified source;
- (g) A plot plan showing the location and height of the constructed or modified source. The plot plan must also indicate the nearest residential or commercial property;
- (h) Type and quantity of fuels used;
- (i) The change in the amount, nature and duration of regulated ~~air~~ pollutant emissions;
- (j) Plans and specifications for air pollution control ~~equipment~~devices and facilities and their relationship to the production process, including estimated efficiency of air pollution control ~~equipment~~devices under present or anticipated operating conditions;
- (k) Any information on pollution prevention measures and cross-media impacts the owner or operator wants ~~the Department~~DEQ to consider in determining applicable control requirements and evaluating compliance methods;
- (l) A list of any requirements applicable to the new construction or modification;
- (m) Where the operation or maintenance of air pollution control ~~equipment~~devices and emission reduction processes can be adjusted or varied from the highest reasonable efficiency and effectiveness, information



necessary for ~~the Department~~ DEQ to establish operational and maintenance requirements under OAR 340-226-0120(1) and (2); and

(n) Amount and method of refuse disposal; and

(o) Land Use Compatibility Statement signed by a local (city or county) planner either approving or disapproving construction or modification to the source if required by the local planning agency.

(2) Any person proposing a Type 3 or 4 change must submit an application for either a construction ACDP, new permit, or permit modification, whichever is appropriate.

(3) The owner of operator must notify ~~The Department~~ DEQ ~~must be notified~~ of any corrections and revisions to the plans and specifications upon becoming aware of the changes.

(4) Where a permit issued in accordance with OAR 340 divisions 216 or 218 includes construction approval for future changes for operational flexibility, the notice requirements in this rule are waived for the approved changes.

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

Stat. Auth.: ORS 468.020, ~~& ORS~~ 468A.025, 468A.040, 468A.050, 468A.055, 468A.070 & 468A.310

Stats. Implemented: ORS ~~468 & ORS~~ 468A.025, 468A.035, 468A.040, 468A.050, 468A.055, 468A.070 & 468A.310

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### **340-210-0240**

#### **Construction Approval**

(1) Approval to Construct:

(a) For Type 1 changes, the owner or operator may proceed with construction or modification 10 calendar days after ~~the Department~~ DEQ receives the notice required in OAR 340-210-0230, unless ~~the Department~~ DEQ notifies the owner or operator in writing that the proposed construction or modification is not a Type 1 change.

(b) For Type 2 changes, the owner or operator may proceed with the construction or modification 60 calendar days after ~~the Department~~ DEQ receives the notice required in OAR 340-210-0230 or on the date that ~~the Department~~ DEQ approves the proposed construction in writing, whichever is sooner, unless DEQ notifies the owner or operator in writing that the proposed construction or modification is not a Type 2 change.

(c) For Type 3 changes, the owner or operator must obtain either a Construction ACDP or a new or modified Standard ACDP in accordance with OAR ~~chapter~~ 340 division 216 before proceeding with the construction or modification.

(d) For Type 4 changes, the owner or operator must obtain a new or modified Standard ACDP before proceeding with the construction or modification.

~~[Note: In non-attainment areas and maintenance areas,~~ Type 4 changes may also be subject to OAR 340 division 224, New Source Review requirements. ~~In attainment areas, Type 4 changes may be subject to OAR 340-224-0070, Prevention of Significant Deterioration, only if the source would be a federal major source after making the change.]~~

(2) Approval to construct does not relieve the owner of the obligation of complying with applicable requirements.

(3) Notice of Completion. Unless otherwise specified in the construction ACDP or approval, the owner or operator must notify ~~the Department~~DEQ in writing that the construction or modification has been completed using a form furnished by ~~the Department~~DEQ. Unless otherwise specified, the notice is due 30 days after completing the construction or modification. The notice of completion must include the following:

(a) The date of completion of construction or modification; and

(b) The date the stationary source, device, activity, process, or air pollution control ~~equipment~~device was or will be put in operation.

(4) Order Prohibiting Construction or Modification. If at any time, ~~the Department~~DEQ determines that the proposed construction is not in accordance with applicable statutes, rules, regulations, and orders, ~~the Department~~DEQ will issue an order prohibiting the construction or modification. The order prohibiting construction or modification will be forwarded to the owner or operator by certified mail.

(5) Hearing. A person against whom an order prohibiting construction or modification is directed may ~~demand~~ request a contested case hearing within 20 days from the date of mailing the order. The ~~demand~~ request must be in writing, state the grounds for hearing, and be mailed to the Director of ~~the Department~~DEQ. The hearing will be conducted pursuant to the applicable provisions in division 11 of this chapter.

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

Stat. Auth.: ORS 468.~~020, & ORS~~ 468A.025, 468A.040, 468A.050, 468A.055, 468A.070 & 468A.310

Stats. Implemented: ORS ~~468 & ORS~~ 468A.025, 468A.035, 468A.040, 468A.050, 468A.055, 468A.070 & 468A.310

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## 340-210-0250

### Approval to Operate

(1) The approval to construct does not provide approval to operate the constructed or modified stationary source or air pollution control ~~equipment~~device unless otherwise allowed by section (2) ~~or (3) of this rule~~ or under the applicable ~~the~~ ACDP or Oregon Title V Operating Permit programs (OAR 340 divisions 216 and 218).

(2) Type 1 and 2 changes:

(a) For sources that are not required to obtain a permit in accordance with OAR 340-216-0020, Type 1 and 2 changes may be operated without further approval subject to the conditions of ~~the Department~~[DEQ](#)'s approval to construct provided in accordance with OAR 340-210-0240.

(A) Approval to operate does not relieve the owner of the obligation of complying with applicable requirements that may include but are not limited to the general opacity standards in OAR 340-208-0110 and general particulate matter standards in OAR 340-226-0210 and OAR 340-228-0210.

(B) If required by ~~the Department~~[DEQ](#) as a condition of the approval to construct or at any other time in accordance with OAR 340-212-0120, the owner or operator must conduct testing or monitoring to verify compliance with applicable requirements. All required ~~Testing of boilers~~ must be performed in accordance with OAR 340-212-0140.

(C) The owner or operator must register the air contaminant source with ~~the Department~~[DEQ](#) if required as a condition of the approval to construct or at any other time in accordance with OAR 340-210-0100.

(b) For new sources that are required to obtain an ACDP in accordance with OAR 340-216-0020, the ACDP, which allows operation, is required before operating ~~Type 1 or 2 changes~~[the newly constructed equipment](#).

(c) For sources currently operating under an ACDP, Type 1 and 2 changes may be operated without further approval unless the ACDP specifically prohibits the operation.

(d) For sources currently operating under an Oregon Title V Operating Permit, Type 1 and 2 changes may only be operated in accordance with OAR 340-218-0190(2).

(3) Type 3 and 4 changes:

(a) For new sources, Type 3 or 4 changes require a standard ACDP before operation of the changes.

(b) For sources currently operating under an ACDP, approval to operate Type 3 or 4 changes will require a new or modified standard ACDP. All ACDP terms and conditions remain in effect until the ACDP is modified.

(c) For sources currently operating under an Oregon Title V Operating Permit, approval to operate Type 3 or 4 changes must be in accordance with OAR 340-218-0190(2).

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

Stat. Auth.: ORS 468.[020](#), ~~&~~ 468A.[025](#), [468A.040](#), [468A.050](#), [468A.055](#), [468A.070](#) & [468A.310](#)

Stats. Implemented: ORS ~~468 &~~ 468A.[025](#), [468A.035](#), [468A.040](#), [468A.050](#), [468A.055](#), [468A.070](#) & [468A.310](#)

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 1-2012, f. & cert. ef. 5-17-12

## DIVISION 212

### STATIONARY SOURCE TESTING AND MONITORING

#### 340-212-0005

##### Applicability and Jurisdiction

(1) This division applies in all areas of the state.

(2) Subject to the requirements in this division, LRAPA is designated by the EQC to implement this division within its area of jurisdiction. The requirements and procedures contained in this division must be used by LRAPA unless LRAPA has adopted or adopts rules which are at least as strict as this division.

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

Stat. Auth.: ORS 468.020 & 468A.050, 468A.055, 468A.070, 468A.135 & 468A.310

Stats. Implemented: ORS 468A.035, 468A.050, 468A.055, 468A.070, 468A.135 & 468A.310

#### **340-212-0010**

##### **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.

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

Stat. Auth.: ORS 468.020 & 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 14-1999, f. & cert. ef. 10-14-99

### **Sampling, Testing and Measurement**

#### **340-212-0110**

##### **Applicability**

OAR 340-212-0110 through 340-212-01650 apply to all stationary sources in the state. Stationary source includes portable sources that are required to have permits under division 216.

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

Stat. Auth.: ORS 468.~~020, & ORS~~ 468A.~~050, 468A.055, 468A.070 & 468A.310~~

Stats. Implemented: ORS ~~468 & ORS~~ 468A.~~035, 468A.050, 468A.055, 468A.070 & 468A.310~~

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-0900

## 340-212-0120

### Program

(1) As part of its coordinated program of air quality control and preventing and abating air pollution, ~~the Department~~ DEQ may:

(a) Require the owner or operator of a stationary source to determine the type, quantity, quality, and duration of the emissions from any air contamination source;

(b) Require full reporting in writing of all test procedures and signed by the person or persons responsible for conducting the tests;

(c) Require continuous monitoring of specified air contaminant emissions or parameters and periodic regular reporting of the results of such monitoring.

(2) ~~The Department~~ DEQ may require an owner or operator of a source to provide emission testing facilities as follows:

(a) Sampling ports, safe sampling platforms, and access to sampling platforms adequate for test methods applicable to such source; and

(b) Utilities for sampling and testing equipment.

(3) Testing must be conducted in accordance with the ~~Department~~ DEQ's Source Sampling Manual ~~(January 1992)~~, the ~~Department~~ DEQ's Continuous Monitoring Manual ~~(January 1992)~~, or an applicable EPA Reference Method unless ~~the Department~~ DEQ, if allowed under applicable federal requirements:

(a) Specifies or approves minor changes in methodology in specific cases;

(b) Approves the use of an equivalent ~~method~~ or alternative method ~~that will provide adequate results~~ as defined in division 200;

(c) Waives the testing requirement because the owner or operator has satisfied ~~the Department~~ DEQ that the affected facility is in compliance with applicable requirements; or

(d) Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors.

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

~~[Publications: The publication(s) referenced in this rule is available from the agency.]~~

Stat. Auth.: ORS 468.020, ~~& ORS~~ 468A.050, 468A.055, 468A.070 & 468A.310

Stats. Implemented: ORS ~~468 & ORS~~ 468A.035, 468A.050, 468A.055, 468A.070 & 468A.310

Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020 0035; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1100; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## 340-212-0130

### Stack Heights and Dispersion Techniques

(1) 40 CFR Parts 51.100(ff) through 51.100(kk), and 51.118, 51.160 through 51.166 (~~July 1, 2000~~), concerning stack heights and dispersion techniques, are adopted and incorporated herein. The federal rule generally prohibits the use of excessive stack height and certain dispersion techniques when calculating compliance with ambient air quality standards. The rule forbids neither the construction and actual use of excessively tall stacks, nor the use of dispersion techniques. It only forbids their use in noted calculations. The rule generally applies as follows. Stacks 65 meters high or greater that were constructed after December 31, 1970, and major modifications made after December 31, 1970 to existing plants with stacks 65 meters high or greater which were constructed before that date are subject to this rule. Certain stacks at federally owned, coal-fired steam electric generating units constructed under a contract awarded before February 8, 1974 are exempt. Any dispersion technique implemented after December 31, 1970 at any plant is subject to this rule. However, if the plant's total allowable emissions of sulfur dioxide are less than 5,000 tons per year, then certain dispersion techniques to increase final exhaust gas plume rise may be used when calculating compliance with ambient air quality standards for sulfur dioxide.

(2) Where found in the federal rule, the following terms apply:

(a) "Reviewing agency" means ~~the Department~~ [DEQ](#), LRAPA, or the EPA, as applicable;

(b) "Authority administering the State Implementation Plan" means ~~Department~~ [DEQ](#), LRAPA, or EPA;

(c) The "procedures" referred to in 40 CFR 51.164 are the ~~Department~~ [DEQ's](#) ~~Major New Source Review~~ [NSR](#) procedures (OAR ~~340 division 224~~ [340-224-0010 through 340-224-0070](#) or Title 38 of LRAPA rules), and the review procedures for new, or modifications to, minor sources, at the ~~Department's~~ [DEQ](#) review procedures for new or modified minor sources (OAR 340-210-020~~50~~ to 340-210-02~~520~~, OAR 340 division 216, [OAR 340-224-0010 through 340-224-0038](#), and [OAR 340-224-0200 through 340-224-0270](#), or LRAPA Title 34).

(d) "The state" or "state, or local control agency" as referred to in 40 CFR 51.118, means ~~the Department~~ [DEQ](#) or LRAPA;

(e) "Applicable state implementation plan" and "plan" refer to the [DEQ](#) ~~Department's~~ or LRAPA's programs and rules, as approved by the EPA, or any regulations promulgated by EPA (see 40 CFR Part 52, Subpart MM).

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

~~[Publications: The publication(s) referenced in this rule is available from the agency.]~~

Stat. Auth.: ORS 468.~~020~~, ~~& ORS~~ 468A.~~050~~, 468A.055, 468A.070, 468A.135 & 468A.310

Stats. Implemented: ORS ~~468 & ORS~~ 468A.~~035~~, 468A.~~050~~, 468A.055, 468A.070, 468A.135 & 468A.310

Hist.: DEQ 11-1986, f. & ef. 5-12-86; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0037; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1110; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## 340-212-0140

### Methods

(1) Any sampling, testing, or measurement performed pursuant to this division must conform to methods contained in the ~~Department~~DEQ's Source Sampling Manual (~~January 1992~~) or to recognized applicable standard methods approved in advance by ~~the Department~~DEQ.

(2) ~~The Department~~DEQ may approve any equivalent or alternative method as defined in division 200~~of sampling if it finds that the proposed method is satisfactory and complies with the intent of these rules, is at least equivalent to the uniform recognized procedures in objectivity and reliability, and is demonstrated to be reproducible, selective, sensitive, accurate, and applicable to the program.~~

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

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

Stat. Auth.: ORS 468.020, ~~468A.050~~, 468A.055, 468A.070 & 468A.310

Stats. Implemented: ORS ~~468 &~~ 468A.~~035~~, 468A.~~050~~, 468A.055, 468A.070 & 468A.310

Hist.: DEQ 15, f. 6-12-70, ef. 9-11-70; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0040; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1120; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 7-2011(Temp), f. & cert. ef. 6-24-11 thru 12-19-11; Administrative correction, 2-6-12

## 340-212-0150

### Department Testing

Instead of asking for tests and sampling of emissions from the owner or operator of a source ~~the Department~~DEQ may conduct such tests alone or in conjunction with the owner or operator. If ~~the Department~~DEQ conducts the testing or sampling, the agency will provide a copy of the results to the owner or operator.

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

Stat. Auth.: ORS 468.020, [468A.050](#), [468A.055](#), [468A.070](#) & ~~ORS~~ 468A.310

Stats. Implemented: ORS ~~468 & ORS~~ 468A.[035](#), [468A..050](#), [468A.055](#), [468A.070](#) & [468A.310](#)

Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0045; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1130; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## Compliance Assurance Monitoring

### 340-212-0200

#### Purpose and Applicability

(1) The purpose of OAR 340-212-0200 through 340-212-0280 is to require, as part of the issuance of a permit under Title V of the [FCAA](#)~~Act~~, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of [OAR](#) 340-212-0200 through 340-212-0280. Except for backup utility units that are exempt under subsection (2)(b)~~of this rule~~, the requirements of [OAR](#) 340-212-0200 through 340-212-0280 apply to a [regulated](#) pollutant-specific emissions unit at a major source that is required to obtain an Oregon Title V Operating Permit if the unit meets all of the following criteria:

- (a) The unit is subject to an emission limitation or standard for the applicable regulated ~~air~~ pollutant (or a surrogate thereof), other than an emission limitation or standard that is exempt under subsection (2)(a);
- (b) The unit uses a control device to achieve compliance with any such emission limitation or standard; and
- (c) The unit has potential pre-control device emissions of the applicable regulated ~~air~~ pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source. For purposes of this subsection, "potential pre-control device emissions" has the same meaning as "potential to emit," as defined in 340-200-0020, except that emission reductions achieved by the applicable control device are not taken into account.

#### (2) Exemptions:

(a) Exempt emission limitations or standards. The requirements of OAR 340-212-0200 through 340-212-0280 do not apply to any of the following emission limitations or standards:

(A) Emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the [FCAA](#)~~Act~~;

(B) Stratospheric ozone protection requirements under title VI of the [FCAA](#)~~Act~~;

(C) Acid Rain Program requirements pursuant to sections 404, 405, 406, 407(a), 407(b), or 410 of the [FCAA](#)~~Act~~;

(D) Emission limitations or standards or other applicable requirements that apply solely under an emissions trading program approved or promulgated by the Administrator under the ~~Act~~ [FCAA](#) that allows for trading emissions within a source or between sources;



(E) An emissions cap that meets the requirements specified in 40 CFR 70.4(b)(12), 71.6(a)(13)(iii) ~~(July 2000)~~, or OAR 340 division 222 ([Stationary Source](#) Plant Site Emission Limits);

(F) Emission limitations or standards for which an Oregon Title V Operating Permit specifies a continuous compliance determination method, as defined in OAR 340-200-0020. The exemption does not apply if the applicable compliance method includes an assumed control device emission reduction factor that could be affected by the actual operation and maintenance of the control device. For example a certain surface coating line is controlled by an incinerator whose continuous compliance is determined by calculating emissions on the basis of coating records and an assumed control device efficiency factor based on an initial performance test. In this example, OAR 340-212-0200 through 212-0280 apply to the control device and capture system, but not to the remaining elements of the coating line, such as raw material usage.

(b) Exemption for backup utility power emissions units. The requirements of OAR 340-212-0200 through 212-0280 do not apply to a utility unit, as defined in 40 CFR 72.2 ~~(July 2000)~~, that is municipally owned if the owner or operator provides documentation in an Oregon Title V Operating Permit application that:

(A) The utility unit is exempt from all monitoring requirements in 40 CFR part 75 ~~(July 2000)~~ (including the appendices thereto);

(B) The utility unit is operated solely for providing electricity during periods of peak electrical demand or emergency situations and will be operated consistent with that purpose throughout the Oregon Title V Operating Permit term. The owner or operator must provide historical operating data and relevant contractual obligations to document that this criterion is satisfied; and

(C) The actual emissions from the utility unit, based on the average annual emissions over the last three calendar years of operation (or such shorter time period that is available for units with fewer than three years of operation) are less than 50 percent of the amount in tons per year required for a source to be classified as a major source and are expected to remain so.

~~{Publications: The publication(s) referenced in this rule is available from the agency.}~~

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.310

Stats. Implemented: ~~ORS 468.020 &~~ ORS 468A.310

Hist.: DEQ 21-1998, f. & cert. ef. 10-14-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1200; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## 340-212-0210

### Monitoring Design Criteria

(1) General criteria. To provide a reasonable assurance of compliance with emission limitations or standards for the anticipated range of operations at a [regulated](#) pollutant-specific emissions unit, monitoring under OAR 340-212-0200 through 340-212-0280 must meet the following general criteria:

(a) The owner or operator must design the monitoring to obtain data for one or more indicators of emission control performance for the control device, any associated capture system and, if necessary to satisfy subsection

(1)(b) ~~of this rule~~, processes at a [regulated](#) pollutant-specific emissions unit. Indicators of performance may

include, but are not limited to, direct or predicted emissions (including visible emissions or opacity), process and control device parameters that affect control device (and capture system) efficiency or emission rates, or recorded findings of inspection and maintenance activities conducted by the owner or operator;

(b) The owner or operator must establish an appropriate range(s) or designated condition(s) for the selected indicator(s) such that operation within the ranges provides a reasonable assurance of ongoing compliance with emission limitations or standards for the anticipated range of operating conditions. Such range(s) or condition(s) must reflect the proper operation and maintenance of the control device (and associated capture system), in accordance with applicable design properties, for minimizing emissions over the anticipated range of operating conditions at least to the level required to achieve compliance with the applicable requirements. The reasonable assurance of compliance will be assessed by maintaining performance within the indicator range(s) or designated condition(s). The ranges must be established in accordance with the design and performance requirements in this rule and documented in accordance with the requirements in OAR 340-212-0220. If necessary to assure that the control device and associated capture system can satisfy this criterion, the owner or operator must monitor appropriate process operational parameters (such as total throughput where necessary to stay within the rated capacity for a control device). In addition, unless specifically stated otherwise by an applicable requirement, the owner or operator must monitor indicators to detect any bypass of the control device (or capture system) to the atmosphere, if such bypass can occur based on the design of the [regulated](#) pollutant-specific emissions unit;

(c) The design of indicator ranges or designated conditions may be:

(A) Based on a single maximum or minimum value if appropriate (e.g., maintaining condenser temperatures a certain number of degrees below the condensation temperature of the applicable compound(s) being processed) or at multiple levels that are relevant to distinctly different operating conditions (e.g., high versus low load levels);

(B) Expressed as a function of process variables (e.g., an indicator range expressed as minimum to maximum pressure drop across a venturi throat in a particulate control scrubber);

(C) Expressed as maintaining the applicable parameter in a particular operational status or designated condition (e.g., position of a damper controlling gas flow to the atmosphere through a by-pass duct);

(D) Established as interdependent between more than one indicator.

(2) Performance criteria. The owner or operator must design the monitoring to meet the following performance criteria:

(a) Specifications that provide for obtaining data that are representative of the emissions or parameters being monitored (such as detector location and installation specifications, if applicable);

(b) For new or modified monitoring equipment, verification procedures to confirm the operational status of the monitoring prior to the date by which the owner or operator must conduct monitoring under OAR 340-212-0200 through 340-212-0280 as specified in OAR 340-212-0250(1). The owner or operator must consider the monitoring equipment manufacturer's requirements or recommendations for installation, calibration, and start-up operation;

(c) Quality assurance and control practices that are adequate to ensure the continuing validity of the data. The owner or operator must consider manufacturer recommendations or requirements applicable to the monitoring in developing appropriate quality assurance and control practices;

(d) Specifications for the frequency of the monitoring, the data collection procedures that will be used (e.g., computerized data acquisition and handling, alarm sensor, or manual log entries based on gauge readings), and, if applicable, the period over which discrete data points will be averaged for the purpose of determining whether an excursion or exceedance has occurred:

(A) At a minimum, the owner or operator must design the period over which data are obtained and, if applicable, averaged consistent with the characteristics and typical variability of the [regulated](#) pollutant-specific emissions unit (including the control device and associated capture system). Such intervals must be commensurate with the time period over which a change in control device performance that would require actions by owner or operator to return operations within normal ranges or designated conditions is likely to be observed;

(B) For all [regulated](#) pollutant-specific emissions units with the potential to emit, calculated including the effect of control devices, the applicable regulated ~~air~~ pollutant in an amount equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source, for each parameter monitored, the owner or operator must collect four or more data values equally spaced over each hour and average the values, as applicable, over the applicable averaging period as determined in accordance with paragraph (2)(d)(A). ~~The Department~~ [DEQ](#) may approve a reduced data collection frequency based on information presented by the owner or operator concerning the data collection mechanisms available for a particular parameter for the particular [regulated](#) pollutant-specific emissions unit (e.g., integrated raw material or fuel analysis data, noninstrumental measurement of waste feed rate or visible emissions, use of a portable analyzer or an alarm sensor);

(C) For other [regulated](#) pollutant-specific emissions units, the frequency of data collection may be less than the frequency specified in paragraph (2)(d)(B) ~~of this rule~~, but the monitoring must include some data collection at least once per 24-hour period (e.g., a daily inspection of a carbon adsorber operation in conjunction with a weekly or monthly check of emissions with a portable analyzer).

(3) Evaluation factors. In designing monitoring to meet the requirements in sections (1) and (2) ~~of this rule~~, the owner or operator must take into account site-specific factors including the applicability of existing monitoring equipment and procedures, the ability of the monitoring to account for process and control device operational variability, the reliability and latitude built into the control technology, and the level of actual emissions relative to the compliance limitation.

(4) Special criteria for the use of continuous emission, opacity or predictive monitoring systems:

(a) If a continuous emission monitoring system (CEMS), continuous opacity monitoring system (COMS), or predictive emission monitoring system (PEMS) is required by other authority under the ~~Act~~ [FCAA](#) or state or local law, the owner or operator must use such system to satisfy the requirements of OAR 340-212-0200 through 340-212-0280;

(b) The use of a CEMS, COMS, or PEMS that satisfies any of the following monitoring requirements satisfies the general design criteria in sections (1) and (2)-~~of this rule~~. However, a COMS may be subject to the criteria for establishing indicator ranges under section (1)-~~of this rule~~:

(A) Section 51.214 and Appendix P of 40 CFR part 51-~~(July 1, 2000)~~;

(B) Section 60.13 and Appendix B of 40 CFR part 60 ~~(July 1, 2001)~~;

(C) Section 63.8 and any applicable performance specifications required pursuant to the applicable subpart of 40 CFR part 63-~~(July 1, 2000)~~;

(D) 40 CFR part 75-~~(July 1, 2000)~~;

(E) Subpart H and Appendix IX of 40 CFR part 266-~~(July 1, 2000)~~; or

(F) If an applicable requirement does not otherwise require compliance with the requirements listed in paragraphs (4)(b)(A) through (E), comparable requirements and specifications established by ~~the Department~~[DEQ](#).

(c) The owner or operator must design the monitoring system subject to section (4) to:

(A) Allow for reporting exceedances (or excursions if applicable to a COMS used to assure compliance with a particulate matter standard), consistent with any period for reporting of exceedances in an underlying requirement. If an underlying requirement does not contain a provision for establishing an averaging period for the reporting of exceedances or excursions, the criteria used to develop an averaging period in section (2)(d) applies; and

(B) Provide an indicator range consistent with section (1) for a COMS used to assure compliance with a particulate matter standard. If an opacity standard applies to the [regulated](#) pollutant-specific emissions unit, such limit may be used as the appropriate indicator range unless the opacity limit fails to meet the criteria in section (1) after considering the type of control device and other site-specific factors applicable to the [regulated](#) pollutant-specific emissions unit.

~~[Publications: The publication(s) referenced in this rule is available from the agency.]~~

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.310

Stats. Implemented: ORS ~~468.020 & ORS~~ 468A.310

Hist.: DEQ 21-1998, f. & cert. ef. 10-14-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1210; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## 340-212-0220

### Submittal Requirements

(1) The owner or operator must submit to ~~the Department~~[DEQ](#) monitoring plans that satisfy the design requirements in OAR 340-212-0210. The submission must include the following information:

(a) The indicators to be monitored to satisfy OAR 340-212-0210(1)(a) and (b);

(b) The ranges or designated conditions for such indicators, or the process by which such indicator ranges or designated conditions will be established;

(c) The performance criteria for the monitoring to satisfy OAR 340-212-0210(2); and

(d) If applicable, the indicator ranges and performance criteria for a CEMS, COMS or PEMS pursuant to OAR 340-212-0210(4).

(2) As part of the information submitted, the owner or operator must submit a justification for the proposed elements of the monitoring plans. If the performance specifications proposed to satisfy OAR 340-212-0210(2)(b) or (c) include differences from manufacturer recommendations, the owner or operator must explain the reasons for the differences. The owner or operator also must submit any data supporting the justification and may refer to generally available sources of information used to support the justification (such as generally available air pollution engineering manuals, or EPA or ~~Department~~ [DEQ](#) publications on appropriate monitoring for various types of control devices or capture systems). To justify the appropriateness of the monitoring elements proposed, the owner or operator may rely in part on existing applicable requirements that establish the monitoring for the applicable [regulated](#) pollutant-specific emissions unit or a similar unit. If an owner or operator relies on presumptively acceptable monitoring, no further justification for the appropriateness of that monitoring should be necessary other than an explanation of the applicability of such monitoring to the unit in question, unless data or information is brought forward to rebut the assumption. Presumptively acceptable monitoring includes:

(a) Presumptively acceptable or required monitoring approaches, established by ~~the Department~~ [DEQ](#) in a rule that constitutes part of the applicable implementation plan required pursuant to title I of the ~~FCAA Act~~, that are designed to achieve compliance with OAR 340-212-0200 through 340-212-0280 for particular [regulated](#) pollutant-specific emissions units;

(b) Continuous emission, opacity, or predictive emission monitoring systems that satisfy applicable monitoring requirements and performance specifications contained in OAR 340-212-0210(d);

(c) Excepted or alternative monitoring methods allowed or approved pursuant to 40 CFR part 75 ~~(July 1, 2000)~~;

(d) Monitoring included for standards exempt from OAR 340-212-0200 through 340-212-0280 pursuant to OAR 340-212-0200(2)(a)(A) through (F) to the extent such monitoring is applicable to the performance of the control device (and associated capture system) for the [regulated](#) pollutant-specific emissions unit; and

(e) Presumptively acceptable monitoring methods identified in guidance by EPA.

(3)(a) Except as provided in section (4), the owner or operator must submit control device (and process and capture system, if applicable) operating parameter data obtained during the conduct of the applicable compliance or performance test conducted under conditions specified by the applicable rule. If the applicable rule does not specify testing conditions or only partially specifies test conditions, the performance test generally must be conducted under conditions representative of maximum emissions potential under anticipated operating conditions at the [regulated](#) pollutant-specific emissions unit. Such data may be supplemented by engineering assessments and manufacturer's recommendations to justify the indicator ranges (or, if applicable, the procedures for establishing such indicator ranges). Emission testing is not required to be conducted over the entire indicator range or range of potential emissions;

(b) The owner or operator must document that no changes to the [regulated](#) pollutant-specific emissions unit, including the control device and capture system, have taken place that could result in a significant change in the control system performance or the selected ranges or designated conditions for the indicators to be monitored since the performance or compliance tests were conducted.

(4) If existing data from unit-specific compliance or performance testing specified in section (3) are unavailable, the owner or operator:

(a) Must submit a test plan and schedule for obtaining such data in accordance with section (5); or

(b) May submit indicator ranges (or procedures for establishing indicator ranges) that rely on engineering assessments and other data, if the owner or operator demonstrates that factors specific to the type of monitoring, control device, or [regulated](#) pollutant-specific emissions unit make compliance or performance testing unnecessary to establish indicator ranges at levels that satisfy the criteria in OAR 340-212-0210(1).

(5) If the monitoring plans submitted by the owner or operator requires installation, testing, or other necessary activities before conducting the monitoring for purposes of OAR 340-212-0200 through 340-212-0280, the owner or operator must include an implementation plan and schedule for installing, testing and performing any other appropriate activities before conducting the monitoring. The implementation plan and schedule must provide for conducting the monitoring as expeditiously as practicable after ~~the Department~~ [DEQ](#) approves the monitoring plans in the Oregon Title V Operating Permit pursuant to OAR 340-212-0240. In no case may the schedule for completing installation and beginning operation of the monitoring exceed 180 days after approval of the permit.

(6) If a control device is common to more than one [regulated](#) pollutant-specific emissions unit, the owner or operator may submit monitoring plans for the control device and identify the [regulated](#) pollutant-specific emissions units affected and any process or associated capture device conditions that must be maintained or monitored in accordance with OAR 340-212-0210(1) rather than submit separate monitoring plans for each [regulated](#) pollutant-specific emissions unit.

(7) If a single [regulated](#) pollutant-specific emissions unit is controlled by more than one control device that is similar in design and operation, the owner or operator may submit monitoring plans that apply to all the control devices and identify the control devices affected and any process or associated capture device conditions that must be maintained or monitored in accordance with OAR 340-212-0210(1) rather than submit a separate description for each control device.

~~[Publications: The publication(s) by referenced in this rule is available from the agency.]~~

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.310

Stats. Implemented: ORS ~~468.020 & ORS~~ 468A.310

Hist.: DEQ 21-1998, f. & cert. ef. 10-14-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1220; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## 340-212-0230

### Deadlines for Submittals

(1) Large [regulated](#) pollutant-specific emissions units. For all [regulated](#) pollutant-specific emissions units with the potential to emit the applicable regulated ~~air~~ pollutant in an amount equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source, the owner or operator must submit the information required under OAR 340-212-0220 at the following times:

(a) The owner or operator must submit information as part of an application for an initial Oregon Title V Operating Permit if, by that date, the application either:

(A) Has not been filed; or

(B) Has not yet been determined to be complete by ~~the Department~~ [DEQ](#).

(b) The owner or operator must submit information as part of an application for a significant permit revision under OAR 340-218-0080, but only with respect to those [regulated](#) pollutant-specific emissions units for which the proposed permit revision applies;

(c) The owner or operator must submit any information not submitted under the deadlines set forth in subsections (1)(a) and (b) ~~of this rule~~ as part of the application for the renewal of an Oregon Title V Operating Permit.

(2) Other [regulated](#) pollutant-specific emissions units. For all other [regulated](#) pollutant-specific emissions units subject to OAR 340-212-0220 through 340-212-0280 and not subject to section (1) ~~of this rule~~, the owner or operator must submit the information required under 340-212-0220 as part of an application for a renewal of an Oregon Title V Operating Permit.

(3) A permit reopening to require the submittal of information under this rule is not required by OAR 340-218-0200(1)(a)(A). If, however, an Oregon Title V Operating Permit is reopened for cause by EPA or ~~the Department~~ [DEQ](#) pursuant to [OAR](#) 340-218-0200(1)(a)(C), (D), or (E), the applicable agency may require the submittal of information under this rule for those [regulated](#) pollutant-specific emissions units that are subject to [OAR](#) 340-212-0200 through 340-212-0280 and that are affected by the permit reopening.

(4) Until ~~the Department~~ [DEQ](#) approves monitoring plans that satisfy the requirements of OAR 340-212-0200 through 340-212-0280, the owner or operator is subject to the requirements of [OAR](#) 340-218-0050(3)(a)(C).

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.310

Stats. Implemented: ORS ~~468.020 & ORS~~ 468A.310

Hist.: DEQ 21-1998, f. & cert. ef. 10-14-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1230; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## 340-212-0240

### Approval of Monitoring Plans

(1) Based on an application that includes the information submitted in accordance with OAR 340-212-0230, ~~the Department~~ [DEQ](#) will approve the monitoring plans submitted by the owner or operator by confirming that the plans satisfy the requirements in [OAR](#) 340-212-0210.



(2) ~~The Department~~DEQ may condition its approval on the owner or operator collecting additional data on the indicators to be monitored for a regulated pollutant-specific emissions unit, including required compliance or performance testing, to confirm that the monitoring will provide data sufficient to satisfy the requirements of OAR 340-212-0200 through 340-212-0280 and to confirm the appropriateness of an indicator range~~(s)~~ or designated condition~~(s)~~ proposed to satisfy OAR 340-212-0210(1)(b) and (c) and consistent with the schedule in OAR 340-212-0220(4).

(3) If ~~the Department~~DEQ approves the proposed monitoring, ~~the Department~~DEQ will establish one or more permit terms or conditions that specify the required monitoring in accordance with OAR 340-218-0050(3)(a). At a minimum, the permit will specify:

(a) The approved monitoring approach that includes all of the following:

(A) The indicator~~(s)~~ to be monitored (such as temperature, pressure drop, emissions, or similar parameter);

(B) The means or device to be used to measure the indicator~~(s)~~ (such as temperature measurement device, visual observation, or CEMS); and

(C) The performance requirements established to satisfy OAR 340-212-0210(2) or (4), as applicable.

(b) The means by which the owner or operator will define an exceedance or excursion for purposes of responding to and reporting exceedances or excursions under OAR 340-212-0250 and OAR 340-212-0260. The permit will specify the level at which an excursion or exceedance will be deemed to occur, including the appropriate averaging period associated with such exceedance or excursion. For defining an excursion from an indicator range or designated condition, the permit may either include the specific value~~(s)~~ or condition~~(s)~~ at which an excursion occurs, or the specific procedures that will be used to establish that value or condition. If the latter, the permit will specify appropriate notice procedures for the owner or operator to notify ~~the Department~~DEQ upon any establishment or reestablishment of the value;

(c) The obligation to conduct the monitoring and fulfill the other obligations specified in OAR 340-212-0250 through 340-212-0270;

(d) If appropriate, a minimum data availability requirement for valid data collection for each averaging period, and, if appropriate, a minimum data availability requirement for the averaging periods in a reporting period.

(4) If the monitoring proposed by the owner or operator requires installation, testing or final verification of operational status, the Oregon Title V Operating Permit will include an enforceable schedule with appropriate milestones for completing such installation, testing, or final verification consistent with the requirements in OAR 340-212-0220(5).

(5) If ~~the Department~~DEQ disapproves the proposed monitoring, the following applies:

(a) The draft or final permit will include, at a minimum, monitoring that satisfies the requirements of OAR 340-218-0050(3)(a)(C);

(b) The draft or final permit will include a compliance schedule for the owner or operator to submit monitoring plans that satisfy OAR 340-212-0210 and OAR 340-212-0220. In no case may the owner or operator submit revised monitoring more than 180 days from the date of issuance of the draft or final permit; and



(c) If the owner or operator does not submit the monitoring plans in accordance with the compliance schedule contained in the draft or final permit or if ~~the Department~~[DEQ](#) disapproves the proposed monitoring plans, the owner or operator is not in compliance with OAR 340-212-0200 through 340-212-0280, unless the source owner or operator successfully challenges the disapproval.

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.310

Stats. Implemented: ORS ~~468.020 & ORS~~ 468A.310

Hist.: DEQ 21-1998, f. & cert. ef. 10-14-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1240; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## **340-212-0250**

### **Operation of Approved Monitoring**

(1) Commencement of operation. The owner or operator must conduct the monitoring required under OAR 340-212-0200 through 340-212-0280 upon issuance of an Oregon Title V Operating Permit that includes such monitoring, or by any later date specified in the permit pursuant to [OAR](#) 340-212-0240(4).

(2) Proper maintenance. The owner or operator must at all times maintain the monitoring equipment, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(3) Continued operation. Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator must conduct all monitoring in continuous operation (or must collect data at all required intervals) at all times that the [regulated](#) pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities cannot be used for purposes of OAR 340-212-0200 through 340-212-0280, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator must use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(4) Response to excursions or exceedances:

(a) Upon detecting an excursion or exceedance, the owner or operator must restore operation of the [regulated](#) pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response must include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable;

(b) Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process;

(c) Documentation of need for improved monitoring. After ~~the Department~~[DEQ](#) approves the monitoring plans under OAR 340-212-0200 through 340-212-0280, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not indicate an excursion or exceedance while providing valid data, or if the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator must promptly notify ~~the Department~~[DEQ](#) and, if necessary, submit a proposed modification to the Oregon Title V Operating Permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.310

Stats. Implemented: ORS ~~468.020 & ORS~~ 468A.310

Hist.: DEQ 21-1998, f. & cert. ef. 10-14-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1250; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### **340-212-0260**

#### **Quality Improvement Plan (QIP) Requirements**

(1) Based on the results of a determination made under OAR 340-212-0250(4)(b), the Administrator or ~~the Department~~[DEQ](#) may require the owner or operator to develop and implement a QIP. Consistent with [OAR](#) 340-212-0240(3)(c), the Oregon Title V Operating Permit may specify an appropriate threshold, such as an accumulation of exceedances or excursions exceeding 5 percent duration of a [regulated](#) pollutant-specific emissions unit's operating time for a reporting period, for requiring the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a [regulated](#) pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.

(2) Elements of a QIP:

(a) The owner or operator must maintain a written QIP, if required, and have it available for inspection;

(b) The plan initially must include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator must modify the plan to include procedures for conducting one or more of the following actions, as appropriate:

(A) Improved preventive maintenance practices;

(B) Process operation changes;

(C) Appropriate improvements to control methods;

(D) Other steps appropriate to correct control performance;

(E) More frequent or improved monitoring (only in conjunction with one or more steps under paragraphs (A) through (D) above).

(3) If a QIP is required, the owner or operator must develop and implement a QIP as expeditiously as practicable and notify ~~the Department~~ [DEQ](#) if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

(4) Following implementation of a QIP, upon any subsequent determination pursuant to OAR 340-212-0250(4)(b) the Administrator or ~~the Department~~ [DEQ](#) may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:

(a) Failed to address the cause of the control device performance problems; or

(b) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(5) Implementation of a QIP does not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the [FCAA](#) Act.

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.310

Stats. Implemented: ORS ~~468.020 & ORS~~ 468A.310

Hist.: DEQ 21-1998, f. & cert. ef. 10-14-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1260; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## **340-212-0270**

### **Reporting and Recordkeeping Requirements**

(1) General reporting requirements:

(a) On and after the date specified in OAR 340-212-0250(1) by which the owner or operator must conduct monitoring that meets the requirements of [OAR](#) 340-212-0200 through 340-212-0280, the owner or operator must submit monitoring reports to ~~the Department~~ [DEQ](#) in accordance with [OAR](#) 340-218-0050(3)(c);

(b) A report for monitoring under OAR 340-212-0200 through 340-218-0280 must include, at a minimum, the information required under [OAR](#) 340-218-0050(3)(c) and the following information, as applicable:

(A) Summary information on the number, duration and cause (including unknown cause) of excursions or exceedances, as applicable, and the corrective actions taken;

(B) Summary information on the number, duration and cause (including unknown cause) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks); and

(C) A description of the actions taken to implement a QIP during the reporting period as specified in OAR 340-212-0260. Upon completion of a QIP, the owner or operator must include in the next summary report documentation that the implementation of the plan has been completed and has reduced the likelihood of similar levels of excursions or exceedances occurring.

(2) General recordkeeping requirements:

(a) The owner or operator must comply with the recordkeeping requirements specified in OAR 340-218-0050(3)(b). The owner or operator must maintain records of monitoring data, performance data, corrective actions taken, any written quality improvement plan required pursuant to [OAR 340-212-0260](#) and any activities undertaken to implement a quality improvement plan, and other supporting information required by [OAR 340-212-0200](#) through 340-212-0280 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions);

(b) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, if the use of such alternative media allows for expeditious inspection and review and does not conflict with other applicable recordkeeping requirements.

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.310

Stats. Implemented: ORS ~~468.020 & ORS~~ 468A.310

Hist.: DEQ 21-1998, f. & cert. ef. 10-14-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1270; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-212-0280

#### Savings Provisions

Nothing in OAR 340-212-0200 through 340-212-0280:

(1) Excuses the owner or operator of a source from complying with any existing emission limitation or standard, or with any existing monitoring, testing, reporting, or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the [FCAA](#)~~Act~~. The requirements of OAR 340-212-0200 through 340-212-0280 may not be used to justify the approval of monitoring less stringent than the monitoring required under separate legal authority. Nor are they intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under separate authority under the [FCAA](#)~~Act~~, including monitoring in permits issued pursuant to title I of the [FCAA](#)~~Act~~.

(2) Restricts or abrogates the authority of the Administrator or ~~the Department~~[DEQ](#) to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of the [FCAA](#)~~Act~~, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable;

(3) Restricts or abrogates the authority of the Administrator or ~~Department~~[DEQ](#) to take any enforcement action under the ~~Act~~ [FCAA](#) for any violation of an applicable requirement or of any person to take action under section 304 of the [FCAA](#)~~Act~~.

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.310

Stats. Implemented: ORS ~~468.020 & ORS~~ 468A.310

Hist.: DEQ 21-1998, f. & cert. ef. 10-14-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1280; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## DIVISION 214

### STATIONARY SOURCE REPORTING REQUIREMENTS

#### 340-214-0005

##### Applicability and Jurisdiction

(1) This division applies in all areas of the state.

(2) Subject to the requirements in this division, LRAPA is designated by the EQC to implement this division within its area of jurisdiction. The requirements and procedures contained in this division must be used by LRAPA unless LRAPA has adopted or adopts rules which are at least as strict as this division.

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

Stat. Auth.: ORS 468.020, 468A.050 & 468A.135

Stats. Implemented: ORS 468A.025, 468A.050 & 468A.135

#### **340-214-0010**

##### **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) "Large ~~S~~source", as used in OAR 340-214-0300 through 340-214-0350, means any stationary source required to maintain a Title V Operating Permit or whose actual emissions or potential controlled emissions while operating full time at the design capacity are equal to or exceed 100 tons per year of any regulated ~~air~~ pollutant other than GHG, or 100,000 tons per year of GHG, ~~or which is subject to a National Emissions Standard for Hazardous Air Pollutants (NESHAP). Where PSELs have been incorporated into the ACDP, the PSEL will be used to determine actual emissions.~~

(2) "Small ~~S~~source" means any other stationary source that is not a large source and that operates under ~~with~~ a general, basic, simple or standard ACDP.

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

Stat. Auth.: ORS 468.020 & 468A

Stats. Implemented: ORS 468A.025 & 468A.050

Hist.: DEQ 14-1999, f. & cert. ef. 10-14-99; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2007, f. & cert. ef. 11-8-07

##### **Reporting**

## 340-214-0100

### Applicability

OAR 340-214-0100 through 340-214-0130 apply to all stationary sources in the state. [Stationary source includes portable sources that are required to have permits under division 216.](#)

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

Stat. Auth.: ORS [468.020 & 468A.050](#)

Stats. Implemented: ORS ~~468 &~~[468A.025 & 468A.050](#)

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-0200

## 340-214-0110

### Request for Information

All stationary sources must provide in a reasonably timely manner any and all information that ~~the Department~~[DEQ](#) reasonably requires for the purpose of regulating stationary sources. Such information may be required on a one-time, periodic, or continuous basis and may include, but is not limited to, information necessary to:

- (1) Issue a permit and ascertain compliance or noncompliance with the permit terms and conditions;
- (2) Ascertain applicability of any requirement;
- (3) Ascertain compliance or noncompliance with any applicable requirement; and
- (4) Incorporate monitoring, recordkeeping, reporting, and compliance certification requirements into a permit.

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

Stat. Auth.: ORS [468.020 & 468A](#)

Stats. Implemented: ORS ~~468 &~~[468A.025 & 468A.050](#)

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-0300; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## 340-214-0114

### Records; Maintaining and Reporting

- (1) When notified by ~~the Department~~[DEQ](#), any person owning or operating a source within the state must keep and maintain written records of the nature, type, and amounts of emissions from such source and other information ~~the Department~~[DEQ](#) may require in order to determine whether the source is in compliance with applicable emission rules, limitations, or control measures.
- (2) The records must be prepared in the form of a report and submitted to ~~the Department~~[DEQ](#) on an annual, semi-annual, or more frequent basis, as requested in writing by ~~the Department~~[DEQ](#). Submittals must be filed at the end of the first full period after ~~the Department~~[DEQ](#)'s notification to such persons owning or operating a stationary air contaminant source of these recordkeeping requirements. Unless otherwise required by rule or permit, semi-annual periods are Jan.~~uary~~ 1 to June 30, and July 1 to Dec.~~ember~~ 31. A more frequent basis for reporting may be required due to noncompliance or if necessary to protect human health or the environment.
- (3) The required reports must be completed on forms approved by ~~the Department~~[DEQ](#) and submitted within 30 days after the end of the reporting period, unless otherwise authorized by permit.
- (4) All reports and certifications submitted to ~~the Department~~[DEQ](#) under ~~D~~ivisions 200 to 264 must accurately reflect the monitoring, record keeping and other documentation held or performed by the owner or operator.
- (5) The owner or operator of any source required to obtain a permit under OAR 340 division 216 or 218 must retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. The owner or operator of a source permitted under OAR 340 division 216 must begin retaining information under this section on July 1, 2015.

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

Stat. Auth.: ORS 468.~~020~~, [468A.050](#) & 468A.[310](#)

Stats. Implemented: ORS ~~468 &~~ [468A.025](#), [468A.050](#) & [468A.310](#)

Hist.: DEQ 44(Temp), f. & ef. 5-5-72; DEQ 48, f. 9-20-72, ef. 10-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0046; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1140; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01, Renumbered from 340-212-0160

### **340-214-0130**

#### **Information Exempt from Disclosure**

- (1) Pursuant to the provisions of ORS 192.410 to 192.505, all information submitted to ~~the Department~~[DEQ](#) is subject to inspection upon request by any person unless such information is determined to be exempt from disclosure pursuant to section (2) or (3)~~-of this rule~~.
- (2) If an owner or operator claims that any writing, as that term is defined in ORS 192.410, is confidential or otherwise exempt from disclosure, in whole or in part, the owner or operator must comply with the following procedures:



(a) The writing must be clearly marked with a request for exemption from disclosure. For a multi-page writing, each page must be so marked.

(b) The owner or operator must state the specific statutory provision under which it claims exemption from disclosure and explain why the writing meets the requirements of that provision.

(c) For writings that contain both exempt and non-exempt material, the proposed exempt material must be clearly distinguishable from the non-exempt material. If possible, the exempt material should be arranged so that it is placed on separate pages from the non-exempt material.

(3) For a writing to be considered exempt from disclosure as a “trade secret,” it must meet all of the following criteria:

(a) The information cannot be patented;

(b) It must be known only to a limited number of individuals within a commercial concern who have made efforts to maintain the secrecy of the information;

(c) It must be information that derives actual or potential economic value from not being disclosed to other persons; ~~and~~

(d) It must give its users the chance to obtain a business advantage over competitors not having the information; and

(e) It must not be emissions data.

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

Stat. Auth.: ORS 192.430, 468.020 ~~468~~ & 468A.050

Stats. Implemented: ORS 192.410 through 192.505, 468.020, ~~&~~ 468A.025 & 468A.050

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 22-1996, f. & cert. ef. 10-22-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-0400; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## **Emission Statements for VOC and NO<sub>x</sub> Sources**

### **340-214-0200**

#### **Purpose and Applicability**

(1) The purpose of these rules is to obtain data on actual emissions of VOCs and NO<sub>x</sub> from sources in ozone nonattainment areas, in accordance with FCAA requirements, for the purpose of monitoring progress toward attainment of the ozone ~~national~~ ambient air quality standards.

(2) OAR 340-214-0200 through 340-214-0220 ~~This rule applies~~ ies to sources of VOC and NO<sub>x</sub> in ozone nonattainment areas that have a PSEL equal to or greater than 25 tons per year for either regulated pollutant, or whose actual emissions are equal to or greater than 25 tons per year for either regulated pollutant.

(3) For purposes of establishing consistent emission reporting requirements, owners or operators of VOC and NOx sources already subject to Oregon Title V Operating Permit Fees, OAR 340 division 220, and electing to pay fees based on actual emissions must report emission data to ~~the Department~~[DEQ](#), utilizing procedures identified in those rules to calculate actual VOC and NOx emissions, to the extent applicable. Owners or operators of other sources must use current and applicable emission factors and actual production data to estimate and report actual emissions.

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

Stat. Auth.: ORS 468.[020](#), ~~&~~ 468A.[050](#), [468A.070](#) & [468A.310](#)

Stats. Implemented: ORS ~~468 &~~ 468A.[050](#), [468A.070](#) & [468A.310](#)

Hist.: DEQ 27-1992, f. & cert. ef. 11-12-92; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0450; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1500; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## 340-214-0210

### Requirements

(1) Owners or operators of VOC and NOx sources subject to the requirements of OAR 340-214-0200 through 340-214-0220 must submit data annually on the [average](#) actual ~~average~~ emissions during the ozone season to ~~the Department~~[DEQ](#). These Emission Statements must contain the following information:

(a) Certification that the information contained in the statement is accurate to the best of the certifying individual's knowledge;

(b) Source identification information: full name, physical location, mailing address of the facility, and permit number; [and](#)

(c) Emissions information:

(A) The ~~estimated actual~~ VOC and NOx [actual](#) emissions ~~for those emissions equal to or greater than 25 tons per year, on an average weekday operating day basis during the preceding year's ozone season, by source category, for the calendar year for the ozone season; and~~ [For the purpose of this requirement, actual emissions include, but are not limited to routine process emissions, fugitive emissions, excess emissions from maintenance, startups and shutdowns, equipment malfunction, and other activities; and](#)

(B) Each emission factor used and [the](#) reference source for the emission factor, if applicable, or an explanation of any other method or procedure used to calculate emissions (e.g., material balance, source test, or continuous monitoring).

(2) Owners or operators of sources subject to these rules must keep at the plant site records of the information used to calculate actual emissions pursuant to these rules. These records must contain all applicable operating data, process rate data, control ~~equipment~~[device](#) efficiency information, and other information used to calculate or estimate actual emissions. The information must be available for ~~the Department~~[DEQ](#)'s review or submitted

upon request. Such records must be kept by the owner or operator for three ~~calendar~~-years after [the date of the](#) submittal of the emission statement.

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

Stat. Auth.: ORS 468~~A.~~[.020, 468A.050, 468A.070 & 468A.310](#)

Stats. Implemented: ORS ~~468 &~~468A.[.050, 468A.070 & 468A.310](#)

Hist.: DEQ 27-1992, f. & cert. ef. 11-12-92; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0470; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1510; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### **340-214-0220**

#### **Submission of Emission Statement**

The owner or operator of any facility meeting the applicability requirements stated in OAR 340-214-0200 must submit annual Emission Statements to ~~the Department~~[DEQ](#). The Emission Statement for the preceding calendar year is due to ~~the Department~~[DEQ](#) no later than the due date for the annual permit report specified in the source's ACDP or Oregon Title V Operating Permit.

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

Stat. Auth.: ORS 468~~.~~[.020](#) & 468A.[.050, 468A.070 & 468A.310](#)

Stats. Implemented: ORS ~~468 &~~468A.[.050, 468A.070 & 468A.310](#)

Hist.: DEQ 27-1992, f. & cert. ef. 11-12-92; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0480; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1520; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### **Excess Emissions and Emergency Provision**

#### **340-214-0300**

##### **Purpose and Applicability**

Emissions of air contaminants in excess of applicable standards or permit conditions are unauthorized and subject to enforcement action. OAR 340-214-0300 through 340-214-0360 apply to any source that emits air contaminants in excess of any applicable air quality rule or permit condition, including but not limited to excess emissions resulting from the breakdown of air pollution control ~~equipment~~[devices](#) or operating equipment, process upset, startup, shutdown, or scheduled maintenance. Sources that do not emit air contaminants in excess of any applicable air quality rule or permit condition are not subject to the recordkeeping and reporting requirements in [OAR](#) 340-214-0300 through 340-214-0360. The purpose of these rules is to:

- (1) Require that, where applicable, the owner or operator immediately report all excess emissions to ~~the Department~~[DEQ](#);
- (2) Require the owner or operator to submit information and data regarding conditions that resulted or could result in excess emissions;
- (3) Identify criteria for ~~the Department~~[DEQ](#) to use in determining whether it will take enforcement action against an owner or operator for an excess emission; and
- (4) Provide owners and operators [of sources with Oregon Title V Operating Permits](#) an affirmative defense to a penalty action when noncompliance with technology-based emission limits is due to an emergency, as provided in OAR 340-214-0360.

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

Stat. Auth.: ORS 468.020, [468A.050](#) & 468A.310

Stats. Implemented: ORS ~~468 &~~ [468A.050 & 468A.310](#)

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 42-1990, f. 12-13-90, cert. ef. 1-2-91, Renumbered from 340-021-0065; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0350; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1400; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2007, f. & cert. ef. 11-8-07

### **340-214-0310**

#### **Planned Startup and Shutdown**

- (1) This rule applies to any source where startup or shutdown of a production process or system may result in excess emissions, and
  - (a) That is a major source; or
  - (b) That is in a non-attainment or maintenance area for the [regulated](#) pollutant which may constitute excess emissions; or
  - (c) From which ~~the Department~~[DEQ](#) requires the application in section (2) ~~of this rule~~.
- (2) The owner or operator must obtain prior ~~Department~~[DEQ](#) authorization of startup and shutdown procedures. The owner or operator must submit to ~~the Department~~[DEQ](#) a written application for approval of new procedures or modifications to existing procedures. The application must be submitted in time for ~~the Department~~[DEQ](#) to receive it at least 72 hours before the first occurrence of a startup or shutdown event to which the procedures apply. The application must:
  - (a) Explain why the excess emissions during startup and shutdown cannot be avoided;
  - (b) Identify the specific production process or system that will cause the excess emissions;

(c) Identify the nature of the air contaminants likely to be emitted and estimate the amount and duration of the excess emissions; and

(d) Identify specific procedures to be followed that will minimize excess emissions at all times during startup and shutdown.

(3) ~~The Department~~ [DEQ](#) will approve the procedures if it determines that they are consistent with good pollution control practices, will minimize emissions during such period to the extent practicable, and that no adverse health impact on the public will occur. The owner or operator must record all excess emissions in the excess emissions log, as required in OAR 340-214-0340(3). Approval of the procedures does not shield the owner or operator from an enforcement action, but ~~the Department~~ [DEQ](#) will consider whether the procedures were followed in determining whether an enforcement action is appropriate.

(4) Once ~~the Department~~ [DEQ](#) approves startup and shutdown procedures, the owner or operator does not have to notify ~~the Department~~ [DEQ](#) of a planned startup or shutdown event unless it results in excess emissions.

(5) When notice is required by section (4) ~~of this rule~~, it must be made in accordance with OAR 340-214-0330(1)(a).

(6) ~~The Department~~ [DEQ](#) may revoke or require modifications to previously approved procedures at any time by written notification to the owner or operator.

(7) No startups or shutdowns that may result in excess emissions associated with the approved procedures in section (3) ~~of this rule~~ are allowed during any period in which an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency has been declared, or during an announced yellow or red woodstove curtailment period in areas designated by ~~the Department~~ [DEQ](#) as PM10 ~~Non~~-attainment ~~A~~ areas.

(8) The owner or operator is subject to the requirements under All Other Excess Emissions in OAR 340-214-0330 if the owner or operator fails to obtain ~~Department~~ [DEQ](#) approval of start-up and shutdown procedures in accordance with section (2) ~~of this rule~~.

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

Stat. Auth.: ORS 468.020, [468A.025](#), [468A.040](#) & [468A.310](#)

Stats. Implemented: ORS 468A.025, [468A.040](#) & [468A.310](#)

Hist.: DEQ 42-1990, f. 12-13-90, cert. ef. 1-2-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0360; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 19-1996, f. & cert. ef. 9-24-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1410; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2007, f. & cert. ef. 11-8-07

## 340-214-0320

### Scheduled Maintenance

(1) If the owner or operator anticipates that ~~shutdown, by-pass, or operation at reduced efficiency of air pollution control equipment for necessary~~ scheduled maintenance [of air contaminant sources or air pollution](#)

control devices may result in excess emissions, the owner or operator must obtain prior ~~Department~~ DEQ authorization of procedures that will be used. The owner or operator must submit a written application for approval of new procedures or modifications to existing procedures. The application must be submitted in time for ~~the Department~~ DEQ to receive it at least 72 hours before the first occurrence of a maintenance event to which the procedures apply. The application must:

(a) Explain the need for maintenance, including but not limited to:

(A) Why the maintenance activity is necessary;

(B) ~~Why~~ Why it would be impractical to shut down the source operation during the ~~period~~ maintenance activity;  
~~and~~

(C) If applicable, why air pollution control devices must be ~~the~~ by-passed or operated at ~~or~~ reduced efficiency during the maintenance activity; and

(D) Why the excess emissions could not be avoided through better scheduling for maintenance or through better operation and maintenance practices;

(b) Identify the specific production or emission control ~~equipment~~ device or system to be maintained;

(c) Identify the nature of the air contaminants likely to be emitted during the maintenance period and the estimated amount and duration of the excess emissions, including measures such as the use of overtime labor and contract services and equipment, that will be taken to minimize the length of the maintenance period;

(d) Identify specific procedures to be followed that will minimize excess emissions at all times during the scheduled maintenance.

(2) ~~The Department~~ DEQ will approve the procedures if it determines that they are consistent with good pollution control practices, will minimize emissions during such period to the extent practicable, and that no adverse health impact on the public will occur. The owner or operator must record all excess emissions in the excess emissions log, as required in OAR 340-214-0340(3). Approval of the above procedures does not shield the owner or operator from an enforcement action, but ~~the Department~~ DEQ will consider whether the procedures were followed in determining whether an enforcement action is appropriate.

(3) Once ~~the Department~~ DEQ approves the maintenance procedures the owner or operator does not have to notify ~~the Department~~ DEQ of a scheduled maintenance event unless it results in excess emissions.

(4) When required by section (3) ~~of this rule~~, notification must be made in accordance with OAR 340-214-0330(1)(a).

(5) ~~The Department~~ DEQ may revoke or require modifications to previously approved procedures at any time by written notification to the owner or operator.

(6) No scheduled maintenance associated with the approved procedures in section (2) ~~of this rule~~, that is likely to result in excess emissions, may occur during any period in which an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency has been declared, or during an announced yellow or red woodstove curtailment period in areas designated by ~~the Department~~ DEQ as PM10 Nonattainment Areas.

(7) The owner or operator is subject to the requirements under All Other Excess Emissions in OAR 340-214-0330 if the owner or operator fails to obtain Department approval of maintenance procedures in accordance with section (1) ~~of this rule~~.

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

Stat. Auth.: ORS 468.020, ~~&~~ 468A.025, 468A.040 & 468A.310

Stats. Implemented: ORS ~~468~~ & 468A.025, 468A.040 & 468A.310

Hist.: DEQ 42-1990, f. 12-13-90, cert. ef. 1-2-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0365; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1420; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2007, f. & cert. ef. 11-8-07

### **340-214-0330**

#### **All Other Excess Emissions**

(1) For all other excess emissions not addressed in OAR 340-214-310, 340-214-320, or 340-214-360, the following requirements apply:

(a) The owner or operator of a large source, as defined by OAR 340-214-0010, must immediately notify ~~the Department~~ DEQ of the first onset per calendar day of any excess emissions event, unless otherwise specified by a permit condition.

(b) The owner or operator of a small source, as defined by OAR 340-214-0010, need not immediately notify ~~the Department~~ DEQ of excess emissions events unless otherwise required by a permit condition, written notice by ~~the Department~~ DEQ, or if the excess emission is of a nature that could endanger public health.

(c) Additional reporting and recordkeeping requirements are specified in OAR 340-214-0340.

(2) During any period of excess emissions, ~~the Department~~ DEQ may require that an owner or operator immediately reduce or cease operation of the equipment or facility until the condition causing the excess emissions has been corrected or brought under control. ~~The Department~~ DEQ will consider the following factors:

(a) The potential risk to the public or environment;

(b) Whether shutdown could result in physical damage to the equipment or facility, or cause injury to employees;

(c) Whether any Air Pollution Alert, Warning, Emergency, or yellow or red woodstove curtailment period exists; and

(d) Whether continued excess emissions were avoidable.

(3) If there is an on-going period of excess emissions, the owner or operator must cease operation of the equipment or facility no later than 48 hours after the beginning of the excess emission period, if the condition



causing the emissions is not corrected within that time. The owner or operator does not have to cease operation if ~~the Department~~[DEQ](#) approves procedures to minimize excess emissions until the condition causing the excess emissions is corrected or brought under control. ~~The Department~~[DEQ](#) will consider the following before approving the procedures:

(a) Why the condition~~(s)~~ causing the excess emissions cannot be corrected or brought under control, including equipment availability and difficulty of repair or installation; and

(b) Information as required in OAR 340-214-0310(2)(b), (c), and (d) or 340-214-0320(1)(b), (c), and (d), as appropriate.

(4) ~~The Department~~[DEQ](#) will approve the procedures if it determines that they are consistent with good pollution control practices, will minimize emissions during such period to the extent practicable, and that no adverse health impact on the public will occur. The owner or operator must record all excess emissions in the excess emissions log as required in OAR 340-214-0340(3)-~~of this rule~~. At any time during the period of excess emissions ~~the Department~~[DEQ](#) may require the owner or operator to cease operation of the equipment or facility, in accordance with section (2)-~~of this rule~~. Approval of these procedures does not shield the owner or operator from an enforcement action, but ~~the Department~~[DEQ](#) will consider whether the procedures were followed in determining whether an enforcement action is appropriate.

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

Stat. Auth.: ORS 468.020, [468A.025](#), [468A.040](#) & [468A.310](#)

Stats. Implemented: ORS 468A.025, [468A.040](#) & [468A.310](#)

Hist.: DEQ 42-1990, f. 12-13-90, cert. ef. 1-2-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0370; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 24-1994, f. & cert. ef. 10-28-94; DEQ 19-1996, f. & cert. ef. 9-24-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1430; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2007, f. & cert. ef. 11-8-07

## 340-214-0340

### Reporting Requirements

(1) For any excess emissions event at a source with an [Oregon](#) Title V [Operating p](#)~~ermit~~ Permit and for any other source as required by permit, the owner or operator ~~shall~~[must](#) submit a written report of excess emissions for each calendar day of the event. The report must be submitted within 15 days of the date of the event and include the following:

(a) The date and time of the beginning of the excess emissions event and the duration or best estimate of the time until return to normal operation;

(b) The date and time the owner or operator notified ~~the Department~~[DEQ](#) of the event;

(c) The equipment involved;



(d) Whether the event occurred during planned startup, planned shutdown, scheduled maintenance, or as a result of a breakdown, malfunction, or emergency;

(e) Steps taken to mitigate emissions and corrective actions taken, including whether the approved procedures for a planned startup, shutdown, or maintenance activity were followed;

(f) The magnitude and duration of each occurrence of excess emissions during the course of an event and the increase over normal rates or concentrations as determined by continuous monitoring or a best estimate (supported by operating data and calculations);

(g) The final resolution of the cause of the excess emissions; and

(h) Where applicable, evidence supporting any claim that emissions in excess of technology-based limits were due to an emergency pursuant to OAR 340-214-0360.

(2) Based on the severity of event, ~~the Department~~ [DEQ](#) may specify a shorter time period for report submittal.

(3) All source owners or operators must keep an excess emissions log of all planned and unplanned excess emissions. The log must include all pertinent information as required in section (1) ~~of this rule~~ and be kept by the owner or operator for five calendar years.

(4) At each annual reporting period specified in a permit, or sooner if ~~the Department~~ [DEQ](#) requires, the owner or operator must submit:

(a) A copy of the excess emissions log entries for the reporting period; unless previously submitted in accordance with section (1) ~~of this rule~~; and

(b) Where applicable, current procedures to minimize emissions during startup, shutdown, or maintenance as outlined in OAR 340-214-0310 and 340-214-0320. The owner or operator must specify in writing whether these procedures are new, modified, or have already been approved by ~~the Department~~ [DEQ](#).

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

Stat. Auth.: ORS 468.~~020~~, & 468A.~~050~~ & 468A.310

Stats. Implemented: ORS ~~468~~ & 468A.~~025~~, 468A.050 & 468A.310

Hist.: DEQ 42-1990, f. 12-13-90, cert. ef. 1-2-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0375; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1440; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2007, f. & cert. ef. 11-8-07

## 340-214-0350

### Enforcement Action Criteria

In determining whether to take enforcement action for excess emissions, ~~the Department~~ [DEQ](#) considers, based upon information submitted by the owner or operator, the following:

(1) Whether the owner or operator met the notification, recordkeeping and reporting requirements of OAR 340-214-0330 and 340-214-0340;

(2) Whether during the period of the excess emissions event the owner or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other permit requirements;

(3) Whether the owner or operator took the appropriate remedial action;

(4) Whether the event was due to the owner's or operator's negligent or intentional operation. For ~~the Department~~ [DEQ](#) to find that an incident of excess emissions was not due to the owner's or operator's negligent or intentional operation, ~~the Department~~ [DEQ](#) may ask the owner or operator to demonstrate that all of the following conditions were met:

(a) The process or handling equipment and the air pollution control ~~equipment~~ [device](#) were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;

(b) Repairs or corrections were made in an expeditious manner when the owner or operator knew or should have known that emission limits were being or were likely to be exceeded. "Expeditious manner" may include activities such as use of overtime labor or contract labor and equipment that would reduce the amount and duration of excess emissions; [and](#)

(c) The event was not one in a recurring pattern of incidents that indicate inadequate design, operation, or maintenance;

(5) Whether the owner or operator was following procedures approved in OAR 340-214-0310 or 340-214-0320 at the time of the excess emissions;

[\(6\) Whether any federal New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants applies and whether the excess emission event caused a violation of the federal standard; and](#)

[\(7\) Whether the excess emissions event was due to an emergency.](#)

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

Stat. Auth.: ORS 468.[020](#), ~~&~~ 468A.[025](#)

Stats. Implemented: ORS 468 & 468A.[025](#)

Hist.: DEQ 42-1990, f. 12-13-90, cert. ef. 1-2-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0380; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1450; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2007, f. & cert. ef. 11-8-07

### 340-214-0360

#### Emergency as an Affirmative Defense [for Title V Permitted Sources](#)

(1) An emergency constitutes an affirmative defense to penalty actions due to noncompliance with technology-based emission limits [in an Oregon Title V Operating Permit](#) if the owner or operator notifies ~~the~~

~~Department~~ DEQ immediately of the emergency condition and provides and demonstrates through properly signed, contemporaneous operating logs, excess emission logs, or other relevant evidence that:

- (a) ~~That a~~ An emergency occurred and caused the excess emissions;
  - (b) The cause~~(s)~~ of the emergency;
  - (c) The facility was at the time being properly operated;
  - (d) During the occurrence of the emergency, the owner or operator took all reasonable steps to minimize levels of excess emissions; and
  - (e) The notification to ~~the Department~~ DEQ contained a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (2) The person seeking to establish the occurrence of an emergency has the burden of proof by a preponderance of the evidence.
- (3) This provision is in addition to any emergency or any other excess emissions provision contained in any applicable requirement.

~~**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 & 468A.310

Stats. Implemented: ORS ~~468 &~~ 468A.310

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1460; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2007, f. & cert. ef. 11-8-07

### **Sulfur Dioxide Emission Inventory**

#### **~~340-214-0400~~**

##### **~~Purpose~~**

~~The purpose of OAR 340-214-0400 through 340-214-0430 is to establish consistent monitoring, recordkeeping, and reporting requirements for stationary sources in Oregon to determine whether sulfur dioxide emissions remain below the sulfur dioxide milestones established in the State Implementation Plan, section 5.5.2.3.1.a, incorporated by reference in 340-200-0040.~~

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

~~Stat. Auth.: ORS 468.020~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03~~

### ~~340-214-0410~~

#### ~~Applicability~~

~~(1) OAR 340-214-0410 through 340-214-0430 apply to all stationary sources with actual sulfur dioxide emissions of 100 tons per year or more in calendar year 2000 or any subsequent calendar year.~~

~~(2) Any source that triggers applicability and then emits less than 100 tons per year in any subsequent year remains subject to the requirements of OAR 340-214-0410 to 340-214-0430 until 2018 or until the first control period under the Western Backstop Sulfur Dioxide Trading Program as established in 340-228-0510(1)(a), whichever is earlier.~~

~~(3) Sources that emit less than 100 tons per year of sulfur dioxide in all years (2003 through 2018) are not subject to OAR 340-214-0420 through 0430.~~

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

~~Stat. Auth.: ORS 468.020~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03~~

### ~~340-214-0420~~

#### ~~Annual Sulfur Dioxide Emission Report~~

~~(1) The owner or operator must:~~

~~(a) Submit a report of actual annual SO<sub>2</sub> inventory emissions;~~

~~(b) Use appropriate emission factors and estimating techniques and document the emissions monitoring/estimation methodology used;~~

~~(c) Include emissions from start up, shut down, and upset conditions in the annual total inventory;~~

~~(d) Use 40 CFR Part 75 methodology for reporting emissions for all sources subject to the federal acid rain program; and~~

~~(e) Maintain all records used in the calculation of the emissions, including but not limited to the following:~~

~~(A) Amount and type of fuel combusted;~~

~~(B) Percent sulfur content of fuel and how the content was determined;~~

~~(C) Quantity of product produced;~~

~~(D) Emissions monitoring data;~~

~~(E) Operating data;~~

~~(F) How the emissions are calculated;~~

~~(G) If the emissions increased or decreased by twenty percent or more from a previous year, then the owner or operator must include in their annual emissions report an explanation of why this occurred.~~

~~(f) Maintain records of any physical changes to facility operations or equipment, or any other changes (e.g. raw material or feed) that may affect the emissions projections as established in the State Implementation Plan.~~

~~(g) Retain records for a minimum of ten years from the date of establishment, or if the record was the basis for an adjustment to the milestone, 5 years after the date of an implementation plan revision, whichever is longer. Smelters must submit an annual report of sulfur input, in tons/year.~~

~~(2) The owner or operator must report emissions for the year 2003 by May 15, 2004 and annually thereafter.~~

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

~~Stat. Auth.: ORS 468.020~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03~~

## **340-214-0430**

### **~~Changes in Emission Measurement Techniques~~**

~~The owner or operator that uses a different emission monitoring or calculation method than was used to report the sulfur dioxide emissions (1999 for utilities and 1998 for all other sources) under OAR 340-214-0114 must indicate this in the annual emission report, so that the Department DEQ can ensure consistent comparison to the regional SO<sub>2</sub> milestones, as described in State Implementation Plan Section 5.5.2.3.2 a.(3).~~

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

~~Stat. Auth.: ORS 468.020~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03~~

## DIVISION 216

### AIR CONTAMINANT DISCHARGE PERMITS

#### 340-216-0010

##### Purpose

This division prescribes the requirements and procedures for obtaining Air Contaminant Discharge Permits (ACDPs) pursuant to ORS 468A.040 through 468A.060 and related statutes for sources of air contaminants.

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

Stat. Auth.: ORS 468.020, ~~&~~ 468A.025, 468A.040 & 468A.310

Stats. Implemented: ORS ~~468 &~~ 468A.025, 468A.040 & 468A.310

Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-86;

Renumbered from 340-020-0033.02; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93;

Renumbered from 340-020-0140; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99,

Renumbered from 340-028-1700; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

#### 340-216-0020

##### Applicability and Jurisdiction

(1) This division applies to all sources ~~referred to~~listed in OAR 340-216-8010 ~~Table 1 of this rule~~. This division also applies to Oregon Title V Operating Permit program sources when an ACDP is required by OAR 340-218-0020 or OAR 340-224-0010. Sources referred to in OAR 340-216-8010 ~~Table 1~~ are subject to fees as set forth in OAR 340-216-8020 ~~Table 2~~.

(2) ~~A-s~~ Sources in any one of the ~~source~~ categories in OAR 340-216-8010 must obtain a permit. If a source meets the requirements of more than one of the source categories and the source is not eligible for a Basic ACDP or a General ACDP that has been authorized by DEQ, then the source must obtain a Simple or Standard ACDP. Source categories are not listed in alphabetical order.

(a) The commercial and industrial sources in OAR 340-216-8010 Part A must obtain a Basic ACDP under OAR 340-216-0056 unless the source also meets the requirements of Part B or C, or chooses to obtain a General, Simple or Standard ACDP. For purposes of Part A, production and emission parameters are based on the latest consecutive 12 month period, or future projected operation, whichever is higher. Emission cutoffs are based on actual emissions.

(b) ~~The-s~~ Sources in any one of the categories in OAR 340-216-8010 Part B must obtain either:

(A) A General ACDP, if one is available for the source classification and the source qualifies for a General ACDP under OAR 340-216-0060;

(B) A Simple ACDP under OAR 340-216-0064; or

(C) A Standard ACDP under OAR 340-216-0066 if the source fits one of the criteria of Part C or does not qualify for a Simple ACDP.

(c) Sources in any one of the categories in OAR 340-216-8010 Part C must obtain a Standard ACDP under the procedures set forth in 340-216-0066.

~~(31)~~ No person may construct, install, establish, develop or operate any air contaminant source which is ~~referred to~~ listed in OAR 340-216-8010 Table 1 of this rule without first obtaining an Air Contaminant Discharge Permit (ACDP) from DEQ or ~~Regional Authority~~ LRAPA and keeping a copy onsite at all times, unless otherwise deferred from the requirement to obtain an ACDP in subsection (1)(~~be~~) ~~of this rule~~ or DEQ has granted an exemption from the requirement to obtain an ACDP under subsection (1)(~~ef~~) ~~of this rule~~. No person may continue to operate an air contaminant source if the ACDP expires, or is terminated or revoked; except as provided in OAR 340-216-0082.

(a) For portable sources, a single permit may be issued for operating at any area of the state if the permit includes the requirements from both DEQ and ~~Regional Authorities~~ LRAPA.

~~(b)~~ DEQ or ~~Regional Authority~~ LRAPA, depending where the portable source's ~~C~~ corporate offices are located, will be responsible for issuing the permit. If the corporate office of a portable source is located outside of the state, DEQ will be responsible for issuing the permit.

~~(be)~~ An air contaminant source required to obtain an ACDP or ACDP Attachment pursuant to a NESHAP under OAR division 244 or NSPS under OAR division 238 ~~adopted by the Commission by rule~~ is not required to submit an application for an ACDP or ACDP Attachment until four months after the effective date of the ~~Commission~~ EQC's adoption of the NESHAP or NSPS, and is not required to obtain an ACDP or ACDP Attachment until six months after the ~~Commission~~ EQC's adoption of the NESHAP or NSPS. In addition, DEQ may defer the requirement to submit an application for, or to obtain an ACDP or ACDP Attachment, or both, for up to an additional twelve months.

~~(cd)~~ Deferrals of Oregon permitting requirements do not relieve an air contaminant source from the responsibility of complying with federal NESHAP or NSPS requirements.

~~(de)~~ OAR 340-216-0060(1)(b)(A), 340-216-0062(2)(b)(A), 340-216-0064(4)(a), and 340-216-0066(3)(a), do not relieve a permittee from the responsibility of complying with federal NESHAP or NSPS requirements that apply to the source even if DEQ has not incorporated such requirements into the permit.

~~(ef)~~ DEQ may exempt a source from the requirement to obtain an ACDP if it determines that the source is subject to only procedural requirements, such as notification that the source is affected by an NSPS or NESHAP.

~~(42)~~ No person may construct, install, establish, or develop any source that will be subject to the Oregon Title V Operating Permit program without first obtaining an ACDP from DEQ or ~~Regional Authority~~ LRAPA.

~~(53)~~ No person may modify any source that has been issued an ACDP without first complying with the requirements of OAR 340-210-0205 through 340-210-0250.

(64) No person may modify any source required to have an ACDP such that the source becomes subject to the Oregon Title V Operating Permit program without complying with the requirements of OAR 340-210-0205 through 340-210-0250.

(75) No person may increase emissions above the PSEL by more than the de minimis emission levels specified in OAR 340-200-0020 without first applying for and obtaining a modified ACDP.

(86) Subject to the requirements in this ~~D~~division, ~~the Lane Regional Air Protection Agency~~LRAPA is designated by the ~~Commission~~EQC as the permitting agency to implement the Air Contaminant Discharge Permit program within its area of jurisdiction. ~~The Regional Agency~~LRAPA's program is subject to DEQ oversight. The requirements and procedures contained in this ~~D~~division pertaining to the Air Contaminant Discharge Permit program ~~shall~~must be used by ~~the Regional Agency~~LRAPA to implement its permitting program ~~unless until the Regional Agency~~LRAPA has adopted or adopts ~~superseding~~ rules which are at least as ~~restrictive strict~~ as ~~state rules~~this division.

**NOTE:** This rule is included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the EQC~~that EQC adopted under OAR 340-~~21100~~0040.

[ED. NOTE: Tables referenced are not included in rule text. [Click here for PDF copy of tables.](#)]

Stat. Auth.: ORS 468.020, [468A.025](#), [468A.040](#), [468A.155](#) & [468A.310](#)

Stats. Implemented: ORS 468A.[025](#), [468A.040](#), [468A.135](#) through [468A.155](#) & [468A.310](#)

Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76;

Renumbered from 340-020-0033; DEQ 125, f. & ef. 12-16-76; DEQ 20-1979, f. & ef. 6-29-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 13-1981, f. 5-6-81, ef. 7-1-81; DEQ 11-1983, f. & ef. 5-31-83; DEQ 3-1986, f. & ef. 2-12-86; DEQ 12-1987, f. & ef. 6-15-87; DEQ 27-1991, f. & cert. ef. 11-29-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0155; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 22-1994, f. & cert. ef. 10-4-94; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 19-1996, f. & cert. ef. 9-24-96; DEQ 22-1996, f. & cert. ef. 10-22-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1720; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 4-2002, f. & cert. ef. 3-14-02; DEQ 7-2007, f. & cert. ef. 10-18-07; DEQ 8-2007, f. & cert. ef. 11-8-07; DEQ 15-2008, f. & cert. ef. 12-31-08; DEQ 8-2009, f. & cert. ef. 12-16-09; DEQ 9-2009(Temp), f. 12-24-09, cert. ef. 1-1-10 thru 6-30-10; Administrative correction 7-27-10; DEQ 10-2010(Temp), f. 8-31-10, cert. ef. 9-1-10 thru 2-28-11; DEQ 12-2010, f. & cert. ef. 10-27-10; DEQ 1-2011, f. & cert. ef. 2-24-11; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11; DEQ 11-2011, f. & cert. ef. 7-21-11; DEQ 13-2011, f. & cert. ef. 7-21-11; DEQ 14-2011, f. & cert. ef. 7-21-11; DEQ 4-2013, f. & cert. ef. 3-27-13; DEQ 9-2013(Temp), f. & cert. ef. 10-24-13 thru 4-22-14

## 340-216-0025

### Types of Permits

#### (1) Construction ACDP:

(a) A Construction ACDP may be used for approval of Type 3 changes specified in OAR 340-210-02250 at a source subject to the ACDP permit requirements in this division.



(b) A Construction ACDP is required for Type 3 changes specified in OAR 340-210-0225 at sources subject to the Oregon Title V Operating Permit requirements.

(2) General ACDP. A General ACDP is [a permit](#) for a category of sources for which individual permits are unnecessary in order to protect the environment, [as determined by DEQ](#). An owner or operator of a source may be assigned to a General ACDP if ~~the Department~~[DEQ](#) has issued a General ACDP for the source category [and](#):

(a) The source meets the qualifications specified in the General ACDP;

(b) ~~The Department~~[DEQ](#) determines that the source has not had ongoing, reoccurring, or serious compliance problems; and

(c) ~~The Department~~[DEQ](#) determines that a General ACDP would appropriately regulate the source.

(3) Short Term Activity ACDP. A Short Term Activity ACDP is a letter permit that authorizes the activity and includes any conditions placed upon the method or methods of operation of the activity. ~~The Department~~[DEQ](#) may issue a Short Term Activity ACDP for unexpected or emergency activities, operations, or emissions.

(4) Basic ACDP. A Basic ACDP is a permit that authorizes the regulated source to operate in conformance with the rules contained in OAR 340 divisions 200 to 268.

(a) Owners and operators of sources and activities listed in [OAR 340-216-8010 Table 1](#), Part A ~~of OAR 340-216-0020~~ must at a minimum obtain a Basic ACDP.

(b) Any owner or operator of a source required to obtain a Basic ACDP may obtain either a Simple or Standard ACDP.

(5) Simple ACDP.

[\(a\) Owners and operators of sources and activities listed in OAR 340-216-8010 Part B that do not qualify for a General ACDP and are not required to obtain a Standard ACDP must, at a minimum, obtain a Simple ACDP. Any source required to obtain a Simple ACDP may obtain a Standard ACDP. DEQ may determine that a source is ineligible for a Simple ACDP and must obtain a Standard ACDP based upon, but not limited to, the following considerations:](#)

[\(A\) The nature, extent, and toxicity of the source's emissions;](#)

[\(B\) The complexity of the source and the rules applicable to that source;](#)

[\(C\) The complexity of the emission controls and potential threat to human health and the environment if the emission controls fail;](#)

[\(D\) The location of the source; and](#)

[\(E\) The compliance history of the source.](#)

[\(b\) A Simple ACDP is a permit that contains:](#)

[\(Aa\) All relevant applicable requirements for source operation, including general ACDP conditions for incorporating generally applicable requirements;](#)

~~(Bb)~~ Generic PSELs for all regulated pollutants emitted at more than the de minimis emission level ~~in accordance with as provided in~~ OAR 340 division 222;

~~(Ce)~~ Testing, monitoring, recordkeeping, and reporting requirements sufficient to determine compliance with the PSEL and other emission limits and standards, as necessary; and

~~(Dd)~~ A permit duration not to exceed 5 years.

(6) Standard ACDP:

~~(a) A Standard ACDP is a permit that contains:~~

~~(A) All applicable requirements, including general ACDP conditions for incorporating generally applicable requirements;~~

~~(B) Source specific PSELs or Generic PSELs, whichever are applicable, as specified in OAR 340 division 222;~~

~~(C) Testing, monitoring, recordkeeping, and reporting requirements sufficient to determine compliance with the PSEL and other emission limits and standards, as necessary; and~~

~~(D) A permit duration not to exceed 5 years.~~

~~(ab)~~ Applicability.

~~(A) All The~~ owners ~~and or~~ operators of a sources ~~and activities~~ listed in OAR 340-216-8010 Table 1, Part C of ~~OAR 340-216-0020~~ must obtain a Standard ACDP.

~~(Be)~~ ~~The~~ Owners or operators of a sources ~~and activities~~ listed in OAR 340-216-8010 Table 1, Part B of ~~OAR 340-216-0020~~ which does not qualify for a General ACDP or Simple ACDP must obtain a Standard ACDP.

~~(Cd)~~ ~~Any The~~ owner or operator of a source not required to obtain a Standard ACDP may obtain a Standard ACDP.

(b) A Standard ACDP is a permit that contains:

(A) All applicable requirements, including general ACDP conditions for incorporating generally applicable requirements;

(B) Source specific PSELs or Generic PSELs, whichever are applicable, as specified in OAR 340 division 222;

(C) Testing, monitoring, recordkeeping, and reporting requirements sufficient to determine compliance with the PSEL and other emission limits and standards, as necessary; and

(D) A permit duration not to exceed 5 years.

**NOTE:** This rule is included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the EQC~~ that EQC adopted under OAR 340-214-00-0040.

[ED. NOTE: Tables referenced are available from the agency. [Click here for PDF copy of tables.](#)]

Stat. Auth.: ORS 468.~~020~~, & 468A.~~025~~, 468A.040 & 468A.310

Stats. Implemented: ORS ~~468.020 &~~ 468A.025, 468A.040 & 468A.310

Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-020-0033; DEQ 125, f. & ef. 12-16-76; DEQ 20-1979, f. & ef. 6-29-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 13-1981, f. 5-6-81, ef. 7-1-81; DEQ 11-1983, f. & ef. 5-31-83; DEQ 3-1986, f. & ef. 2-12-86; DEQ 12-1987, f. & ef. 6-15-87; DEQ 27-1991, f. & cert. ef. 11-29-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0155; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 22-1994, f. & cert. ef. 10-4-94; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 19-1996, f. & cert. ef. 9-24-96; DEQ 22-1996, f. & cert. ef. 10-22-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1720; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 4-2002, f. & cert. ef. 3-14-02; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

## 340-216-0030

### Definitions

~~(1)~~ 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.

~~(2) "Permit modification" or "modified permit" means any change to the content of a permit.~~

(1) "Basic technical modification" includes, but is not limited to changing source test dates if the equipment is not being operated, and similar changes.

(2) "Complex technical modification" includes, but is not limited to incorporating a complex new compliance method into a permit, adding a complex compliance method or monitoring for an emission point or control device not previously addressed in a permit, adding a complex new applicable requirement into a permit due to a change in process or change in rules, and similar changes.

(3) "Moderate technical modification" includes, but is not limited to adding a simple compliance method or monitoring for an emission point or control device not previously addressed in a permit, revising monitoring and reporting requirements other than dates and frequency, adding a new applicable requirement into a permit due to a change in process or change in rules, incorporating NSPS and NESHAP requirements, and similar changes.

(4) "Non-technical modification" means name changes, change of ownership, correction of typographical errors and similar administrative changes.

(5) "Simple technical modification" includes, but is not limited to modifying a compliance method to use different emission factors or process parameters, changing reporting dates or frequency, and similar changes.

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

Stat. Auth.: ORS 468.020 & 468A

Stats. Implemented: ORS 468A.025, 468A.040 & 468A.310

Hist.: DEQ 14-1999, f. & cert. ef. 10-14-99; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## 340-216-0040

### Application Requirements

#### (1) New Permits.

(a) Except for Short Term Activity ACDPs, any person required to obtain a new ACDP must provide the following general information, as applicable, using forms provided by ~~the Department~~ [DEQ](#) in addition to any other information required for a specific permit type:

(aA) Identifying information, including the name of the company, the mailing address, the facility address, and the nature of business (Standard Industrial Classification (SIC) code);

(bB) The name and phone number of a local person responsible for compliance with the permit;

(cC) The name of a person authorized to receive requests for data and information;

(dD) A description of the production processes and related flow chart;

(eE) A plot plan showing the location and height of air contaminant sources. The plot plan must also indicate the nearest residential or commercial property;

(fF) The type and quantity of fuels used;

(gG) An estimate of the amount and type of each air contaminant emitted by the source in terms of hourly, daily, or monthly and yearly rates, showing calculation procedures;

(hH) Any information on pollution prevention measures and cross-media impacts the applicant wants ~~the Department~~ [DEQ](#) to consider in determining applicable control requirements and evaluating compliance methods;

(iI) Estimated efficiency of air pollution control ~~equipment~~ [devices](#) under present or anticipated operating conditions;

(jJ) Where the operation or maintenance of air pollution control ~~equipment~~ [devices](#) and emission reduction processes can be adjusted or varied from the highest reasonable efficiency and effectiveness, information necessary for ~~the Department~~ [DEQ](#) to establish operational and maintenance requirements ~~in accordance with~~ [under](#) OAR 340-226-0120(1) and (2);

(kK) A Land Use Compatibility Statement signed by a local (city or county) planner either approving or disapproving construction or modification of the source, if required by the local planning agency;

(lL) [Any information required by OAR 340 division 224 and 225, including but not limited to control technology and analysis, air quality impact analysis; and information related to offsets and net air quality benefit, if applicable;](#) and

(mM) Any other information requested by ~~the Department~~ [DEQ](#).

(b) Applications for new permits should be submitted at least 60 days prior to when a permit is needed. When preparing an application, the applicant should also consider the timelines provided in paragraph (2)(b), as well as OAR 340-224-0030 (permit applications subject to NSR), to allow DEQ adequate time to process the application and issue a permit before it is needed.

(2) Renewal Permits. Except for Short Term Activity ACDPs, any person required to renew an existing permit must submit the information identified in section (1) using forms provided by ~~the Department~~ DEQ, unless there are no significant changes to the permit. If there are significant changes, the applicant must provide the information identified in section (1) only for those changes.

(a) Where there are no significant changes to the permit, the applicant may use a streamlined permit renewal application process by providing the following information:

(a) Identifying information, including the name of the company, the mailing address, the facility address, and the nature of business (Standard Industrial Classification (SIC) code) using a form provided by ~~the Department~~ DEQ; and

(b) A marked up copy of the previous permit indicating minor changes along with an explanation for each requested change.

(b) The owner or operator must submit an application for renewal of the existing permit by no later than:

(A) 30 days prior to the expiration date of a Basic ACDP;

(B) 120 days prior to the expiration date of a Simple ACDP; or

(C) 180 days prior to the expiration date of a Standard ACDP.

(c) DEQ must receive an application for reassignment to General ACDPs and attachments within 30 days prior to expiration of the General ACDPs or attachment.

(3) Permit Modifications. For Simple and Standard ACDP modifications, the applicant must provide the information in section (1) relevant to the requested changes to the permit and a list of any new requirements applicable to those changes. When preparing an application, the applicant should also consider the timelines provided in subsection (2)(b), as well as OAR 340-224-0030 (permit applications subject to NSR), for guidance on how much time DEQ may need to process the application and issue a permit before it is needed.

(4) Any owner or operator who fails to submit any relevant facts or who has submitted incorrect information in a permit application must, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

~~(5) The department must receive the application at least 60 days before a permit or modified permit is needed.~~

~~(6)~~ (5) The application must be completed in full and signed by the applicant or the applicant's legally authorized representative.

~~(7)~~ (6) Two copies of the application are required, unless otherwise requested by ~~the Department~~ DEQ. At least one of the copies must be a paper copy, but the others may be in any other format, including electronic copies, upon approval by ~~the Department~~ DEQ.

(87) A copy of ~~NSR~~-permit applications subject to NSR under OAR 340 division 224, including all and supplemental and supporting information, must also be submitted directly to the EPA.

(98) The name of the applicant must be the legal name of the facility or the owner's agent or the lessee responsible for the operation and maintenance of the facility. The legal name must be registered with the Secretary of State Corporations Division.

(109) All applications must include the appropriate fees as specified in OAR 340-216-8020~~Table 2 of OAR 340-216-0020.~~

(110) Applications that are obviously incomplete, unsigned, improperly signed, or lacking the required exhibits or fees will be rejected by ~~the Department~~DEQ and returned to the applicant for completion.

(121) Within 15 days after receiving the application, ~~the Department~~DEQ will preliminarily review the application to determine the adequacy of the information submitted:

(a) If ~~the Department~~DEQ determines that additional information is needed, ~~the Department~~DEQ will promptly ask the applicant for the needed information. The application will not be considered complete for processing until the requested information is received. The application will be considered withdrawn if the applicant fails to submit the requested information within 90 days of the request;

(b) If, in the opinion of ~~the Department~~DEQ, additional measures are necessary to gather facts regarding the application, ~~the Department~~DEQ will notify the applicant that such measures will be instituted along with the timetable and procedures to be followed. The application will not be considered complete for processing until the necessary additional fact-finding measures are completed. When the information in the application is deemed adequate for processing, ~~the Department~~DEQ will so notify the applicant-.

(132) If at any time while processing the application, ~~the Department~~DEQ determines that additional information is needed, ~~the Department~~DEQ will promptly ask the applicant for the needed information. The application will not be considered complete for processing until the requested information is received. The application will be considered withdrawn if the applicant fails to submit the requested information within 90 days of the request.

(143) If, upon review of an application, ~~the Department~~DEQ determines that a permit is not required, ~~the Department~~DEQ will so notify the applicant in writing. Such notification is a final action by ~~the Department~~DEQ on the application.

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

~~[ED. NOTE: Tables referenced are available from the agency.]~~

Stat. Auth.: ORS 468.020, 468.065, & 468A.025, 468A.040, 468A.310 & 468A.315

Stats. Implemented: ORS 468 & 468A

Hist.: DEQ 42, f. 4-5-72, ef. 4-15-72; DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-020-0033; DEQ 20-1979, f. & ef. 6-29-79; DEQ 13-1988, f. & cert. ef. 6-17-88; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0175; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-

## 340-216-0052

### Construction ACDP

(1) Purpose. A Construction ACDP is a permit for approval of Type 3 construction or modification changes as specified in OAR 340-210-0225~~0~~ and [340-210-0240](#). The Construction ACDP includes requirements for the construction or modification of stationary sources or air pollution control ~~equipment~~ [devices](#) and does not by itself provide authorization to operate the new construction or modification. A new or modified Standard ACDP or Oregon Title V Operating Permit is required before operation of the new construction or modification. A Construction ACDP may be used for the following situations:

(a) For complex construction or modification projects that require an extended period of time to construct, the Construction ACDP may provide construction approval faster than issuance of a Standard ACDP or modified Standard ACDP because the operating requirements would not need to be included in the permit.

(b) For Oregon Title V Operating Permit sources, the Construction ACDP may include the requirements of OAR 340-218-0050 and follow the external review procedures in [OAR 340-218-0210](#) and [340-218-0230](#) so that the requirements may later be incorporated into the Oregon Title V Operating Permit by an administrative amendment. If the applicant elects to incorporate the Construction ACDP by administrative amendment, all of the application submittal, permit content, and permit issuance requirements of OAR 340 division 218 must be met for the Construction ACDP.

(2) Application requirements. Any person requesting a Construction ACDP must:

(a) Submit an application ~~in accordance with~~ [under](#) OAR 340-216-0040 and provide the information specified in 340-216-0040(1) as it relates to the proposed new construction or modification; and

(b) Provide a list of any applicable requirements related to the new construction or modification.

(3) Fees. Applicants for a Construction ACDP must pay the fees ~~set forth in~~ [OAR 340-216-8020 Table 2 of OAR 340-216-0020](#).

(4) Permit content. A Construction ACDP must include at least the following:

~~(a) A requirement that construction must commence within 18 months after the permit is issued;~~

~~(a)~~ A requirement to construct ~~in accordance with~~ [as described in](#) approved plans;

~~(b)~~ A requirement to comply with all applicable requirements;

~~(c)~~ Emission limits for affected stationary sources;

~~(d)~~ Performance standards for affected stationary sources and air pollution control ~~equipment~~ [devices](#);

~~(e)~~ Performance test requirements;



- (f) Monitoring requirements, if specialized equipment is required (e.g., continuous monitoring systems);
- (g) Notification and reporting requirements (construction status reports, startup dates, source test plans, CEMS performance specification testing plans, etc.);
- (h) General ACDP conditions for incorporating generally applicable requirements;
- (i) A requirement to modify the operating permit before commencing operation of the new construction or modification;
- (j) A permit expiration date of no more than 5 years; and
- (k) Oregon Title V Permit requirements as specified in OAR 340-218-0050, if the applicant requests the external review procedures in OAR 340-218-0210 and 340-218-0230.

(5) Permit issuance procedures:

- (a) A Construction ACDP requires that DEQ provide public notice ~~in accordance with~~ under OAR 340 division 209 ~~for as a~~ Category III permit actions.
- (b) For sources subject to the Oregon Title V Operating Permit program, the applicant may ask for the external review procedures in OAR 340-218-0210 and 340-218-0230 in addition to the requirements of OAR 340 division 209 to allow the Construction ACDP to be incorporated into the Oregon Title V Operating Permit at a later date by an administrative amendment provided the requirements of subsection (1)(b) are met.
- (c) Issuance of a modified Construction ACDP requires ~~one of~~ the following public notice, as applicable:
  - (A) Public notice as a Category I permit action under OAR 340 division 209 for ~~Non-technical~~ modifications and ~~non-NSR-B~~ basic and ~~S~~ simple technical modifications ~~require public notice in accordance with OAR 340 division 209 for Category I permit actions.; or~~
  - (B) Public notice as a Category II permit action under OAR 340 division 209 for ~~Non-NSR/PSD-M~~ moderate and ~~C~~ complex technical modifications ~~require public notice in accordance with OAR 340 division 209 for Category II permit actions.~~

(6) Construction ACDPs may not be renewed.

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

~~[ED. NOTE: Tables referenced are available from the agency.]~~

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.055, 468A.310 & 468A.315

Stats. Implemented: ORS 468 & 468A

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

## 340-216-0054

### Short Term Activity ACDPs



(1) Application requirements. Any person requesting a Short Term Activity ACDP must apply in writing, fully describing the unexpected or emergency activity requiring an ACDP and the proposed activities, operations, and emissions. The application must include the fees specified in section (2) ~~of this rule~~.

(2) Fees. Applicants for a Short Term Activity ACDP must pay the fees ~~set forth in~~ OAR 340-216-8020-Table 2 of 340-216-0020.

(3) Permit content:

(a) ~~This A Short Term Activity ACDP permit~~ must includes conditions that ensure adequate protection of property and preservation of public health, welfare, and resources.

(b) A Short Term Activity ACDP ~~does~~ may not include a PSEL for any air contaminants discharged as a result of the permitted activity.

(c) A Short Term Activity ACDP will automatically terminates 60 days from the date of issuance and may not be renewed.

~~(d) A Short Term Activity ACDPs will be properly conditioned to ensure adequate protection of property and preservation of public health, welfare and resources.~~

(4) Permit issuance public notice procedures. A Short Term Activity ACDP requires public notice ~~in accordance with as a Category I permit action under~~ OAR 340 division 209 ~~for Category I permit actions~~.

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

~~[ED. NOTE: Tables referenced are available from the agency.]~~

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.310 & 468A.315

Stats. Implemented: ORS 468 & 468A

Hist.: DEQ 42, f. 4-5-72, ef. 4-15-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 22-1996, f. & cert. ef. 10-22-96; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01, Renumbered from 340-014-0050; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

## **340-216-0056**

### **Basic ACDPs**

(1) Application requirements. Any person requesting a Basic ACDP must submit an application ~~in accordance with~~ under OAR 340-216-0040 and provide the information specified in OAR 340-216-0040(1).

(2) Fees. Applicants for a new Basic ACDP must pay the fees ~~set forth in~~ OAR 340-216-8020-Table 2 of 340-216-0020.

(3) Permit content:

(a) A Basic ACDP will contains only the most significant and relevant rules applicable to the source;

- (b) A Basic ACDP ~~does~~may not contain a PSEL;
- (c) A Basic ACDP will requires ~~that~~ a simplified annual report be submitted to ~~the Department~~DEQ; and
- (d) A Basic ACDP may be issued for a period not to exceed ten years.

(4) Permit issuance public notice procedures. A Basic ACDP requires public notice as a Category I permit action under ~~in accordance with~~ OAR 340 division 209 ~~for Category I permit actions~~.

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

~~[ED. NOTE: Tables referenced are available from the agency.]~~

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.310 & 468A.315

Stats. Implemented: ORS 468 & 468A

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2007, f. & cert. ef. 11-8-07; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

## **340-216-0060**

### **General Air Contaminant Discharge Permits**

#### **(1) Applicability.**

(a) DEQ may issue a General ACDP under the following circumstances:

- (A) There are ~~several~~multiple sources that involve the same or substantially similar types of operations;
- (B) All requirements applicable to the covered operations can be contained in a General ACDP;
- (C) The emission limitations, monitoring, recordkeeping, reporting and other enforceable conditions are the same for all operations covered by the General ACDP; and
- (D) The regulated pollutants emitted are of the same type for all covered operations.

(b) Permit content. Each General ACDP must include the following:

- (A) All relevant requirements for the operations covered by the General ACDP, excluding any federal requirements not adopted by the EQC;
- (B) Generic PSELs for all regulated pollutants emitted at more than the de minimis emission level ~~in accordance with~~under OAR 340, division 222;
- (C) Testing, monitoring, recordkeeping, and reporting requirements necessary to ensure compliance with the PSEL and other applicable emissions limits and standards; and
- (D) A permit expiration date not to exceed 10 years from the date of issuance.

(c) Permit issuance [public notice](#) procedures: A new General ACDP requires public notice [as a Category III permit action](#) ~~and opportunity for comment in accordance with~~ [under](#) OAR 340 division 209 ~~for Category III permit actions~~. A reissued General ACDP or a modification to a General ACDP requires public notice [as a Category II permit action](#) ~~and opportunity for comment in accordance with~~ [under](#) OAR 340 division 209 ~~for Category II permit actions~~.

[\(d\) DEQ will retain](#) ~~All~~ General ACDPs ~~are~~ on file and [make them](#) available for [public](#) review at DEQ's headquarters.

(2) Source assignment:

(a) Application requirements. Any person requesting that a source be assigned to a General ACDP must submit a written application ~~in accordance with~~ [under](#) OAR 340-216-0040 that includes the information in OAR 340-216-0040(1), specifies the General ACDP source category, and shows that the source qualifies for the General ACDP.

(b) Fees. Applicants must pay the fees ~~set forth in~~ [OAR 340-216-8020 Table 2 of OAR 340-216-0020](#). The fee class for each General ACDP is [Fee Class One unless otherwise specified](#) as follows:

(A) Hard chrome platers — Fee Class Three;

(B) Decorative chrome platers — Fee Class Two;

(C) Halogenated solvent degreasers — batch cold, batch vapor, and in-line — Fee Class Two;

(D) Perchloroethylene dry cleaners — Fee Class Six;

(E) Asphalt plants — Fee Class Three;

(F) Rock crushers — Fee Class Two;

(G) Ready-mix concrete — Fee Class One;

(H) Sawmills, planing mills, millwork, plywood manufacturing and veneer drying — Fee Class Three;

(I) Boilers — Fee Class Two;

(J) Crematories — Fee Class One;

(K) Grain elevators — Fee Class One;

(L) Prepared feeds, flour, and cereal — Fee Class One;

(M) Seed cleaning — Fee Class One;

(N) Coffee roasters — Fee Class One;

(O) Bulk gasoline plants — Fee Class One;

(P) Electric power generators — Fee Class Two;

(Q) Clay ceramics — Fee Class One;

- (R) Hospital sterilizers — Fee Class Four;
- (S) Secondary nonferrous metals — Fee Class One;
- (T) Gasoline dispensing facilities — stage I — Fee Class Five;
- (U) Gasoline dispensing facilities — stage II — Fee Class Four;
- (V) Wood preserving — Fee Class Four;
- (W) Metal fabrication and finishing — with two or more of the following operations — Fee Class Two;
- (i) Dry abrasive blasting performed in a vented enclosure or of objects greater than 8 feet (2.4 meters) in any one dimension that uses materials that contain MFHAP or has the potential to emit MFHAP;
- (ii) Spray-applied painting operation using MFHAP containing paints;
- (iii) Welding operation that uses materials that contain MFHAP or has the potential to emit MFHAP and uses 2,000 pounds or more per year of MFHAP containing welding wire and rod (calculated on a rolling 12-month basis);
- (X) Metal fabrication and finishing — with only one of the operations listed in subparagraphs (2)(b)(~~W~~Y)(i) through (iii) ~~of this rule~~ — Fee Class One;
- (Y) Metal fabrication and finishing — with none of the operations listed in subparagraphs (2)(b)(~~W~~Y)(i) through (iii) ~~of this rule~~ — Fee Class Four;
- (Z) Plating and polishing — Fee Class One;
- (AA) Surface coating operations — Fee Class One;
- (BB) Paint stripping — Fee Class One;
- (CC) Aluminum, copper, and nonferrous foundries — Fee Class Two;
- (DD) Paints and allied products manufacturing — Fee Class Two; and
- (EE) Emergency generators and firewater pumps, the emissions, in aggregate, are greater than 10 tons for any regulated pollutant based on 100 hours of operation – Fee Class Two.
- ~~(EE) Any General ACDP not listed above — Fee Class One.~~
- (c) Source assignment procedures:
- (A) Assignment of a source to a General ACDP is a Category I permit action and is subject to the Category I public notice requirements ~~in accordance with~~ using OAR 340, division 209.
- (B) A person is not a permittee under the General ACDP until DEQ assigns the General ACDP to the person.
- (C) Assignments to General ACDPs and attachment(s) terminate when the General ACDP or attachment expires or is modified, terminated or revoked.

(D) Once a source has been assigned to a General ACDP, if the assigned General ACDP does not cover all requirements applicable to the source, excluding any federal requirements not adopted by the EQC, the other applicable requirements must be covered by assignment to one or more General ACDP Attachments ~~in accordance with~~ under OAR 340-216-0062, otherwise the source must obtain a Simple or Standard ACDP.

(E) A source requesting to be assigned to a General ACDP Attachment, ~~in accordance with~~ under OAR 340-216-0062, for a source category in a higher annual fee class than the General ACDP to which the source is currently assigned ~~to~~, must be reassigned to the General ACDP for the source category in the higher annual fee class.

(3) DEQ Initiated Modification. If DEQ determines that the conditions have changed such that a General ACDP for a category needs to be modified, DEQ may issue a new General ACDP for that category and assign all existing General ACDP permit holders to the new General ACDP.

(4) Rescission. ~~In addition to OAR 340-216-0082 (Termination or Revocation of an ACDP),~~ DEQ may rescind an individual source's assignment to a General ACDP if the source no longer meets the requirements ~~of this rule or the conditions~~ of the permit, ~~including, but not limited to a source having an ongoing, reoccurring or serious compliance problem.~~ In such case, the source must submit an application within 60 days for a Simple or Standard ACDP upon notification by DEQ of DEQ's intent to rescind the General ACDP. Upon issuance of the Simple or Standard ACDP, or if the source fails to submit an application for a Simple or Standard ACDP, DEQ will rescind ~~ing a~~ the source's assignment to ~~at~~ the General ACDP ~~DEQ will place the source on a Simple or Standard ACDP. DEQ may also revoke a General ACDP or attachment or both if conditions, standards or rules have changed so the permit or attachment no longer meets the requirements of this rule.~~

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

~~[ED. NOTE: Tables referenced are available from the agency.]~~

Stat. Auth.: ORS 468.020, 468.065, & 468A.025, 468A.040, 468A.310 & 468A.315

Stats. Implemented: ORS 468.~~020~~ & 468A.~~025~~

Hist.: DEQ 14-1998, f. & cert. ef. 9-14-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1725; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 10-2001, f. & cert. ef. 8-30-01; DEQ 4-2002, f. & cert. ef. 3-14-02; DEQ 2-2006, f. & cert. ef. 3-14-06; DEQ 8-2007, f. & cert. ef. 11-8-07; DEQ 15-2008, f. & cert. ef. 12-31-08; DEQ 8-2009, f. & cert. ef. 12-16-09; DEQ 1-2011, f. & cert. ef. 2-24-11; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11; DEQ 4-2013, f. & cert. ef. 3-27-13

## **340-216-0062**

### **General ACDP Attachments**

(1) Purpose. This rule allows a source to be assigned to one General ACDP and one or more General ACDP Attachments, as long as the General ACDP and General ACDP Attachment~~(s)~~ contain all requirements applicable to the source. This would allow a source to avoid having to obtain a more costly Simple or Standard ACDP if there are no General ACDPs that contain all requirements applicable to the source.

(2) Applicability.

(a) DEQ may issue a General ACDP Attachment under the following circumstances:

- (A) There are ~~several~~ multiple sources that involve the same or substantially similar types of operations;
- (B) All requirements applicable to the covered operations can be contained in a General ACDP Attachment;
- (C) The emission limitations, monitoring, recordkeeping, reporting and other enforceable conditions are the same for all operations covered by the General ACDP Attachment;
- (D) The regulated pollutants emitted are of the same type for all covered operations. If a General ACDP and a General ACDP Attachment~~(s)~~ cannot address all activities at a source, the owner or operator of the source must apply for a Simple or Standard ACDP ~~in accordance with~~ under this ~~D~~ division.

(b) Attachment content. Each General ACDP Attachment must include the following:

- (A) All relevant requirements for the operations covered by the General ACDP Attachment, excluding any federal requirements not adopted by the EQC;
- (B) Testing, monitoring, recordkeeping, and reporting requirements necessary to ensure compliance with the applicable emissions limits and standards; and
- (C) An attachment expiration date not to exceed 10 years from the date of issuance.

(c) Attachment issuance public notice procedures: A General ACDP Attachment requires public notice as a Category II permit action ~~and opportunity for comment in accordance with~~ under OAR 340 division 209 ~~for Category II permit actions~~.

(d) DEQ will retain ~~A~~ all General ACDP Attachments ~~will be~~ on file and make them available for public review at DEQ's headquarters.

(3) Source assignment:

(a) Application requirements. Any person requesting to be assigned to a General ACDP Attachment must submit a written application for each requested General ACDP Attachment that specifies the requested General ACDP Attachment and shows that the source qualifies for the requested General ACDP Attachment.

(b) Fees. ~~Permittees~~ Applicants must pay ~~an annual fee of \$144~~ the fees in OAR 340-216-8020 for each assigned General ACDP Attachment. The fee class for each General ACDP Attachment is Fee Class Five.

(c) Assignment procedures:

(A) Assignment to a General ACDP Attachment is a Category I permit action and is subject to the Category I public notice requirements ~~in accordance with~~ under OAR 340, division 209.

(B) A person is not a permittee under the General ACDP Attachment until DEQ assigns the General ACDP Attachment to the person.

(C) ~~Assignments~~ to a General ACDP Attachment ~~s~~ terminates when the General ACDP Attachment expires or is modified, terminated or revoked.

(D) A source may not be assigned to a General ACDP Attachment for a source category in a higher annual fee class than the General ACDP to which the source is currently assigned~~-to~~. Instead a source must be reassigned to the General ACDP for the source category in the higher annual fee class ~~in accordance with~~under OAR 340-216-0060(2)(c)(E) and may be assigned to one or more General ACDP Attachments associated with source categories in an equal or lower annual fee class.

(d) If all activities at a source cannot be addressed by a General ACDP and General ACDP Attachments, the owner or operator of the source must apply for a Simple or Standard ACDP ~~in accordance with~~under this ~~D~~ivision.

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

Stat. Auth.: ORS 468.020, 468.065, & 468A.025, 468A.040, 468A.310 & 468A.315

Stats. Implemented: ORS 468.~~020~~ & 468A.~~025~~

Hist.: DEQ 8-2009, f. & cert. ef. 12-16-09; DEQ 4-2013, f. & cert. ef. 3-27-13; DEQ 9-2013(Temp), f. & cert. ef. 10-24-13 thru 4-22-14

## 340-216-0064

### Simple ACDPs

#### ~~(1) Applicability:~~

~~(a) Sources and activities listed in Table 1, Part B of OAR 340-216-0020 that do not qualify for a General ACDP and are not required to obtain a Standard ACDP must, at a minimum, obtain a Simple ACDP.~~

~~(b) Any source required to obtain a Simple ACDP may obtain a Standard ACDP.~~

~~(c) DEQ may determine that a source is ineligible for a Simple ACDP and must obtain a Standard ACDP based upon, but not limited to, the following considerations:~~

~~(A) The nature, extent, and toxicity of the source's emissions;~~

~~(B) The complexity of the source and the rules applicable to that source;~~

~~(C) The complexity of the emission controls and potential threat to human health and the environment if the emission controls fail;~~

~~(D) The location of the source; and~~

~~(E) The compliance history of the source.~~

~~(1)~~ Application Requirements. Any person requesting a new, modified, or renewed Simple ACDP must submit an application ~~in accordance with~~using OAR 340-216-0040.

(23) Fees. Applicants for a new or modified Simple ACDP must pay the fees set forth in [OAR 340-216-8020 Table 2 of 340-216-0020](#). ~~Applicants for a new Simple ACDP must initially pay the High Annual Fee. Once the initial permit is issued, a~~ Annual fees for Simple ACDPs will be assessed based on the following:

(a) Low Fee — A ~~S~~source may qualify for the ~~L~~low ~~F~~fee if:

(A) ~~T~~he source is, or will be, permitted under only one of the following categories from [OAR 340-216-80100020 Table 1](#), Part B ~~(category 27. Electric Power Generation, may be included with any category listed below) of OAR 340-216-0020~~:

(i) Category 7. Asphalt felt and coatings;

(ii) Category 13. Boilers and other fuel burning equipment [\(can be combined with category 27. Electric power generation\)](#);

[\(iii\) Category 27. Electric power generation;](#)

~~(iv)~~ Category 33. Galvanizing & ~~P~~pipe coating;

~~(iv)~~ Category 39. Gray iron and steel foundries, malleable iron foundries, steel investment foundries, steel foundries 100 or more tons/yr. metal charged (not elsewhere identified);

~~(v)~~ Category 40. Gypsum products;

~~(vi)~~ Category 45. Liquid ~~S~~storage ~~T~~tanks subject to OAR [340](#) division 232;

~~(vii)~~ Category 56. Non-~~F~~errous ~~M~~metal ~~F~~foundries 100 or more tons/~~year~~; of metal charged;

~~(ix)~~ Category 57. Organic or ~~I~~norganic ~~I~~ndustrial ~~C~~hemical ~~M~~anufacturing;

~~(ix)~~ Category 62. Perchloroethylene ~~D~~dry ~~C~~leaning;

~~(xi)~~ Category 73. Secondary ~~S~~melting and/or ~~R~~efining of ~~F~~errous and ~~N~~on-~~F~~errous ~~M~~etals; or

~~(xii)~~ Category 85. All ~~O~~ther ~~S~~ources not listed in [OAR 340-216-8010 Table 1 of OAR 340-216-0020](#) ~~which would have actual emissions, if the source were to operate uncontrolled, of 5 or more tons a year of direct PM2.5 or PM10 if located in a PM2.5 or PM10 non-attainment or maintenance area, or 10 or more tons of any single criteria pollutant in any part of the state~~ [\(can be combined with category 27. Electric Power Generation\)](#); and

(B) The actual emissions from the ~~12-month~~[calendar year](#) immediately preceding the invoice date, ~~and future projected emissions~~ are less than ~~5~~[five](#) tons/~~year~~. of PM10 in a PM10 nonattainment or maintenance area ~~or PM2.5 in a PM2.5 nonattainment or maintenance area~~, and less than 10 tons/~~year~~. for each criteria pollutant; and

(C) The source is not ~~considered creating an air quality problem or~~ nuisance [under OAR 340-208-0310 or 340-208-0450](#)~~source by DEQ.~~

(b) High Fee — Any source required to have a Simple ACDP (~~Table 1, Part B of OAR 340-216-0020~~[8010 Part B](#)) that does not qualify for the ~~L~~low ~~F~~fee [under subsection \(2\)\(a\)](#) will be assessed the ~~H~~igh ~~F~~fee.



(c) If DEQ determines that a source was invoiced for the ~~L~~ow ~~A~~nnual ~~F~~ee but does not meet the ~~L~~ow ~~F~~ee criteria outlined above, the source will be required to pay the difference between the ~~L~~ow and ~~H~~igh ~~F~~ees, plus applicable late fees in ~~accordance with Table 2 of~~ OAR 340-216-~~8020 Part 40020~~. Late fees start upon issuance of the initial invoice. In this case, DEQ will issue a new invoice specifying applicable fees.

(d) If a source must pay fees and late fees to DEQ under subsection (c) ~~of this section~~ and an authorized representative of the source with knowledge and responsibility for submitting permit fees to DEQ certifies under penalty of law that, to the best of the certifying individual's good faith knowledge and belief, the source met the ~~L~~ow ~~F~~ee criteria outlined above during the period the source paid the ~~L~~ow ~~F~~ee, then the source will be required to pay only the difference between the ~~L~~ow and ~~H~~igh ~~F~~ees under subsection (c) ~~of this section~~ for the past two years. A source that meets the requirements of this subsection will not be required to pay any late fees associated with the fee payments hereunder unless the source fails to make such payments on or before the deadline provided by DEQ for such payments, in which case the source will be required to pay the late fees described in ~~Table 2 of~~ OAR 340-216-~~8020 Part 40020~~. The provisions of this subsection shall apply to any fees due under subsection (c) ~~of this section~~ including fees for years that preceded the effective date of this subsection.

(34) Permit Content. Each Simple ACDP must include the following:

(a) All relevant applicable requirements for source operation, including general ACDP conditions for incorporating generally applicable requirements, but excluding any federal requirements not adopted by the EQC;

(b) Generic PSELs for all regulated pollutants emitted at more than the de minimis emission level ~~in accordance with under~~ OAR 340 division 222;

(c) Testing, monitoring, recordkeeping, and reporting requirements sufficient to determine compliance with the PSEL and other emission limits and standards, as necessary; and

(d) A permit duration not to exceed 5 years.

(45) Permit issuance public notice procedures:

(a) Issuance of a new or renewed Simple ACDP requires public notice as a Category II permit action ~~in accordance with under~~ OAR 340 division 209 ~~for Category II permit actions~~.

(b) Issuance of a modification to a Simple ACDP requires one of the following procedures, as applicable:

(A) Public notice as a Category I permit action for ~~N~~on-technical and ~~non-NSR/PSD B~~asic and ~~S~~imple technical modifications ~~require public notice in accordance with under~~ OAR 340; division 209 ~~for Category I permit actions~~; or

(B) Public notice as a Category II permit action for ~~Issuance of non-NSR/PSD M~~oderate and ~~G~~complex technical modifications ~~require public notice in accordance with under~~ OAR 340 division 209 ~~for Category II permit actions~~.

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

~~[ED. NOTE: Tables referenced are available from DEQ.]~~

Stat. Auth.: ORS 468.020, [468.065](#), [468A.025](#), [468A.040](#), [468A.310](#) & [468A.315](#)

Stats. Implemented: ORS [468](#) & 468A

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 4-2002, f. & cert. ef. 3-14-02; DEQ 8-2009, f. & cert. ef. 12-16-09; DEQ 1-2011, f. & cert. ef. 2-24-11; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11; DEQ 4-2013, f. & cert. ef. 3-27-13(Temp), f. & cert. ef. 10-24-13 thru 4-22-14

## 340-216-0066

### Standard ACDPs

(1) Application requirements. Any person requesting a new, modified, or renewed Standard ACDP must submit an application ~~in accordance with~~ under OAR 340-216-0040 and include the following additional information as applicable:

(a) For new or modified Standard ACDPs that are not subject to Major NSR (OAR 340-~~division~~-224-0010 through 340-224-0070) but have emissions increases above the significant emissions rate are subject to the requirements of State NSR (OAR 340-224-0010 through 340-224-0038, and 340-224-0210 through 340-224-0270). ~~†~~ The application must include an analysis of the air quality and, for federal major sources only, the visibility ~~(federal major sources only)~~ impacts of the source or modification, including meteorological and topographical data, specific details of models used, and other information necessary to estimate air quality impacts.

(b) For new or modified Standard ACDPs that are subject to Major NSR (OAR 340-~~division~~-224-0010 and 340-224-0025 through 340-224-0070), the application must include the following ~~additional~~ information as applicable:

(A) A detailed description of the air pollution control ~~equipment~~ devices and emission reductions processes which are planned for the major source or major modification, and any other information necessary to determine that BACT or LAER technology, whichever is applicable, would be applied;

(B) An analysis of the air quality and, for federal major sources only, the visibility ~~(federal major sources only)~~ impacts of the major source or major modification, including meteorological and topographical data, specific details of models used, and other information necessary to estimate air quality impacts; and

(C) An analysis of the air quality and, for federal major sources only, the visibility ~~(federal major sources only)~~ impacts, and the nature and extent of all commercial, residential, industrial, and other source emission growth, which has occurred since ~~January 1, 1978,~~ the baseline concentration year in the area the major source or major modification would affect.

(2) Fees. Applicants for a Standard ACDP must pay the fees set forth in OAR 340-216-8020 ~~Table 2 of 340-216-0020~~.

(3) Permit content. ~~A~~ Each Standard ACDP ~~is a permit that contains~~ must include the following:

- (a) All applicable requirements, including general ACDP conditions for incorporating generally applicable requirements, but excluding any federal requirements not adopted by the EQC;
- (b) Source specific PSELs or Generic PSELs, whichever are applicable, ~~as specified in~~ under OAR 340, division 222;
- (c) Testing, monitoring, recordkeeping, and reporting requirements sufficient to determine compliance with the PSEL and other emission limits and standards, as necessary; and
- (d) A permit duration not to exceed 5 years.
- (4) Permit issuance procedures.

(a) Issuance of a new or renewed Standard ACDP requires public notice under OAR 340 division 209 as follows:

(A) Public notice as a Category III permit action ~~F~~for ~~non-NSR~~ permit actions that will increase allowed emissions but that are not subject to Major NSR or Type A State NSR actions under OAR 340 division 224, ~~issuance of a new or renewed Standard ACDP requires public notice in accordance with OAR 340 division 209 for Category III permit actions for any increase in allowed emissions,~~ or as a Category II permit actions if the permit will not increase authorized ~~no emissions increase is allowed.~~

(B) Public notice as a Category IV permit action ~~F~~for Major NSR or Type A State NSR ~~permit~~ actions under OAR 340 division 224, ~~issuance of a new Standard ACDP requires public notice in accordance with OAR 340 division 209 for Category IV permit actions.~~

(b) Issuance of a modified Standard ACDP requires public notice under OAR 340 division 209 as follows ~~one of the following, as applicable:~~

(A) Public notice as a Category I permit action for ~~N~~non-technical modifications and ~~non-NSR~~ ~~B~~basic and ~~S~~simple technical modifications ~~require public notice in accordance with~~ under OAR 340 division 209 ~~for Category I permit actions.~~

(B) Public notice as a Category II permit action for ~~Non-NSR/PSD~~ ~~M~~moderate and ~~C~~complex technical modifications ~~require public notice in accordance with OAR 340 division 209 for Category II permit actions~~ if there will be no increase in allowed emissions, or as a Category III permit actions if there will be an increase in emissions; ~~or is allowed.~~

(C) Public notice as a Category IV permit action for ~~NSR/PSD~~ ~~major~~ modifications subject to NSR under OAR 340 division 224 ~~require public notice in accordance with OAR 340 division 209 for Category IV permit actions.~~

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

~~[ED. NOTE: Tables referenced are available from DEQ.]~~

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.310 & 468A.315

Stats. Implemented: ORS 468 & 468A

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 4-2002, f. & cert. ef. 3-14-02; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11; DEQ 4-2013, f. & cert. ef. 3-27-13

## 340-216-0068

### Simple and Standard ACDP Attachments

(1) Purpose. This rule allows DEQ to add new requirements to existing Simple or Standard ACDPs by assigning the source to an ACDP Attachment issued ~~in accordance with~~under section (2) ~~of this rule~~. An ACDP Attachment would apply to an affected source until the new requirements are incorporated into the source's Simple or Standard ACDP at the next permit renewal or at the time of permit modification.

(2) ACDP Attachment issuance procedures:

(a) An ACDP Attachment requires public notice as a Category II permit action ~~and opportunity for comment in accordance with~~under OAR 340 division 209 ~~for Category II permit actions, except that ACDP Attachments to Simple or Standard ACDPs require notice as Category I permit actions.~~

(b) DEQ may issue an ACDP Attachment when there are multiple sources that are subject to the new requirements.

(c) Attachment content. Each ACDP Attachment must include the following:

(A) Testing, monitoring, recordkeeping, and reporting requirements necessary to ensure compliance with the applicable emissions limits and standards; and

(B) An attachment expiration date not to exceed 5 years from the date of issuance.

(3) Assignment to ACDP Attachment:

~~(a) Adding an ACDP Attachment to a Simple or Standard ACDP is a Category I permit action and is subject to the Category I public notice requirements in accordance with OAR 340, division 209.~~

~~(a)~~ A source is not a permittee under the ACDP Attachment until DEQ assigns the ACDP Attachment to the source.

~~(b)~~ The ACDP Attachment is removed from the Simple or Standards ACDP when the requirements of the ACDP Attachment are incorporated into the source's Simple or Standard ACDP at the time of renewal or of a modification.

~~(c)~~ If an EPA or DEQ action causes ~~a~~s a source to be subject to the requirements in an ACDP Attachment, assignment to the ACDP Attachment is a DEQ initiated modification to the Simple or Standard ACDP. ~~T~~and the permittee is not required to submit an application or pay fees for the permit action. In such case, DEQ would notify the permittee of the proposed permitting action and the permittee may object to the permit action if the permittee demonstrates that the source is not subject to the requirements of the ACDP Attachment.

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

Stat. Auth.: ORS 468.~~020~~, ~~&~~ 468A.~~025~~, 468A.040 & 468A.310

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

Hist.: DEQ 4-2013, f. & cert. ef. 3-27-13

### 340-216-0070

#### Permitting a Source with Multiple Activities or Processes~~Sources~~ at a Single Adjacent or Contiguous Site

A single or contiguous site containing activities or processes that are covered by more than one General ACDP, or a source that contains processes or activities listed in more than one Part of OAR 340-216-8010-Table 1, Part A to Part C, ~~OAR 340-216-0020~~ may obtain a Standard ACDP, even if not otherwise required to obtain a Standard ACDP under this division.

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

~~[ED. NOTE: Tables referenced are available from the agency.]~~

Stat. Auth.: ORS 468.~~020~~, ~~&~~ 468A.~~025~~, 468A.040 & 468A.310

Stats. Implemented: ORS 468 & 468A

Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76;

Renumbered from 340-020-0033, DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93,

Renumbered from 340-020-0160; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 14-1999, f. & cert. ef. 10-14-99,

Renumbered from 340-028-1730; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

### 340-216-0082

#### Termination or Revocation of an ACDP

(1) Expiration.

(a) A source may not be operated after the expiration date of a permit, unless any of the following occur prior to the expiration date of the permit:

(A) A timely and complete application for renewal or for an Oregon Title V Operating Permit has been submitted; or

(B) another type of permit (ACDP or Oregon Title V Operating Permit) has been issued authorizing operation of the source.

(b) For a source operating under an ACDP or Oregon Title V Operating Permit, a requirement established in an earlier ACDP remains in effect notwithstanding expiration of the ACDP, unless the provision expires by its terms or unless the provision is modified or terminated according to the procedures used to establish the requirement initially.

(2) Automatic Termination. A permit is automatically terminated upon:

(a) Issuance of a renewal or new ACDP for the same activity or operation;

(b) Written request of the permittee, if ~~the Department~~ DEQ determines that a permit is no longer required;

(c) Failure to submit a timely application for permit renewal. Termination is effective on the permit expiration date; or

(d) Failure to pay annual fees within 90 days of invoice by ~~the Department~~ DEQ, unless prior arrangements for payment have been approved in writing by ~~the Department~~ DEQ.

(3) Reinstatement of Terminated Permit: A permit automatically terminated under ~~340-216-0082~~ any of subsections (2)(b) through (2)(d) may only be reinstated by the permittee by applying for a new permit, ~~including~~ The permittee must also pay the applicable new source permit application fees ~~as set forth~~ in this ~~D~~ ivision, unless the owner or operator submits the renewal application within three months of the permit expiration date.

(4) Revocation:

(a) If ~~the Department~~ DEQ determines that a permittee is in noncompliance with the terms of the permit, submitted false information in the application or other required documentation, or is in violation of any applicable rule or statute, ~~the Department~~ DEQ may revoke the permit. ~~DEQ will provide~~ A notice of the intent to revoke the permit ~~will be provided~~ to the permittee ~~in accordance with~~ under OAR 340-011-0525. The notice will include the reasons why the permit will be revoked, and include an opportunity for the permittee to request a contested case hearing prior to the revocation. A permittee's written request for hearing must be received by DEQ within 60 days from service of the notice on the permittee, and must state the grounds of the request. The hearing will be conducted as a contested case hearing ~~in accordance with~~ under ORS 183.413 through 183.470 and OAR 340 division 011. The permit will continue in effect until the 60<sup>th</sup> days ~~expires~~ after service of the notice on the permittee, if the permittee does not timely request a hearing, or until a final order is issued if the permittee timely requests a hearing ~~an appeal is filed, whichever is later~~.

(b) If ~~the Department~~ DEQ finds there is a serious danger to the public health, safety or the environment caused by a permittee's activities, ~~the Department~~ DEQ may immediately revoke or refuse to renew the permit without prior notice or opportunity for a hearing. If no advance notice is provided, notification will be provided to the permittee as soon as possible ~~as provided in~~ under OAR 340-011-0525. The notification will set forth the specific reasons for the revocation or refusal to renew and will provide an opportunity for the permittee to request a contested case hearing for review of the revocation or refusal to renew. A permittee's written request for hearing must be received by DEQ. ~~For the permittee to contest the Department's revocation or refusal to renew the Department must receive a written request for a hearing~~ within 90 days of service of the notice on the permittee and ~~the request~~ must state the grounds for the request. The hearing will be conducted as a contested case hearing ~~in accordance with~~ under ORS 183.413 through 183.470 and OAR 340; division 011. The revocation or refusal to renew becomes final without further action by ~~the Department~~ DEQ if a request for a hearing is not received within the 90 days. If a request for a hearing is timely received, the revocation or refusal to renew will remain in place until issuance of a final order.

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

Stat. Auth.: ORS 468.020, [468.065](#), [468A.025](#), [468A.040](#), [468A.310](#) & [468A.315](#)

Stats. Implemented: ORS [183.468](#) & 468A

Hist.: DEQ 42, f. 4-5-72, ef. 4-15-72; DEQ 125, f. & ef. 12-16-76; DEQ 21-1990, f. & cert. ef. 7-6-90; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01, Renumbered from 340-014-0015 & 340-014-0045; DEQ 8-2007, f. & cert. ef. 11-8-07

## **340-216-0084**

### **Department Initiated Modification**

If ~~the Department~~[DEQ](#) determines it is appropriate to modify an ACDP, other than a General ACDP, ~~the Department~~[DEQ](#) will notify the permittee by regular, registered or certified mail of the modification and will include the proposed modification and the reasons for the modification. The modification will become effective upon mailing unless the permittee requests a [contested case](#) hearing within 20 days. ~~Such a~~[A](#) request for hearing must be made in writing and must include the grounds for the request. The hearing will be conducted as a contested case hearing ~~in accordance with~~[under](#) ORS 183.413 through 183.470 and OAR ~~chapter~~[340](#) division 011. If a hearing is requested, the existing permit will remain in effect until after a final order is issued ~~in~~[following](#) the hearing.

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

Stat. Auth.: ORS 468.020, [468A.025](#), [468A.040](#) & [468A.310](#)

Stats. Implemented: ORS [183](#) & 468A

Hist.: DEQ 42, f. 4-5-72, ef. 4-15-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01, Renumbered from 340-014-0040

## **340-216-0090**

### **Sources Subject to ACDPs and Fees**

All air contaminant discharge sources listed in [OAR 340-216-8010](#) ~~Table 1 OAR 340-216-0020~~ must obtain a permit from ~~the Department~~[DEQ](#) and are subject to fees ~~as set forth in~~ [OAR 340-216-8020](#) ~~Table 2 OAR 340-216-0020~~.

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

~~[ED. NOTE: Tables referenced are available from the agency.]~~

Stat. Auth.: ORS 468.020, [468.065](#), ~~&~~ [468A.040](#), [468A.310](#) & [468A.315](#)

Stats. Implemented: ORS 468.065, [468A.040](#), [468A.310](#) & [468A.315](#)



Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-020-0033.12; DEQ 125, f. & ef. 12-16-76; DEQ 20-1979, f. & ef. 6-29-79; DEQ 11-1983, f. & ef. 5-31-83; DEQ 6-1986, f. & ef. 3-26-86; DEQ 12-1987, f. & ef. 6-15-87; DEQ 17-1990, f. & cert. ef. 5-25-90; DEQ 27-1991, f. & cert. ef. 11-29-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0165; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 20-1993(Temp), f. & cert. ef. 11-4-93; DEQ 13-1994, f. & cert. ef. 5-19-94; DEQ 21-1994, f. & cert. ef. 10-14-94; DEQ 22-1994, f. & cert. ef. 10-14-94; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 18-1997, f. 8-27-97, cert. ef. 10-1-97; DEQ 7-1998, f. & cert. ef. 5-5-98; DEQ 12-1998, f. & cert. ef. 6-30-98; DEQ 14-1998, f. & cert. ef. 9-14-98; DEQ 10-1999, f. & cert. ef. 7-1-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1750; DEQ 8-2000, f. & cert. ef. 6-6-00; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

### 340-216-0094

#### Temporary Closure

(1) ~~A P~~ermittees ~~who are~~that temporarily suspend~~ing~~ activities for which an ACDP is required may apply for a fee reduction due to temporary closure. However, the anticipated period of closure must exceed six months and must not be due to regular maintenance or seasonal limitations.

(2) DEQ will prorate Annual fees for temporary closure based on the length of the closure in a calendar year, ~~but will not be less than~~are one half of the regular annual fee for the source.

(3) ~~A S~~ources who has~~ve~~ received Department approval for payment of the temporary closure fee must obtain authorization from ~~the Department~~DEQ prior to resuming permitted activities. ~~An O~~wners or operators ~~of the~~ source must submit written notification, together with the prorated annual fee for the remaining months of the year, to ~~the Department~~DEQ at least thirty (30) days before startup and specify in the notification the earliest anticipated startup date.

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

Stat. Auth.: ORS 468.020, 468.065, 468A.040, 468A.310 & 468A.315

Stats. Implemented: ORS 468 & 468A

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01



## AIR CONTAMINANT DISCHARGE PERMITS

The following source categories must obtain a permit as required by OAR 340-216-0020 for applicability.

**Part A: Activities and Sources**

~~The following commercial and industrial sources must obtain a Basic ACDP under the procedures set forth in 340-216-0056 unless the source is required to obtain a different form of ACDP by Part B or C hereof: (Production and emission parameters are based on the latest consecutive 12 month period, or future projected operation, whichever is higher. Emission cutoffs are based on actual emissions.)~~

## OAR 340-216-8010

## Part A

## Basic ACDP Activities and Sources

|    |                                                                                                                                                                                                                                                                                            |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | <del>**</del> Autobody <del>R</del> epair or <del>P</del> ainting <del>S</del> hops painting more than 25 automobiles in a year <u>and that are located inside the Portland AQMA.</u>                                                                                                      |
| 2. | Concrete <del>M</del> anufacturing including <del>R</del> edimix and CTB <u>both portable and stationary</u> more than 5,000 but less than 25,000 cubic yards per year output.                                                                                                             |
| 3. | Crematory <del>and Pathological Waste I</del> ncinerators with less than 20 tons/ <del>year</del> ; material input.                                                                                                                                                                        |
| 4. | Natural gas and propane fired boilers (with or without #2 diesel oil back-up: <u>with "backup" meaning less than 10,000 gallons of fuel per year****</u> ) of 10 or more MMBTU but less than 30 MMBTU/ <u>hour</u> heat input constructed after June 9, 1989.                              |
| 5. | Prepared feeds for animals and fowl and associated grain elevators more than 1,000 tons/ <del>year</del> ; but less than 10,000 tons per year throughput.                                                                                                                                  |
| 6. | Rock, <del>C</del> oncrete or <del>A</del> sphalt <del>C</del> rushing both portable and stationary more than 5,000 tons/ <del>year</del> ; but less than 25,000 tons/ <del>year</del> ; crushed.                                                                                          |
| 7. | Surface coating operations whose actual or expected usage of coating materials is greater than 250 gallons per month <u>but does not exceed 3,500 gallons per month</u> , excluding sources that exclusively use non-VOC and non-HAP containing coatings (e.g. powder coating operations). |

**Part B Activities and Sources**

~~The following commercial and industrial sources must obtain either:~~

- ~~• a General ACDP, if one is available for the source classification and the source qualifies for a General ACDP under the procedures set forth in 340-216-0060;~~
- ~~• a Simple ACDP under the procedures set forth in 340-216-0064; or~~
- ~~• a Standard ACDP under the procedures set forth in 340-216-0066 if the source fits one of the criteria of Part C hereof.~~

## OAR 340-216-8010

## Part B

## General, Simple, or Standard ACDP Activities and Sources

|    |                                                                                                                                                      |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | <del>**</del> Aerospace or <del>A</del> erospace <del>P</del> arts <del>M</del> anufacturing <u>subject to RACT as regulated by OAR 340 division</u> |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------|

OAR 340-216-8010

Part B

General, Simple, or Standard ACDP Activities and Sources

|     |                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     | <u>232.</u>                                                                                                                                                                                                                                                                                                                                                                                                         |
| 2.  | Aluminum, <del>C</del> copper, and <del>O</del> other <del>N</del> nonferrous <del>F</del> foundries subject to an <del>A</del> area <del>S</del> source NESHAP <u>under OAR 340 division 244.</u>                                                                                                                                                                                                                  |
| 3.  | Aluminum <del>P</del> roduction <del>— P</del> primary.                                                                                                                                                                                                                                                                                                                                                             |
| 4.  | Ammonia <del>M</del> anufacturing.                                                                                                                                                                                                                                                                                                                                                                                  |
| 5.  | Animal <del>R</del> endering and <del>A</del> animal <del>R</del> eduction <del>F</del> acilities.                                                                                                                                                                                                                                                                                                                  |
| 6.  | Asphalt <del>B</del> lowing <del>P</del> plants.                                                                                                                                                                                                                                                                                                                                                                    |
| 7.  | Asphalt <del>F</del> elts or <del>C</del> oating <u>manufacturing.</u>                                                                                                                                                                                                                                                                                                                                              |
| 8.  | Asphaltic <del>C</del> oncrete <del>P</del> paving <del>P</del> plants, both stationary and portable.                                                                                                                                                                                                                                                                                                               |
| 9.  | Bakeries, <del>C</del> ommercial over 10 tons of VOC emissions per year.                                                                                                                                                                                                                                                                                                                                            |
| 10. | Battery <del>S</del> eparator <del>M</del> anufacturing.                                                                                                                                                                                                                                                                                                                                                            |
| 11. | <u>Lead-acid B</u> battery <del>M</del> anufacturing and <del>R</del> e-manufacturing.                                                                                                                                                                                                                                                                                                                              |
| 12. | Beet <del>S</del> sugar <del>M</del> anufacturing.                                                                                                                                                                                                                                                                                                                                                                  |
| 13. | Boilers and other <del>F</del> uel <del>B</del> urning <del>E</del> quipment <u>equal to or greater than</u> <del>over</del> 10 MMBTU/hour; heat input <u>each</u> , except exclusively <del>N</del> natural <del>G</del> as and <del>P</del> ropane fired <u>boilers</u> <del>units</del> (with or without #2 diesel backup) <u>less than</u> <del>under</del> 30 MMBTU/hour <u>each</u> ; <del>heat input</del> . |
| 14. | Building paper and <del>B</del> uildingboard <del>M</del> mills.                                                                                                                                                                                                                                                                                                                                                    |
| 15. | Calcium <del>C</del> arbide <del>M</del> anufacturing.                                                                                                                                                                                                                                                                                                                                                              |
| 16. | <del>***</del> Can or <del>D</del> rum <del>C</del> oating <u>subject to RACT as regulated by OAR 340 division 232.</u>                                                                                                                                                                                                                                                                                             |
| 17. | Cement <del>M</del> anufacturing.                                                                                                                                                                                                                                                                                                                                                                                   |
| 18. | <del>*</del> Cereal <del>P</del> preparations and <del>A</del> ssociated <del>G</del> rain <del>E</del> levators 10,000 or more tons/year; Throughput.                                                                                                                                                                                                                                                              |
| 19. | Charcoal <del>M</del> anufacturing.                                                                                                                                                                                                                                                                                                                                                                                 |
| 20. | Chlorine and <del>A</del> lkalies <del>M</del> anufacturing.                                                                                                                                                                                                                                                                                                                                                        |
| 21. | Chrome <del>P</del> lating <u>and anodizing</u> subject to a NESHAP <u>under OAR 340 division 244.</u>                                                                                                                                                                                                                                                                                                              |
| 22. | Clay <del>C</del> eramics <del>M</del> anufacturing subject to an <del>A</del> area <del>S</del> source NESHAP <u>under OAR 340 division 244.</u>                                                                                                                                                                                                                                                                   |
| 23. | Coffee <del>R</del> oasting (roasting 30 or more <u>green</u> tons per year).                                                                                                                                                                                                                                                                                                                                       |
| 24. | Concrete <del>M</del> anufacturing including <del>R</del> edimix and CTB, <u>both stationary and portable</u> , 25,000 or more cubic yards per year output.                                                                                                                                                                                                                                                         |
| 25. | Crematory <u>and Pathological Waste I</u> ncinerators 20 or more tons/year; material input.                                                                                                                                                                                                                                                                                                                         |
| 26. | Degreas <u>ing operations</u> (halogenated solvent <u>cleanings</u> subject to a NESHAP <u>under OAR 340 division 244.</u>                                                                                                                                                                                                                                                                                          |
| 27. | Electrical <del>P</del> power <del>G</del> eneration from combustion, excluding units used exclusively as emergency generators and units less than 500 kW.                                                                                                                                                                                                                                                          |
| 28. | Commercial <del>E</del> thylene <del>O</del> xide <del>S</del> terilization, excluding facilities using less than 1 ton of ethylene oxide within all consecutive 12-month periods after December 6, 1996.                                                                                                                                                                                                           |
| 29. | Ferroalloy <del>P</del> roduction <del>F</del> acilities subject to an <del>A</del> area <del>S</del> source NESHAP <u>under OAR 340 division 244.</u>                                                                                                                                                                                                                                                              |
| 30. | <del>***</del> Flatwood <del>C</del> oating regulated by <u>OAR</u> <del>D</del> ivision 232.                                                                                                                                                                                                                                                                                                                       |
| 31. | <del>***</del> Flexographic or <del>R</del> otogravure <del>P</del> rinting subject to RACT <u>under OAR 340 division 232.</u>                                                                                                                                                                                                                                                                                      |
| 32. | <del>*</del> Flour, <del>B</del> lended and/or <del>P</del> prepared and <del>A</del> ssociated <del>G</del> rain <del>E</del> levators 10,000 or more tons/year; throughput.                                                                                                                                                                                                                                       |
| 33. | Galvanizing and <del>P</del> pipe <del>C</del> oating (except galvanizing operations that use less than 100 tons of zinc/year).                                                                                                                                                                                                                                                                                     |
| 34. | <del>Gasoline</del> -Bulk <u>gasoline</u> <del>P</del> plants, <del>B</del> bulk <u>gasoline</u> <del>T</del> erminals, and <del>P</del> ipeline <del>F</del> acilities.                                                                                                                                                                                                                                            |
| 35. | <del>***</del> Gasoline dispensing facilities, excluding gasoline dispensing facilities with monthly throughput of                                                                                                                                                                                                                                                                                                  |

OAR 340-216-8010

Part B

General, Simple, or Standard ACDP Activities and Sources

|         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|         | less than 10,000 gallons of gasoline per month. <del>*****</del>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 36.     | Glass and <del>G</del> glass <del>C</del> ontainer <del>M</del> anufacturing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 37. *   | Grain <del>E</del> levators used for intermediate storage 10,000 or more tons/ <del>year</del> ; throughput.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 38.     | <del>Grain terminal elevators</del> Reserved.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 39.     | Gray iron and steel foundries, malleable iron foundries, steel investment foundries, steel foundries 100 or more tons/ <del>year</del> ; metal charged (not elsewhere identified).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 40.     | Gypsum <del>P</del> roducts <del>M</del> anufacturing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 41.     | Hardboard <del>M</del> anufacturing (including fiberboard).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 42.     | Hospital sterilization operations subject to an <del>A</del> area <del>S</del> ource NESHAP <u>under OAR 340 division 244.</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 43.     | Incinerators with two or more ton per day capacity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 44.     | Lime <del>M</del> anufacturing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 45. *** | Liquid <del>S</del> torage <del>T</del> anks <u>subject to RACT under OAR 340 division 232.</u> <del>subject to OAR Division 232</del>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 46.     | Magnetic <del>T</del> ape <del>M</del> anufacturing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 47.     | Manufactured <del>home, and M</del> obile <del>H</del> ome <u>and recreational vehicle</u> <del>M</del> anufacturing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 48. **  | Marine <del>V</del> essel <del>P</del> etroleum <del>L</del> oading and <del>U</del> nloading <u>subject to RACT under OAR 340 division 232.</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 49.     | Metal <del>F</del> abrication and <del>F</del> inishing <del>O</del> perations subject to an <del>A</del> area <del>S</del> ource NESHAP <u>under OAR 340 division 244,</u> excluding facilities that meet all the following:<br><div style="margin-left: 20px;"> <del>(a.)</del> Do not perform any of the operations listed in OAR 340-216-0060(2)(b)(<del>Y</del><u>W</u>)(i) through (iii);<br/> <del>(b.)</del> Do not perform shielded metal arc welding (SMAW) using metal fabrication and finishing hazardous air pollutant (MFHAP) containing wire or rod; and<br/> <del>(c.)</del> Use less than 100 pounds of MFHAP containing welding wire and rod per year. </div>                     |
| 50.     | Millwork <u>manufacturing</u> (including kitchen cabinets and structural wood members) 25,000 or more <del>board feet</del> ; /maximum 8 <del>hour</del> ; input.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 51.     | Molded <del>C</del> ontainer <u>manufacturing.</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 52.     | Motor <del>C</del> oach <del>M</del> anufacturing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 53.     | Motor <del>V</del> ehicle and <del>M</del> obile <del>E</del> quipment <del>S</del> urface <del>C</del> oating <del>O</del> perations subject to an <del>A</del> area <del>S</del> ource NESHAP <u>under OAR 340 division 244,</u> excluding motor vehicle surface coating operations painting less than 10 vehicles per year or using less than 20 gallons of coating and 20 gallons of methylene chloride containing paint stripper per year, mobile equipment surface coating operations using less than 20 gallons of coating and 20 gallons of methylene chloride containing paint stripper per year, and motor vehicle surface coating operations registered pursuant to OAR 340-210-0100(2). |
| 54.     | Natural <del>G</del> as and <del>O</del> il <del>P</del> roduction and <del>P</del> rocessing and associated fuel burning equipment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 55.     | Nitric <del>A</del> cid <del>M</del> anufacturing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 56.     | Non- <del>F</del> errous <del>M</del> etal <del>F</del> oundries 100 or more tons/ <del>year</del> ; of metal charged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 57.     | Organic or <del>I</del> norganic <del>C</del> hemical <del>M</del> anufacturing and <del>D</del> istribution with ½ or more tons per year emissions of any one criteria pollutant (sources in this category with less than ½ ton/ <del>year</del> ; of each criteria pollutant are not required to have an ACDP).                                                                                                                                                                                                                                                                                                                                                                                   |
| 58.     | Paint and <del>A</del> llied <del>P</del> roducts <del>M</del> anufacturing subject to an <del>A</del> area <del>S</del> ource NESHAP <u>under OAR 340 division 244.</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 59.     | Paint <del>S</del> tripping and <del>M</del> iscellaneous <del>S</del> urface <del>C</del> oating <del>O</del> perations subject to an <del>A</del> area <del>S</del> ource NESHAP, excluding paint stripping and miscellaneous surface coating operations using less than 20 gallons of coating and 20 gallons of methylene chloride containing paint stripper per year.                                                                                                                                                                                                                                                                                                                           |
| 60. *** | Paper or other <del>S</del> ubstrate <del>C</del> oating <u>subject to RACT under OAR 340 division 232.</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 61.     | Particleboard <del>M</del> anufacturing (including strandboard, flakeboard, and waferboard).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 62.     | Perchloroethylene <del>D</del> ry <del>C</del> leaning <del>O</del> perations subject to an <del>A</del> area <del>S</del> ource NESHAP <u>under OAR 340 division 244,</u> excluding perchloroethylene dry cleaning operations registered pursuant to OAR                                                                                                                                                                                                                                                                                                                                                                                                                                           |

OAR 340-216-8010

Part B

General, Simple, or Standard ACDP Activities and Sources

|        |                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|        | 340-210-0100(2).                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 63.    | Pesticide <del>M</del> anufacturing 5,000 or more tons/ <del>year</del> ; annual production.                                                                                                                                                                                                                                                                                                                                                    |
| 64.    | Petroleum <del>R</del> efining and <del>R</del> re-refining of <del>L</del> ubricating <del>O</del> ils and <del>G</del> reases including <del>A</del> sphalt <del>P</del> roduction by <del>D</del> istillation and the reprocessing of oils and/or solvents for fuels.                                                                                                                                                                        |
| 65.    | Plating and <del>P</del> polishing <del>O</del> perations subject to an <del>A</del> rea <del>S</del> source NESHAP <a href="#">under OAR 340 division 244</a> .                                                                                                                                                                                                                                                                                |
| 66.    | Plywood <del>M</del> anufacturing and/or <del>V</del> eneer <del>D</del> drying.                                                                                                                                                                                                                                                                                                                                                                |
| 67.    | Prepared <del>F</del> feeds <del>M</del> anufacturing for animals and fowl and associated grain elevators 10,000 or more tons per year throughput.                                                                                                                                                                                                                                                                                              |
| 68.    | Primary <del>S</del> melting and/or <del>R</del> efining of <del>F</del> errous and <del>N</del> on- <del>F</del> errous <del>M</del> etals.                                                                                                                                                                                                                                                                                                    |
| 69.    | Pulp, <del>P</del> paper and <del>P</del> paperboard <del>M</del> mills.                                                                                                                                                                                                                                                                                                                                                                        |
| 70.    | Rock, <del>C</del> oncrete or <del>A</del> sphalt <del>C</del> rushing, both <a href="#">stationary and</a> portable, <del>and stationary</del> 25,000 or more tons/ <del>year</del> ; crushed.                                                                                                                                                                                                                                                 |
| 71.    | Sawmills and/or <del>P</del> planing <del>M</del> mills 25,000 or more <del>board</del> ; <del>feet</del> ; /maximum 8 <del>hour</del> ; finished product.                                                                                                                                                                                                                                                                                      |
| 72.    | Secondary <del>N</del> onferrous <del>M</del> etals <del>P</del> rocessing subject to an Area Source NESHAP <a href="#">under OAR 340 division 244</a> .                                                                                                                                                                                                                                                                                        |
| 73.    | Secondary <del>S</del> melting and/or <del>R</del> efining of <del>F</del> errous and <del>N</del> on- <del>F</del> errous <del>M</del> etals.                                                                                                                                                                                                                                                                                                  |
| 74.*   | Seed <del>C</del> leaning and <del>A</del> ssociated <del>G</del> rain <del>E</del> elevators 5,000 or more tons/ <del>year</del> ; throughput.                                                                                                                                                                                                                                                                                                 |
| 75.    | Sewage <del>T</del> treatment <del>F</del> acilities employing internal combustion <a href="#">engines</a> for digester gasses.                                                                                                                                                                                                                                                                                                                 |
| 76.    | Soil <del>R</del> emediation <del>F</del> acilities, <del>stationary or both stationary and</del> portable.                                                                                                                                                                                                                                                                                                                                     |
| 77.    | Steel <del>W</del> orks, <del>R</del> olling and <del>F</del> inishing <del>M</del> mills.                                                                                                                                                                                                                                                                                                                                                      |
| 78.*** | Surface <del>C</del> oating in <del>M</del> anufacturing subject to RACT <a href="#">under OAR 340 division 232</a> .                                                                                                                                                                                                                                                                                                                           |
| 79.    | Surface <del>C</del> oating <del>O</del> perations with actual emissions of VOCs before add on controls of 10 or more tons/ <del>year</del> .                                                                                                                                                                                                                                                                                                   |
| 80.    | Synthetic <del>R</del> esin <del>M</del> anufacturing.                                                                                                                                                                                                                                                                                                                                                                                          |
| 81.    | Tire <del>M</del> anufacturing.                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 82.    | Wood <del>F</del> urniture and <del>F</del> ixtures 25,000 or more <del>board</del> ; <del>feet</del> ; /maximum 8 <del>hour</del> ; input.                                                                                                                                                                                                                                                                                                     |
| 83.    | Wood <del>P</del> reserving (excluding waterborne).                                                                                                                                                                                                                                                                                                                                                                                             |
| 84.    | All <del>O</del> ther <del>S</del> ources not listed herein that DEQ determines an air quality concern exists or one which would emit significant malodorous emissions.                                                                                                                                                                                                                                                                         |
| 85.    | All <del>O</del> ther <del>S</del> ources not listed herein which would have actual emissions, if the source were to operate uncontrolled, of 5 or more tons <del>a</del> -per year of <a href="#">direct PM2.5 or</a> PM10 if located in a <a href="#">PM2.5 or</a> PM10 non-attainment or maintenance area, or 10 or more tons <a href="#">per year</a> of any single criteria pollutant <a href="#">if located</a> in any part of the state. |
| 86     | <a href="#">Chemical manufacturing facilities that do not transfer liquids containing organic HAP listed in Table 1 of 40 CFR part 63 subpart VVVVVV to tank trucks or railcars and are not subject to emission limits in Table 2, 3, 4, 5, 6, or 8 of 40 CFR part 63 subpart VVVVVV.</a>                                                                                                                                                       |

OAR 340-216-8010

Part B

General, Simple, or Standard ACDP Activities and Sources

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 87 | <u>Stationary internal combustion engines only if:</u><br><u>(a) For emergency generators and firewater pumps, the emissions , in aggregate, are greater than 10 tons for any regulated pollutant based on 100 hours of operation or some other hours of operation specified in a permit; or</u><br><u>(b) For any individual non-emergency or non-fire pump engine, the engine is subject to 40 CFR Part 63, Subpart ZZZZ and is rated at 500 horsepower or more, excluding two stroke lean burn engines, engines burning exclusively landfill or digester gas, and four stroke engines located in remote areas; or</u><br><u>(c) For any individual non-emergency engine, the engine is subject to 40 CFR Part 60, Subpart IIII and:</u><br><u>(A) The engine has a displacement of 30 liters or more per cylinder; or</u><br><u>(B) The engine has a displacement of less than 30 liters per cylinder, is rated at 500 horsepower or more; or</u><br><u>(d) For any individual non-emergency engine, the engine is subject to 40 CFR Part 60, Subpart JJJJ, is rated at 500 horsepower or more,</u> |
| 88 | <u>All sources subject to RACT under OAR division 232, BACT or LAER under OAR division 224, a NESHAP under OAR 340 division 244, a NSPS under OAR 340 division 238, or State MACT under OAR 340-244-0200(2), except sources registered pursuant to OAR 340-210-0100(2).</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 89 | <u>All other portable sources not listed herein for which DEQ determines that:</u><br><u>(a) An air quality concern exists;</u><br><u>(b) The source would emit significant malodorous emissions; or</u><br><u>(c) The source would have actual emissions, if the source were to operate uncontrolled, of 5 or more tons per year of direct PM2.5 or PM10 if located in a PM2.5 or PM10 non-attainment or maintenance area, or 10 or more tons per year of any single criteria pollutant if located in any part of the state.</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 90 | <u>Pathological waste incinerators.</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

**Part C: Activities and Sources**

~~The following sources must obtain a Standard ACDP under the procedures set forth in 340-216-0066:~~

OAR 340-216-8010

Part C

Standard ACDP Activities and Sources

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 1. | <del>Incinerators for PCBs, and /or other hazardous wastes, or both.</del>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 2. | <del>All Ssources that DEQ determines have emissions that constitute a nuisance.</del>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 3. | <del>All Ssources electing to maintain the source's <del>baseline emission rate, or</del> netting basis.</del>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 4. | <u>All sources that request a PSEL equal to or greater than the SER for a regulated pollutant.</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 4. | <del>All Sources subject to a RACT, BACT, LAER, NESHAP adopted in OAR 340-244-0220, NSPS adopted in OAR 340-238-0060, State MACT, or other significant Air Quality regulation(s), except:</del><br><del>a. Source categories for which a General ACDP has been issued;</del><br><del>b. Sources with less than 10 tons/yr. actual emissions that are subject to RACT, NSPS adopted in OAR 340-238-0060 or a NESHAP adopted in OAR 340-244-0220 which qualify for a Simple ACDP;</del><br><del>c. Sources registered pursuant to OAR 340-210-0100(2);</del><br><del>d. Electrical power generation units used exclusively as emergency generators and units less than</del> |

OAD 340-216-8010

Part C

Standard ACDP Activities and Sources

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <p>500 kW.</p> <p>e. <del>Gasoline dispensing facilities, provided the gasoline dispensing facility has monthly throughput of less than 10,000 gallons of gasoline per month</del></p> <p>f. <del>Motor vehicle surface coating operations painting less than 10 vehicles per year or using less than 20 gallons of coating and 20 gallons of methylene chloride containing paint stripper per year; mobile equipment surface coating operations using less than 20 gallons of coating and 20 gallons of methylene chloride containing paint stripper per year, and motor vehicle surface coating operations registered pursuant to OAR 340-210-0100(2).</del></p> <p>g. <del>Paint stripping and miscellaneous surface coating operations using less than 20 gallons of coating and 20 gallons of methylene chloride containing paint stripper per year</del></p> <p>h. <del>Commercial ethylene oxide sterilization operations using less than 1 ton of ethylene oxide within all consecutive 12-month periods after December 6, 1996.</del></p> <p>i. <del>Metal fabrication and finishing operations that meet all the following:</del></p> <p>A. <del>Do not perform any of the operations listed in OAR 340-216-0060(2)(b)(Y)(i) through (iii);</del></p> <p>B. <del>Do not perform shielded metal arc welding (SMAW) using metal fabrication and finishing hazardous air pollutant (MFHAP) containing wire or rod; and</del></p> <p>C. <del>Use less than 100 pounds of MFHAP containing welding wire and rod per year.</del></p> <p>j. <del>Chemical manufacturing facilities that do not transfer liquids containing organic HAP listed in Table 1 of 40 CFR part 63 subpart VVVVVV to tank trucks or railcars and are not subject to emission limits in Table 2, 3, 4, 5, 6, or 8 of 40 CFR part 63 subpart VVVVVV.</del></p> <p>k. <del>Prepared feeds manufacturing facilities with less than 10,000 tons per year throughput.</del></p> |
| 5. | All sources having the potential to emit more than 100,000 tons CO <sub>2</sub> e of GHG emissions in a year.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 6. | All <del>S</del> sources having the <del>P</del> potential to <del>E</del> emit more than 100 tons of any regulated <del>air contaminant pollutant</del> in a year.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 7. | All <del>S</del> sources having the <del>P</del> potential to <del>E</del> emit more than 10 tons of a single hazardous air pollutant in a year.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 8. | All <del>S</del> sources having the <del>P</del> potential to <del>E</del> emit more than 25 tons of all hazardous air pollutants combined in a year.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

Notes:

\* Applies only to Special Control Areas

~~\*\* Portland AQMA only~~

~~\*\*\* Portland AQMA, Medford-Ashland AQMA or Salem-[Keizer in the](#) SKATS only~~

~~\*\*\*\* “back-up” means less than 10,000 gallons of fuel per year~~

~~\*\*\*\*\* “monthly throughput” means the total volume of gasoline that is loaded into, or dispensed from, all gasoline storage tanks at the gasoline dispensing facility during a month. Monthly throughput is calculated by summing the volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at the gasoline dispensing facility during the month, plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at the gasoline dispensing facility during the previous 11 months, and then dividing that sum by 12~~

[Stat. Auth.: ORS 468.020, 468A.025, 468A.040 & 468A.310](#)

[Stats. Implemented: ORS 468A](#)

[NOTE: See history of these tables under OAR 340-216-0020.](#)

[OAR 340-216-8020](#)

[AIR CONTAMINANT DISCHARGE PERMIT FEES](#)

**Table 2**

**Part 1. Initial Permitting Application Fees:** (in addition to first annual fee)

|                                                                                                     |             |
|-----------------------------------------------------------------------------------------------------|-------------|
| a. Short Term Activity ACDP                                                                         | \$3,000.00  |
| b. Basic ACDP                                                                                       | \$120.00    |
| c. Assignment to General ACDP                                                                       | \$1,200.00* |
| d. Simple ACDP                                                                                      | \$6,000.00  |
| e. Construction ACDP                                                                                | \$9,600.00  |
| f. Standard ACDP                                                                                    | \$12,000.00 |
| g. Standard ACDP ( <del>Major NSR</del> <del>PSD/NSR</del> or<br><a href="#">Type A State NSR</a> ) | \$42,000.00 |

\*DEQ may waive the assignment fee for an existing source requesting to be assigned to a General ACDP because the source is subject to a newly adopted area source NESHAP as long as the existing source requests assignment within 90 days of notification by DEQ.

**Part 2. Annual Fees:** (Due date 12/1\* for 1/1 to 12/31 of the following year)

|                                                                                  |                     |                                                            |
|----------------------------------------------------------------------------------|---------------------|------------------------------------------------------------|
| a. Short Term Activity ACDP                                                      |                     | \$NA                                                       |
| b. Basic ACDP                                                                    |                     | \$360.00                                                   |
| c. General ACDP                                                                  | (A) Fee Class One   | \$720.00                                                   |
|                                                                                  | (B) Fee Class Two   | \$1,296.00                                                 |
|                                                                                  | (C) Fee Class Three | \$1,872.00                                                 |
|                                                                                  | (D) Fee Class Four  | \$360.00                                                   |
|                                                                                  | (E) Fee Class Five  | \$120.00                                                   |
|                                                                                  | (F) Fee Class Six   | \$240.00                                                   |
| d. Simple ACDP                                                                   | (A) Low Fee         | \$1,920.00                                                 |
|                                                                                  | (B) High Fee        | \$3,840.00                                                 |
| e. Standard ACDP                                                                 |                     | \$7,680.00                                                 |
| <a href="#">f. Greenhouse Gas Reporting, as required by OAR 340 division 215</a> |                     | <a href="#">15% of the applicable annual fee in Part 2</a> |

\*The payment due date for dry cleaners or gasoline dispensing facilities may be extended by ~~the Department~~[DEQ](#) until March 1st.



### Part 3. Specific Activity Fees:

|                                                                                       |                                                       |
|---------------------------------------------------------------------------------------|-------------------------------------------------------|
| a. Non-Technical Permit Modification* <del>(1)</del>                                  | \$360.00                                              |
| b. <del>Non-PSD/NSR</del> Basic Technical Permit Modification <del>(2)</del>          | \$360.00                                              |
| c. <del>Non-PSD/NSR</del> Simple Technical Permit Modification <del>(3)</del>         | \$1,200.00                                            |
| d. <del>Non-PSD/NSR</del> Moderate Technical Permit Modification <del>(4)</del>       | \$6,000.00                                            |
| e. <del>Non-PSD/NSR</del> Complex Technical Permit Modification <del>(5)</del>        | \$12,000.00                                           |
| f. <u>Major NSR or Type A State NSR</u> <del>PSD/NSR</del> Permit Modification        | \$42,000.00                                           |
| g. Modeling Review (outside <u>Major NSR or Type A State NSR</u> <del>PSD/NSR</del> ) | \$6,000.00                                            |
| h. Public Hearing at Source's Request                                                 | \$2,400.00                                            |
| i. State MACT Determination                                                           | \$6,000.00                                            |
| j. Compliance Order Monitoring** <del>(6)</del>                                       | \$120.00/month                                        |
| <del>k. Greenhouse Gas Reporting, as required by OAR 340-215-</del>                   | <del>15% of the applicable annual fee in Part 2</del> |

\* For gasoline dispensing facilities, a portion of these fees will be used to cover the fees required for changes of ownership in OAR 340-150-0052(4).

\*\* This is a one time fee payable when a compliance order is established in a permit or a DEQ order containing a compliance schedule becomes a final order of DEQ and is based on the number of months DEQ will have to oversee the order.

### Part 4. Late Fees:

- a. 8-30 days late 5%
- b. 31-60 days late 10%
- c. 61 or more days late 20%

~~1. Non-Technical modifications include, but are not limited to name changes, change of ownership and similar administrative changes. For gasoline dispensing facilities, a portion of these fees will be used to cover the fees required for changes of ownership in OAR 340-150-0052(4).~~

~~2. Basic Technical Modifications include, but are not limited to corrections of emission factors in compliance methods, changing source test dates for extenuating circumstances, and similar changes.~~

~~3. Simple Technical Modifications include, but are not limited to, incorporating a PSEL compliance method from a review report into an ACDP, modifying a compliance method to use different emission factors or process parameter, changing source test dates for extenuating circumstances, changing reporting frequency, incorporating NSPS and NESHAP requirements that do not require judgment, and similar changes.~~

~~4. Moderate Technical Modifications include, but are not limited to incorporating a relatively simple new compliance method into a permit, adding a relatively simple compliance method or monitoring for an emission point or control device not previously addressed in a permit, revising monitoring and reporting requirements other than dates and frequency, adding a new applicable requirement into a permit due to a change in process or change in rules and that does not require judgment by the Department, incorporating NSPS and NESHAP requirements that do not require judgment, and similar changes.~~

~~5. Complex Technical Modifications include, but are not limited to incorporating a relatively complex new compliance method into a permit, adding a relatively complex compliance method or monitoring for an emission point or control device not previously addressed in a permit, adding a relatively complex new applicable requirement into a permit due to a change in process or change in rules and that requires judgment by the Department, and similar changes.~~

~~6. This is a one time fee payable when a Compliance Order is established in a Permit or a Department Order containing a compliance schedule becomes a Final Order of the Department and is based on the number of months the Department will have to oversee the Order.~~

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.040 & 468A.310

Stats. Implemented: ORS 468A

NOTE: See history of this table under OAR 340-216-0020.

## DIVISION 218

### OREGON TITLE V OPERATING PERMITS

**340-218-0010**

#### **Policy and Purpose**

These rules establish a program to implement Title V of the FCAA for the State of Oregon as part of the overall industrial source control program:

(1) All sources subject to this division shall have an Oregon Title V Operating Permit that assures compliance by the source with all applicable requirements in effect as of the date of permit issuance.

(2) The requirements of the Oregon Title V Operating Permit program, including provisions regarding schedules for submission and approval or disapproval of permit applications, shall apply to the permitting of affected sources under the national acid rain program, except as provided herein.

(3) All sources subject to this division are exempt from the following:

(a) Registration as required by ORS 468A.050 and OAR 340-210-0100 through 340-210-0120; and

(b) Air Contaminant Discharge Permits, OAR 340 division 216, unless required by 340-216-0020(2) or (4), or 340-224-0010(1).

(A) Oregon Title V Operating Permits do not replace requirements in [an](#) Air Contaminant Discharge Permits issued to the source even if the ACDP~~(s)~~ has~~ve~~ expired. For a source operating under a Title V Permit, requirements established in an earlier ACDP remain in effect notwithstanding expiration of the ACDP or the Title V permit, unless a provision expires by its terms or unless a provision is modified or terminated following the procedures used to establish the requirement initially.

(B) Source specific requirements, including, but not limited to TACT, RACT, BACT, and LAER requirements, established in an ACDP must be incorporated into the Oregon Title V Operating Permit and any revisions to those requirements must follow the procedures used to establish the requirements initially.

(4) Subject to the requirements in this ~~D~~division, ~~the Lane Regional Air Protection Agency~~[LRAPA](#) is designated by the ~~Commission~~[EQC](#) as the permitting agency to implement the Oregon Title V Operating Permit program within its area of jurisdiction. ~~The Regional Agency~~[LRAPA](#)'s program is subject to ~~Department~~[DEQ](#) oversight. The requirements and procedures contained in this ~~D~~division pertaining to the Oregon Title V Operating Permit program shall be used by ~~the Regional Agency~~[LRAPA](#) to implement its permitting program ~~until the Regional Agency~~[unless LRAPA has adopted or](#) adopts ~~superseding~~ rules which are at least as ~~restrictive-strict~~ as ~~state rules~~[this division](#).

Stat. Auth.: ORS 468.020, [468A.025](#), [468A.040](#), [468A.155](#) & 468A.310

Stats. Implemented: ORS ~~468 &~~ 468A

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2100; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2007, f. & cert. ef. 11-8-07

## 340-218-0020

### Applicability

(1) Except as provided in ~~S~~section (4)~~-of this rule~~, this division applies to the following sources:

(a) Any major source;

(b) Any source, including an area source, subject to a standard, limitation, or other requirement under section 111 of the FCAA;

(c) Any source, including an area source, subject to a standard or other requirement under section 112 of the FCAA, except that a source is not required to obtain a permit solely because it is subject to regulations or requirements under section 112(r) of the FCAA;

(d) Any affected source under Title IV; and

(e) Any source in a source category designated by the ~~Commission~~EQC pursuant to this rule.

(2) The owner or operator of a source with an Oregon Title V Operating Permit whose potential to emit later falls below the emission level that causes it to be a major source, and which is not otherwise required to have an Oregon Title V Operating Permit, may submit a request for revocation of the Oregon Title V Operating Permit. Granting of the request for revocation does not relieve the source from compliance with all applicable requirements or ACDP requirements.

(3) Synthetic minor sources.

(a) A source which would otherwise be a major source subject to this division may choose to become a synthetic minor source by limiting its emissions below the emission level that causes it to be a major source through limits contained in an ACDP issued by ~~the Department~~DEQ under 340 division 216.

(b) The reporting and monitoring requirements of the emission limiting conditions contained in the ACDPs of synthetic minor sources issued by ~~the Department~~DEQ under OAR 340-216 must meet the requirements of OAR 340-212-012010- through 340-212-0150 and ~~340-~~division 214.

(c) Synthetic minor sources who request to increase their potential to emit above the major source emission rate thresholds will become subject to this division and must submit a permit application under OAR 340-218-0040 and obtain an Oregon Title V Operating Permit before increasing emissions above the major source emission rate thresholds.

(d) Synthetic minor sources that exceed the limitations on potential to emit are in violation of OAR 340-218-0020(1)(a).

(4) Source category exemptions.

(a) All sources listed in 340-218-0020(1) that are not major sources, affected sources, or solid waste incineration units required to obtain a permit pursuant to section 129(e) of the FCAA are not required to obtain a Title V permit, except non-major sources subject to a standard under section 111 or section 112 of the FCAA

promulgated after July 21, 1992 are required to obtain a Title V permit unless specifically exempted from the requirement to obtain a Title V permit in section 111 or 112 standards.

(b) The following source categories are exempted from the obligation to obtain an Oregon Title V Operating Permit:

(A) All sources and source categories that would be required to obtain a permit solely because they are subject to 40 CFR part 60, Subpart AAA -- Standards of Performance for New Residential Wood Heaters; and

(B) All sources and source categories that would be required to obtain a permit solely because they are subject to 40 CFR part 61, Subpart M -- National Emission Standard for Hazardous Air Pollutants for Asbestos, section 61.145, Standard for Demolition and Renovation.

(c) Any source listed in OAR 340-218-0020(1) exempt from the requirement to obtain a permit under this rule may opt to apply for an Oregon Title V Operating Permit.

(5) Emissions units and Oregon Title V Operating Permit program sources. ~~The Department~~ [DEQ](#) will include in the permit all applicable requirements for all relevant emissions units in the Oregon Title V Operating Permit source, including any equipment used to support the major industrial group at the site.

(6) Fugitive emissions. Fugitive emissions from an Oregon Title V Operating Permit program source must be included in the permit application and the permit in the same manner as stack emissions, regardless of whether the source category in question is included in the list of sources contained in the definition of major source.

(7) Insignificant activity emissions. All emissions from insignificant activities, including categorically insignificant activities and aggregate insignificant emissions, ~~shall~~ [must](#) be included in the determination of the applicability of any requirement.

(8) Oregon Title V Operating Permit program sources that are required to obtain an ACDP, OAR 340 division 216, or a Notice of Approval, OAR 340-210-0205- [through](#) 340-210-0250, because of a Title I modification, must operate in compliance with the Oregon Title V Operating Permit until the Oregon Title V Operating Permit is revised to incorporate the ACDP or the Notice of Approval for the Title I modification.

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

Stat. Auth.: ORS 468.020, ~~468.065,~~ [468A.025](#), 468A.040 & 468A.310

Stats. Implemented: ORS ~~468.020, 468.065, 468A.025 & 468A.310~~

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 24-1994, f. & ef. 10-28-94; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 24-1995, f. & cert. ef. 10-11-95; DEQ 1-1997, f. & cert. ef. 1-21-97; DEQ 14-1998, f. & cert. ef. 9-14-98; DEQ 10-1999, f. & cert. ef. 7-1-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2110; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2007, f. & cert. ef. 11-8-07

## 340-218-0030

### 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.

Stat. Auth.: ORS 468.020 [& 468A](#)

Stats. Implemented: ORS 468A.~~025~~

Hist.: DEQ 14-1999, f. & cert. ef. 10-14-99

## **340-218-0040**

### **Permit Applications**

(1) Duty to apply. For each Oregon Title V Operating Permit program source, the owner or operator must submit a timely and complete permit application ~~in accordance with~~ [using](#) this rule:

(a) Timely application:

(A) A timely application for a source that is in operation as of the effective date of the Oregon Title V Operating Permit program is one that is submitted 12 months after the effective date of the Oregon Title V Operating Permit program in Oregon or on or before such earlier date as ~~the Department~~ [DEQ](#) may establish. If an earlier date is established, ~~the Department~~ [DEQ](#) will provide at least six (6) months for the owner or operator to prepare an application. A timely application for a source that is not in operation or that is not subject to the Oregon Title V Operating Permit program as of the effective date of the Oregon Title V Operating Permit program is one that is submitted within 12 months after the source becomes subject to the Oregon Title V Operating Permit program.

(B) Any Oregon Title V Operating Permit program source required to have obtained a permit prior to construction under the ACDP program, OAR 340 division 216; New Source Review program, OAR 340 division 224; or the Notice of Construction and Approval of Plans rules, 340-210-0205 through 340-210-0250, must file a complete application to obtain the Oregon Title V Operating Permit or permit revision within 12 months after commencing operation. Commencing operation will be considered initial startup. Where an existing Oregon Title V Operating Permit would prohibit such construction or change in operation, the owner or operator must obtain a permit revision before commencing operation;

(C) Any Oregon Title V Operating Permit program source owner or operator must follow the appropriate procedures under this division prior to commencement of operation of a source permitted under the Notice of Construction and Approval of Plans rules, OAR 340-210-0205 through 340-0210-0250;

(D) For purposes of permit renewal, a timely application is one that is submitted at least 12 months prior to the date of permit expiration, or such other longer time as may be approved by ~~the Department~~ [DEQ](#) that ensures that the term of the permit will not expire before the permit is renewed. If more than 12 months is required to process a permit renewal application, ~~the Department~~ [DEQ](#) will provide no less than six (6) months for the owner or operator to prepare an application. In no event will this time be greater than 18 months;

(E) Applications for initial phase II acid rain permits ~~shall~~ [must](#) be submitted to ~~the Department~~ [DEQ](#) by January 1, 1996 for sulfur dioxide, and by January 1, 1998 for nitrogen oxides;

(F) Applications for Compliance Extensions for Early Reductions of HAP must be submitted before proposal of an applicable emissions standard issued under section 112(d) of the FCAA and ~~shall~~must comply with ~~be in accordance with provisions prescribed in~~ OAR 340-244-0100 ~~through 340-244-0180~~.

(b) Complete application:

(A) To be deemed complete, an application must provide all information required pursuant to section (3) ~~of this rule~~, except applications for permit renewal only need to include information that has changed since issuance of the last permit and applications for permit revision only need to include information related to proposed changes. The application must include three (3) copies of all required forms and exhibits in hard copy and one (1) copy in electronic format as specified by ~~the Department~~DEQ. Information required under section (3) ~~of this rule~~ must be sufficient to evaluate the subject source and its application and to determine all applicable requirements. A responsible official must certify the submitted information ~~is in accordance with~~ under section (5) ~~of this rule~~;

(B) Applications which are obviously incomplete, unsigned, or which do not contain the required exhibits, clearly identified, will not be accepted by ~~the Department~~DEQ for filing and will be returned to the applicant for completion;

(C) If ~~the Department~~DEQ determines that additional information is necessary before making a completeness determination, it may request such information in writing and set a reasonable deadline for a response. The application will not be considered complete for processing until the adequate information has been received. When the information in the application is deemed adequate, the applicant will be notified that the application is complete for processing;

(D) Unless ~~the Department~~DEQ determines that an application is not complete within 60 days of receipt of the application, such application will be deemed to be complete, except as otherwise provided in OAR 340-218-0120(1)(e). If, while processing an application that has been determined or deemed to be complete, ~~the Department~~DEQ determines that additional information is necessary to evaluate or take final action on that application, it may request such information in writing and set a reasonable deadline for a response. If the additional information is not provided by the deadline specified, the application will be determined to be incomplete, and the application shield will cease to apply;

(E) Applications determined or deemed to be complete will be submitted by ~~the Department~~DEQ to the EPA as required by OAR 340-218-0230(1)(a);

(F) The source's ability to operate without a permit, as set forth in 340-218-0120(2), will be in effect from the date the application is determined or deemed to be complete until the final permit is issued, provided that the applicant submits any requested additional information by the deadline specified by ~~the Department~~DEQ.

(2) Duty to supplement or correct application. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application must, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant must provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit.

(3) Standard application form and required information. Applications must be submitted on forms and in electronic formats specified by ~~the Department~~ [DEQ](#). Information as described below for each emissions unit at an Oregon Title V Operating Permit program source must be included in the application. An application may not omit information needed to determine the applicability of, or to impose, any applicable requirement, including those requirements that apply to categorically insignificant activities, or to evaluate the fee amount required. The application must include the elements specified below:

(a) Identifying information, including company name and address, plant name and address if different from the company's name, owner's name and agent, and telephone number and names of plant site manager/contact;

(b) A description of the source's processes and products by Standard Industrial Classification Code including any associated with each alternative operating scenario identified by the owner or operator and related flow chart~~(s)~~;

(c) The following emissions-related information for all requested alternative operating scenarios identified by the owner or operator:

(A) All emissions of [regulated](#) pollutants for which the source is major, all emissions of regulated ~~air~~ pollutants and all emissions of [regulated](#) pollutants listed in OAR 340-224-0040. A permit application must describe all emissions of regulated ~~air~~ pollutants emitted from any emissions unit, except where such units are exempted under section(3)-~~of this rule~~. ~~The Department~~ [DEQ](#) may require additional information related to the emissions of ~~air-regulated~~ pollutants sufficient to verify which requirements are applicable to the source, and other information necessary to collect any permit fees owed;

(B) Identification and description of all points of emissions described in paragraph (3)(c)(A) ~~of this rule~~ in sufficient detail to establish the basis for fees and applicability of requirements of the FCAA and state rules;

(C) Emissions rates in tons per year and in such terms as are necessary to establish compliance consistent with the applicable standard reference test method and to establish PSELs for all regulated ~~air~~ pollutants except as restricted by OAR [340-222-0035 and 340-222-0060](#) ~~and 340-222-0070~~:

(i) If a short term PSEL is required, an applicant may request that a period longer than daily be used for the short term PSEL provided that the requested period is consistent with the means for demonstrating compliance with any other applicable requirement and the PSEL requirement, and:

(I) The requested period is no longer than the shortest period of the Ambient Air Quality Standards for the [regulated](#) pollutant or daily for VOC and NOx; or

(II) The applicant demonstrates that the requested period, if longer than the shortest period of the Ambient Air Quality Standards for the [regulated](#) pollutant, is the shortest period compatible with source operations but no longer than monthly.

(ii) The requirements of the applicable rules must be satisfied for any requested increase in PSELs, establishment of baseline emissions rates, requested emission reduction credit banking, or other PSEL changes.

(D) Additional information as determined to be necessary to establish any alternative emission limit ~~in accordance with~~ [under](#) OAR 340-226-0400, if the permit applicant requests one;



(E) The application must include a list of all categorically insignificant activities and an estimate of all emissions of regulated ~~air~~ pollutants from those activities which are designated insignificant because of aggregate insignificant emissions. Owners or operators that use more than 100,000 pounds per year of a mixture that contains not greater than 1% by weight of any chemical or compound regulated under divisions 200 through 268 of this chapter, and not greater than 0.1% by weight of any carcinogen listed in the U.S. Department of Health and Human Service's Annual Report on Carcinogens must contact the supplier and manufacturer of the mixture to try and obtain information other than Material Safety Data Sheets in order to quantify emissions;

(F) The following information to the extent it is needed to determine or regulate emissions: fuels, fuel sulfur content, fuel use, raw materials, production rates, and operating schedules;

(G) Any information on pollution prevention measures and cross-media impacts the owner or operator wants ~~the Department~~ [DEQ](#) to consider in determining applicable control requirements and evaluating compliance methods; and

(H) Where the operation or maintenance of air pollution control ~~equipment~~ [devices](#) and emission reduction processes can be adjusted or varied from the highest reasonable efficiency and effectiveness, information necessary for ~~the Department~~ [DEQ](#) to establish operational and maintenance requirements under OAR 340-226-0120(1) and (2);

(I) Identification and description of air pollution control ~~equipment~~ [devices](#), including estimated efficiency of the control ~~equipment~~ [devices](#), and compliance monitoring devices or activities;

(J) Limitations on source operation affecting emissions or any work practice standards, where applicable, for all regulated ~~air~~ pollutants at the Oregon Title V Operating Permit program source;

(K) Other information required by any applicable require-ment, including information related to stack height limitations developed pursuant to OAR 340-212-0130;

(L) Calculations on which the information in items (A) through (K) ~~of this section~~ is based.

(d) A plot plan showing the location of all emissions units identified by Universal Transverse Mercator or "UTM" as provided on United States Geological Survey maps and the nearest residential or commercial property;

(e) The following air pollution control requirements:

(A) Citation and description of all applicable requirements; and

(B) Description of or reference to any applicable test method for determining compliance with each applicable requirement.

(f) The following monitoring, recordkeeping, and reporting requirements:

(A) All emissions monitoring and analysis procedures or test methods required under the applicable requirements, including OAR 340-212-0200 through 340-212-0280;

- (B) Proposed periodic monitoring to determine compliance where an applicable requirement does not require periodic testing or monitoring;
- (C) The proposed use, maintenance, and installation of monitoring equipment or methods, as necessary;
- (D) Documentation of the applicability of the proposed monitoring protocol, such as test data and engineering calculations;
- (E) Proposed consolidation of reporting requirements, where possible;
- (F) A proposed schedule of submittal of all reports; and
- (G) Other similar information as determined by ~~the Department~~ [DEQ](#) to be necessary to protect human health or the environment or to determine compliance with applicable requirements.
- (g) Other specific information that may be necessary to implement and enforce other applicable requirements of the FCAA or state rules or of this division or to determine the applicability of such requirements;
- (h) An explanation of any proposed exemptions from otherwise applicable requirements.
- (i) A copy of any existing permit attached as part of the permit application. Owners or operators may request that ~~the Department~~ [DEQ](#) make a determination that an existing permit term or condition is no longer applicable by supplying adequate information to support such a request. The existing permit term or condition will remain in effect unless or until ~~the Department~~ [DEQ](#) determines that the term or condition is no longer applicable by permit modification.
- (j) Additional information as determined to be necessary by ~~the Department~~ [DEQ](#) to define permit terms and conditions implementing off-permit changes for permit renewals;
- (k) Additional information as determined to be necessary by ~~the Department~~ [DEQ](#) to define permit terms and conditions implementing section 502(b)(10) changes for permit renewals;
- (l) Additional information as determined to be necessary by ~~the Department~~ [DEQ](#) to define permit terms and conditions implementing emissions trading under the PSEL including but not limited to proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable if the applicant requests such trading;
- (m) Additional information as determined to be necessary by ~~the Department~~ [DEQ](#) to define permit terms and conditions implementing emissions trading, to the extent that the applicable requirements provide for trading without a case-by-case approval of each emissions trade if the applicant requests such trading;
- (n) A compliance plan that contains all the following:
  - (A) A description of the compliance status of the source with respect to all applicable requirements.
  - (B) A description as follows:
    - (i) For applicable requirements with which the source is in compliance, a statement that the source will continue to comply with such requirements.

(ii) For applicable requirements that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis.

(iii) For requirements for which the source is not in compliance at the time of permit issuance, a narrative description of how the source will achieve compliance with such requirements.

(C) A compliance schedule as follows:

(i) For applicable requirements with which the source is in compliance, a statement that the source will continue to comply with such requirements;

(ii) For applicable requirements that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis. A generic statement that the source will meet in a timely manner applicable requirements that become effective during the permit term ~~shall~~will satisfy this provision, unless a more detailed schedule is expressly required by the applicable requirement;

(iii) A schedule of compliance for sources that are not in compliance with all applicable requirements at the time of permit issuance. Such a schedule will include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the source will be in noncompliance at the time of permit issuance and interim measures to be taken by the source to minimize the amount of excess emissions during the scheduled period. This compliance schedule must resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. Any such schedule of compliance must be supplemental to, and must not sanction noncompliance with, the applicable requirements on which it is based.

(D) A schedule for submission of certified progress reports no less frequently than every 6 months for sources required to have a schedule of compliance to remedy a violation.

(E) The compliance plan content requirements specified in this section will apply and be included in the acid rain portion of a compliance plan for an affected source, except as specifically superseded by regulations promulgated under Title IV of the FCAA with regard to the schedule and method~~(s)~~ the source will use to achieve compliance with the acid rain emissions limitations.

(o) Requirements for compliance certification, including the following:

(A) A certification of compliance with all applicable requirements by a responsible official consistent with section (5) ~~of this rule~~ and section 114(a)(3) of the FCAA;

(B) A statement of methods used for determining compliance, including a description of monitoring, recordkeeping, and reporting requirements and test methods;

(C) A schedule for submission of compliance certifications during the permit term, to be submitted no less frequently than annually, or more frequently if specified by the underlying applicable requirement or by ~~the Department~~DEQ; and

(D) A statement indicating the source's compliance status with any applicable ~~enhanced~~compliance assurance monitoring and compliance certification requirements of the FCAA or state rules.

(p) A Land Use Compatibility Statement (LUCS), if applicable, to assure that the type of land use and activities in conjunction with that use have been reviewed and approved by local government before a permit is processed and issued.

(q) The use of nationally standardized forms for acid rain portions of permit applications and compliance plans, as required by regulations promulgated under Title IV of the FCAA.

(r) For purposes of permit renewal, the owner or operator must submit all information as required in section (3) ~~of this rule~~. The owner or operator may identify information in its previous permit or permit application for emissions units that should remain unchanged and for which no changes in applicable requirements have occurred and provide copies of the previous permit or permit application for those emissions units.

#### (4) Quantifying Emissions:

(a) When quantifying emissions for purposes of a permit application, modification, or renewal an owner or operator must use the most representative data available or required in a permit condition. ~~The Department~~ [DEQ](#) will consider the following data collection methods as acceptable for determining air emissions:

(A) Continuous emissions monitoring system data obtained ~~in accordance with~~ [using](#) the ~~Department~~ [DEQ's](#) Continuous Monitoring Manual ~~(January, 1992)~~;

(B) Source testing data obtained ~~in accordance with~~ [using](#) the ~~Department~~ [DEQ's](#) Source Sampling Manual ~~(January, 1992)~~ except where material balance calculations are more accurate and more indicative of an emission unit's continuous operation than limited source test results (e.g. a volatile organic compound coating operation);

(C) Material balance calculations;

(D) Emission factors subject to Department review and approval; and

(E) Other methods and calculations subject to Department review and approval.

(b) When continuous monitoring or source test data has previously been submitted to and approved by ~~the~~ [Department](#) [DEQ](#) for a particular emissions unit, that information must be used for quantifying emissions. Material balance calculations may be used as the basis for quantifying emissions when continuous monitoring or source test data exists if it can be demonstrated that the results of material balance calculations are more indicative of actual emissions under normal continuous operating conditions. Emission factors or other methods may be used for calculating emissions when continuous monitoring data, source test data, or material balance data exists if the owner or operator can demonstrate that the existing data is not representative of actual operating conditions. When an owner or operator uses emission factors or other methods as the basis of calculating emissions, a brief justification for the validity of the emission factor or method must be submitted with the calculations. ~~The Department~~ [DEQ](#) will review the validity of the emission factor or method during the permit application review period. When an owner or operator collects emissions data that is more representative of actual operating conditions, either as required under a specific permit condition or for any other requirement imposed by ~~the Department~~ [DEQ](#), the owner or operator must use that data for calculating emissions when applying for a permit modification or renewal. Nothing in this provision requires owners or operators to conduct monitoring or testing solely for the purpose of quantifying emissions for permit applications, modifications, or renewals.

(5) Any application form, report, or compliance certification submitted pursuant to this division must contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this division ~~shall~~must state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.040, 468A.050 ~~&~~ 468A.310

Stats. Implemented: ORS ~~468 &~~ 468A

Hist.: DEQ 13-1993, f. & ef. 9-24-93; DEQ 19-1993, f. & ef. 11-4-93; DEQ 24-1994, f. & ef. 10-28-94; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2120; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2007, f. & cert. ef. 11-8-07

## 340-218-0050

### Standard Permit Requirements

Each permit issued under this division must include the following elements:

(1) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance:

(a) The permit must specify and reference the origin of and authority for each term or condition, and identify any difference in form as compared to the applicable requirement upon which the term or condition is based;

(b) For sources regulated under the national acid rain program, the permit must state that, where an applicable requirement of the FCAA or state rules is more stringent than an applicable requirement of regulations promulgated under Title IV of the FCAA, both provisions must be incorporated into the permit and will be enforceable by the EPA;

(c) For any alternative emission limit established ~~in accordance with~~using OAR 340-226-0400, the permit must contain an equivalency determination and provisions to ensure that any resulting emissions limit has been demonstrated to be quantifiable, accountable, enforceable, and based on replicable procedures.

(2) Permit duration. ~~The Department~~DEQ will issue permits for a fixed term of 5 years in the case of affected sources, and for a term not to exceed 5 years in the case of all other sources.

(3) Monitoring and related recordkeeping and reporting requirements:

(a) Each permit must contain the following requirements with respect to monitoring:

(A) A monitoring protocol to provide accurate and reliable data that:

(i) Is representative of actual source operation;

(ii) Is consistent with the averaging time in the permit emission limits;

(iii) Is consistent with monitoring requirements of other applicable requirements; and

(iv) Can be used for compliance certification and enforcement.

(B) All emissions monitoring and analysis procedures or test methods required under applicable monitoring and testing requirements, including OAR 340-212-0200 through 340-212-0280 and any other procedures and methods that may be promulgated pursuant to sections 504(b) or 114(a)(3) of the FCAA. If more than one monitoring or testing requirement applies, the permit may specify a streamlined set of monitoring or testing provisions provided the specified monitoring or testing is adequate to assure compliance at least to the same extent as the monitoring or testing applicable requirements that are not included in the permit as a result of such streamlining;

(C) Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit, as reported pursuant to OAR 340-218-0050(3)(c). Such monitoring requirements must assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement. Continuous monitoring and source testing must be conducted ~~in accordance with~~ using the ~~Department~~ DEQ's Continuous Monitoring Manual ~~(January, 1992)~~ and the Source Sampling Manual ~~(January, 1992)~~, respectively. Other monitoring must be conducted ~~in accordance with~~ using ~~Department~~ DEQ approved procedures. The monitoring requirements may include but are not limited to any combination of the following:

- (i) Continuous emissions monitoring systems (CEMS);
- (ii) Continuous opacity monitoring systems (COMS);
- (iii) Continuous parameter monitoring systems (CPMS);
- (iv) Continuous flow rate monitoring systems (CFRMS);
- (v) Source testing;
- (vi) Material balance;
- (vii) Engineering calculations;
- (viii) Recordkeeping; or
- (ix) Fuel analysis; and

(D) As necessary, requirements concerning the use, maintenance, and, where appropriate, installation of monitoring equipment or methods;

(E) A condition that prohibits any person from knowingly rendering inaccurate any required monitoring device or method;

(F) Methods used in ~~accordance with~~ OAR 340 division 220 to determine actual emissions for fee purposes must also be used for compliance determination and can be no less rigorous than the requirements of OAR 340-218-0080. The compliance monitoring protocol must include the method used to determine the amount of actual emissions;

(G) Monitoring requirements must commence on the date of permit issuance unless otherwise specified in the permit.

(b) With respect to recordkeeping, the permit must incorporate all applicable recordkeeping requirements and require, where applicable, the following:

(A) Records of required monitoring information that include the following:

(i) The date, place as defined in the permit, and time of sampling or measurements;

(ii) The date ~~(s)~~ analyses were performed;

(iii) The company or entity that performed the analyses;

(iv) The analytical techniques or methods used;

(v) The results of such analyses;

(vi) The operating conditions as existing at the time of sampling or measurement; and

(vii) The records of quality assurance for continuous monitoring systems (including but not limited to quality control activities, audits, calibrations drifts).

(B) Retention of records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit;

(C) Recordkeeping requirements must commence on the date of permit issuance unless otherwise specified in the permit.

(c) With respect to reporting, the permit must incorporate all applicable reporting requirements and require the following:

(A) Submittal of three (3) copies of reports of any required monitoring at least every 6 months, completed on forms approved by ~~the Department~~ [DEQ](#). Unless otherwise approved in writing by ~~the Department~~ [DEQ](#), six month periods are January 1 to June 30, and July 1 to December 31. The reports required by this rule must be submitted within 30 days after the end of each reporting period, unless otherwise approved in writing by ~~the Department~~ [DEQ](#). One copy of the report must be submitted to the EPA, and two copies to ~~the Department~~ [DEQ](#)'s regional office identified in the permit. All instances of deviations from permit requirements must be clearly identified in such reports:

(i) The semi-annual report will be due on July 30, unless otherwise approved in writing by ~~the Department~~ [DEQ](#), and must include the semi-annual compliance certification, OAR 340-218-0080;

(ii) The annual report will be due on February 15, unless otherwise approved in writing by ~~the Department~~ [DEQ](#), but may not be due later than March 15, and must consist of the annual reporting requirements as specified in the permit; the emission fee report; the emission statement, if applicable, OAR 340-214-0220; the annual certification that the risk management plan is being properly implemented, OAR 340-218-0050; and the semi-annual compliance certification, OAR 340-218-0080.



(B) Prompt reporting of deviations from permit requirements that do not cause excess emissions, including those attributable to upset conditions, as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. "Prompt" means within fifteen (15) days of the deviation. Deviations that cause excess emissions, as specified in OAR 340-214-0300 through 340-214-0360 must be reported ~~in accordance with~~under 340-214-0340;

(C) Submittal of any required source test report within 30 days after the source test unless otherwise approved in writing by ~~the Department~~DEQ or specified in a permit;

(D) All required reports must be certified by a responsible official consistent with OAR 340-218-0040(5);

(E) Reporting requirements must commence on the date of permit issuance unless otherwise specified in the permit.

(d) ~~The Department~~DEQ may incorporate more rigorous monitoring, recordkeeping, or reporting methods than required by applicable requirements in an Oregon Title V Operating Permit if they are contained in the permit application, are determined by ~~the Department~~DEQ to be necessary to determine compliance with applicable requirements, or are needed to protect human health or the environment.

(4) A permit condition prohibiting emissions exceeding any allowances that the source lawfully holds under Title IV of the FCAA or the regulations promulgated there under:

(a) No permit revision will be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement;

(b) No limit may be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement;

(c) Any such allowance must be accounted for according to the procedures established in regulations promulgated under Title IV of the FCAA.

(5) A severability clause to ensure the continued validity of the various permit requirements in the event of a challenge to any portions of the permit.

(6) Provisions stating the following:

(a) The permittee must comply with all conditions of the Oregon Title V Operating Permit, including keeping a copy of the permit onsite at the source. Any permit condition noncompliance constitutes a violation of the FCAA and state rules and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application;

(b) The need to halt or reduce activity will not be a defense. It will not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit;

(c) The permit may be modified, revoked, reopened and reissued, or terminated for cause as determined by ~~the Department~~DEQ. The filing of a request by the permittee for a permit modification, revocation and reissuance,



or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition;

(d) The permit does not convey any property rights of any sort, or any exclusive privilege;

(e) The permittee must furnish to ~~the Department~~[DEQ](#), within a reasonable time, any information that ~~the Department~~[DEQ](#) may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee must also furnish to ~~the Department~~[DEQ](#) copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality.

(7) A provision to ensure that an Oregon Title V Operating Permit program source pays fees to ~~the Department~~[DEQ](#) consistent with the fee schedule [in OAR 340 division 220](#).

(8) Terms and conditions for reasonably anticipated alternative operating scenarios identified by the owner or operator in its application as approved by ~~the Department~~[DEQ](#). Such terms and conditions:

(a) Must require the owner or operator, contemporaneously with making a change from one operating scenario to another, to record in a log at the permitted facility a record of the scenario under which it is operating;

(b) Must extend the permit shield described in OAR 340-218-0110 to all terms and conditions under each such alternative operating scenario; and

(c) Must ensure that the terms and conditions of each such alternative operating scenario meet all applicable requirements and the requirements of this division.

(9) Terms and conditions, if the permit applicant requests them, for the trading of emissions increases and decreases in the permitted facility solely for the purpose of complying with the PSELs. Such terms and conditions:

(a) Must include all terms required under OAR 340-218-0050 and 340-218-0080 to determine compliance;

(b) Must extend the permit shield described in OAR 340-218-0110 to all terms and conditions that allow such increases and decreases in emissions;

(c) Must ensure that the trades are quantifiable and enforceable;

(d) Must ensure that the trades are not Title I modifications;

(e) Must require a minimum 7-day advance, written notification to ~~the Department~~[DEQ](#) and the EPA of the trade that must be attached to ~~the Department~~[DEQ](#)'s and the source's copy of the permit. The written notification must state when the change will occur and must describe the changes in emissions that will result and how these increases and decreases in emissions will comply with the terms and conditions of the permit; and

(f) Must meet all applicable requirements and requirements of this division.

(10) Terms and conditions, if the permit applicant requests them, for the trading of emissions increases and decreases in the permitted facility, to the extent that the applicable requirements provide for trading such increases and decreases without a case-by-case approval of each emission trade. Such terms and conditions:

(a) Must include all terms required under OAR 340-218-0050 and 340-218-0080 to determine compliance;

(b) Must extend the permit shield described in OAR 340-218-0110 to all terms and conditions that allow such increases and decreases in emissions; and

(c) Must meet all applicable requirements and requirements of this division.

(11) Terms and conditions allowing for off-permit changes, OAR 340-218-0140(2).

(12) Terms and conditions allowing for section 502(b)(10) changes, OAR 340-218-0140(3).

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

Stat. Auth.: ORS 468.020, [468.065](#), [468A.025](#), [468A.040](#), [468A.050](#), ~~&~~ 468A.310 [& 468A.315](#)

Stats. Implemented: ORS ~~468.020~~ & ~~468A.310~~

Hist.: DEQ 13-1993, f. & ef. 9-24-93; DEQ 24-1994, f. & ef. 10-28-94; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 21-1998, f. & cert. ef. 10-14-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2130; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 6-2007(Temp), f. & cert. ef. 8-17-07 thru 2-12-08; DEQ 8-2007, f. & cert. ef. 11-8-07; DEQ 10-2008, f. & cert. ef. 8-25-08

### 340-218-0060

#### State-Enforceable Requirements

~~The Department~~[DEQ](#) will specifically designate as not being federally enforceable any terms and conditions included in the permit that are not required under the FCAA or under any of its applicable requirements. Terms and conditions so designated are subject to the requirements of OAR 340-218-0040 through 340-218-0220, other than those contained in 340-218-0070. All terms and conditions in an Oregon Title V Operating Permit are enforceable by ~~the Department~~[DEQ](#).

Stat. Auth.: ORS ~~468.020~~, [468A.025](#), [468A.040](#) & ORS ~~468A.310~~

Stats. Implemented: ORS ~~468 & ORS~~ 468A

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2140; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-218-0070

#### Federally Enforceable Requirements

~~The Department~~[DEQ](#) will specifically designate as being federally enforceable under the FCAA any terms and conditions included in the permit that are required under the FCAA or under any of its applicable requirements. Federally enforceable conditions are subject to enforcement actions by the EPA and citizens.

Stat. Auth.: ORS 468.020, [468A.025](#), [468A.040](#) & ~~ORS~~ 468A.310

Stats. Implemented: ORS ~~468 & ORS~~ 468A

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2150; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## 340-218-0080

### Compliance Requirements

All Oregon Title V Operating Permits must contain the following elements with respect to compliance:

- (1) Consistent with OAR 340-218-0050(3), compliance certification, testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit.
- (2) A requirement that any document (including but not limited to reports) required by an Oregon Title V Operating Permit must contain a certification by a responsible official or the designated representation for the acid rain portion of the permit that meets the requirements of OAR 340-218-0040(5).
- (3) Inspection and entry requirements that require that, upon presentation of credentials and other documents as may be required by law, the permittee must allow ~~the Department~~ [DEQ](#) or an authorized representative to perform the following:
  - (a) Enter upon the permittee's premises where an Oregon Title V Operating Permit program source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
  - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
  - (c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control ~~equipment~~ [devices](#)), practices, or operations regulated or required under the permit; and
  - (d) As authorized by the FCAA or state rules, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
- (4) A schedule of compliance consistent with OAR 340-218-0040(3)(n)(c).
- (5) Progress reports consistent with an applicable schedule of compliance and OAR 340-218-0040(3)(n)(c) to be submitted at least semi-annually, or at a more frequent period if specified in the applicable requirement or by ~~the Department~~ [DEQ](#). Such progress reports must contain the following:
  - (a) Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
  - (b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- (6) Requirements for compliance certification with terms and conditions contained in the permit, including emission limitations, standards, or work practices. Permits must include each of the following:

- (a) The frequency (not less than annually or such more frequent periods as specified in the applicable requirement or by ~~the Department~~[DEQ](#)) of submissions of compliance certifications;
- (b) ~~In accordance with~~[Under](#) OAR 340-218-0050(3), a means for monitoring the compliance of the source with its emissions limitations, standards, and work practices;
- (c) A requirement that the compliance certification include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):
- (A) The identification of each term or condition of the permit that is the basis of the certification;
- (B) The identification of the method~~(s)~~ or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period. Such methods and other means must include, at a minimum, the methods and means required under OAR 340-218-0050(3). If necessary, the owner or operator also must identify any other material information that must be included in the certification to comply with section 113(c)(2) of the FCAA, which prohibits knowingly making a false certification or omitting material information;
- (C) The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification must be based on the method or means designated in paragraph (6)(c)(B) ~~of this rule~~. The certification must identify each deviation and take it into account in the compliance certification. The certification must also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under OAR 340-200-0020 and 40 CFR part 64 occurred; and
- (D) Such other facts as ~~the Department~~[DEQ](#) may require to determine the compliance status of the source.
- (d) A requirement that all compliance certifications be submitted to the EPA as well as to ~~the Department~~[DEQ](#); and
- (e) Notwithstanding any other provision contained in any applicable requirement, the owner or operator may use monitoring as required under OAR 340-218-0050(3) and incorporated into the permit, in addition to any specified compliance methods, for the purpose of submitting compliance certifications.
- (7) Annual certification that the risk management plan is being properly implemented, OAR 340-2~~2~~[44](#)-0230.
- (8) Such other provisions as ~~the Department~~[DEQ](#) may require in order to protect human health or the environment.

Stat. Auth.: ORS 468.020, [468A.025](#), [468A.040](#), [468A.050](#) & 468A.310

Stats. Implemented: ORS 468.~~020~~ & 468A.~~310~~

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 21-1998, f. & cert. ef. 10-14-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2160; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 2-2005, f. & cert. ef. 2-10-05

**340-218-0090**

## General Permits

(1) ~~The Department~~DEQ may, after notice and opportunity for public participation provided under OAR 340-218-0210, issue general permits covering numerous similar sources in specific source categories as defined in section (2) ~~of this rule~~. General permits must comply with all requirements applicable to other Oregon Title V Operating Permits.

(2) The owner or operator of an existing major HAP source which meets all of the following criteria may apply to be covered under the terms and conditions of a general permit:

(a) The source is a major source under section 112 of the ~~Act~~ FCAA only;

(b) No emissions standard for existing sources, promulgated pursuant to section 112(d) of the FCAA or adopted under OAR 340-244-0200 through 340-244-0220, applies to the source; and

(c) ~~The Department~~DEQ does not consider the source to be a problem source based on its complaint record and compliance history.

(3) Notwithstanding the shield provisions of OAR 340-218-0110, the source will be subject to enforcement action for operation without an Oregon Title V Operating Permit if the source is later determined not to qualify for the conditions and terms of the general permit. General permits will not be authorized for affected sources under the national acid rain program unless provided in regulations promulgated under Title IV of the FCAA.

(4)(a) Oregon Title V Operating Permit program sources that would qualify for a general permit must apply to ~~the Department~~DEQ for coverage under the terms of the general permit or must apply for an Oregon Title V Operating Permit consistent with OAR 340-218-0040.

(b) ~~The Department~~DEQ may, in the general permit, provide for applications which deviate from the requirements of OAR 340-218-0040, provided that such applications meet the requirements of Title V of the FCAA and include all information necessary to determine qualification for, and compliance with, the general permit.

(c) Without repeating the public participation procedures required under OAR 340-218-0210, ~~the Department~~DEQ may grant an owner's or operator's request for authorization to operate under a general permit if the source meets the applicability criteria for the general permit, but such a grant will not be a final permit action for purposes of judicial review.

(5) When an emissions limitation applicable to a general permit source is promulgated by the EPA pursuant to 112(d), or adopted by the state pursuant to OAR 340-244-0200 through OAR 340-244-0220, the source must:

(a) Immediately comply with the provisions of the applicable emissions standard; and

(b)(A) Within 12 months of standard promulgation, apply for an operating permit, pursuant to OAR 340-218-0040, if three (3) or more years are remaining on the general permit term; or

(B) Apply for an operating permit at least 12 months prior to permit expiration, pursuant to OAR 340-218-0040, if less than three (3) years remain on the general permit term.

Stat. Auth.: ORS 468.020, ~~&~~ ORS 468A.025, 468A.040 & 468A.310

Stats. Implemented: ORS ~~468 & ORS~~ 468A

Hist.: DEQ 13-1993, f. & ef. 9-24-93; DEQ 24-1994, f. & ef. 10-28-94; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2170; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-218-0100

#### Temporary Sources

~~The Department~~DEQ may issue a single permit authorizing emissions from similar operations by the same source owner or operator at multiple temporary locations. The operation must be temporary and involve at least one change of location during the term of the permit. An affected source may not be permitted as a temporary source. Permits for temporary sources must include the following:

- (1) Conditions that will assure compliance with all applicable requirements at all authorized locations;
- (2) Requirements that the owner or operator notify ~~the Department~~DEQ at least ten days in advance of each change in location;
- (3) Conditions that assure compliance with land use compatibility; and
- (4) Conditions that assure compliance with all other provisions of this division.

Stat. Auth.: ORS 468.020, 468A.025, 468A.040 & ~~ORS~~ 468A.310

Stats. Implemented: ORS ~~468 & ORS~~ 468A

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2180; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-218-0110

#### Permit Shield

- (1) Except as provided in this division, ~~the Department~~DEQ must expressly include in an Oregon Title V Operating Permit a provision stating that compliance with the conditions of the permit will be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:
  - (a) Such applicable requirements are included and are specifically identified in the permit; or
  - (b) ~~The Department~~DEQ, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
- (2) An Oregon Title V Operating Permit that does not expressly state that a permit shield exists will be presumed not to provide such a shield.

(3) Changes made to a permit ~~in accordance with~~ using OAR 340-218-0150(1)(h) and OAR 340-218-0180 will be shielded.

(4) Nothing in this rule or in any Oregon Title V Operating Permit may alter or affect the following:

(a) The provisions of ORS 468.115 (enforcement in cases of emergency) and ORS 468.035;

(b) The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

(c) The applicable requirements of the national acid rain program, consistent with section 408(a) of the FCAA; or

(d) The ability of ~~the Department~~ DEQ to obtain information from a source pursuant to ORS 468.095 (investigatory authority, access to records).

Stat. Auth.: ORS 468.020, 468A.025, 468A.040 & ~~ORS~~ 468A.310

Stats. Implemented: ORS ~~468 & ORS~~ 468A

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2190; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## **340-218-0120**

### **Permit Issuance**

(1) Action on application:

(a) A permit, permit modification, or permit renewal may be issued only if all of the following conditions have been met:

(A) ~~The Department~~ DEQ has received a complete application for a permit, permit modification, or permit renewal, except that a complete application need not be received before issuance of a general permit under OAR 340-218-0090;

(B) Except for modifications qualifying for minor permit modification procedures under OAR 340-218-0170, ~~the Department~~ DEQ has complied with the requirements for public participation under OAR 340-218-0210;

(C) ~~The Department~~ DEQ has complied with the requirements for notifying and responding to affected States under OAR 340-218-0230(2);

(D) The conditions of the permit provide for compliance with all applicable requirements and the requirements of this division; and

(E) The EPA has received a copy of the proposed permit and any notices required under OAR 340-218-0230(1) and(2), and has not objected to issuance of the permit under 340-218-0230(3) within the time period specified therein or such earlier time as agreed to with ~~the Department~~ DEQ if no changes were made to the draft permit.



(b) When a multiple-source permit includes air contaminant sources subject to the jurisdiction of ~~the Department~~[DEQ](#) and ~~the Regional Agency~~[LRAPA](#), ~~the Department~~[DEQ](#) may require that it will be the permit issuing agency. In such cases, ~~the Department~~[DEQ](#) and ~~the Regional Authority~~[LRAPA](#) will otherwise maintain and exercise all other aspects of their respective jurisdictions over the permittee;

(c) Denial of a Permit. If ~~the Department~~[DEQ](#) proposes to deny issuance of a permit, permit renewal, permit modification, or permit amendment, it must notify the applicant by registered or certified mail of the intent to deny and the reasons for denial. The denial will become effective 60 days from the date of mailing of such notice unless within that time the applicant requests a hearing. Such a request for hearing must be made in writing to the Director and must state the grounds for the request. Any hearing held will be conducted pursuant to the applicable provisions of ORS Chapter 183;

(d) ~~The Department~~[DEQ](#) or ~~Lane Regional Air Pollution Agency~~[LRAPA](#) is the permitting authority for purposes of the 18 month requirement contained in 42 USC ' 7661b(c) and this subsection. Except as provided under the initial transition plan or under regulations promulgated under Title IV of the FCAA or under this division for the permitting of affected sources under the national acid rain program, ~~the Department~~[DEQ](#) will take final action on each permit application (including a request for permit modification or renewal) within 18 months after receiving a complete application. In the case of any complete permit application containing an early reductions demonstration pursuant to OAR 340-244-0100, ~~the Department~~[DEQ](#) will take final action within 9 months of receipt;

(e) ~~The Department~~[DEQ](#) will promptly provide notice to the applicant of whether the application is complete. Unless ~~the Department~~[DEQ](#) requests additional information or otherwise notifies the applicant of incompleteness within 60 days of receipt of an application, the application will be deemed complete. For modifications processed through minor permit modification procedures, OAR 340-218-0170(2), ~~the Department~~[DEQ](#) will not require a completeness determination;

(f) ~~The Department~~[DEQ](#) will provide a review report that sets forth the legal and factual basis for the draft permit conditions (including references to the applicable statutory or regulatory provisions). ~~The Department~~[DEQ](#) will send this report to the EPA and to any other person who requests it;

(g) The submittal of a complete application will not affect the requirement that any source have a Notice of Approval ~~in accordance with~~[under](#) OAR 340-210-0205 through 340-0210-0250 or a preconstruction permit ~~in accordance with~~[under](#) OAR 340 division 216 or 340 division 224;

(h) Failure of ~~the Department~~[DEQ](#) to take final action on a complete application or failure of ~~the Department~~[DEQ](#) to take final action on an EPA objection to a proposed permit within the appropriate time will be considered to be a final order for purposes of ORS Chapter 183;

(i) If the final permit action being challenged is ~~the Department~~[DEQ](#)'s failure to take final action, a petition for judicial review may be filed any time before ~~the Department~~[DEQ](#) denies the permit or issues the final permit.

(2) Requirement for a permit:

(a) Except as provided in OAR 340-218-0120(2)(b), 340-218-0140(3), and 340-218-0170(2)(d), no Oregon Title V Operating Permit program source may operate after the time that it is required to submit a timely and



complete application after the effective date of the program, except in compliance with a permit issued under an Oregon Title V Operating Permit program;

(b) If an Oregon Title V Operating Permit program source submits a timely and complete application for permit issuance (including for renewal), the source's failure to have an Oregon Title V Operating Permit is not a violation of this division until ~~the Department~~[DEQ](#) takes final action on the permit application, except as noted in this rule. This protection will cease to apply if, subsequent to the completeness determination made pursuant to OAR 340-218-0120(1)(e), and as required by 340-218-0040(1)(b), the applicant fails to submit by the deadline specified in writing by ~~the Department~~[DEQ](#) any additional information identified as being needed to process the application. If the final permit action being challenged is ~~the Department~~[DEQ](#)'s failure to take final action, a petition for judicial review may be filed any time before ~~the Department~~[DEQ](#) denies the permit or issues the final permit.

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

Stat. Auth.: ORS 468.020, [468A.025](#), [468A.040](#), [468A.155](#) & 468A.310

Stats. Implemented: ORS ~~468-183~~ & 468A

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 20-1993(Temp), f. & cert. ef. 11-4-93; DEQ 13-1994, f. & cert. ef. 5-19-94; DEQ 24-1994, f. & ef. 10-28-94; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2200; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2007, f. & cert. ef. 11-8-07

## **340-218-0140**

### **Operational Flexibility**

Operational flexibility provisions allow owners or operators to make certain changes at their facility without a permit modification. The following sections describe the provisions and the procedures owners or operators must follow to utilize operational flexibility:

(1) Alternative Operating Scenarios. Owners or operators may identify as many reasonably anticipated alternative operating scenarios in the permit application as possible and request the approval of ~~the~~ [Department](#)[DEQ](#) for incorporation of the scenarios in the permit:

(a) Alternative operating scenarios mean the different conditions, including equipment configurations or process parameters, under which a source can operate that:

(A) Require different terms and conditions in the permit to determine compliance; or

(B) Trigger different applicable requirements.

(b) Alternative operating scenarios must be identified in the permit application, approved by ~~the~~ [Department](#)[DEQ](#); and listed in the permit;

(c) Changes between approved alternative operating scenarios listed in the permit can be made at any time. Owners or operators must contemporaneously record in a log at the permitted facility any change from one alternative operating scenario to another.

(d) Owners or operators are not required to submit the record of changes of alternative operating scenarios on a periodic basis but must make the record available or submit the record upon the request of ~~the Department~~[DEQ](#).

(e) The permit shield extends to all alternative operating scenarios listed in the permit.

(2) Off-permit Changes. Changes that qualify as off-permit do not require Department approval:

(a) Off-permit changes mean changes to a source that:

(A) Are not addressed or prohibited by the permit;

(B) Are not Title I modifications;

(C) Are not subject to any requirements under Title IV of the FCAA;

(D) Meet all applicable requirements;

(E) Do not violate any existing permit term or condition; and

(F) May result in emissions of regulated ~~air~~-pollutants subject to an applicable requirement, but not otherwise regulated under the permit or may result in insignificant changes as defined in OAR 340-200-0020.

(b) Off-permit changes can be made at any time. Owners or operators must contemporaneously submit written notice to ~~the Department~~[DEQ](#) and the EPA, except for changes that qualify as insignificant under OAR 340-200-0020. The written notice must contain:

(A) A description of the change;

(B) The date on which the change will occur;

(C) Any change in emissions within the PSELs;

(D) ~~Regulated P~~[Regulated](#) pollutants emitted;

(E) Any applicable requirement that would apply as a result of the change;

(F) Verification that the change is not addressed or prohibited by the permit;

(G) Verification that the change is not a Title I modification, such as an explanation that the change does not meet any of the Title I modification criteria;

(H) Verification that the change is not subject to any requirements under Title IV of the FCAA; and

(I) Verification that the change does not violate any existing permit term or condition.

(c) The permittee must keep a record describing off-permit changes made at the facility that result in emissions of a regulated ~~air~~-pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those off-permit changes.

(d) Written notifications of off-permit changes must be attached to ~~the Department~~[DEQ](#)'s and the source's copy of the permit.

(e) Terms and conditions that result from off-permit changes will be incorporated into the permit upon permit renewal, if applicable.

(f) The permit shield of OAR 340-218-0110 will not extend to off-permit changes.

(3) Section 502(b)(10) Changes. Changes that qualify as section 502(b)(10) changes do not require permit revision.

(a) Section 502(b)(10) changes mean changes that contravene an express permit term. Such changes do not include:

(A) Changes that would violate applicable requirements (including but not limited to increases in PSELs);

(B) Changes that contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements; and

(C) Changes that are Title I modifications.

(b) Section 502(b)(10) changes can be made at any time. Owners or operators must submit a minimum 7-day advance, written notification to ~~the Department~~ [DEQ](#) and the EPA. The written notice must contain:

(A) A description of the change;

(B) The date on which the change will occur;

(C) Any change in emissions within the PSELs;

(D) Any permit term or condition that is no longer applicable as a result of the change;

(E) Any new terms or conditions applicable to the change;

(F) Verification that the change does not cause or contribute to a violation of any applicable requirements, such as an explanation that the permit term or condition that is being contravened is not based on an applicable requirement;

(G) Verification that the change does not cause or contribute to an exceedance of the PSELs, such as calculations of emissions resulting from the change in relation to the PSEL; and

(H) Verification that the change is not a Title I modification, such as an explanation that the change does not meet any of the Title I modification criteria.

(c) Written notifications of section 502(b)(10) changes must be attached to ~~the Department~~ [DEQ](#)'s and the source's copy of the permit.

(d) Terms and conditions that result from section 502(b)(10) changes will be incorporated into the permit upon permit renewal, if applicable.

(e) The permit shield does not extend to section 502(b)(10) changes.

(4) ~~The Department~~ [DEQ](#) may initiate enforcement if a change under operational flexibility has been initiated and does not meet the applicable operational flexibility criteria.

Stat. Auth.: ORS 468.020, [468A.025](#), [468A.040](#) & ~~ORS~~ 468A.310

Stats. Implemented: ORS ~~468 & ORS~~ 468A

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 24-1994, f. & cert. ef. 10-28-94; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2220; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## 340-218-0150

### Administrative Permit Amendments

(1) An "administrative permit amendment" is a permit revision that:

(a) Corrects typographical errors;

(b) Identifies a change in the name, address, or phone number of the responsible official~~(s)~~ identified in the permit, or provides a similar minor administrative change at the source;

(c) Allows for a change in the name of the permittee;

(d) Allows for a change in ownership or operational control of a source where ~~the Department~~[DEQ](#) determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to ~~the Department~~[DEQ](#);

(e) Requires more frequent monitoring or reporting by the permittee;

(f) Allows for a change in the date for reporting or source testing requirements for a source or emissions unit that is temporarily shutdown or would otherwise have to be operated solely for the purposes of conducting the source test, except when required by a compliance schedule;

(g) Relaxes monitoring, reporting or recordkeeping due to a permanent source shutdown for only the emissions unit~~(s)~~ being shutdown; or

(h) Incorporates into the Oregon Title V Operating Permit the requirements from preconstruction review permits authorized under OAR 340 division 224 or 340-210-0205 through 340-~~0210-0~~[250](#), provided that the procedural requirements followed in the preconstruction review are substantially equivalent to the requirements of 340-218-0120 through 340-218-0210 and 340-218-0230 that would be applicable to the change if it were subject to review as a permit modification, compliance requirements are substantially equivalent to those contained in 340-218-0050 through 340-218-0110, and no changes in the construction or operation of the facility that would require a permit modification under 340-218-0160 through 340-218-0180 have taken place.

(2) Administrative permit amendments for purposes of the national acid rain portion of the permit will be governed by regulations promulgated under Title IV of the FCAA.

(3) Administrative permit amendment procedures. An administrative permit amendment will be made by ~~the Department~~[DEQ](#) consistent with the following:

- (a) The owner or operator must promptly submit an application for an administrative permit amendment upon becoming aware of the need for one on forms provided by ~~the Department~~ [DEQ](#) along with a copy of the draft amendment;
- (b) ~~The Department~~ [DEQ](#) will take no more than 60 days from receipt of a request for an administrative permit amendment to take final action on such request, and may incorporate such changes without providing notice to the public or affected States provided that it designates any such permit revisions as having been made pursuant to this rule;
- (c) ~~The Department~~ [DEQ](#) will issue the administrative permit amendment in the form of a permit addendum for only those conditions that will change;
- (d) ~~The Department~~ [DEQ](#) will submit a copy of the permit addendum to the EPA;
- (e) The source may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request;
- (f) If the source fails to comply with its draft permit terms and conditions upon submittal of the application and until ~~the Department~~ [DEQ](#) takes final action, the existing permit terms and conditions it seeks to modify may be enforced against it.
- (4) ~~The Department~~ [DEQ](#) must, upon taking final action granting a request for an administrative permit amendment, allow coverage by the permit shield in OAR 340-218-0110 only for administrative permit amendments made pursuant to 340-218-0150(1)(h) which meet the relevant requirements of 340-218-0050 through 340-218-0240 for significant permit modifications.
- (5) If it becomes necessary for ~~the Department~~ [DEQ](#) to initiate an administrative amendment to the permit, ~~the Department~~ [DEQ](#) will notify the permittee of the intended action by certified or registered mail. The action will become effective 20 days after the date of mailing unless within that time the permittee makes a written request for a hearing. The request must state the grounds for the hearing. Any hearing held will be conducted pursuant to the applicable provisions of ORS 183.

Stat. Auth.: ORS 468.020, [468A.025](#), [468A.040](#) & 468A.310

Stats. Implemented: ORS ~~468 &~~ 468A

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 24-1994, f. & ef. 10-28-94; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2230; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2007, f. & cert. ef. 11-8-07

### 340-218-0160

#### Permit Modification

A permit modification is any revision to an Oregon Title V Operating Permit that cannot be accomplished under ~~the Department~~ [DEQ](#)'s provisions for administrative permit amendments under OAR 340-218-0150. A permit modification for purposes of the acid rain portion of the permit will be governed by regulations promulgated under Title IV of the FCAA.

Stat. Auth.: ORS 468.020, [468A.025](#), [468A.040](#) & ~~ORS~~ 468A.310

Stats. Implemented: ORS ~~468 & ORS~~ 468A

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2240; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## 340-218-0170

### Minor Permit Modifications

#### (1) Criteria:

(a) Minor permit modification procedures may be used only for those permit modifications that:

(A) Do not violate any applicable requirement;

(B) Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

(C) Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;

(D) Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:

(i) A federally enforceable emissions cap assumed to avoid classification as a Title I modification; and

(ii) An alternative emissions limit approved pursuant to OAR 340-244-0100 through 340-244-0180.

(E) Do not increase emissions over the PSEL;

(F) Are not Title I modifications; and

(G) Are not required by OAR 340-218-0180 to be processed as a significant modification.

(b) Notwithstanding subsection (1)(a) ~~of this rule~~, minor permit modification procedures may be used for permit modifications involving the use of emissions trading and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in the Oregon ~~State Implementation Plan~~ [SIP](#) or in applicable requirements promulgated by the EPA.

(2) Minor permit modification procedures. A minor permit modification will be made by ~~the Department~~ [DEQ](#) consistent with the following:

(a) Application. An application requesting the use of minor permit modification procedures must meet the requirements of OAR 340-218-0040(3), must be submitted on forms and electronic formats provided by ~~the Department~~ [DEQ](#), and must include the following additional information:

(A) A description of the change, the change in emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

(B) The source's suggested draft permit;

(C) Certification by a responsible official, consistent with OAR 340-218-0040(5) ~~of this rule~~, that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

(D) Completed forms for ~~the Department~~ [DEQ](#) to use to notify the EPA and affected states as required under OAR 340-218-0230.

(b) EPA and affected state notification. Within five working days of receipt of a complete minor permit modification application, ~~the Department~~ [DEQ](#) will meet its obligation under OAR 340-218-0230(1)(a) and (2)(a) to notify the EPA and affected states of the requested permit modification. ~~The Department~~ [DEQ](#) promptly will send any notice required under 340-218-0230(2)(b) to the EPA;

(c) Timetable for issuance. ~~The Department~~ [DEQ](#) will not issue a final permit modification until after the EPA's 45-day review period or until the EPA has notified ~~the Department~~ [DEQ](#) that the EPA will not object to issuance of the permit modification, whichever is first, although ~~the Department~~ [DEQ](#) can approve the permit modification prior to that time. Within 90 days of ~~the Department~~ [DEQ](#)'s receipt of an application under minor permit modification procedures or 15 days after the end of the EPA's 45-day review period under OAR 340-218-0230(3), whichever is later, ~~the Department~~ [DEQ](#) will:

(A) Issue the permit modification as proposed for only those conditions that will change;

(B) Deny the permit modification application;

(C) Determine that the requested modification does not meet the minor permit modification criteria and should be reviewed under the significant modification procedures; or

(D) Revise the draft permit modification and transmit to the EPA the new proposed permit modifications as required by OAR 340-218-0230(1).

(d) Source's ability to make change. The source may make the change proposed in its minor permit modification application immediately after it files an application. After the source makes the change, and until the permitting authority takes any of the actions specified in paragraphs (2)(c)(A) through (C) ~~of this rule~~, the source must comply with both the applicable requirements governing the change and the draft permit terms and conditions. During this time period, the source need not comply with the existing permit terms and conditions it seeks to modify. However, if the source fails to comply with its draft permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against it;

(e) ~~The Department~~ [DEQ](#) may initiate enforcement if the modification has been initiated and does not meet the minor permit modification criteria;

(f) Permit shield. The permit shield under OAR 340-218-0110 does not extend to minor permit modifications.

Stat. Auth.: ORS 468.020, [468A.025](#), [468A.040](#) & ~~ORS~~ 468A.310

Stats. Implemented: ORS ~~468 & ORS~~ 468A

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2250; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## 340-218-0180

### Significant Permit Modifications

#### Significant Permit Modifications

(1) Criteria. Significant modification procedures must be used for applications requesting permit modifications that do not qualify as minor permit modifications or as administrative amendments. Significant modifications must include:

(a) Increases in PSEs except those increases subject to OAR 340-210-0205 through 340-210-0250; 340-218-0150(1)(b); or 340 division 224;

(b) Every significant change in existing monitoring permit terms or conditions;

(c) Every relaxation of reporting or recordkeeping permit terms or conditions;

(d) Incorporation into the Oregon Title V Operating Permit the requirements from pre-construction review permits authorized under OAR 340 division 224 unless the incorporation qualifies as an administrative amendment;

(e) Incorporation into the Oregon Title V Operating Permit the requirements from preconstruction review permits authorized under OAR 340-210-205 through 340-210-0250 unless otherwise specified in 340-218-0190(2); and

(f) Nothing herein may be construed to preclude the permittee from making changes consistent with this division that would render existing permit compliance terms and conditions irrelevant.

(2) Significant permit modifications will be subject to all requirements of this division, including those for applications, public participation, review by affected States, and review by the EPA, as they apply to permit issuance and permit renewal.

(3) Major modifications, as defined in OAR 340-200-0020, require an ACDP under OAR 340 division 224.

(4) Constructed and reconstructed major hazardous air pollutant sources are subject to OAR 340 210-0205 through 340-210-0250 and 340-244-0200.

Stat. Auth.: ORS 468.020, [468A.025](#), [468A.040](#) & 468A.310

Stats. Implemented: ORS ~~468~~ & 468A

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2260; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2007, f. & cert. ef. 11-8-07

## 340-218-0190

### Construction/Operation Modifications



(1) Notice of Approval. The owner or operator of a major stationary source must obtain approval from ~~the Department~~[DEQ](#) prior to construction or modification of any stationary source or air pollution control ~~equipment devices in accordance with~~[using](#) OAR 340-210-0205 through 340-210-0250.

(2) Incorporation into an Oregon Title V Operating Permit:

(a) Where an Oregon Title V Operating Permit would allow incorporation of such construction or modification as an off-permit change (OAR 340-218-0140(2)) or a FCAA section 502(b)(10) change ([OAR](#) 340-218-0140(3)):

(A) The owner or operator of the stationary source or air pollution control ~~equipment device~~[equipment device](#) listed in section ~~(1) of this rule~~ must submit to ~~the Department~~[DEQ](#) the applicable notice; and

(B) ~~The Department~~[DEQ](#) will incorporate the construction or modification at permit renewal, if applicable.

(b) Where an Oregon Title V Operating Permit would allow incorporation of such construction or modification as an administrative amendment (OAR 340-218-0150), the owner or operator of the stationary source or air pollution control ~~equipment device~~[equipment device](#) listed in section (1) ~~of this rule~~ may:

(A) Submit the permit application information required under OAR 340-218-0150(3) with the information required under 340-210-0225(2) upon becoming aware of the need for an administrative amendment; and

(B) Request that the external review procedures required under OAR 340-218-0210 and 340-218-0230 be used in addition to the public notice procedures of OAR 340 division 209 for Category III permit actions to allow for subsequent incorporation of the construction permit as an administrative amendment.

(c) Where an Oregon Title V Operating Permit would require incorporation of such construction or modification as a minor permit modification (OAR 340-218-0170) or a significant permit modification ( 340-218-0180), the owner or operator of the stationary source or air pollution control ~~equipment device~~[equipment device](#) listed in section ~~(1) of this rule~~ must submit the permit application information required under 340-218-0040(3) within one year of initial startup of the construction or modification, except as prohibited in paragraph(2)(d) ~~of this rule~~.

(d) Where an existing Oregon Title V Operating Permit would prohibit such construction or change in operation, the owner or operator must obtain a permit revision before commencing operation.

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

Stat. Auth.: ORS 468.[020](#), [468A.025](#), [468A.040](#) & 468A.[310](#)

Stats. Implemented: ORS ~~468 &~~ 468A

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 24-1994, f. & ef. 10-28-94; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2270; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2007, f. & cert. ef. 11-8-07

## 340-218-0200

## Reopenings

### (1) Reopening for cause:

(a) Each issued permit must include provisions specifying the conditions under which the permit will be reopened prior to the expiration of the permit. A permit will be reopened and revised under any of the following circumstances:

(A) Additional applicable requirements under the FCAA or state rules become applicable to a major Oregon Title V Operating Permit program source with a remaining permit term of 3 or more years. Such a reopening will be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to OAR 340-218-0130;

(B) Additional requirements (including excess emissions requirements) become applicable to an affected source under the national acid rain program. Upon approval by the EPA, excess emissions offset plans will be deemed to be incorporated into the permit;

(C) ~~The Department~~ [DEQ](#) or the EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

(D) ~~The Department~~ [DEQ](#) or the EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;

(E) ~~The Department~~ [DEQ](#) determines that the permit must be revised or revoked to assure compliance with the ~~National Ambient Air Quality Standards (NAAQS)~~.

(b) Proceedings to reopen and issue a permit must follow the same procedures as apply to initial permit issuance and affect only those parts of the permit for which cause to reopen exists. Such reopening will be made as expeditiously as practicable;

(c) Reopenings under subsection (1)(a) ~~of this rule~~ may not be initiated before a notice of such intent is provided to the source by ~~the Department~~ [DEQ](#) at least 30 days in advance of the date that the permit is to be reopened, except that ~~the Department~~ [DEQ](#) may provide a shorter time period in the case of an emergency.

### (2) Reopening for cause by the EPA:

(a) ~~The Department~~ [DEQ](#) will, within 90 days after receipt of a notification from the EPA of reopening for cause, forward to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate. The EPA may extend this 90-day period for an additional 90 days if the EPA finds that a new or revised permit application is necessary or that the permittee must submit additional information;

(b) ~~The Department~~ [DEQ](#) will have 90 days from receipt of an EPA objection to resolve any objection that the EPA makes and to terminate, modify, or revoke and reissue the permit in accordance with the EPA's objection or determine not to reissue the permit in accordance with the EPA's objection;

(c) ~~The Department~~ [DEQ](#) will provide at least 30 days' notice to the permittee in writing of the reasons for any such action and provide an opportunity for a hearing;

(d) Proceedings to terminate, revoke, or modify and reissue a permit initiated by the EPA must follow the same procedures as apply to initial permit issuance and affect only those parts of the permit for which cause to reopen exists. Such reopening will be made as expeditiously as practicable by ~~the Department~~[DEQ](#).

Stat. Auth.: ORS 468.020, [468A.025](#), [468A.040](#) & ~~ORS~~ 468A.310

Stats. Implemented: ORS ~~468 & ORS~~ 468A

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2280; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-218-0210

#### Public Participation

(1) Except for modifications qualifying for minor permit modification procedures and administrative amendments, all permit proceedings, including initial permit issuance, significant modifications, Notice of Construction and Approval of Plans when there is an increase of emissions above the PSEL, and renewals, must provide adequate procedures for public notice including offering an opportunity for public comment and a hearing on the draft permit ~~in accordance~~[using](#) the procedures in OAR 340, division 209 for Category III permit actions.

(2) Any person who submitted written or oral comments during the public participation process described in OAR 340 division 209 will be an adversely affected or aggrieved person for purposes of ORS 183.484.

Stat. Auth.: ORS 468.020, [468A.025](#), [468A.040](#) & ~~ORS~~ 468A.310

Stats. Implemented: ORS [183](#)~~468~~ & ORS 468A

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2290; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-218-0220

#### Contested Permits

(1) A final permit issued by ~~the Department~~[DEQ](#) will become effective upon the date it was signed by the Air Quality Division Administrator or his or her designated representative, unless the applicant requests a hearing before the ~~Commission~~[EQC](#) or its authorized representative. A final permit issued by LRAPA will become effective upon the date it was signed by the LRAPA Director or his or her designated representative, unless the applicant requests a hearing before LRAPA's Board of Directors.

(2) The request for hearing must be in writing within 20 days of the date of mailing of the notification of issuance of the permit. The applicant must specify which permit conditions are being challenged and why, including each alleged factual or legal objection.

(3)(a) Permit conditions that are not contested, including any conditions that are severable from those contested, will remain in effect upon the date the permit was signed by the Air Quality Division Administrator or the LRAPA Director;

(b) Upon such request for review, the effect of the contested conditions, as well as any conditions that are not severable from those contested, will be stayed only upon a showing that, during the pendency of the appeal, compliance with the contested conditions would require substantial expenditures or losses that would not be incurred if the applicant prevails on the merits of the review; and also that there exists a reasonable likelihood of success on the merits. ~~The Department~~[DEQ](#) may require that the contested conditions not be stayed if it finds that substantial endangerment of public health or welfare would result from the staying of the conditions. ~~The Department~~[DEQ](#) must deny or grant the stay within 30 days.

(4) If an applicant requests a hearing pursuant to this section, then any adversely affected or aggrieved person, as those terms have been construed under ORS Chapter 183, may petition the ~~Commission~~[EQC](#) to be allowed to intervene in the contested case hearing to challenge any permit condition. This petition must be in writing and must be filed with the ~~Commission~~[EQC](#) at least 21 days before the date set for hearing. The petition must specify which permit conditions are being challenged and the reasons for those challenges, including each alleged factual or legal objection.

(5) Any hearing held under this section will be conducted pursuant to the applicable provisions of ORS Chapter 183 and OAR ~~chapter~~ 340 division 11.

Stat. Auth.: ORS 468.020, [468A.025](#), [468A.040](#), [468A.155](#) & ~~ORS~~ 468A.310

Stats. Implemented: ORS [183](#)~~468~~ & ~~ORS~~ 468A

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2300; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## **340-218-0230**

### **Permit Review by the EPA and Affected States**

(1) Transmission of information to the EPA:

(a) ~~The Department~~[DEQ](#) will provide to the EPA a copy of each permit application (including any application for permit modification), each proposed permit except when a draft permit has been submitted and the EPA determines that the submittal of the draft permit is adequate, and each final Oregon Title V Operating Permit;

(b) The requirements of OAR 340-218-0230(1)(a) and (2)(a) may be waived for any category of sources (including any class, type, or size within such category) other than major sources if allowed by the EPA;

(c) ~~The Department~~[DEQ](#) will keep for 5 years such records and submit to the EPA such information as the EPA may reasonably require to ascertain whether ~~the Department~~[DEQ](#) program complies with the requirements of the FCAA or state rules or of this division.

(2) Review by affected states:

(a) ~~The Department~~[DEQ](#) will give notice of each draft permit to any affected State on or before the time that ~~the Department~~[DEQ](#) provides this notice to the public under OAR 340-218-0210, except to the extent that 340-218-0170 requires the timing of the notice to be different;

(b) ~~The Department~~[DEQ](#), as part of the submittal of the proposed permit to the EPA (or as soon as possible after the submittal for minor permit modification procedures allowed under OAR 340-218-0170), will notify the EPA and any affected State in writing of any omission by ~~the Department~~[DEQ](#) of any recommendations for the proposed permit that the affected State submitted during the public or affected State review period. The notice will include ~~the Department~~[DEQ](#)'s reasons for not accepting any such recommendation. ~~The Department~~[DEQ](#) is not required to accept recommendations that are not based on applicable requirements or the requirements of this division.

(3) EPA objection:

(a) No permit for which an application must be transmitted to the EPA under section (1) ~~of this rule~~ may be issued as drafted if the EPA objects to its issuance in writing within 45 days of receipt of the proposed permit and all necessary supporting information or such earlier time as agreed to by the EPA;

(b) ~~The Department~~[DEQ](#) will, within 90 days after the date of an objection under subsection (3)(a) ~~of this rule~~, revise and submit a proposed permit in response to the objection, or determine not to issue the permit;

(c) If ~~the Department~~[DEQ](#) determines not to issue the permit, notice of the determination will be provided to the source by certified or registered mail.

(4) Public petitions to the EPA:

(a) If the EPA does not object in writing under section (3), any person may petition the EPA within 60 days after the expiration of the EPA's 45-day review period to make such objection. Any such petition must be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided for in OAR 340-218-0210, unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period;

(b) If the EPA objects to the permit as a result of a petition filed under this section, ~~the Department~~[DEQ](#) may not issue the permit until the EPA's objection has been resolved, except that a petition for review does not stay the effectiveness of a permit or its requirements if the permit was issued after the end of the 45-day review period and prior to an EPA objection;

(c) If ~~the Department~~[DEQ](#) has issued a permit prior to receipt of an EPA objection under OAR 340-218-0230, the EPA will modify, terminate, or revoke such permit, and must do so consistent with the procedures in 340-218-0200(2)(b) except in unusual circumstances, and ~~the Department~~[DEQ](#) may thereafter issue only a revised permit that satisfies the EPA's objection. In any case, the source will not be in violation of the requirement to have submitted a timely and complete application.

(5) Prohibition on default issuance. ~~The Department~~[DEQ](#) may not issue an Oregon Title V Operating Permit (including a permit renewal or modification) until affected States and the EPA have had an opportunity to review the proposed permit as required under this rule.

Stat. Auth.: ORS 468.[020](#) & ~~ORS~~-468A.[310](#)

Stats. Implemented: ORS ~~468 & ORS~~-468A.[310](#)

Hist.: DEQ 13-1993, f. & ef. 9-24-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2310; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## 340-218-0240

### Enforcement

(1) Whenever it appears to ~~the Department~~[DEQ](#) that any activity in violation of a permit that results in air pollution or air contamination is presenting an imminent and substantial endangerment to the public health, ~~the Department~~[DEQ](#) may enter a cease and desist order pursuant to ORS 468.115 or seek injunction relief pursuant to 468.100.

(2)(a) Whenever ~~the Department~~[DEQ](#) has good cause to believe that any person is engaged in or about to engage in acts or practices that constitute a violation of any part of the stationary source air permitting rules or any provision of a permit issued pursuant to these rules, ~~the Department~~[DEQ](#) may seek injunctive relief in court to enforce compliance thereto or to restrain further violations;

(b) The proceedings authorized by subsection (a) ~~of this section~~ may be instituted without the necessity of prior agency revocation of the permit or during a permit revocation proceeding if one has been commenced.

(3) In addition to the enforcement authorities contained in sections (1) and (2) ~~of this rule~~ and any other penalty provided by law, any person who violates any of the following will incur a civil penalty as authorized under ORS 468.140 and established pursuant to OAR ~~chapter~~ 340 division 12:

(a) Any applicable requirement;

(b) Any permit condition;

(c) Any fee or filing requirements;

(d) Any duty to allow or carry out inspection, entry or monitoring activities; or

(e) Any rules or orders issued by ~~the Department~~[DEQ](#).

Stat. Auth.: ORS 468.020, [468A.025](#), [468A.040](#) & ~~ORS~~ 468A.310

Stats. Implemented: ORS 468 & ~~ORS~~ 468A

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2320; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## 340-218-0250

### ~~Permit Program For Regional Air Pollution Authority~~

~~Subject to the provisions of this rule, the Commission authorizes the Regional Agency to issue, modify, renew, suspend, and revoke Oregon Title V Operating Permits for air contamination sources within its jurisdiction:~~

~~(1) Each permit proposed to be issued or modified by the Regional Agency must be submitted to the Department at least thirty (30) days prior to the proposed issuance date.~~

~~(2) A copy of each permit issued, modified, or revoked by the Regional Agency must be promptly submitted to the Department.~~

~~Stat. Auth.: ORS 468 & 468A~~

~~Stats. Implemented: ORS 468 & 468A~~

~~Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76;~~

~~Renumbered from 340-020-0033, DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93,~~

~~Renumbered from 340-020-0185; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99,~~

~~Renumbered from 340-028-1790; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 8-2007, f. & cert. ef. 11-8-07~~

## DIVISION 220

### OREGON TITLE V OPERATING PERMIT FEES

#### 340-220-0010

##### **Purpose, Scope, ~~And~~ Applicability and Jurisdiction**

(1) The purpose of this division is to provide owners and operators of Oregon Title V Operating Permit program sources and ~~the Department~~[DEQ](#) with the criteria and procedures to determine emissions and fees based on air emissions and specific activities.

(2) This division applies to Oregon Title V Operating Permit program sources as defined in OAR 340-200-0020.

(3) The owner or operator may elect to pay emission fees for each regulated pollutant on either actual emissions or permitted emissions.

(4) Sources subject to the Oregon Title V Operating Permit program defined in OAR 340-200-0020, are subject to both an annual base fee established under 340-220-0030 and an emission fee calculated pursuant to 340-220-0040.

(5) Sources subject to the Oregon Title V Operating Permit program may also be subject to user fees (OAR 340-220-0050 and 340-216-0090).

(6) ~~The Department~~[DEQ](#) will credit owners and operators of new Oregon Title V Operating Permit program sources for the unused portion of paid Annual Fees. The credit will begin from the date ~~the Department~~[DEQ](#) receives the Title V permit application.

(7) Subject to the requirements in this division, LRAPA is designated by the EQC to implement this division within its area of jurisdiction. The requirements and procedures contained in this division must be used by LRAPA unless LRAPA has adopted or adopts rules which are at least as strict as this division.

Stat. Auth.: ORS 468.[020](#), [468.065](#), [468A.310](#) & 468A.[315](#)

Stats. Implemented: ORS 468.[065](#) & 468A.[315](#)

Hist.: DEQ 20-1993(Temp), f. & cert. ef. 11-4-93; DEQ 13-1994, f. & cert. ef. 5-19-94; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 7-1996, f. & cert. ef. 5-31-96; DEQ 10-1999, f. & cert. ef. 7-1-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2560; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 6-2007(Temp), f. & cert. ef. 8-17-07 thru 2-12-08; Administrative correction 2-22-08; DEQ 10-2008, f. & cert. ef. 8-25-08

#### 340-220-0020

##### **Definitions**



The definitions in OAR 340-200-0020, [340-204-0010](#) and this rule apply to this division. If the same term is defined in this rule and [OAR 340-200-0020](#) or [340-204-0010](#), the definition in this rule applies to this division. Particulates. For purposes of this division, particulates mean PM10; or if a source's permit specifies ~~P~~particulate ~~M~~atter (PM) and not PM10, then PM; or if a source's permit specifies PM2.5 and neither PM10 nor PM, then PM2.5.

Stat. Auth.: ORS 468.020, [468.065](#), [468A.310](#) & [468A.315](#)

Stats. Implemented: ORS [468.065](#) & [468A.315](#)~~025~~

Hist.: DEQ 14-1999, f. & cert. ef. 10-14-99; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 6-2007(Temp), f. & cert. ef. 8-17-07 thru 2-12-08; Administrative correction 2-22-08; DEQ 10-2008, f. & cert. ef. 8-25-08

### 340-220-0060

#### Regulated Pollutants Subject to Emission Fees

(1) ~~The Department~~[DEQ](#) will assess emission fees on emissions of regulated pollutants up to and including 4,000 tons per year for each regulated pollutant for each source through calendar year 2010, and up to and including 7,000 tons per year of all regulated pollutants for each source each calendar year thereafter.

(2) The owner or operator must pay emission fees for all regulated pollutants emitted from the source, except as limited in section (1).

Stat. Auth.: ORS 468.020, [468.065](#), [468A.310](#) & [468A.315](#)

Stats. Implemented: ORS [468.065](#) & [468A.315](#)~~025~~

Hist.: DEQ 20-1993(Temp), f. & cert. ef. 11-4-93; DEQ 13-1994, f. & cert. ef. 5-19-94; DEQ 19-1996, f. & cert. ef. 9-24-96; DEQ 10-1999, f. & cert. ef. 7-1-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2610; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 6-2007(Temp), f. & cert. ef. 8-17-07 thru 2-12-08; Administrative correction 2-22-08; DEQ 10-2008, f. & cert. ef. 8-25-08

### 340-220-0070

#### Exclusions

(1) ~~The Department~~[DEQ](#) will not assess emission fees on newly permitted major sources that have not begun initial operation.

(2) ~~The Department~~[DEQ](#) will not assess emission fees on carbon monoxide. However, sources that emit or are permitted to emit 100 tons or more per year of carbon monoxide are subject to the emission fees on all other regulated ~~air~~ pollutants pursuant to OAR 340-220-0010.

(3) ~~The Department~~[DEQ](#) will not assess emission fees on any device or activity that did not operate at any time during the calendar year.

(4) If an owner or operator of an Oregon Title V Operating Permit program source operates a device or activity for less than 5% of the permitted operating schedule, the owner or operator may elect to report emissions based on a proration of the permitted emissions for the actual operating time.

(5) ~~The Department~~ [DEQ](#) will not assess emission fees on emissions categorized as credits or unassigned emissions within an Oregon Title V Operating Permit.

(6) ~~The Department~~ [DEQ](#) will not assess emission fees on categorically insignificant emissions as defined in OAR 340-200-0020.

Stat. Auth.: ORS 468.020, [468.065](#), [468A.310](#) & [468A.315](#)

Stats. Implemented: ORS [468.065](#) & [468A.315](#) ~~025~~

Hist.: DEQ 20-1993(Temp), f. & cert. ef. 11-4-93; DEQ 13-1994, f. & cert. ef. 5-19-94; DEQ 24-1994, f. & ef. 10-28-94; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 19-1996, f. & cert. ef. 9-24-96; DEQ 10-1999, f. & cert. ef. 7-1-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2620; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 6-2007(Temp), f. & cert. ef. 8-17-07 thru 2-12-08; Administrative correction 2-22-08; DEQ 10-2008, f. & cert. ef. 8-25-08

### 340-220-0080

#### References

Reference documents used in this division include the ~~Department~~ [DEQ](#) Source Sampling Manual and the ~~Department~~ [DEQ](#) Continuous Monitoring Manual.

~~{Publications: Publications referenced are available from the agency.}~~

Stat. Auth.: ORS 468.~~020~~, [468.065](#) & [468A.315](#)

Stats. Implemented: ORS 468 & 468A

Hist.: DEQ 13-1994, f. & ef. 5-19-94; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2630

### 340-220-0090

#### Election for Each Regulated Pollutant

(1) The owner or operator must elect to pay emission fees on either actual emissions, permitted emissions, or a combination of both for the previous calendar year for each regulated pollutant and notify ~~the Department~~ [DEQ](#) ~~in accordance with~~ [using](#) OAR 340-220-0110.

(2) If an owner or operator fails to notify ~~the Department~~ [DEQ](#) of the election for a regulated pollutant, ~~the~~ [DEQ](#) will assess emission fees based on permitted emissions.

(3) If the permit or review report does not identify permitted emissions for a regulated pollutant, ~~the~~ [DEQ](#) will develop representative permitted emissions.

(4) An owner or operator may elect to pay emission fees on the aggregate limit for insignificant emissions that are not categorically exempt insignificant emissions.

Stat. Auth.: ORS 468.020, [468.065 & 468A.310](#)

Stats. Implemented: ORS [468.065 & 468A.315](#)~~025~~

Hist.: DEQ 20-1993(Temp), f. & cert. ef. 11-4-93; DEQ 13-1994, f. & cert. ef. 5-19-94; DEQ 12-1995, f. & cert. ef. 5-23-95; DEQ 19-1996, f. & cert. ef. 9-24-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2640; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 6-2007(Temp), f. & cert. ef. 8-17-07 thru 2-12-08; Administrative correction 2-22-08; DEQ 10-2008, f. & cert. ef. 8-25-08

## **340-220-0100**

### **Emission Reporting**

(1) Using a form~~(s)~~ developed by ~~the Department~~[DEQ](#) the owner or operator must report the following emissions:

(a) Particulates;

(b) Sulfur Dioxide as SO<sub>2</sub>;

(c) Oxides of Nitrogen (NO<sub>x</sub>) as Nitrogen Dioxide (NO<sub>2</sub>);

(d) Volatile Organic Compounds as:

(A) VOC for material balance emission reporting; or

(B) Propane (C<sub>3</sub>H<sub>8</sub>), unless otherwise specified by permit, OAR ~~Chapter~~ 340, or a method approved by ~~the Department~~[DEQ](#), for emissions verified by source testing.

(2) The owner or operator must report emissions in tons per year and as follows:

(a) Round up to the nearest whole ton for emission values 0.5 and greater; and

(b) Round down to the nearest whole ton for emission values less than 0.5.

(3) The owner or operator electing to pay emission fees on actual emissions for a regulated pollutant must submit documentation necessary to support the actual emissions ~~in accordance with~~[using](#) OAR 340-220-0120.

(4) The owner or operator electing to pay on actual emissions must report total emissions, including those emissions in excess of 4,000 tons for each regulated pollutant and in excess of 7,000 tons for all regulated pollutants.

(5) The owner or operator electing to pay on permitted emissions for a regulated pollutant must identify such an election on the form~~(s)~~ developed by ~~the Department~~[DEQ](#).

(6) If more than one permit is in effect for a calendar year for an Oregon Title V Operating Permit program source, the owner or operator electing to pay on permitted emissions must pay on the most current permitted or actual emissions.

Stat. Auth.: ORS 468.020, [468.065](#), [468A.050](#), [468A.070](#), [468A.310](#) & [468A.315](#)

Stats. Implemented: ORS [468](#) & ~~468A.025~~

Hist.: DEQ 13-1993, f. & ef. 9-24-93; DEQ 20-1993(T), f. & ef. 11-4-93; DEQ 13-1994, f. & ef. 5-19-94; DEQ 24-1994, f. & ef. 10-28-94; DEQ 12-1995, f. & cert. ef. 5-23-95; DEQ 19-1996, f. & cert. ef. 9-24-96; DEQ 10-1999, f. & cert. ef. 7-1-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2650; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 6-2007(Temp), f. & cert. ef. 8-17-07 thru 2-12-08; Administrative correction 2-22-08; DEQ 10-2008, f. & cert. ef. 8-25-08

## 340-220-0110

### Emission Reporting and Fee Procedures

- (1) The owner or operator must submit the required form(s), including the election to pay on permitted or actual emissions for each regulated pollutant, to ~~the Department~~[DEQ](#) with the annual permit report ~~in accordance with~~[using](#) annual reporting procedures.
- (2) The owner or operator may request that information, other than emission information, submitted pursuant to this division be exempt from disclosure ~~in accordance with~~[under](#) OAR 340-214-0130.
- (3) Records developed ~~in accordance with~~[using](#) these rules are subject to inspection and entry requirements in OAR 340-218-0080. The owner or operator must retain records for at least five years ~~in accordance with~~[under](#) 340-218-0050(3)(b)(B).
- (4) ~~The Department~~[DEQ](#) may accept the information submitted or request additional information from the owner or operator. The owner or operator must submit additional actual emission information requested by ~~the Department~~[DEQ](#) within 30 days of the date of the request. ~~The Department~~[DEQ](#) may approve a request for additional time, up to 30 days, to submit the requested information.
- (5) If ~~the Department~~[DEQ](#) determines the actual emission information submitted for any regulated pollutant does not meet the criteria in this division, ~~the Department~~[DEQ](#) will assess the emission fee on the permitted emission for that regulated pollutant.
- (6) The owner or operator must submit emission fees payable to ~~the Department~~[DEQ](#) by the later of:
  - (a) August 1 for emission fees from the previous calendar year; or
  - (b) Thirty days after ~~the Department~~[DEQ](#) mails the fee invoice.
- (7) ~~Department~~[DEQ](#) acceptance of emission fees does not indicate approval of data collection methods, calculation methods, or information reported on Emission Reporting Forms. If ~~the Department~~[DEQ](#) determines initial emission fee assessments were inaccurate or inconsistent with this division, ~~the Department~~[DEQ](#) may assess or refund emission fees up to two years after emission fees are received by ~~the Department~~[DEQ](#).
- (8) ~~The Department~~[DEQ](#) will not revise a PSEL solely due to an emission fee payment.
- (9) Owners or operators operating sources pursuant to OAR 340 division 218 must submit the emission reporting information with the annual permit report.

Stat. Auth.: ORS 468.[020](#), [468.065](#), [468A.050](#), [468A.310](#) & 468A.[315](#)

Stats. Implemented: ORS [468 &](#) 468A.~~025~~

Hist.: DEQ 20-1993(Temp), f. & cert. ef. 11-4-93; DEQ 13-1994, f. & cert. ef. 5-19-94; DEQ 10-1999, f. & cert. ef. 7-1-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2660; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 6-2007(Temp), f. & cert. ef. 8-17-07 thru 2-12-08; Administrative correction 2-22-08; DEQ 10-2008, f. & cert. ef. 8-25-08

## 340-220-0120

### Actual Emissions

(1) Actual emissions include, but are not limited to, routine process emissions, fugitive emissions, and excess emissions from maintenance, startups and shutdowns, equipment malfunction, and other activities, but do not include categorically insignificant activities and secondary emissions.

(2) Actual emissions must be directly measured with a continuous monitoring system or calculated using a material balance or verified emission factor determined under division 220 in combination with the source's actual operating hours, production rates, or types of materials processed, stored, or combusted during the specified time period.

(3) An owner or operator electing to pay on actual emissions must obtain emission data and determine regulated pollutant emissions using one of the following methods:

(4a) Continuous monitoring systems used in ~~accordance with~~ OAR 340-220-0130;

(2b) Verified emission factors developed for a particular source or a combination of sources venting to a common stack ~~in accordance with~~ using OAR 340-220-0170;

(3c) Material balances determined ~~in accordance with~~ using OAR 340-220-0140, 340-220-0150, or 340-220-0160; or

(4d) Verified emission factors for source categories developed ~~in accordance with~~ using OAR 340-220-0170(11).

Stat. Auth.: ORS 468.020, [468.065](#), [468A.070](#), [468A.310](#) & 468A.[315](#)

Stats. Implemented: ORS [468 &](#) 468A.~~025~~

Hist.: DEQ 20-1993(Temp), f. & cert. ef. 11-4-93; DEQ 13-1994, f. & cert. ef. 5-19-94; DEQ 12-1995, f. & cert. ef. 5-23-95; DEQ 19-1996, f. & cert. ef. 9-24-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2670; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 6-2007(Temp), f. & cert. ef. 8-17-07 thru 2-12-08; Administrative correction 2-22-08; DEQ 10-2008, f. & cert. ef. 8-25-08

## 340-220-0130

### Determining Emissions from Continuous Monitoring Systems

(1) The owner or operator must use data collected ~~in accordance with~~under Oregon Title V Operating Permit conditions, applicable rules in OAR 340, or the ~~Department's~~DEQ Continuous Monitoring Manual.

(2) If the owner or operator has continuous monitoring data from less than 90% of the plant operating time, the emissions during the period when the continuous monitoring system was not operating must be determined from the 90th percentile of the continuous monitoring data.

~~{Publications: Publications referenced are available from the agency.}~~

Stat. Auth.: ORS 468.020, 468.065, 468A.070, 468A.310 & 468A.315

Stats. Implemented: ORS 468 & 468A

Hist.: DEQ 13-1993, f. & ef. 9-24-93; DEQ 20-1993(T), f. & ef. 11-4-93; DEQ 13-1994, f. & ef. 5-19-94; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2680; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### **340-220-0140**

#### **Determining Emissions Using Material Balance**

The owner or operator may elect to use material balance to determine actual emissions:

(1) If the amount of material added to a process, less the amount consumed and recovered in a process, can be documented ~~in accordance with~~using ~~DEQ~~Department approved permit conditions and ~~in accordance with~~ this division.

(2) The owner or operator may only apply material balance calculations to VOC or sulfur dioxide emissions ~~in accordance with~~using OAR 340-220-0150 and 340-220-0160 respectively.

Stat. Auth.: ORS 468.020, 468.065, 468A.070, 468A.310 & 468A.315

Stats. Implemented: ORS 468 & 468A

Hist.: DEQ 20-1993(Temp), f. & cert. ef. 11-4-93; DEQ 13-1994, f. & cert. ef. 5-19-94; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2690; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### **340-220-0150**

#### **Determining VOC Emissions Using Material Balance**

The owner or operator may determine the amount of VOC emissions for emissions of a regulated pollutant by using material balance. The owner or operator using material balance to calculate VOC emissions must determine the amount of VOC added to the process, the amount of VOC consumed in the process, and the amount of VOC recovered in the process, if any, by testing ~~in accordance with~~using 40 ~~Code of Federal Regulations (CFR)~~ Part 60 Appendix A EPA Method 18, 24, 25, a material balance method, or an equivalent plant specific method specified in the Oregon Title V Operating Permit using the following equation: [Equation not included. See ED. NOTE.]

[ED. NOTE: Equations referenced are available from the agency.]

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

Stat. Auth.: ORS 468.020, 468.065, 468A.070, 468A.310 & 468A.315

Stats Implemented: ORS 468.~~020~~, ~~468A.025~~ & 468A.~~315~~

Hist.: DEQ 20-1993(Temp), f. & cert. ef. 11-4-93; DEQ 13-1994, f. & cert. ef. 5-19-94; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 2-1996, f. & cert. ef. 1-29-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2700; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 6-2007(Temp), f. & cert. ef. 8-17-07 thru 2-12-08; Administrative correction 2-22-08; DEQ 10-2008, f. & cert. ef. 8-25-08

### 340-220-0160

#### Determining Sulfur Dioxide Emissions Using Material Balance

(1) The owner or operator may determine sulfur dioxide emissions for Oregon Title V Operating Permit program sources by measuring the sulfur content of fuels and assuming that all of the sulfur in the fuel is oxidized to sulfur dioxide.

(2) The owner or operator must ensure that ASTM methods were used to measure the sulfur content in fuel for each quantity of fuel burned.

(3) The owner or operator must determine sulfur dioxide emissions for each quantity of fuel burned, determining quantity by a method that is reliable for the source, by performing the following calculation: [Equation not included. See ED. NOTE.]

(4) For coal-fired steam generating units, owners or operators of major sources must use the following equation to account for sulfur retention: [Equation not included. See ED. NOTE.]

(5) Total sulfur dioxide emissions for the year must be the sum of each quantity burned, calculated ~~in~~ accordance with using section (3) ~~of this rule~~ and reported in units of tons per year.

[ED. NOTE: Equations referenced are available from the agency.]

Stat. Auth.: ORS 468.020, 468.065, 468A.070, 468A.310 & 468A.315

Stats. Implemented: ORS 468.~~020~~, ~~468A.025~~ & 468A.~~315~~

Hist.: DEQ 20-1993(Temp), f. & cert. ef. 11-4-93; DEQ 13-1994, f. & cert. ef. 5-19-94; DEQ 2-1996, f. & cert. ef. 1-29-96; DEQ 10-1999, f. & cert. ef. 7-1-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2710; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-220-0170

#### Verified Emission Factors

(1) The owner or operator must verify emission factors before using them to determine emissions of regulated pollutants. To verify emission factors, the owner or operator must perform either source testing ~~in accordance with~~ using the ~~Department~~ DEQ's Source Sampling Manual or use other methods approved by ~~the~~

~~Department~~DEQ for source tests. Source tests must be conducted ~~in accordance with~~using testing procedures on file at ~~the Department~~DEQ and ~~the Department~~DEQ approved pretest plan which must be submitted at least 15 days before the testing. All test data and results must be submitted for review to ~~the Department~~DEQ within 30 days after testing, unless ~~the Department~~DEQ approves otherwise or a different time period is specified in a permit.

**NOTE:** DEQ recommends that the owner or operator notify ~~the Department~~DEQ and obtain pre-approval of the emission factor source testing program before or as part of the first source test notification.

(2) The owner or operator must conduct or have conducted at least three compliance source tests. Each test must consist of at least three individual test runs for a total of at least nine test runs.

(3) The owner or operator must monitor and record applicable process and control device operating data.

(4) The owner or operator must perform a source test either:

(a) In each of three quarters of the year with no two successive source tests performed any closer than 30 days apart; or

(b) At equal intervals over the operating period if the owner or operator demonstrates and ~~the Department~~DEQ agrees that the device or activity operates or has operated for part of the year; or

(c) At any time during the year if the owner or operator demonstrates, and ~~the Department~~DEQ agrees, that the process is or was not subject to seasonal variations.

(5) The owner or operator must conduct the source tests to test the entire range of operating levels. At least one test must be conducted at minimum operating conditions, at normal or average operating levels, and at anticipated maximum operating levels. If the process rate is constant, all tests must be conducted at that rate.

The owner or operator must submit documentation to ~~the Department~~DEQ demonstrating a constant process rate.

(6) The owner or operator must determine an emission factor for each source test by dividing each test run, in pounds of emission per hour, by the applicable process rate during the source test run. At least nine emission factors must be plotted against the respective process rates and a regression analysis performed to determine the best fit equation and the correlation coefficient. If the correlation coefficient is less than 0.50, which indicates that there is a relatively weak relationship between emissions and process rates, the arithmetic average and standard deviation of at least nine emission factors must be determined.

(7) The owner or operator must determine the Emissions Estimate Adjustment Factor (EEAF) as follows:

(a) If the correlation coefficient ( $R^2$ ) of the regression analysis is greater than 0.50, the EEAF will be  $1+(1-R^2)$ .

(b) If the correlation coefficient ( $R^2$ ) is less than 0.50, the EEAF will be: [Equation not included. See ED. NOTE.]

(8) The owner or operator must determine actual emissions for emission fee purposes using one of the following methods:



(a) If the regression analysis correlation coefficient is less than 0.50, the actual emissions is the average emission factor determined from at least nine test runs multiplied by the EEAF multiplied by the total production for the entire year; or [Equation not included. See ED. NOTE.]

(b) If the regression analysis correlation coefficient is greater than 0.50, perform the following calculations :

(A) Determine the average emission factor (EF) for each production rate category (maximum = EFmax, normal = EFnorm, and minimum = EFmin);

(B) Determine the total annual production and operating hours, production time (PTtot), for the calendar year;

(C) Determine the total hours operating within the maximum production rate category (PTmax). The maximum production rate category is any operation rate greater than the average of at least three maximum operating rates during the source testing plus the average of at least three normal operating rates during the source testing divided by 2;

(D) Determine the total hours while operating within the normal production rate category (PTnorm). The normal production rate category is defined as any operating rate less than the average of at least three maximum operating rates during the source testing plus the average of at least three normal operating rates during the source testing divided by 2 and any operating rate greater than the average of at least three minimum operating rates during the source testing plus the average of at least three normal operating rates during the source testing divided by 2;

(E) Determine the total hours while operating within the minimum production rate category (PTmin). The minimum production rate category is defined as any operating rate less than the average of at least three minimum operating rates during the source testing plus the average of at least three normal operating rates during the source testing divided by 2;

(F) Actual emissions equals EEAF x ((PTmax/PTtot) x EFmax + (PTnorm/PTtot) x EFnorm + (PTmin/PTtot) x EFmin.)

(9) The owner or operator must determine emissions during startup and shutdown, and for emissions greater than normal, during conditions that are not accounted for in the procedure~~(s)~~ otherwise used to document actual emissions. The owner or operator must apply 340-220-0170(9)(a) or 340-220-0170(9)(b), (c) and (d) in developing emission factors. The owner or operator must apply the emission factor obtained to the total time the device or activity operated under these conditions.

(a) All emissions during startup and shutdown, and emissions greater than normal are assumed equivalent to operation without an air pollution control device, unless the owner or operator accurately demonstrates otherwise ~~in accordance with~~under OAR 340-220-0170(9)(b), (9)(c), (9)(d), and (9)(e), and approved by ~~the Department~~DEQ. The emission factor plus the EEAF must be adjusted by the air pollution control device collection efficiency as follows: [Equation not included. See ED. NOTE.]

(b) During process startups a ~~Department~~DEQ approved source test may be performed to determine an average startup factor. The average of at least three tests runs plus the standard deviation will be used to determine actual emissions during startups.

(c) During process shutdowns a ~~Department~~[DEQ](#) approved source test may be performed to determine an emission factor for shutdowns. The average of at least three test runs plus the standard deviation will be used to determine actual emissions during shutdowns.

(d) During routine maintenance activity the owner or operator may:

(A) Perform routine maintenance activity during source testing for verified emission factors; or

(B) Determine emissions ~~in accordance with~~[using](#) ~~§~~section (a) ~~of this rule~~.

(e) The emission factor need not be adjusted if the owner or operator demonstrates to ~~the Department~~[DEQ](#) that the [regulated](#) pollutant emissions do not increase during startup and shutdown, and for conditions that are not accounted for in the procedure~~(s)~~ otherwise used to document actual emissions (e.g. NO<sub>x</sub> emissions during an ESP failure).

(10) A verified emission factor developed pursuant to this division and approved by ~~the Department~~[DEQ](#) can not be used if a process change occurs that would affect the accuracy of the verified emission factor.

(11) The owner or operator may elect to use verified emission factors for source categories if ~~the Department~~[DEQ](#) determines the following criteria are met:

(a) The verified emission factor for a source category must be based on verified emission factors from at least three individual sources within the source category;

(b) Verified emission factors from sources within a source category must be developed ~~in accordance with~~[using](#) this rule;

(c) The verified emission factors from the sources must not differ from the mean by more than twenty percent; and

(d) The source category verified emission factor must be the mean of the source verified emission factors plus the average of the source emission estimate adjustment factors.

[ED. NOTE: Equations referenced are available from the agency.]

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

Stat. Auth.: ORS 468.020, [468.065](#), [468A.070](#), [468A.310](#) & [468A.315](#)

Stats. Implemented: ORS [468](#) & ~~468A.025~~

Hist.: DEQ 20-1993(Temp), f. & cert. ef. 11-4-93; DEQ 13-1994, f. & cert. ef. 5-19-94; DEQ 24-1994, f. & cert. ef. 10-28-94; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 19-1996, f. & cert. ef. 9-24-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2720; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 6-2007(Temp), f. & cert. ef. 8-17-07 thru 2-12-08; Administrative correction 2-22-08; DEQ 10-2008, f. & cert. ef. 8-25-08

**340-220-0180**

## **Late and Underpayment of Fees**

(1) Notwithstanding any enforcement action, the owner or operator will be subject to a late payment fee of:

(a) Two hundred dollars for payments postmarked more than seven or less than 30 days late; and

(b) Four hundred dollars for payments postmarked on or after 30 days late.

(2) Notwithstanding any enforcement action, ~~the Department~~[DEQ](#) may assess an additional fee of the greater of \$400 or 20 percent of the amount underpaid for substantial underpayment.

Stat. Auth.: ORS 468.[020](#), [468.065](#), [468A.310](#) & ~~ORS~~[468A.315](#)

Stats. Implemented: ORS 468 & ~~ORS~~ 468A

Hist.: DEQ 20-1993(Temp), f. & cert. ef. 11-4-93; DEQ 13-1994, f. & cert. ef. 5-19-94; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2730; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-220-0190

#### Failure to Pay Fees

Any owner or operator that fails to pay fees imposed by ~~the Department~~[DEQ](#) under this division must pay a penalty of 50 percent of the fee amount, plus interest on the fee amount computed ~~in accordance with~~[using](#) Section 6621(a)(2) of the Internal Revenue Code of 1986 (as amended).

~~{Publications: The publication(s) referenced in this rule is available from the agency.}~~

Stat. Auth.: ORS 468.[020](#), [468.065](#), [468A.310](#) & ~~ORS~~[468A.315](#)

Stats. Implemented: ORS 468 & ~~ORS~~ 468A

Hist.: DEQ 20-1993(Temp), f. & cert. ef. 11-4-93; DEQ 13-1994, f. & cert. ef. 5-19-94; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2740; DEQ 8-2000, f. & cert. ef. 6-6-00; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-220-0150

#### Determining VOC Emissions Using Material Balance

$$\text{VOC}_{\text{tot}} = \text{VOC}_{\text{add}} - \text{VOC}_{\text{cons}}$$

Where:

- $\text{VOC}_{\text{tot}}$  = Total VOC emissions, tons
- $\text{VOC}_{\text{add}}$  = VOC added to the process, tons
- $\text{VOC}_{\text{cons}}$  = VOC consumed and/or recovered from the process, tons

### 340-220-0160

#### Determining Sulfur Dioxide Emissions Using Material Balance

$$(3) \text{SO}_2 = \%S/100 \times F \times 2$$

Where:

- $\text{SO}_2$  = Sulfur dioxide emissions for each quantity of fuel, tons
- $\%S$  = Percent sulfur in the fuel being burned, % (w/w).
- $F$  = Amount of fuel burned, based on a quantity measurement, tons
- $2$  = Pounds of sulfur dioxide per pound of sulfur

$$(4) \text{SO}_{2\text{adj}} = \text{SO}_2 \times 0.97$$

Where:

- $\text{SO}_{2\text{adj}}$  = Sulfur dioxide adjusted for sulfur retention (40 CFR Part 60, Appendix A, Method 19, Section 5.2)
- $\text{SO}_2$  = Sulfur dioxide emissions from each quantity burned (OAR 340-220-0140(3))

### 340-220-0170

#### Verified Emission Factors Using Source Testing

(7)(b) If the correlation coefficient ( $R^2$ ) is less than 0.50, the EEAF shall be:

$$\text{EEAF} = 1 + \text{SD}/\text{EF}_{\text{avg}}$$

Where:

- $\text{SD}$  = Standard Deviation
- $\text{EF}_{\text{avg}}$  = Average of the Emission Factors

**8(a)** If the regression analysis correlation coefficient is less than 0.50, the actual emissions shall be the average emission factor determined from at least nine test runs multiplied by the EEAF multiplied by the total production for the entire year; or

$$AE = EF_{avg} \times EEAF \times P$$

Where:

- AE = Actual Emissions
- $EF_{avg}$  = Average of the Emission Factors
- EEAF = Estimated Emissions Adjustment Factor
- P = Total production for the year

**(9)(a)** All emissions during startup and shutdown, and emissions greater than normal shall be assumed equivalent to operation without an air pollution control device, unless accurately demonstrated by the owner or operator and approved by the Department in accordance with OAR 340-220-0170(9)(b), (9)(c), (9)(d), and (9)(e). The emission factor plus the EEAF shall be adjusted by the air pollution control device collection efficiency as follows:

$$\text{Actual emission factor} = (EF \times EEAF) / (1 - PCDE)$$

Where:

- EF = Emission Factor
- EEAF = Emission Estimate Adjustment Factor
- PCDE = Pollution Control Device Collection Efficiency Unless otherwise approved by the Department, the pollution control device collection efficiencies used in this calculation shall be:

Particulate Matter:

ESP or baghouse — 0.90

High energy wet scrubber — 0.80

Low energy wet scrubber — 0.70

Cyclonic separator — 0.50

Acid gases:

Wet or dry scrubber — 0.90

VOCs:

Incinerator — 0.98

Carbon absorber — 0.95

## DIVISION 222

### STATIONARY SOURCE PLANT SITE EMISSION LIMITS

#### 340-222-0010

##### Policy

The ~~Commission~~[EQC](#) recognizes the need to establish a more definitive method for regulating increases and decreases in air emissions of permit holders. However, except as needed to protect ambient air quality standards, ~~prevention of significant deterioration~~[PSD](#) increments and visibility, the ~~Commission~~[EQC](#) does not intend to: limit the use of existing production capacity of any air quality permittee; cause any undue hardship or expense to any permittee who wishes to use existing unused productive capacity; or create inequity within any class of permittees subject to specific industrial standards that are based on emissions related to production.

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

Stat. Auth.: ORS ~~468.020, 468A.025, 468A.040~~ & ~~ORS~~[468A.310](#)

Stats. Implemented: ORS ~~468 & ORS~~ 468A

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0300; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1000; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

#### 340-222-0020

##### Applicability [and Jurisdiction](#)

(1) Plant Site Emission Limits (PSELs) will be included in all Air Contaminant Discharge Permits (ACDP) and Oregon Title V Operating Permits, except as provided in section (3), as a means of managing airshed capacity by regulating increases and decreases in air emissions. Except as provided in OAR [340-222-0035\(5\) and 340-222-0060](#) ~~or 340-222-0070~~, all ACDP and Title V sources are subject to PSELs for all regulated pollutants [listed in the definition of SER in OAR 340-200-0020\(160\)\(a\) through \(u\)](#). ~~The Department~~[DEQ](#) will incorporate PSELs into permits when issuing a new permit or renewing or modifying an existing permit.

(2) The emissions limits established by PSELs provide the basis for:

- (a) Assuring reasonable further progress toward attaining compliance with ambient air [quality](#) standards;
- (b) Assuring compliance with ambient air [quality](#) standards and ~~Prevention of Significant Deterioration~~[PSD](#) increments;
- (c) Administering offset and banking programs; and
- (d) Establishing the baseline for tracking the consumption of ~~Prevention of Significant Deterioration~~[PSD](#) ~~I~~increments.

(3) PSELs are not required for:

(a) ~~Regulated P~~pollutants that will be emitted at less than the de minimis emission level listed in OAR 340-200-0020 from the entire source~~;~~;

(b) Short Term Activity and Basic ACDPs; ~~or~~

(c) Hazardous air pollutants as listed in OAR 340-244-0040 Table 1; ~~Early Reduction H~~high ~~R-~~risk ~~P~~pollutants listed in ~~40 CFR 63.74340-244-0120 Table 2~~; or ~~A~~accidental ~~R~~release ~~S~~substances listed in ~~40 CFR 68.130340-244-0230 Table 3~~; ~~or air toxics listed in OAR 340 division 246; any of except that PSELs are required for the pollutants identified in this subsection that are also listed in the definition of SER, OAR 340-200-0020(160)(a) through (u).~~

(4) ~~PSELs may be G~~generic PSELs, source specific PSELs set at the generic PSEL levels, or source specific PSELs set at source specific levels.~~may be used for any category of ACDP or Title V permit.~~

(a) A source with a generic PSEL cannot maintain a netting basis for that regulated pollutant.

(b) A source with a source specific PSEL that is set at the generic PSEL level may maintain a netting basis for that regulated pollutant provided the source is operating under a Standard ACDP or Title V Operating permit.

(5) Subject to the requirements in this division, LRAPA is designated by the EQC to implement this division within its area of jurisdiction. The requirements and procedures contained in this division must be used by LRAPA unless LRAPA has adopted or adopts rules which are at least as strict as this division.

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

[ED. NOTE: Tables referenced are available from the agency. [Click here for PDF copy of tables.](#)]

Stat. Auth.: ORS 468.020, ~~468A.025, &~~ 468A.040 & 468A.310

Stats. Implemented: ORS ~~468.020, 468.065 &~~ 468A.025

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0301; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 22-1996, f. & cert. ef. 10-22-96; DEQ 14-1998, f. & cert. ef. 9-14-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1010; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 4-2008(Temp). f. 3-4-08, cert. ef. 3-6-08 thru 9-1-08; DEQ 11-2008, f. & cert. ef. 8-29-08

## 340-222-0030

### 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.

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



Stat. Auth.: ORS 468.020 & 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 14-1999, f. & cert. ef. 10-14-99

## Criteria for Establishing Plant Site Emission Limits

340-222-00~~43~~35

### General Requirements for Establishing All PSELs

(1) ~~No~~ PSELs may not exceed limits established ~~allow emissions in excess of those allowed~~ by any applicable federal or state regulation or by any specific permit conditions unless the source meets the specific provisions of OAR 340-226-0400 (Alternative Emission Controls).

(2) DEQ may change ~~S~~source specific PSELs at the time of a permit renewal, or if DEQ modifies a permit pursuant to OAR 340-216-0084, Department Initiated Modifications, or 340-218-0200, Reopenings, if ~~may be changed pursuant to the Department's rules for permit modifications when:~~

(a) DEQ determines ~~E~~errors were made in calculating the PSELs~~are found~~ or better~~more~~ accurate and reliable data is available for calculating PSELs; or

(b) More stringent control is required by a rule adopted by the ~~Commission~~EQC; ~~or~~

~~(c) The Department modifies a permit pursuant to OAR 340-216-0084, Modification of a Permit, or 340-218-0200, Reopenings.~~

(3) PSEL reductions required by rule, order or permit condition will be effective on the compliance date of the rule, order, or permit condition.

~~(34)~~ Annual PSELs apply ~~are established~~ on a rolling 12 consecutive month basis and ~~will~~ limit the source's potential to emit.

(5) PSELs do not include emissions from categorically insignificant activities. Emissions from categorically insignificant activities must be considered when determining NSR or PSD applicability under OAR 340 division 224.

(6) PSELs must include aggregate insignificant emissions, if applicable.

~~(4) In order to maintain the netting basis, permittees must maintain either a Standard ACDP or an Oregon Title V Operating Permit. A request by a permittee to be assigned any other type of an ACDP sets the netting basis at zero upon issuance of the other type of permit.~~

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.040 & ~~ORS~~ 468A.310

Stats. Implemented: ORS ~~468 & ORS~~ 468A

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-222-0040

#### Generic Annual PSEL

- (1) Sources with capacity less than the ~~Significant Emission Rate (SER)~~ will receive a ~~G~~generic PSEL unless they have a netting basis and request a source specific PSEL under 340-222-0041.
- (2) A ~~G~~generic PSEL may be used for any regulated pollutant that will be emitted at less than the SER.
- (3) The netting basis for a source with a generic PSEL is zero for that regulated pollutant.

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.040 & 468A.310

Stats. Implemented: ORS 468A

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0310; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1020; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-222-0041

#### Source Specific Annual PSEL

- (1) For sources with potential to emit less than the SER, ~~that request a source specific PSEL, an initial the~~ source specific PSEL will be set equal to the ~~G~~generic PSEL level.
- (2) For sources with potential to emit greater than or equal to the SER, ~~an initial~~the source specific PSEL will be set equal to the source's potential to emit, ~~or~~ netting basis or a level requested by the applicant, whichever is less, except as provided in section (3) or (4).
- (3) The initial source specific PSEL for PM2.5 for a source that was permitted on or before May 1, 2011 with potential to emit greater than or equal to the SER will be set equal to the PM2.5 fraction of the PM10 PSEL in effect on May 1, 2011.
- (a) Any source with a permit in effect on May 1, 2011 is eligible for an initial PM2.5 PSEL without being otherwise subject to OAR 340-222-0041(4).
- (b) For a source that had a permit in effect on May 1, 2011 but later needs to correct its PM10 PSEL that was in effect on May 1, 2011 due to more accurate or reliable information, the corrected PM10 PSEL will be used to correct the initial PM2.5 PSEL.
- (i) Correction of a PM10 PSEL will not by itself trigger OAR 340-222-0041(4) for PM2.5.
- (ii) Correction of a PM10 PSEL could result in further requirements for PM10 in accordance with all applicable regulations.

(c) If after establishing the initial PSEL for PM2.5 in accordance with this rule and establishing the initial PM2.5 netting basis in accordance with OAR 340-222-0046, the PSEL is more than nine tons above the netting basis, any future increase in the PSEL for any reason would be subject to OAR 340-222-0041(4).

(43) If an increase in a PSEL or an initial PSEL will exceed the netting basis by an amount equal to or greater than the SER, the source is subject to Major NSR or State NSR as specified in OAR 340-224-0010, as applicable. Any increase in the PSEL for greenhouse gases that is not due to a major modification is not subject to NSR under OAR 340 division 224. ~~If an applicant wants an annual PSEL at a rate greater than the netting basis, the applicant must:~~

~~(a) Demonstrate that the requested increase over the netting basis is less than the SER; or~~

~~(b) For increases equal to or greater than the SER over the netting basis, but not subject to New Source Review (OAR 340 division 224);~~

(5) If the netting basis is adjusted in accordance with OAR 340-222-0051(3) then the source specific PSEL is not required to be adjusted.

(6) If a PSEL is established or revised to include emissions from activities that existed at a source prior to [INSERT SOS FILING DATE OF RULES] and which were previously considered categorically insignificant activities prior to [INSERT SOS FILING DATE OF RULES], and results in a PSEL that exceeds the netting basis by more than or equal to the SER as a result of this revision, the requirements of OAR 340-222-0041(4) do not apply. If the revised PSEL is greater than the netting basis by the SER or more, any future increase in the PSEL for any reason would be subject to OAR 340-222-0041(4).

~~(A) If located within, or creating a significant air quality impact as defined in OAR 340-200-0020 upon, an area designated as nonattainment in OAR 340-204-0030, the applicant must obtain offsets and demonstrate a net air quality benefit in accordance with 340-225-0090.~~

~~(B) If located within, or creating a significant air quality impact as defined in OAR 340-200-0020 upon, an area designated as maintenance in 340-204-0040, the applicant must~~

~~(i) Obtain offsets and demonstrate a net air quality benefit in accordance with OAR 340-225-0090;~~

~~(ii) Obtain an allocation from an available growth allowance in accordance with the applicable maintenance plan; or~~

~~(iii) Demonstrate compliance with the air quality impact levels in OAR 340-224-0060(2)(c) or (2)(d), whichever applies to the maintenance area, by conducting an air quality analysis in accordance with 340-225-0045.~~

~~(C) If located within an attainment, maintenance, or unclassifiable area, the applicant must demonstrate compliance with the NAAQS and PSD increments by conducting an air quality analysis in accordance with OAR 340-225-0050(1) and (2) and 340-225-0060.~~

~~(D) For federal major sources, the applicant must demonstrate compliance with AQRV protection in accordance with OAR 340-225-0050(3) and 340-225-0070.~~

~~(c) For increases equal to or greater than the SER over the netting basis and subject to New Source Review, the applicant must demonstrate that the applicable New Source Review requirements have been satisfied.~~

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.040 & 468A.310

Stats. Implemented: ORS 468A

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 11-2002, f. & cert. ef. 10-8-02

## 340-222-0042

### Short Term PSEL

(1) For sources located in areas with an established short term SER that is measured over an averaging period less than a full year~~(OAR 340-200-0020 Table 3)~~, PSELs are required on a short term basis for those regulated pollutants that have a short term SER. The short term averaging period is daily, unless emissions cannot be monitored on a daily basis. The averaging period for short term PSELs can never be greater than monthly.

(a) For new and existing sources; with potential to emit less than the short term SER, the short term PSEL will be set equal to the level of the short term generic PSEL. ~~the initial short term PSEL will be set as:~~

~~(A) the lesser of the short term capacity or the current permit's short term PSEL, if each is greater than or equal to the short term SER; or~~

~~(b) For existing sources with potential to emit greater than or equal to the short term SER, a short term PSEL will be set equal to the source's short term potential to emit or to the current permit's short term PSEL, whichever is less the generic PSEL, if either the short term capacity or the current short term PSEL is less than the short term SER.~~

~~(c) For new sources with potential to emit greater than or equal to the short term SER, the initial short term PSEL will be zero~~set at the level requested by the applicant provided the applicant meets the requirements of (2)(b).

(2) If a permittee an applicant wants requests an increase in a short term PSEL that will exceed the short term netting basis by an amount equal to or at a rate greater than the ~~initial~~ short term SER-PSEL, the ~~applicant~~ permittee must satisfy the requirements of subsections (a) or (b). In order to satisfy the requirements of subsection (a) or (b), the short term PSEL increase must first be converted to an annual increase by multiplying the short term increase by 8,760 hours, 365 days, or 12 months, depending on the term of the short term PSEL.

~~(a) Demonstrate that the requested increase over the initial short term PSEL is less than the significant emission rate (Note: In this case new sources would get a generic PSEL); or~~

~~(b) For increases equal to or greater than the SER over the initial short term PSEL:~~

~~(a) Obtain offsets in accordance with the offset provisions for the designated area as specified in OAR 340 division 224 and demonstrate a net air quality benefit in accordance with OAR 340-225-0090; or~~

(Bb) Obtain an allocation from an available growth allowance in accordance with the applicable maintenance plan;~~or~~

~~(C) For carbon monoxide, demonstrate that the source or modification will not cause or contribute to an air quality impact equal to or greater than 0.5 mg/m<sup>3</sup> (8 hour average) and 2 mg/m<sup>3</sup> (1 hour average).~~

~~(D) For federal major sources, demonstrate compliance with air quality related values (AQRV) protection in accordance with OAR 340-225-0070.~~

(3) Once the short term PSEL is increased pursuant to section (2) ~~of this rule~~, the increased level becomes the ~~basis~~~~initial short term PSEL~~ for evaluating future ~~evaluations~~increases in the short term PSEL.

~~[ED. NOTE: Tables referenced are available from the agency.]~~

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.040 & 468A.310

Stats. Implemented: ORS 468A

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

## 340-222-0046

### Netting Basis

~~“(76) Netting Basis” means the baseline emission rate MINUS any emission reductions required by rule, orders, or permit conditions required by the SIP or used to avoid SIP requirements, MINUS any unassigned emissions that are reduced from allowable under OAR 340-222-0045, MINUS any emission reduction credits transferred off-site, PLUS any emission increases approved through the New Source Review regulations in OAR 340 division 224 MINUS any emissions reductions required by subsection (g) of this section.~~

(1a) A netting basis will only be established for those regulated pollutants that could subject a source to NSR under OAR 340 division 224 ~~as specified in the definition of regulated pollutant~~.

(ab) The initial PM<sub>2.5</sub> netting basis ~~and PSEL~~ for a source that was permitted prior to May 1, 2011 will be established with the first permitting action issued after July 1, 2011, provided the permitting action involved a public notice period that began after July 1, 2011.

~~(A) The initial netting basis is the PM<sub>2.5</sub> fraction of the PM<sub>10</sub> netting basis in effect on May 1, 2011. DEQ may increase the initial PM<sub>2.5</sub> netting basis by up to 5 tons if necessary to avoid exceedance of the PM<sub>2.5</sub> significant emission rate as of May 1, 2011.~~

~~(B) Notwithstanding OAR 340-222-0041(2), the initial source-specific PSEL for a source with PTE greater than or equal to the SER will be set equal to the PM<sub>2.5</sub> fraction of the PM<sub>10</sub> PSEL.~~

(be) The initial greenhouse gas netting basis ~~and PSEL~~ for a source will be established with the first permitting action issued after July 1, 2011, provided the permitting action involved a public notice period that began after July 1, 2011.

(2) ~~The~~A source's netting basis is established as specified in subsection (a), (b), or (c) and will be adjusted according to section (3):

(a) For all regulated pollutants except for PM<sub>2.5</sub>, a source's initial netting basis is equal to the baseline emission rate.

(b) For PM<sub>2.5</sub>, a source's initial netting basis is equal to the overall PM<sub>2.5</sub> fraction of the PM<sub>10</sub> PSEL in effect on May 1, 2011 multiplied by the PM<sub>10</sub> netting basis in effect on May 1, 2011. DEQ may increase the initial PM<sub>2.5</sub> netting basis by not more than 5 tons to ensure that the PM<sub>2.5</sub> PSEL does not exceed the PM<sub>2.5</sub> netting basis by more than the PM<sub>2.5</sub> SER.

(A) Any source with a permit in effect on May 1, 2011 is eligible for a PM<sub>2.5</sub> netting basis without being otherwise subject to OAR 340-222-0041(4).

(B) For a source that had a permit in effect on May 1, 2011 but later needs to correct its PM<sub>10</sub> netting basis that was in effect on May 1, 2011, due to more accurate or reliable information, the corrected PM<sub>10</sub> netting basis will be used to correct the initial PM<sub>2.5</sub> netting basis.

(i) Correction of a PM<sub>10</sub> netting basis will not by itself trigger OAR 340-222-0041(4) for PM<sub>2.5</sub>.

(ii) Correction of a PM<sub>10</sub> netting basis could result in further requirements for PM<sub>10</sub> in accordance with all applicable regulations.

(~~d~~c) A source's ~~N~~netting basis is zero for:

(A) Any regulated pollutant emitted from a source that first obtained permits to construct and operate after the applicable baseline period for that regulated pollutant, and has not undergone ~~New Source Review~~NSR for that regulated pollutant, except as provided in subsection (2)(b) for PM<sub>2.5</sub>;

(B) Any regulated pollutant that has a generic PSEL in a permit; or

(C) Any source permitted as portable; ~~or~~

~~(D) Any source with a netting basis calculation resulting in a negative number.~~

(3) A source's netting basis will be adjusted as follows:

(a) The netting basis will be reduced by any emission reductions required under a rule, order, or permit condition issued by the EQC or DEQ and required by the SIP or used to avoid any state (e.g., NSR) or federal requirements (e.g., NSPS, NESHAP), as of the effective date of the rule, order or permit condition;

(A) Netting basis reductions are effective on the effective date of the rule, order or permit condition that requires the reductions;

(B) Netting basis reductions may only apply to sources that are permitted, on the effective date of the applicable rule, order or permit condition, to operate the affected devices or emissions units that are subject to the rule, order, or permit condition requiring emission reductions;

(C) Netting basis reductions will include reductions for unassigned emissions for devices or emissions units that are affected by the rule, order or permit condition, if the shutdown or over control that created the unassigned

emissions occurred within five years prior to the adoption of the rule, order or permit condition that required an emission reduction unless the unassigned emissions have been used for internal netting actions. This provision applies to emission reductions that have been placed in unassigned emissions or that are eligible to be placed in unassigned emissions but the permit that would place them in unassigned emissions has not been issued.

(D) Netting basis reductions will not affect emission reduction credits established under division 268.

(E) Netting basis reductions for the affected devices or emissions units will be determined consistent with the approach used to determine the netting basis prior to the regulatory action reducing the emissions. The netting basis reduction is the difference between the emissions calculated using the previous emission rate and the emission rate established by rule, order, or permit using appropriate conversion factors when necessary.

~~(Fh) Emission-~~The netting basis reductions ~~required by rule do~~will not include emissions reductions achieved under OAR 340-226-0110, ~~and~~ 340-226-0120, or OAR 340 division 244;

(b) The netting basis will be reduced by any unassigned emissions that are reduced under OAR 340-222-0055(3)(a);

(c) The netting basis will be reduced by the amount of emission reduction credits transferred off site in accordance with OAR 340 division 268;

(d) The netting basis will be reduced when actual emissions are reduced according to OAR 340-222-0051(3);

(e) The netting basis will be increased by any of the following:

(A) For sources that obtained a permit on or after [INSERT SOS FILING DATE OF RULES], any emission increases approved through Major NSR or Type A State NSR action under OAR 340 division 224;

(B) For sources that obtained a permit prior to [INSERT SOS FILING DATE OF RULES], any emission increases approved through the NSR regulations in OAR 340 division 224 in effect at the time; or

(C) For sources where the netting basis was increased in accordance with the DEQ PSD rules that were in effect prior to July 1, 2001, the netting basis may include emissions from emission units that were not subject to both an air quality analysis and control technology requirements if the netting basis had been increased following the rules in effect at the time.

(f) The netting basis will be increased by any emissions from activities previously classified as categorically insignificant prior to [INSERT SOS FILING DATE OF RULES], provided the activities existed during the baseline period or at the time of the last NSR permitting action that changed the netting basis under subsection (e).

(4) In order to maintain the netting basis, permittees must maintain either a Standard ACDP or an Oregon Title V Operating Permit. A request to be assigned any other type of ACDP sets the netting basis at zero upon issuance of the other type of permit and remains at zero unless an increase is approved under subsection (3)(e).

(5e) If a source relocates to an adjacent site, and the time between operation at the old and new sites is less than six months, the source may retain the netting basis from the old site.

~~(f) Emission reductions required by rule, order, or permit condition affect the netting basis if the source currently has devices or emissions units that are subject to the rules, order, or permit condition. The baseline emission rate is not affected. The netting basis reduction will be effective on the effective date of the rule, order, or permit condition requiring the reduction. The PSEL reduction will be effective on the compliance date of the rule, order, or permit condition.~~

~~(g) For permits issued after May 1, 2011 under New Source Review regulations in OAR 340 division 224, and where the netting basis initially equaled the potential to emit for a new or modified source, the netting basis will be reduced in accordance with the definition of actual emissions. Notwithstanding OAR 340-222-0041(2), this adjustment does not require a reduction in the PSEL.~~

(6i) A source's ~~N~~netting basis for a regulated pollutant with a revised definition will be ~~adjusted~~ corrected if the source is emitting the regulated pollutant at the time ~~of redefining the definition is revised~~, and the regulated pollutant is included in the ~~permit's~~ source's netting basis.

(7j) Where EPA requires an attainment demonstration based on dispersion modeling, the netting basis ~~will~~ must ~~not be established at no~~ more than the level used in the dispersion modeling to demonstrate attainment with the ambient air quality standard (i.e., the attainment demonstration is an emission reduction required by rule).

NOTE: This rule was moved verbatim from OAR 340-200-0020(76) and amended in redline/strikeout. This note will not become part of OAR 340-222-0046.

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.040 & 468A.310

Stats. Implemented: ORS 468A

### 340-222-0048

#### Baseline Period and Baseline Emission Rate

(14) ~~"The Bbaseline Pperiod"~~ means: used to calculate the baseline emission rate is either:

(a) For any regulated pollutant other than greenhouse gases, Any consecutive 12 calendar month period during the calendar years 1977 or 1978 ~~for any regulated pollutant other than greenhouse gases~~. DEQ may allow the use of a prior time period upon a determination that it is more representative of normal source operation.

(b) For greenhouse gases, Any consecutive 12 calendar month period during the calendar years 2000 through 2010 ~~for greenhouse gases~~.

(c) For a pollutant that becomes a regulated pollutant subject to OAR 340 division 224 after May 1, 2011, any consecutive 12 calendar month period within the 24 months immediately preceding the pollutant's designation as a regulated pollutant if a baseline period has not been defined for the regulated pollutant.

~~(13) "Baseline Emission Rate" means the actual emission rate during a baseline period. Baseline emission rate does not include increases due to voluntary fuel switches or increased hours of operation that occurred after that~~



~~baseline period.~~

~~(2a)~~ A baseline emission rate will be established only for those regulated pollutants subject to OAR 340 division 224 ~~as specified in the definition of regulated pollutant.~~

~~(3)~~ A baseline emission rate will not be established for PM2.5.

~~(4b)~~ The baseline emission rate for greenhouse gases, on a CO2e basis, will be established with the first permitting action issued after July 1, 2011, provided the permitting action involved a public notice period that began after July 1, 2011.

~~(5e)~~ For a pollutant that becomes a regulated pollutant subject to OAR 340 division 224 after May 1, 2011, the initial baseline emission rate is the actual emissions of that regulated pollutant during the baseline period ~~any consecutive 12-month period within the 24 months immediately preceding its designation as a regulated pollutant if a baseline period has not been defined for the pollutant.~~

~~(6d)~~ The baseline emission rate will be recalculated only under the following circumstances:

~~(a)~~ For greenhouse gases, if actual emissions are reset in accordance with OAR 340-222-0051(3);

~~the definition of actual emissions.~~

~~(b)~~ ~~Once the baseline emission rate has been established or recalculated in accordance with subsection (d) of this section, the production basis for the baseline emission rate may only be changed if~~ If a material mistake or an inaccurate statement was made in establishing the production basis for the baseline emission rate; or

~~(c)~~ If a more accurate or reliable emission factor is available.

~~(7)~~ The baseline emission rate is not affected if emission reductions are required by rule, order, or permit condition.

NOTE: This rule was moved verbatim from OAR 340-200-0020(13) and (14) and amended in redline/strikeout. This note will not become part of OAR 340-222-0048.

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.040 & 468A.310

Stats. Implemented: ORS 468A

## 340-222-0051

### Actual Emissions

~~(3) "Actual emissions" means the mass emissions of a pollutant from an emissions source during a specified time period.~~

~~(1a) For determining~~ A source's actual emissions as of the baseline period are the sum total of the actual emissions from each part of the source for each regulated pollutant. The actual emissions as of the baseline period will be determined to be:

~~(aA) Except as provided in paragraphs subsections (bB) and (cC) of this subsection and subsection (2b) of this section, actual emissions equal~~ the average rate at which the source actually emitted the regulated pollutant during normal source operations over an applicable baseline period ~~and that represents normal source operation;~~

~~(bB) DEQ presumes that t~~The source's specific mass emissions limit included in a source's permit that was effective on Sep.ember 8, 1981 is equivalent to the source's actual emissions during the applicable baseline period if it is such emissions are within 10% of the actual emissions calculated under paragraph subsection (aA) of this subsection; ~~or~~

~~(cC) Actual emissions equal t~~The potential to emit of the source or part of a source for the sources listed in as specified in paragraphs (Ai) through and (Biii) of this paragraph. The actual emissions will be reset if required in accordance with subsection (3e) of this section.

~~(Ai)~~ Any source or part of a source that had not begun normal operations during the applicable baseline period but was approved to construct and operate before or during the baseline period in accordance with OAR 340 division 210 or 216, or was not required to obtain approval to construct and operate before or during the applicable baseline period; ~~or~~

~~(Biii)~~ Any source or part of a source that will emit of greenhouse gases that had not begun normal operations prior to Jan.uary 1, 2010, but was approved to construct and operate prior to Jan.uary 1, 2011 in accordance with OAR 340 division 210 or 216; ~~or~~

~~(iii) Any source or part of a source that had not begun normal operations during the applicable baseline period and was not required to obtain approval to construct and operate before or during the applicable baseline period.~~

~~(2b) For any source or part of a source or any modification of a source or part of a source that had not begun normal operations during the applicable baseline period, but was approved to construct and operate in accordance with OAR 340 division 210, 216 or 224, actual emissions of the source or part of the source equal the potential to emit of the source or part of the source on the date the source or part of the source was approved to construct and operate. permit is issued equal the potential to emit of the source. The actual emissions will be reset if required in accordance with subsection (c) of this section.~~

(3) For any source or part of a source whose actual emissions of greenhouse gases were determined pursuant to paragraph (1)(c)(B), and for all other sources of all other regulated pollutants that are permitted in accordance with the Major NSR rules in OAR 340 division 224 on or after May 1, 2011, the potential to emit of the source or part of the source will be reset to actual emissions as follows:

~~(c) Where actual emissions equal potential to emit under paragraph (a)(C) or subsection (b) of this section, the potential emissions will be reset to actual emissions as follows:~~

~~(A) Paragraphs (A) through (D) of this subsection apply to sources whose actual emissions of greenhouse gases were determined pursuant paragraph 3(a)(C), and to all other sources of all other regulated pollutants that are permitted in accordance with OAR division 224 on or after May 1, 2011.~~

~~(aB)~~ Except as provided in ~~paragraph subsection (bD)-of this subsection~~, ten years from the end of the applicable baseline period under paragraph (1a)(~~cE~~)(B) or ten years from the date the permit is issued under ~~subsection (2b)~~, or an earlier time if requested by the source in a permit application involving public notice, DEQ will reset actual emissions of the source or part of the source to equal the highest actual emission rate during any consecutive 12-month period during the ten year period or any shorter period if requested by the source. Actual emissions are determined as follows:

(A) The owner or operator must select a consecutive 12-month period and the same 12-month period must be used for all affected regulated pollutants and all affected devices or emissions units; and

(B) The owner or operator must determine the actual emissions during that 12-month period for each device or emissions unit that was subject to Major NSR or Type A State NSR action under OAR 340 division 224, or for which the baseline emission rate is equal to the potential to emit.

~~(bD)~~ DEQ may extend the date of resetting by five additional years upon satisfactory demonstration by the source that construction is ongoing or normal operation has not yet been achieved.

~~(cE)~~ Any emission reductions achieved due to enforceable permit conditions based on OAR 340-226-0110 and 340-226-0120 ~~(highest and best practicable treatment and control)~~ are not included in the reset calculation required in ~~paragraph subsection (aB)-of this subsection~~.

(4) Regardless of the PSEL compliance requirements specified in a permit, actual emissions from a source or part of a source may be calculated for any given 12 consecutive month period using data that is considered valid and representative of the source's or part of a source's emissions. Actual emissions must be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

~~-(d) For determining actual emissions for Emission Statements under OAR 340-214-0200 through 340-214-0220 and Oregon Title V Operating Permit Fees under OAR 340 division 220, actual emissions include, but are not limited to, routine process emissions, fugitive emissions, excess emissions from maintenance, startups and shutdowns, equipment malfunction, and other activities, except categorically insignificant activities and secondary emissions.~~

~~(e) For Oregon Title V Operating Permit Fees under OAR 340 division 220, actual emissions must be directly measured with a continuous monitoring system or calculated using a material balance or verified emission factor determined in accordance with division 220 in combination with the source's actual operating hours, production rates, or types of materials processed, stored, or combusted during the specified time period.~~

NOTE: This rule was moved verbatim from OAR 340-200-0020(3) and amended in redline/strikeout. This note is not become part of OAR 340-222-0051.

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.040 & 468A.310

Stats. Implemented: ORS 468A

## Unassigned Emissions

(1) Purpose. The purpose of unassigned emissions is to track and manage the difference in the quantity of emissions between the netting basis and what the source could emit based on the facility's current physical and operational design.

(2) Establishing unassigned emissions.

(a) Unassigned emissions equal the netting basis minus the source's current PTE, minus any banked emission reduction credits. Unassigned emissions are zero if this result is negative.

(b) Unused capacity created after the effective date of this rule due to reduced potential to emit that is not banked or expired emission reduction credits (OAR 340-268-0030), increase unassigned emissions on a ton for ton basis.

(3) Maximum unassigned emissions.

(a) Except as provided in paragraph (c) ~~of this section~~, unassigned emissions will be reduced to not more than the SER (OAR 340-200-0020 ~~Table 2~~) on July 1, 2007 and at each permit renewal following ~~this~~ that date.

(b) The netting basis is reduced by the amount that unassigned emissions are reduced.

(c) In an AQMA where the EPA requires an attainment demonstration based on dispersion modeling, unassigned emissions are not subject to reduction under this rule.

(4) Using unassigned emissions.

(a) An existing source may use Uunassigned emissions ~~may be used~~ for internal netting to allow an emission increase ~~at the existing source~~ in accordance with the permit.

(b) A source may not bank Uunassigned emissions ~~may not be banked~~ or transferred ~~them~~ to another source.

(c) A source may not use Emissions that are removed from the netting basis, including emission reductions required by rule, order or permit condition under OAR 340-222-0046(3)(a)(C), ~~are unavailable~~ for netting in any future permit actions.

(5) Upon renewal, modification or other reopening of a permit after July 1, 2002 the unassigned emissions will be established with an expiration date of July 1, 2007 for all unassigned emissions in excess of the SER. Each time the permit is renewed after July 1, 2007 the unassigned emissions will be established again and reduced upon the following permit renewal to no more than the SER for each regulated pollutant ~~in OAR 340-200-0020 Table 2.~~

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

~~[ED. NOTE: Tables referenced are available from the agency.]~~

Stat. Auth.: ORS 468.020, [468A.025](#), [468A.040](#) & 468A.310

Stats. Implemented: ORS ~~468~~ & 468A

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

### 340-222-0060

#### Plant Site Emission Limits for Sources of Hazardous Air Pollutants

- (1) ~~The Department~~[DEQ](#) may establish PSELs for hazardous air pollutants (HAPs) if an owner or operator [requests that DEQ](#):
- (a) ~~Elects to e~~[Establish](#) a PSEL for combined HAPs emitted for purposes of determining emission fees as prescribed in OAR 340 division 220; or
- (b) ~~Asks the Department to e~~[Create](#) an enforceable PTE limit.
- (2) PSELs will be set only for individual or combined HAPs and will not list HAPs by name. The PSEL will be set on a rolling 12 month basis and will be either:
- (a) The generic PSEL if the permittee proposes a limit less than that level; or
- (b) The level the permittee establishes necessary for the source if greater than the generic PSEL.
- (3) The ~~A~~[Alternative](#) ~~E~~[Emissions](#) ~~C~~[Controls](#) (~~B~~[Bubble](#)) provisions of OAR 340-226-0400 do not apply to emissions of HAPs.

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

Stat. Auth.: ORS 468.020, [468A.025](#), [468A.040](#) & 468A.310

Stats. Implemented: ORS 468A.~~025~~

Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 19-1996, f. & cert. ef. 9-24-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1050; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-222-0070

#### Plant Site Emission Limits for Insignificant Activities

- (1) ~~For purposes of establishing PSELs, emissions from categorically insignificant activities listed in OAR 340-200-0020 are not considered under 340-222-0020, except as provided in section (3) of this rule.~~
- (2) ~~For purposes of establishing PSELs, emissions from aggregate insignificant emissions listed in OAR 340-200-0020 are considered under 340-222-0020.~~
- (3) ~~For purposes of determining New Source Review or Prevention of Significant Deterioration applicability under OAR 340 division 224, emissions from insignificant activities are considered.~~

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

~~Stat. Auth.: ORS 468 & ORS 468A~~

~~Stats. Implemented: ORS 468.020, ORS 468A.025, ORS 468A.040, & ORS 468A.045.~~

~~Hist.: DEQ 12-1993, f. & cert. ef. 9-24-93; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 2-1996, f. & cert. ef. 1-29-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1060; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01~~

## 340-222-0080

### Plant Site Emission Limit Compliance

- (1) The permittee must monitor regulated pollutant emissions or other parameters that are sufficient to produce the records necessary for demonstrating compliance with the PSEL.
- (2) The frequency of the monitoring and associated averaging periods must be as short as possible and consistent with that used in the compliance method.
- (3)(a) For annual PSELs, the permittee must monitor appropriate parameters and maintain all records necessary for demonstrating compliance with the annual PSEL at least monthly and be able to determine emissions on a rolling 12 consecutive month basis.
- (b) For short term PSELs, the permittee must monitor appropriate parameters and maintain all records necessary for demonstrating compliance with any short term PSEL at least as frequently as the short term PSEL averaging period.
- (4) The applicant must specify in the permit application the method(s) that will be used to ~~for~~ determining compliance with the PSEL. ~~The Department~~ DEQ will review the method(s) and approve or modify, as necessary, to assure compliance with the PSEL. ~~The Department~~ DEQ will include PSEL compliance monitoring methods in all permits that contain PSELs.
- ~~(5)~~ Depending on source operations, one or more of the following methods may be acceptable:
  - (a) Continuous emissions monitors;
  - (b) Material balance calculations;
  - (c) Emissions calculations using approved emission factors and process information;
  - (d) Alternative production or process limits; and
  - (e) Other methods approved by ~~the Department~~ DEQ.
- ~~(6)~~ 5 When annual reports are required, the permittee must include the emissions total for each consecutive 12 month period during the calendar year, unless otherwise specified by a permit condition.

(6) Regardless of the PSEL compliance requirements specified in a permit, actual emissions may be calculated in accordance with OAR 340-222-0051(4).

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

Stat. Auth.: ORS 468.~~020~~, 468A.025, 468A.040 & ~~ORS 468A.310~~

Stats. Implemented: ORS ~~468 & ORS 468A~~

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## **340-222-0090**

### **Combining and Splitting Sources and Changing Primary SIC Code**

(1) When two or more sources combine into one source:

(a) The ~~sum of the netting basis for all the sources is the~~ combined source netting basis. is the sum of the individual sources' netting basis if:

(A) The individual sources have the same primary SIC code or the primary SIC code of one of the sources is a secondary SIC code of the other source;

(B) The combined source has the same primary SIC code as at least one of the primary SIC codes of the individual sources; and

(C) The netting basis of any individual source may only be included in the combined source's netting basis if that individual source has a primary or secondary SIC code that is the same as the primary or a secondary SIC code of the combined source.

(b) The combined source is regulated as one source, except:

(A) ~~†~~The simple act of combining sources, without an increase over the combined PSEL, does not subject the combined source to ~~New Source Review~~NSR.

(B) ~~†~~If the combined source PSEL, without a requested increase over the existing combined PSEL, exceeds the combined netting basis plus the SER, the source may continue operating at the existing combined source PSEL without becoming subject to ~~New Source Review~~NSR until such time that the source requests an increase in the PSEL ~~is requested~~ or the source is modified. If a source requests an increase in the PSEL ~~is requested~~ or the source is modified, ~~the Department~~DEQ will evaluate whether ~~New Source Review~~NSR will be required~~applies~~.

(2) When one source is split into two or more separate sources, or when a source changes its primary activity (primary 2-digit SIC code):

(a) The netting basis and SER may be transferred to one or more ~~te~~-resulting source or sources only if:

(A) The primary 2-digit SIC code of the resulting source is the same as one of the primary or secondary 2-digit SIC codes that applied at the original source; or

(B) The resulting source and the original source have different primary 2-digit SIC codes but DEQ determines the activities described by the two different primary 2-digit SIC codes are essentially the same.

(b)a) The netting basis and the SER for the original source ~~is~~are split amongst the ~~new~~resulting sources as requested by the original permittee.

(c) The amount of the netting basis that is transferred to the resulting source or sources may not exceed the potential to emit of the existing devices or emissions units involved in the split.

(d)b) The split of netting basis and SER must either:

(A) ~~b~~Be sufficient to avoid ~~New Source Review~~NSR for each of the newly created sources; or

(B) ~~t~~The newly created source~~(s)~~ that becomes~~s~~ subject to ~~New Source Review~~NSR must comply with the requirements of OAR 340 division 224 before beginning operation under the new arrangement.

(3) The owner or operator of the source, device or emissions unit must maintain records of physical changes and changes in the method operation occurring since the baseline period or most recent Major NSR or Type A State NSR action under OAR 340 division 224. These records must be included in any future evaluation under OAR 340-224-0025 (major modification).

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.040 & ~~ORS~~ 468A.310

Stats. Implemented: ORS ~~468 & ORS~~ 468A

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01



## DIVISION 224

### ~~MAJOR~~ NEW SOURCE REVIEW

340-224-0010

#### Applicability, ~~and~~ General Prohibitions and Jurisdiction

(1) The owner or operator of a source undertaking one of the following actions must comply with the Major New Source Review requirements of OAR 340-224-0010 through 340-224-0070 for such actions prior to construction or operation:

(a) Construction of a new federal major source;

(b) Major modification at an existing federal major source; or

(c) Major modification at an existing source that will become a federal major source because a regulated pollutant PSEL is increased to the federal major source level or more.

(2) The owner or operator of a source that is undertaking an action that is not subject to Major NSR under section (1) and is one of the actions identified in subsections (a), (b), or (c) must comply with the State New Source Review requirements of OAR 340-224-0010 through 340-224-0038 and 340-224-0245 through 340-224-0270 for such action prior to construction or operation. State NSR actions are categorized as Type A State NSR actions or Type B State NSR actions as defined in OAR 340 division 200 for netting basis purposes.

(a) Construction of a new source that has emissions of a regulated pollutant equal to or greater than the SER and is not a federal major source;

(b) Increasing a regulated pollutant PSEL to an amount that is equal to or greater than the SER at an existing source that is not a federal major source; or

(c) Increasing a regulated pollutant PSEL to an amount that is equal to or greater than the SER at a federal major source where the increase is not the result of a major modification.

~~(3) Within designated nonattainment and maintenance areas, this division applies to owners and operators of proposed major sources and major modifications for the regulated pollutant(s) for which the area is designated nonattainment or maintenance.~~ The owner or operator of a source subject to section (1) or (2) must apply this division based on the type of designated area where the source is located for each regulated pollutant, taking into consideration that every location in the state carries an area designation for each criteria pollutant and the entire state is treated as an unclassified area for regulated pollutants that are not criteria pollutants.

(4) Where this division requires the owner or operator of a source to conduct analysis under or comply with a rule in OAR 340 division 225, the owner or operator must complete such work in compliance with OAR 340-225-0030 and 340-225-0040.

~~(2) Within attainment and unclassifiable areas, this division applies to owners and operators of proposed federal major sources and major modifications at federal major sources for the regulated pollutant(s) for which the area is designated attainment or unclassified.~~

(53) Owners and operators of all sources ~~that do not meet the applicability criteria of sections (1) or (2) of this rule~~ may be subject to other ~~Department~~ DEQ rules, including, but not limited to, Notice of Construction and Approval of Plans (OAR 340-210-0205 through 340-210-0250), ACDPs (OAR 340 division 216), Title V permits (OAR 340 division 218), Highest and Best Practicable Treatment and Control Required (OAR 340-226-0100 through 340-226-0140), Notice of Construction and Approval of Plans (340-210-0205 through 340-210-0250), ACDPs (OAR 340 division 216), Emission Standards for Hazardous Air Contaminants (OAR 340 division 244), and Standards of Performance for New Stationary Sources (OAR 340 division 238), as applicable.

(64) ~~No~~ An owner or operator of a source that meets the applicability criteria of sections (1) or (2) ~~of this rule~~ may not begin actual construction, continue construction or operate the source without ~~having received~~ complying with the requirements of this division and an air contaminant discharge permit (ACDP) issued by ~~from the Department~~ DEQ authorizing such construction and operation ~~and having satisfied the requirements of this division~~.

(75) ~~Beginning May 1, 2011,~~ The pollutant GHGs is subject to regulation at a source that commences construction after May 1, 2011 if:

(a) The source is a new federal major source for a regulated pollutant that is not GHGs, and also emits, will emit or will have the potential to emit 75,000 tons per year CO<sub>2</sub>e or more; or

(b) The source is or becomes a federal major source subject to OAR 340-224-0070 as a result of a major modification for a regulated pollutant that is not GHGs, and will have an emissions increase of 75,000 tons per year CO<sub>2</sub>e or more over the netting basis.

(86) ~~Beginning July 1, 2011,~~ In addition to the provisions in section (65) ~~of this rule~~, the pollutant GHGs ~~shall~~ must also be subject to regulation at a source that commences construction after July 1, 2011 and is:

(a) A new federal major source; or

(b) An existing source that is or becomes a federal major source when such source undertakes a major modification.

(97) Subject to the requirements in this division, ~~the Lane Regional Air Protection Agency~~ LRAPA is designated by the ~~Commission~~ EQC as the permitting agency to implement the ~~Oregon Major New Source Review~~ NSR and State NSR program within its area of jurisdiction. ~~The Regional Agency~~ LRAPA's program is subject to ~~Department~~ DEQ oversight. The requirements and procedures contained in this division pertaining to the Major ~~New Source Review~~ NSR and State NSR program ~~shall~~ must be used by ~~the Regional Agency~~ LRAPA to implement its permitting program ~~until the Regional Agency unless LRAPA has adopted or~~ adopts superseding rules which are at least as ~~restrictive~~ strict as ~~state rules~~ this division.

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.040, 468A.050, 468A.055, 468A.135 & 468A.155

Stats. Implemented: ORS 468A.025

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0220; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 26-1996, f. & cert. ef. 11-26-96;

DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1900; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 1-2004, f. & cert. ef. 4-14-04; DEQ 10-2010(Temp), f. 8-31-10, cert. ef. 9-1-10 thru 2-28-11; Administrative correction, 3-29-11; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

## 340-224-0020

### Definitions

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

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

Stat. Auth.: ORS 468.020 & [468A](#)

Stats. Implemented: ORS 468A.025

Hist.: DEQ 14-1999, f. & cert. ef. 10-14-99

## [340-224-0025](#)

### [Major Modification](#)

~~(7) Except as provided in section (5), "Major Modification" means any physical change at a source described in or change in the method of operation of a source that results in satisfying the requirements of both subsections (2a) and (b) of this section, or of subsection (3e) of this section for any regulated air pollutant subject to NSR since the later of:~~

[\(a\) The baseline period for all regulated pollutants except PM2.5;](#)

[\(b\) May 1, 2011 for PM2.5; or](#)

[\(c\) The most recent NSR permitting action for that regulated pollutant that allowed for a change to the netting basis under OAR 340-222-0046\(3\)\(e\).](#) ~~Major modifications for ozone precursors or PM2.5 precursors also constitute major modifications for ozone and PM2.5, respectively.~~

[\(2\)\(a\) Any physical change or change in the method of operation of a source that results in emissions described in paragraphs \(A\) and \(B\);](#) ~~Except as provided in subsection (d) of this section, a~~

[\(A\) A PSEL or actual emissions](#) that exceeds the netting basis by an amount that is equal to or greater than the ~~significant emission rate~~ [SER](#); and

~~(b) B~~ The accumulation of emission increases due to physical changes and changes in the method of operation ~~as determined in accordance with paragraphs (A) and (B) of this subsection that~~ is equal to or greater than the ~~significant emission rate~~ [SER](#). [For purposes of this paragraph,](#)

~~(A) Calculations of emission increases in subsection (b) shall be calculated as follows: of this section must account for all accumulated increases in actual emissions due to~~ [For each unit with a physical changes and or](#)

changes in the method of operation occurring at the source since the later of the dates in subsections (1)(a) through (1)(c) as applicable for each pollutant, subtract the unit's portion of the netting basis from its post-change potential to emit taking into consideration any federally enforceable limits on potential to emit, applicable baseline period, or since the time of the last construction approval issued for the source pursuant to the New Source Review Regulations in OAR 340 division 224 for that pollutant, whichever time is more recent. These include fugitive emissions and emissions from insignificant activities. Emissions from categorically insignificant activities, aggregate insignificant emissions, and fugitive emissions must be included in the calculations.

~~(bB)~~ For purposes of this section:

(A) Emission increases due solely to increased use of equipment or facilities that existed or were permitted or approved to construct in accordance with OAR 340 division 210 during the applicable baseline period are not included, except if the increased use is to support a physical change or change in the method of operation.

~~(Bd)~~ If a portion of the netting basis or PSEL ~~(or both)~~ was set based on PTE because the source had not begun normal operations but was permitted or approved to construct and operate, that portion of the netting basis or PSEL ~~(or both)~~ must be excluded ~~from the tests in subsections (a) and (b) of this section~~ until the netting basis is reset as specified in OAR 340-222-0046(3)(d) and 340-222-0051(3) ~~the definitions of baseline emission rate and netting basis.~~

(3e) For a source that obtained a permit to construct and operate after the applicable baseline period but has not undergone Major NSR or Type A State NSR action under OAR 340 division 224, A any change ~~at a source,~~ including production increases, that would result in a ~~Plant Site Emission Limit~~ PSEL increase of 1 ton or more for any regulated pollutant at a federal major source in attainment, unclassified or sustainment areas or for any regulated pollutant for which the source is a major source in nonattainment, reattainment, or maintenance areas ~~or a federal major source in attainment or unclassified areas, if the source obtained permits to construct and operate after the applicable baseline period but has not undergone New Source Review.~~

~~(aA)~~ Sub This section ~~(e) of this section~~ does not apply to PM2.5 and greenhouse gases.

~~(bB)~~ Changes to the PSEL solely due to the availability of ~~better~~ more accurate and reliable emissions information are exempt from being considered an increase under this section.

(4) Major modifications for ozone precursors or PM2.5 precursors also constitute major modifications for ozone and PM2.5, respectively.

(5e) The following are not ~~considered~~ major modifications:

~~(aA)~~ Except as provided in ~~subsection (3e) of this section,~~ ~~proposed~~ increases in hours of operation or production rates that would cause emission increases above the levels allowed in a permit ~~and but~~ would not involve a physical change or change in method of operation ~~in of~~ the source.;

~~(bB)~~ Routine maintenance, repair, and replacement of components.;

~~(cC)~~ Temporary equipment installed for maintenance of the permanent equipment if the temporary equipment is in place for less than six months and operated within the permanent equipment's existing PSEL.;

~~(d)~~ Use of alternate fuel or raw materials, that were available during, and that the source ~~was~~ would have been capable of accommodating in the baseline period.

(6) When more accurate or reliable emissions information becomes available, a recalculation of the PSEL, netting basis, and increases/decreases in emissions must be performed to determine whether a major modification has occurred.

NOTE: This rule was moved verbatim from OAR 340-200-0020(71) and amended in redline/strikeout. This note will not become part of OAR 340-224-0025.

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.035, 468A.040, 468A.050, 468A.055 & 468A.070

Stats. Implemented: ORS 468A

### 340-224-0030

#### New Source Review **Procedural Requirements**

(1) Information Required. The owner or operator of a ~~proposed major source or major modification source~~ subject to NSR under OAR 340-224-0010 must submit an application and all information ~~the Department~~ DEQ needs to perform any analysis or make any determination required under this division and OAR 340 division 225. The information must be in writing on forms supplied or approved by ~~the Department~~ DEQ and include the information required to apply for a permit or permit modification under:

(a) ~~Standard ACDP as detailed in~~ OAR 340 division 216; for Major NSR or Type A State NSR action; or

(b) OAR 340 division 216 or 218, whichever is applicable, for Type B State NSR actions.

~~(2)~~ 3 Application Processing:

(a) For Type B State NSR actions, DEQ will review applications and issue permits using the procedures in OAR 340 division 216 or 218, whichever is applicable.

(b) For Major NSR and Type A State NSR actions:

(Aa) Notwithstanding the requirements of OAR 340-216-0040(11), ~~W~~within 30 days after receiving an ACDP permit application to construct, or any additional information or amendment to such application, ~~the Department~~ DEQ will advise the applicant whether the application is complete or if there is ~~of~~ any deficiency in the application or in the information submitted. For purposes of this section, ~~the date the Department received a complete~~ an application is complete as of the date on which ~~the Department~~ DEQ received all required information;

(Bb) Upon determining that an application is complete, DEQ will undertake the public participation procedures in OAR 340 division 209 for a Category IV permit action; and

~~(Ce) Notwithstanding the requirements of OAR 340-216-0040 or 340-218-0040, concerning permit application requirements, the Department~~ DEQ will make a final determination on the application within ~~six~~ twelve months after receiving a complete application. ~~This involves performing the following actions in a timely manner:~~

~~(A) Making a preliminary determination whether construction should be approved, approved with conditions, or disapproved;~~

~~(B) Making the proposed permit available in accordance with the public participation procedures required by OAR 340 division 209 for Category IV. Extension of Construction Permits beyond the 18-month time period in paragraph (2)(a) of this rule are available in accordance with the public participation procedures required by Category II in lieu of Category IV.~~

~~(32) Other Obligations:~~

~~(a) An ACDP that approves construction must require construction to commence within 18 months of issuance. Construction Approval to construct becomes terminates and is~~ invalid if construction is not commenced within 18 months after the Department DEQ issues such approval, or by the deadline approved by DEQ in an extension under section (5). Construction approval also terminates and is invalid if construction is discontinued for a period of 18 months or more, or if construction is not completed within 18 months of the scheduled time. The Department may extend the 18-month period for good cause. An ACDP may approve a phased construction project with separate construction approval dates for each subsequent phase and, for purposes of applying this section, the construction approval date for the second and subsequent phases will be treated as the construction approval issuance date. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date;

(4) An owner or operator that obtained approval of a project under this division must obtain approval for a revision to the project according to the permit application requirements in this division and OAR 340 division 216 or 218, whichever is applicable, prior to initiating the revision. If construction has commenced, the owner or operator must temporarily halt construction until a revised permit is issued. The following are considered revisions to the project that would require approval:

(a) A change that would increase permitted emissions;

(b) A change that would require a re-evaluation of the approved control technology; or

(c) A change that would affect the air quality analysis.

(5) DEQ may grant, for good cause, two 18-month construction approval extensions for Major NSR or Type A State NSR actions as follows:

(a) For the first extension, the owner or operator must submit an application to modify the permit that includes the following:

(A) A LAER or BACT analysis, as applicable, if any new control technologies have become commercially available since the original LAER or BACT analysis for the original regulated pollutants subject to Major NSR or Type A State NSR; and

(B) Payment of the moderate technical permit modification fee in OAR 340-216-8020 Part 3.

(b) For the second extension, the owner or operator must submit an application to modify the permit that includes the following for the original regulated pollutants subject to Major NSR or Type A State NSR:

(A) A review of the original LAER or BACT analysis for potentially lower limits and a review of any new control technologies that may have become commercially available since the original LAER or BACT analysis;

(B) A review of the air quality analysis to address any of the following:

(i) All ambient air quality standards and PSD increments that were subject to review under the original application;

(ii) Any new competing sources or changes in ambient air quality since the original application was submitted;

(iii) Any new ambient air quality standards and PSD increments for the regulated pollutants that were subject to review under the original application; and

(iv) Any changes to EPA approved models that would affect modeling results since the original application was submitted, and

(C) Payment of the moderate technical permit modification fee plus the modeling review fee in OAR 340-216-8020 Part 3.

(c) The permit will be terminated 54 months after it was initially issued if construction does not commence during that 54 month period. If the owner or operator wants approval to construct beyond the termination of the permit, the owner or operator must submit an application for a new Major NSR or Type A State NSR permit.

(d) If construction is commenced prior to the date that construction approval terminates, the permit can be renewed or the owner or operator may apply for a Title V permit as required in OAR 340-218-0190.

(e) To request a construction approval extension under subsection (a) or (b), the owner or operator must submit an application to modify the permit at least 30 days but not more than 90 days prior to the end of the current construction approval period.

(f) Construction may not commence during the period from the end of the preceding construction approval to the time DEQ approves the next extension.

(g) DEQ will make a proposed permit modification available using the following public participation procedures in OAR 340 division 209:

(i) Category II for an extension that does not require an air quality analysis; or

(ii) Category III for an extension that requires an air quality analysis.

(h) DEQ will grant a permit modification extending the construction approval for 18 months from the end of the first or second 18-month construction approval period, whichever is applicable, if:

(A) Based on the information required to be submitted under subsection (a) or (b), DEQ determines that the proposed source will continue to meet NSR requirements; and



(B) For a second extension, the area impacted by the source has not been redesignated subsequent to the permit issuance date from attainment to sustainment or nonattainment, or from sustainment to nonattainment.

~~(6b)~~ Approval to construct does not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the ~~State Implementation Plan~~SIP and any other requirements under local, state or federal law;

(7e) Sources that are subject to OAR 340 division 218, Oregon Title V Permits, are subject to the following:

(a) Except as prohibited in section (b), Aapproval to construct a source under an ACDP issued under ~~paragraph (3)(b) of this rule~~OAR 340 division 216 authorizes construction and operation of the source, ~~except as prohibited in subsection (d) of this rule,~~until the later of:

(A) One year from the date of initial startup of operation of the ~~major~~-source subject to Major NSR or Type A State NSR under OAR 340-224-0010~~or major modification~~; or

(B) If a timely and complete application for an Oregon Title V Operating Permit is submitted, the date of final action by ~~the Department~~DEQ on the Oregon Title V Operating Permit application.

~~(b)~~ Where an existing Oregon Title V Operating Permit ~~would~~prohibits construction or a change in operation, the owner or operator must obtain a Title V permit revision before commencing the construction, continuing the construction or making the change in operation.

### ~~(3) Application Processing:~~

~~(a) Within 30 days after receiving an application to construct, or any addition to such application, the Department will advise the applicant of any deficiency in the application or in the information submitted. For purposes of this section, the date the Department received a complete application is the date on which the Department received all required information;~~

~~(b) Notwithstanding the requirements of OAR 340-216-0040 or 340-218-0040, concerning permit application requirements, the Department will make a final determination on the application within six months after receiving a complete application. This involves performing the following actions in a timely manner:~~

~~(A) Making a preliminary determination whether construction should be approved, approved with conditions, or disapproved;~~

~~(B) Making the proposed permit available in accordance with the public participation procedures required by OAR 340 division 209 for Category IV. Extension of Construction Permits beyond the 18-month time period in paragraph (2)(a) of this rule are available in accordance with the public participation procedures required by Category II in lieu of Category IV.~~

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.035, 468A.040, 468A.050, 468A.055 & 468A.070

Stats. Implemented: ORS 468A.~~025~~

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 18-1984, f. & ef. 10-16-84; DEQ 13-1988, f. & cert. ef. 6-17-88; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0230;



DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 24-1994, f. & cert. ef. 10-28-94; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 26-1996, f. & cert. ef. 11-26-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1910; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 1-2004, f.& cert. ef. 4-14-04

**340-224-00~~80~~34**

## Exemptions

Temporary emission sources that would be in operation at a site for less than two years, such as pilot plants and portable facilities, and emissions resulting from the construction phase of a ~~new~~-source subject to Major NSR or a Type A State NSR action under OAR 340-224-0010 ~~or modification~~ must comply with only the control technology requirements in the applicable section ~~OAR 340-224-0050(1), 340-224-0060(1) or 340-224-0070(1), whichever is applicable~~, but are exempt from the remaining requirements of the applicable sections 340-224-0050, 340-224-0060 and 340-224-0070 provided that the source subject to Major NSR or a Type A State NSR action under OAR 340-224-0010 ~~or modification~~ would not impact a Class I area or an area with a known violation of a ~~National A~~mbient ~~A~~ir ~~Q~~uality ~~S~~tandard or an ~~applicable~~ PSD increment ~~as defined in OAR 340 division 202~~.

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the EQC~~ that EQC adopted under OAR 340-020-0040~~7~~.

NOTE: This rule was moved verbatim from OAR 340-224-0080 and amended in redline/strikeout. This note will not become part of OAR 340-224-0034.

Stat. Auth.: ORS 468.020, 468A.025, 468A.035, 468A.040, 468A.050, 468A.055 & 468A.070

Stats. Implemented: ORS ~~468 &~~ 468A

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0250; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1950; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 1-2004, f.& cert. ef. 4-14-04

**340-224-~~0100~~0038**

## Fugitive and Secondary Emissions

Fugitive emissions are included in the calculation of emission rates of all air contaminants. Fugitive emissions are subject to the same control requirements and analyses required for emissions from identifiable stacks or vents. Secondary emissions are not included in calculations of potential emissions that are made to determine if a ~~proposed~~-source or modification is subject to NSR under OAR 340-224-0010 ~~major~~. Once a source is subject to NSR under OAR 340-224-0010 ~~or modification is identified as being major~~, secondary emissions ~~are added to the primary emissions and also~~ become subject to the air quality impact analysis requirements in this division and OAR 340 division 225.

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

NOTE: This rule was moved verbatim from OAR 340-224-0100 and amended in redline/strikeout. This note will not become part of OAR 340-224-0038.

Stat. Auth.: ORS 468.020, 468A.025, 468A.035, 468A.040, 468A.050, 468A.055 & ~~ORS~~ 468A.070

Stats. Implemented: ORS ~~468 & ORS~~ 468

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0270; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1990; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### Major New Source Review

#### **340-224-0040**

#### **Review of ~~New Sources and Modifications~~ Sources Subject to Major NSR for Compliance With Regulations**

The owner or operator of a ~~proposed major source or major modification~~ source subject to Major NSR under OAR 340-224-0010 must demonstrate the ability of the ~~proposed source or modification~~ to comply with all applicable air quality requirements of ~~the Department~~ DEQ.

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.035, 468A.040, 468A.050, 468A.055 & 468A.070

Stats. Implemented: ORS 468A.~~025~~

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0235; DEQ 26-1996, f. & cert. ef. 11-26-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1920; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

#### **340-224-0045**

#### **Requirements for Sources in Sustainment Areas**

Within a designated sustainment area, a source subject to Major NSR under OAR 340-224-0010 must meet the requirements listed below for each sustainment pollutant:

(1) OAR 340-224-0070; and

(2) Demonstrate a net air quality benefit under OAR 340-224-0510 and 340-224-0520 for ozone sustainment areas or under OAR 340-224-0510 and 340-224-0530(4) for non-ozone sustainment areas, whichever is applicable, unless the source can demonstrate that the impacts are less than the significant impact levels at all receptors within the sustainment area.

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.035, 468A.040, 468A.050, 468A.055 & 468A.070

Stats. Implemented: ORS 468A

## **340-224-0050**

### **Requirements for Sources in Nonattainment Areas**

Within a designated nonattainment area, and when referred to this rule by other rules in this division, a source subject to Major NSR under OAR 340-224-0010 ~~proposed major sources and major modifications of a nonattainment pollutant, including VOC or NO<sub>x</sub> in a designated ozone nonattainment area SO<sub>2</sub> or NO<sub>x</sub> in a designated PM<sub>2.5</sub> nonattainment area,~~ must meet the requirements listed below for each nonattainment pollutant:

(1) Lowest Achievable Emission Rate (LAER). The owner or operator of the source must apply LAER for each nonattainment pollutant ~~or precursor(s)~~ emitted at or above the ~~significant emission rate (SER)~~. LAER applies separately to the nonattainment pollutant ~~or precursor(s)~~ if emitted at or above a SER over the netting basis.

(a) For a major modification, the requirement for LAER applies to the following:

(A) Each emissions unit that emits the nonattainment pollutant ~~or precursor(s)~~ and is not included in the most recent netting basis established for that pollutant; and

(B) Each emissions unit that emits the nonattainment pollutant ~~or precursor(s)~~ and is included in the most recent netting basis and contributed to the emissions increase calculated in OAR 340-224-0025(2)(a)(B) ~~but has been modified and the modification resulted in an increase in actual emissions above the portion of the most recent netting basis attributable to the emissions unit~~ for the nonattainment pollutant or precursor(s).

(b) For phased construction projects, the LAER determination must be reviewed at the latest reasonable time before commencing construction of each independent phase.

(c) When determining LAER for a change that was made at a source before the current Major NSR application, ~~the Department~~ DEQ will consider technical feasibility of retrofitting required controls provided:

(A) The physical change or change in the method of operation at a unit that contributed to the emissions increase calculated in OAR 340-224-0025(2)(a)(B) was made in compliance with Major NSR requirements in effect when the change was made, and

(B) No limit will be relaxed that was previously relied on to avoid Major NSR.

(d) Physical changes or changes in the method of operation ~~Modifications~~ to individual emissions units that contributed to the emissions increase calculated in OAR 340-224-0025(2)(a)(B) but that increased the potential to emit less than 10 percent of the SER are exempt from this section unless:

(A) They are not constructed yet;

(B) They are part of a discrete, identifiable, larger project that was constructed within the previous 5 years and that resulted in emission increases is equal to or greater than 10 percent of the SER; or

(C) They were constructed without, or in violation of, ~~the Department~~ DEQ's approval.

(2) Air Quality Protection:

(a) Air Quality Analysis: The owner or operator of the source must comply with OAR 340-225-0050(4) and 340-225-0070 if the source has emissions that are equal to or greater than:

(A) 100 tons per year if in a source category listed in OAR 340-200-0020(66)(e); or

(B) 250 tons per year if not in a source category listed in OAR 340-200-0020(66)(e).

(b) Net Air Quality Benefit: The owner or operator of the source must demonstrate net air quality benefit using offsets under OAR 340-224-0510 and 340-224-0520 for ozone nonattainment areas or under OAR 340-224-0510 and 340-224-0530(2) and (5) for non-ozone nonattainment areas, whichever is applicable.

(3) Sources Impacting Other Designated Areas: The owner or operator of any source that will have a significant impact on air quality in a designated area other than the one the source is locating in must also meet the following requirements for demonstrating net air quality benefit, as applicable:

(a) The owner or operator of any source that emits an ozone precursor (VOC or NOx) at or above the SER is considered to have a significant impact if located within 100 kilometers of a designated ozone area, and must also meet the requirements for demonstrating net air quality benefit under OAR 340-224-0510 and 340-224-0520 for ozone designated areas.

(b) The owner or operator of any source that emits any criteria pollutant, other than NOx as an ozone precursor, at or above the SER and has a significant impact greater than the Class II SIL on another designated area must also meet the requirements for demonstrating net air quality benefit under OAR 340-224-0510 and OAR 340-224-0540 for designated areas other than ozone designated areas.

~~(2) Offsets and Net Air Quality Benefit. The owner or operator must obtain offsets and demonstrate that a net air quality benefit will be achieved as specified in OAR 340-225-0090.~~

~~(34) Additional Requirements~~ The owner or operator of the source must:

~~(a) The owner or operator of a source that emits or has the potential to emit 100 tons per year or more of any regulated pollutant subject to this division must~~ evaluate alternative sites, sizes, production processes, and environmental control techniques for the proposed source or major modification and demonstrate that benefits of the proposed source or major modification will significantly outweigh the environmental and social costs imposed as a result of its location, construction or modification.

~~(b) The owner or operator of a source that emits or has the potential to emit 100 tons per year or more of any regulated pollutant subject to this division must~~ demonstrate that all federal major sources owned or operated by such person (or by an entity controlling, controlled by, or under common control with such person) in the state are in compliance, or are on a schedule for compliance, with all applicable emission limitations and standards under the ~~Act~~ FCAA.

~~(c) The owner or operator of a federal major source must meet the visibility impact requirements in OAR 340-225-0070.~~

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

Stat. Auth.: ORS 468.020, [468A.025](#), [468A.035](#), [468A.040](#), [468A.050](#), [468A.055](#) & [468A.070](#)

Stats. Implemented: ORS 468A-~~025~~

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 5-1983, f. & ef. 4-18-83; DEQ 27-1992, f. & cert. ef. 11-12-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0240; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 26-1996, f. & cert. ef. 11-26-96; DEQ 16-1998, f. & cert. ef. 9-23-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1930; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 1-2004, f. & cert. ef. 4-14-04; DEQ 3-2007, f. & cert. ef. 4-12-07; DEQ 10-2010(Temp), f. 8-31-10, cert. ef. 9-1-10 thru 2-28-11; Administrative correction, 3-29-11; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

### 340-224-0055

#### Requirements for Sources in Reattainment Areas

Within a designated reattainment area, a source subject to Major NSR under OAR 340-224-0010 must meet the requirements listed below for each reattainment pollutant:

(1) OAR 340-224-0050, treating the reattainment pollutant as a nonattainment pollutant for that rule; and

(2) The owner or operator must demonstrate that it will not cause or contribute to a new violation of an ambient air quality standard or PSD increment in OAR 340 division 202 by conducting the analysis under OAR 340-225-0050.

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

Stat. Auth.: ORS 468.020, [468A.025](#), [468A.035](#), [468A.040](#), [468A.050](#), [468A.055](#) & [468A.070](#)

Stats. Implemented: ORS [468A](#)

### **340-224-0060**

#### **Requirements for Sources in Maintenance Areas**

Within a designated maintenance area, ~~proposed major sources and major modifications of a maintenance pollutant, including VOC or NOx in a designated ozone maintenance area or SO2 or NOx in a designated PM2.5 maintenance area,~~ a source subject to Major NSR under OAR 340-224-0010 must meet the requirements listed below for each maintenance pollutant:

(1) OAR 340-224-0070; and

(2) Net Air Quality Benefit: Except for sources described in section (7), the owner or operator of the source must demonstrate net air quality benefit by satisfying one of the requirements listed below:

(a) Obtain offsets using OAR 340-224-0510 and 340-224-0520 for ozone maintenance areas or OAR 340-224-0510 and 340-224-0530(3) for non-ozone maintenance areas, whichever is applicable;

(b) Comply with the limits in OAR 340-202-0225 by performing the analysis specified in OAR 340-225-0045;

~~(1) Best Available Control Technology (BACT). Except as provided in section (5) and (6) of this rule, the owner or operator must apply BACT for each maintenance pollutant or precursor(s) emitted at or above a significant emission rate (SER). BACT applies separately to the maintenance pollutant or precursor(s) if emitted at or above a SER over the netting basis.~~

~~(a) For a major modification, the requirement for BACT applies to the following:~~

~~(A) Each emissions unit that emits the maintenance pollutant or precursor(s) and is not included in the most recent netting basis established for that pollutant; and~~

~~(B) Each emissions unit that emits the maintenance pollutant or precursor (s) and is included in the most recent netting basis but has been modified and the modification resulted in an increase in actual emissions above the portion of the most recent netting basis attributable to the emissions unit or the maintenance pollutant or precursor(s);~~

~~(b) For phased construction projects, the BACT determination must be reviewed at the latest reasonable time before commencement of construction of each independent phase.~~

~~(c) When determining BACT for a change that was made at a source before the current NSR application, the technical and economic feasibility of retrofitting required controls may be considered, provided:~~

~~(A) The change was made in compliance with NSR requirements in effect when the change was made; and~~

~~(B) No limit is being relaxed that was previously relied on to avoid NSR.~~

~~(d) Modifications to individual emissions units that increase the potential to emit less than 10 percent of the significant emission rate are exempt from this section unless:~~

~~(A) They are not constructed yet;~~

~~(B) They are part of a discrete, identifiable larger project that was constructed within the previous 5 years and that is equal to or greater than 10 percent of the significant emission rate; or~~

~~(C) They were constructed without, or in violation of, the Department's approval.~~

~~(2) Air Quality Protection:~~

~~(a) Offsets and Net Air Quality Benefit. Except as provided in subsections (b), (c), (d) and (e) of this section, the owner or operator must obtain offsets and demonstrate that a net air quality benefit will be achieved in the area as specified in OAR 340-225-0090.~~

~~(b)~~ (c) Obtain an allocation from a growth allowance. The requirements of this section may be met in whole or in part in an ozone or carbon monoxide maintenance area with an allocation by ~~the Department~~ DEQ from a growth allowance, if available, ~~in accordance with~~ under the applicable maintenance plan in the SIP adopted by the ~~Commission~~ EQC and approved by EPA. ~~An allocation from a growth allowance used to meet the requirements of this section is not subject to OAR 340-225-0090.~~ Procedures for allocating the growth allowances for the Oregon portion of the Portland-Vancouver Interstate Maintenance Area for Ozone and the Portland Maintenance Area for Carbon Monoxide are contained in OAR 340-242-0430 and 340-242-0440.

~~(c) In a carbon monoxide maintenance area, a proposed carbon monoxide major source or major modification is exempt from subsections (a) and (b) of this section if the owner or operator can demonstrate that the source or modification will not cause or contribute to an air quality impact equal to or greater than 0.5 mg/m<sup>3</sup> (8-hour average) and 2 mg/m<sup>3</sup> (1-hour average). The demonstration must comply with the requirements of OAR 340-225-0045.~~

~~(d) In a PM<sub>10</sub> maintenance area, a proposed PM<sub>10</sub> major source or major modification is exempt from subsection (a) of this section if the owner or operator can demonstrate, pursuant to the requirements of OAR 340-225-0045, that the source or modification will not cause or contribute to an air quality impact in excess of:~~

~~(A) 120 ug/m<sup>3</sup> (24-hour average) or 40 ug/m<sup>3</sup> (annual average) in the Grants Pass PM<sub>10</sub> maintenance area;~~

~~(B) 140 ug/m<sup>3</sup> (24-hour average) or 47 ug/m<sup>3</sup> (annual average) in the Klamath Falls PM<sub>10</sub> maintenance area;~~  
~~or~~

~~(C) 140 ug/m<sup>3</sup> (24-hour average) or 45 ug/m<sup>3</sup> (annual average) in the Lakeview PM<sub>10</sub> maintenance area. In addition, a single source impact is limited to an increase of 5 ug/m<sup>3</sup> (24-hour average) in the Lakeview PM<sub>10</sub> maintenance area.~~

~~(e) Proposed major sources and major modifications located in or that impact the Salem Ozone Maintenance Area are exempt from OAR 340-225-0090 and section (2)(a) of this rule for VOC and NO<sub>x</sub> emissions with respect to ozone formation in the Salem Ozone Maintenance Area.~~

~~(3) The owner or operator of a source subject to this rule must provide an air quality analysis in accordance with OAR 340-225-0050(1) and (2), and 340-225-0060.~~

~~(4) Additional Requirements for Federal Major Sources: The owner or operator of a federal major source subject to this rule must provide an analysis of the air quality impacts for the proposed source or modification in accordance with OAR 340-225-0050(3) and 340-225-0070. In addition to the provisions of this section, provisions of section 340-224-0070 also apply to federal major sources.~~

(3) Sources Impacting Other Designated Areas: The owner or operator of any source that will have a significant impact on air quality in a designated area other than the one the source is locating in must also meet the following requirements for demonstrating net air quality benefit, as applicable:

(a) The owner or operator of any source that emits an ozone precursor (VOC or NO<sub>x</sub>) at or above the SER is considered to have a significant impact if located within 100 kilometers of a designated ozone area, and must also meet the requirements for demonstrating net air quality benefit under OAR 340-224-0510 and 340-224-0520 for ozone designated areas.



(b) The owner or operator of any source that emits any criteria pollutant, other than NO<sub>x</sub> as an ozone precursor, at or above the SER and has a significant impact greater than the Class II SIL on another designated area must also meet the requirements for demonstrating net air quality benefit under OAR 340-224-0510 and OAR 340-224-0540 for designated areas other than ozone designated areas.

~~(45)~~ Contingency Plan Requirements. If the contingency plan in an applicable maintenance plan is implemented due to a violation of an ambient air quality standard, this section applies in addition to other requirements of this rule until the ~~EQC Commission~~ adopts a revised maintenance plan and EPA approves it as a SIP revision.

~~(a) The requirement for BACT in section (1) of this rule is replaced by the requirement for LAER contained in OAR 340-224-0050(1). The source must comply with the LAER requirement in OAR 340-224-0050(1) in lieu of the BACT requirement in section (1); and~~

~~(b) An allocation from a growth allowance may not be used to meet the requirement for offsets in section (2) of this rule.~~

~~(be) The source must comply with the net air quality benefit requirement in subsection (2)(a) and may not apply the exemption alternatives provided in subsections (2)(b) and (2)(c) and (2)(d) of this rule for major sources or major modifications within a carbon monoxide or PM<sub>10</sub> maintenance area no longer applies.~~

~~(56)~~ Medford-Ashland AQMA: ~~Proposed major~~ A sources ~~and major modifications~~ that would emit PM<sub>10</sub> within the Medford-Ashland AQMA must meet the LAER emission control technology requirements in OAR 340-224-0050.

~~(67)~~ Pending Redesignation Requests. This rule does not apply to a ~~proposed major source or major modification~~ for which a complete application to construct was submitted to ~~the Department~~ DEQ before the maintenance area was redesignated from nonattainment to attainment by EPA. Such a source is subject to OAR 340-224-0050 or OAR 340-224-0055, whichever is applicable.

(7) The following sources are exempt from net air quality benefit under section (2) as follows:

(a) Sources within or affecting the Medford Ozone Maintenance Area are exempt from the requirement for NO<sub>x</sub> offsets relating to ozone formation; and

(b) Sources within or affecting the Salem Ozone Maintenance Area are exempt from the requirement for VOC and NO<sub>x</sub> offsets relating to ozone formation.

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

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.035, 468A.040, 468A.050, 468A.055 & 468A.070

Stats. Implemented: ORS 468A.~~025~~

Hist.: DEQ 26-1996, f. & cert. ef. 11-26-96; DEQ 15-1998, f. & cert. ef. 9-23-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1935; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 1-2005, f. & cert. ef. 1-4-05; DEQ 9-2005, f. & cert. ef. 9-9-05; DEQ 3-2007, f. & cert. ef. 4-12-07; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11



## Prevention of Significant Deterioration Requirements for Sources in Attainment or Unclassified Areas

Within a designated attainment or unclassified area, and when referred to this rule by other rules in this division, a source that is subject to Major NSR under OAR 340-224-0010 ~~proposed federal major sources and major modifications at federal major sources for the pollutant(s) for any regulated pollutant, other than nonattainment pollutants and reattainment pollutants, for which the area is designated attainment or unclassified,~~ must meet the requirements listed below for each such pollutant:

### (14) (a) Preconstruction Air Quality Monitoring:

~~(a)(A) When referred to this rule by division 224, t~~The owner or operator of a source must submit with the application an analysis of ambient air quality in the area impacted by the proposed project. ~~This analysis, which is subject to the Department's approval, must be conducted~~ for each regulated pollutant subject to this rule potentially emitted at a significant emission rate by the proposed source or modification except as allowed by paragraph (B).

(i) The analysis must include continuous air quality monitoring data for any regulated pollutant that may be emitted by the source ~~or modification~~, except for volatile organic compounds.

(ii) The data must relate to the year preceding receipt of the complete application and must have been gathered over the same time period.

(iii) ~~The Department~~ DEQ may allow the owner or operator to demonstrate that data gathered over some other time period would be adequate to determine that the source ~~or modification~~ would not cause or contribute to a violation of an ambient air quality standard or any applicable ~~pollutant~~ PSD increment.

(iv) When PM10/PM2.5 preconstruction monitoring is required by this section, at least four months of data must be collected, including the season DEQ judges to have the highest PM10/PM2.5 levels. PM10/PM2.5 must be measured using 40 CFR Part 50, Appendices J and L. In some cases, a full year of data will be required.

(v) ~~Pursuant to the requirements of these rules, t~~The owner or operator must submit ~~for the Department's approval,~~ a written preconstruction air quality monitoring plan. ~~This plan must be submitted in writing~~ at least 60 days prior to the planned beginning of monitoring. The applicant may not commence monitoring under the plan until DEQ and approves d the plan in writing ~~by the Department before monitoring begins.~~

(vi) ~~B~~ Required air quality monitoring must ~~be conducted in accordance~~ comply with 40 CFR 58 Appendix AB, "Quality Assurance Requirements for SLAMS, SPMs and Prevention of Significant Deterioration (PSD) Air Monitoring" ~~(July 1, 2000)~~ and with other methods on file with ~~the Department~~ DEQ.

(vii) With DEQ's approval, the owner or operator may use representative or conservative background concentration data in lieu of conducting preconstruction air quality monitoring if the source demonstrates that such data is adequate to determine that the source would not cause or contribute to a violation of an ambient air quality standard or any applicable PSD increment.

~~(B) The Department~~ DEQ may exempt the owner or operator of a ~~proposed~~ source ~~or modification~~ from preconstruction monitoring for a specific regulated pollutant if the owner or operator demonstrates that the air quality impact from the emissions increase would be less than the amounts listed below, or that modeled competing source concentration ~~(plus the General Background Concentration)~~ of the regulated pollutant within the Ssource Impact Area, as defined in OAR 340 division 225, are less than the following significant monitoring concentrations:

(i) Carbon monoxide; 575 ug/m<sup>3</sup>, 8 hour average;

(ii) Nitrogen dioxide; 14 ug/m<sup>3</sup>, annual average;

(iii) PM<sub>10</sub>; 10 ug/m<sup>3</sup>, 24 hour average;

(iv) PM<sub>2.5</sub>; 40 ug/m<sup>3</sup>, 24-hour average;

(v) Sulfur dioxide; 13 ug/m<sup>3</sup>, 24 hour average;

(vi) Ozone; Any net increase of 100 tons/year or more of VOCs from a source ~~or major modification subject to PSD~~ requires an ambient impact analysis, including the gathering of ambient air quality data. ~~However, requirement for ambient air monitoring may be exempted if~~ unless the existing representative monitoring data shows maximum ozone concentrations are less than 50% percent of the ozone ~~NAAQS ambient air quality standards~~ based on a full season of monitoring;

(vii) Lead; 0.1 ug/m<sup>3</sup>, 24 hour average;

(viii) Fluorides; 0.25 ug/m<sup>3</sup>, 24 hour average;

(ix) Total reduced sulfur; 10 ug/m<sup>3</sup>, 1 hour average;

(x) Hydrogen sulfide; 0.04 ug/m<sup>3</sup>, 1 hour average;

(xi) Reduced sulfur compounds; 10 ug/m<sup>3</sup>, 1 hour average.

~~(D) The Department may allow the owner or operator of a source (where required by divisions 222 or 224) to substitute post construction monitoring for the requirements of (4)(a)(A) for a specific pollutant if the owner or operator demonstrates that the air quality impact from the emissions increase would not cause or contribute to an exceedance of any air quality standard. This analysis must meet the requirements of 340-225-0050(2)(b) and must use representative or conservative General Background Concentration data.~~

~~(E) When PM<sub>10</sub> preconstruction monitoring is required by this section, at least four months of data must be collected, including the season(s) the Department judges to have the highest PM<sub>10</sub> levels. PM<sub>10</sub> must be measured in accordance with 40 CFR part 50, Appendix J (July 1, 1999). In some cases, a full year of data will be required.~~

(b) Post-Construction Air Quality Monitoring: ~~After construction has been completed, the Department~~ DEQ may require post-construction ambient air quality monitoring as a permit condition to establish the effect of actual emissions, other than volatile organic compounds, on the air quality of any area that such emissions could affect.

(12) Best Available Control Technology (BACT). The owner or operator must apply BACT for each regulated pollutant ~~or precursor(s)~~ emitted at or above a ~~significant emission rate (SER)~~. BACT applies separately to the regulated pollutant ~~or precursor(s)~~ if emitted at or above a SER over the netting basis. In the Medford-Ashland AQMA, the owner or operator of any ~~proposed new federal major~~ PM10 source, ~~or proposed major modification of a federal major PM10 source~~ must comply with the LAER emission control technology requirement in OAR 340-224-0050(1), and is exempt from the BACT provision of this section.

(a) For a major modification, the requirement for BACT applies to the following:

(A) Each emissions unit that emits the regulated pollutant ~~or precursor(s)~~ and is not included in the most recent netting basis established for that regulated pollutant; and

(B) Each emissions unit that emits the regulated pollutant ~~or precursor(s)~~ and is included in the most recent netting basis and contributed to the emissions increase calculated in OAR 340-224-0025(2)(a)(B) ~~but has been modified and the modification resulted in an increase in actual emissions above the portion of the most recent netting basis attributable to the emissions unit~~ for the ~~nonattainment~~ pollutant ~~or precursor(s)~~.

(b) For phased construction projects, the BACT determination must be reviewed at the latest reasonable time before commencement of construction of each independent phase.

(c) When determining BACT for a change that was made at a source before the current Major NSR application, any additional cost of retrofitting required controls may be considered provided:

(A) The change was made in compliance with Major NSR requirements in effect at the time the change was made, and

(B) No limit is being relaxed that was previously relied on to avoid Major NSR.

(d) Modifications to individual emissions units that increase the potential to emit less than 10 percent of the ~~significant emission rate~~ SER are exempt from this section unless:

(A) They are not constructed yet;

(B) They are part of a discrete, identifiable larger project that was constructed within the previous 5 years and that is equal to or greater than 10 percent of the ~~significant emission rate~~ SER; or

(C) They were constructed without, or in violation of, ~~the Department~~ DEQ's approval.

### (3) Air Quality Protection:

(a2) Air Quality Analysis:

(A) The owner or operator of ~~a~~ the source ~~subject to this rule~~ must comply with OAR 340-225-0050 and, 340-225-0060, and 340-225-0070 ~~provide an analysis of the air quality impacts of~~ for each regulated pollutant for which emissions will exceed the netting basis by the SER or more due to the proposed source or modification ~~in accordance with OAR 340-225-0050 through 340-225-0070~~.

(B) The owner or operator of the source must comply with OAR 340-225-0050(4) and 340-225-0070 if the source has emissions that are equal to or greater than:

(i) 100 tons per year if in a source category listed in OAR 340-200-0020(66)(e); or

(ii) 250 tons per year if not in a source category listed in OAR 340-200-0020(66)(e).

(b) For increases of direct PM<sub>2.5</sub> or PM<sub>2.5</sub> precursors equal to or greater than the ~~significant emission rate~~ SERs, the owner or operator must provide an analysis of PM<sub>2.5</sub> air quality impacts based on all increases of direct PM<sub>2.5</sub> and PM<sub>2.5</sub> precursors.

(c) The owner or operator of the source must demonstrate that it will not cause or contribute to a new violation of an ambient air quality standard or PSD increment even if the single source impact is less than the significant impact level under OAR 340-225-0050(1).

(4b) Sources Impacting Other Designated Areas: ~~The owner or operator of any source subject to this rule that significantly impacts air quality in a designated nonattainment or maintenance area must meet the requirements of net air quality benefit in 340-225-0090.~~ The owner or operator of any source that will have a significant impact on air quality in a designated area other than the one the source is locating in must also meet the following requirements for demonstrating net air quality benefit, as applicable:

(a) The owner or operator of any source that emits an ozone precursor (VOC or NO<sub>x</sub>) at or above the SER is considered to have a significant impact if located within 100 kilometers of a designated ozone area, and must also meet the requirements for demonstrating net air quality benefit under OAR 340-224-0510 and 340-224-0520 for ozone designated areas.

(b) The owner or operator of any source that emits any criteria pollutant, other than NO<sub>x</sub> as an ozone precursor, at or above the SER and has a significant impact greater than the Class II SIL on another designated area must also meet the requirements for demonstrating net air quality benefit under OAR 340-224-0510 and OAR 340-224-0540 for designated areas other than ozone designated areas.

~~(3) Air Quality Monitoring: The owner or operator of a source subject to this rule must conduct ambient air quality monitoring in accordance with the requirements in OAR 340-225-0050.~~

~~(4) The owner or operator of a source subject to this rule and significantly impacting a PM<sub>10</sub> maintenance area (significant air quality impact is defined in OAR 340-200-0020), must comply with the requirements of 340-224-0060(2).~~

NOTE: Section (1) of this rule was moved verbatim from OAR 340-225-0050(4) and amended in redline/strikeout. This note will not become part of OAR 340-224-0070.

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

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.035, 468A.040, 468A.050, 468A.055 & 468A.070

Stats. Implemented: ORS 468A.025

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 5-1983, f. & ef. 4-18-83; DEQ 18-1984, f. & ef. 10-16-84; DEQ 14-1985, f. & ef. 10-16-85; DEQ 5-1986, f. & ef. 2-21-86; DEQ 8-1988, f. & cert. ef. 5-19-88 (and corrected 5-31-88); DEQ 27-1992, f. & cert. ef. 11-12-92, Section (8) Renumbered from 340-020-0241; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0245; DEQ 19-1993, f. & cert. ef.

11-4-93; DEQ 26-1996, f. & cert. ef. 11-26-96; DEQ 16-1998, f. & cert. ef. 9-23-98; DEQ 1-1999, f. & cert. ef. 1-25-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1940; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 1-2004, f. & cert. ef. 4-14-04; DEQ 1-2005, f. & cert. ef. 1-4-05; DEQ 10-2010(Temp), f. 8-31-10, cert. ef. 9-1-10 thru 2-28-11; Administrative correction, 3-29-11; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

## **340-224-0080**

### **Exemptions**

~~Temporary emission sources that would be in operation at a site for less than two years, such as pilot plants and portable facilities, and emissions resulting from the construction phase of a new source or modification must comply with OAR 340-224-0050(1), 340-224-0060(1) or 340-224-0070(1), whichever is applicable, but are exempt from the remaining requirements of 340-224-0050, 340-224-0060 and 340-224-0070 provided that the source or modification would not impact a Class I area or an area with a known violation of a National Ambient Air Quality Standard (NAAQS) or an applicable increment as defined in OAR 340 division 202.~~

~~[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-020-0047.]~~

~~Stat. Auth.: ORS 468 & 468A~~

~~Stats. Implemented: ORS 468 & 468A~~

~~Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0250; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1950; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 1-2004, f. & cert. ef. 4-14-04~~

## **340-224-0100**

### **Fugitive and Secondary Emissions**

~~Fugitive emissions are included in the calculation of emission rates of all air contaminants. Fugitive emissions are subject to the same control requirements and analyses required for emissions from identifiable stacks or vents. Secondary emissions are not included in calculations of potential emissions that are made to determine if a proposed source or modification is major. Once a source or modification is identified as being major, secondary emissions are added to the primary emissions and become subject to the air quality impact analysis requirements in this division and OAR 340 division 225.~~

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

~~Stat. Auth.: ORS 468 & ORS 468A~~

~~Stats. Implemented: ORS 468 & ORS 468~~

~~Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93;~~

## State New Source Review

### 340-224-0245

#### Requirements for Sources in Sustainment Areas

Within a designated sustainment area, a source subject to State NSR under OAR 340-224-0010 must meet the following requirements for each sustainment pollutant:

##### (1) Air Quality Protection:

(a) Air Quality Analysis: The owner or operator must comply with OAR 340-225-0050(1) and (2) and OAR 340-225-0060 for each regulated pollutant for which emissions will exceed the netting basis by the SER or more due to the proposed source or modification. For increases of direct PM<sub>2.5</sub> or PM<sub>2.5</sub> precursors equal to or greater than the SER, the owner or operator must provide an analysis of PM<sub>2.5</sub> air quality impacts based on all increases of direct PM<sub>2.5</sub> and PM<sub>2.5</sub> precursors; or

(b) Net Air Quality Benefit: The owner or operator must demonstrate net air quality benefit under OAR 340-224-0510 and 340-224-0520 for ozone areas and OAR 340-224-0510 and 340-224-0530(4) and (5) for non-ozone areas, whichever is applicable.

(2) If the owner or operator complied with subsection (1)(b) and the increase in emissions is the result of a major modification, then the owner or operator must apply BACT under OAR 340-224-0070(2).

(3) The owner or operator of the source must comply with OAR 340-225-0050(4) and 340-225-0070 if the source has emissions that are equal to or greater than:

(a) 100 tons per year if in a source category listed in OAR 340-200-0020(66)(e); or

(b) 250 tons per year if not in a source category listed in OAR 340-200-0020(66)(e).

(4) The owner or operator must demonstrate that it will not cause or contribute to a new violation of an ambient air quality standard or PSD increment even if the single source impact is less than the significant impact level under OAR 340-225-0050(1).

(5) Sources Impacting Other Designated Areas: The owner or operator of any source that will have a significant impact on air quality in a designated area other than the one the source is locating in must also meet the following requirements for demonstrating net air quality benefit, as applicable:

(a) The owner or operator of any source that emits an ozone precursor (VOC or NO<sub>x</sub>) at or above the SER is considered to have a significant impact if located within 100 kilometers of a designated ozone area, and must also meet the requirements for demonstrating net air quality benefit under OAR 340-224-0510 and 340-224-0520 for ozone designated areas.

(b) The owner or operator of any source that emits any criteria pollutant, other than NO<sub>x</sub> as an ozone precursor, at or above the SER and has a significant impact greater than the Class II SIL on another designated area must also meet the requirements for demonstrating net air quality benefit under OAR 340-224-0510 and OAR 340-224-0540 for designated areas other than ozone designated areas.

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.035, 468A.040, 468A.050, 468A.055 & 468A.070

Stats. Implemented: ORS 468A

### **340-224-0250**

#### **Requirements for Sources in Nonattainment Areas**

Within a designated nonattainment area, a source subject to State NSR under OAR 340-224-0010 must meet the following requirements for each nonattainment pollutant:

(1) If the increase in emissions is the result of a major modification, the owner or operator must apply BACT under OAR 340-224-0070(2).

(2) Air Quality Protection:

(a) Air Quality Analysis: An air quality analysis is not required except that the owner or operator of the source must comply with OAR 340-225-0050(4) and 340-225-0070 if the source has emissions that are equal to or greater than:

(A) 100 tons per year if in a source category listed in OAR 340-200-0020(66)(e); or

(B) 250 tons per year if not in a source category listed in OAR 340-200-0020(66)(e).

(b) Net Air Quality Benefit: The owner or operator of the source must meet the requirements of paragraph (A), (B), or (C), as applicable:

(A) For ozone nonattainment areas, OAR 340-224-0510 and 340-224-0520;

(B) For federal major sources located in non-ozone nonattainment areas, OAR 340-224-0510 and 340-224-0530(2) and (5);

(C) For sources located in non-ozone nonattainment areas that are not federal major sources, OAR 340-224-0510 and 340-224-0530(3) and (5).

(3) Sources Impacting Other Designated Areas: The owner or operator of any source that will have a significant impact on air quality in a designated area other than the one the source is locating in must also meet the following requirements for demonstrating net air quality benefit, as applicable:

(a) The owner or operator of any source that emits an ozone precursor (VOC or NO<sub>x</sub>) at or above the SER is considered to have a significant impact if located within 100 kilometers of a designated ozone area, and must

also meet the requirements for demonstrating net air quality benefit under OAR 340-224-0510 and 340-224-0520 for ozone designated areas.

(b) The owner or operator of any source that emits any criteria pollutant, other than NO<sub>x</sub> as an ozone precursor, at or above the SER and has a significant impact greater than the Class II SIL on another designated area must also meet the requirements for demonstrating net air quality benefit under OAR 340-224-0510 and OAR 340-224-0540 for designated areas other than ozone designated areas.

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.035, 468A.040, 468A.050, 468A.055 & 468A.070

Stats. Implemented: ORS 468A

### **340-224-0255**

#### **Requirements for Sources in Reattainment Areas**

Within a designated reattainment area, a source subject to State NSR under OAR 340-224-0010 must comply with the requirements in OAR 340-224-0260 for each reattainment pollutant, except that OAR 340-224-0260(2)(b)(C) and (5) are not applicable unless DEQ has approved a contingency plan for the reattainment area.

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.035, 468A.040, 468A.050, 468A.055 & 468A.070

Stats. Implemented: ORS 468A

### **340-224-0260**

#### **Requirements for Sources in Maintenance Areas**

Within a designated maintenance area, a source subject to State NSR under OAR 340-224-0010 must meet the following requirements for each maintenance pollutant:

(1) If the increase in emissions is the result of a major modification, the owner or operator of the source must apply BACT under OAR 340-224-0070(2), except for a PM<sub>10</sub> source in the Medford/Ashland AQMA where the owner or operator of the source must apply LAER under OAR 340-224-0050(1).

(2) Air Quality Protection: The owner or operator of the source must satisfy the requirements of either subsection (a), (c), and (d) or of subsections (b), (c) and (d):

(a) Air Quality Analysis: The owner or operator of the source must comply with OAR 340-225-0050(1) and (2) and 340-225-0060 for each regulated pollutant for which emissions will exceed the netting basis by the SER or more due to the proposed source or modification. For emissions increases of direct PM<sub>2.5</sub> or PM<sub>2.5</sub> precursors equal to or greater than the SER, the owner or operator must provide an analysis of PM<sub>2.5</sub> air quality impacts based on all increases of direct PM<sub>2.5</sub> and PM<sub>2.5</sub> precursors.



(b) Net Air Quality Benefit: The owner or operator of the source must satisfy one of the following requirements:

(A) Demonstrate net air quality benefit under OAR 340-224-0510 and 340-224-0520 for ozone maintenance areas or OAR 340-224-0510 and 340-224-0530(3) and (5) for non-ozone maintenance areas, whichever is applicable;

(B) Comply with the limits in OAR 340-202-0225 by performing the analysis specified in OAR 340-225-0045; or

(C) Obtain an allocation from a growth allowance. The requirements of this section may be met in whole or in part in an ozone or carbon monoxide maintenance area with an allocation by DEQ from a growth allowance, if available, under the applicable maintenance plan in the SIP adopted by the EQC and approved by EPA. Procedures for allocating the growth allowances for the Oregon portion of the Portland-Vancouver Interstate Maintenance Area for Ozone and the Portland Maintenance Area for Carbon Monoxide are contained in OAR 340-242-0430 and 340-242-0440.

(c) The owner or operator of the source must comply with OAR 340-225-0050(4) and 340-225-0070 if the source has emissions that are equal to or greater than:

(A) 100 tons per year if in a source category listed in OAR 340-200-0020(66)(e); or

(B) 250 tons per year if not in a source category listed in OAR 340-200-0020(66)(e).

(d) The owner or operator of the source must demonstrate that it will not cause or contribute to a new violation of an ambient air quality standard or PSD increment even if the single source impact is less than the significant impact level under OAR 340-225-0050(1).

(3) Sources Impacting Other Designated Areas: The owner or operator of any source that will have a significant impact on air quality in a designated area other than the one the source is locating in must also meet the following requirements for demonstrating net air quality benefit, as applicable:

(a) The owner or operator of any source that emits an ozone precursor (VOC or NO<sub>x</sub>) at or above the SER is considered to have a significant impact if located within 100 kilometers of a designated ozone area, and must also meet the requirements for demonstrating net air quality benefit under OAR 340-224-0510 and 340-224-0520 for ozone designated areas.

(b) The owner or operator of any source that emits any criteria pollutant, other than NO<sub>x</sub> as an ozone precursor, at or above the SER and has a significant impact greater than the Class II SIL on another designated area must also meet the requirements for demonstrating net air quality benefit under OAR 340-224-0510 and OAR 340-224-0540 for designated areas other than ozone designated areas.

(4) Contingency Plan Requirements. If the contingency plan in an applicable maintenance plan is implemented due to a violation of an ambient air quality standard, this section applies in addition to other requirements of this rule until the EQC adopts a revised maintenance plan and EPA approves it as a SIP revision.

(a) The source must comply with the LAER requirement in OAR 340-224-0050(1) in lieu of the BACT requirement in section (1); and

(b) The owner or operator must comply with paragraph (2)(b)(A).

(5) Medford-Ashland AQMA: Proposed major sources and major modifications that would emit PM10 within the Medford-Ashland AQMA must meet the LAER emission control technology requirements in OAR 340-224-0050(1).

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.035, 468A.040, 468A.050, 468A.055 & 468A.070

Stats. Implemented: ORS 468A

### **340-224-0270**

#### **Requirement for Sources in Attainment and Unclassified Areas**

Within a designated attainment or unclassified area, a source subject to State NSR under OAR 340-224-0010 must meet the following requirements for each attainment pollutant:

##### (1) Air Quality Protection:

(a) Air Quality Analysis: The owner or operator of the source must comply with OAR 340-225-0050(1) and (2) and 340-225-0060 for each regulated pollutant for which emissions will exceed the netting basis by the SER or more due to the proposed source or modification.

(b) For increases of direct PM2.5 or PM2.5 precursors equal to or greater than the SER, the owner or operator of the source must provide an analysis of PM2.5 air quality impacts based on all increases of direct PM2.5 and PM2.5 precursors.

(c) The owner or operator of the source must comply with OAR 340-225-0050(4) and 340-225-0070 if the source has emissions that are equal to or greater than:

(A) 100 tons per year if in a source category listed in OAR 340-200-0020(66)(e); or

(B) 250 tons per year if not in a source category listed in OAR 340-200-0020(66)(e).

(d) The owner or operator of the source must demonstrate that it will not cause or contribute to a new violation of an ambient air quality standard or PSD increment even if the single source impact is less than the significant impact level under OAR 340-225-0050(1).

(2) Sources Impacting Other Designated Areas: The owner or operator of any source that will have a significant impact on air quality in a designated area other than the one the source is locating in must also meet the following requirements for demonstrating net air quality benefit, as applicable:

(a) The owner or operator of any source that emits an ozone precursor (VOC or NOx) at or above the SER is considered to have a significant impact if located within 100 kilometers of a designated ozone area, and must also meet the requirements for demonstrating net air quality benefit under OAR 340-224-0510 and 340-224-0520 for ozone designated areas.

(b) The owner or operator of any source that emits any criteria pollutant, other than NOx as an ozone precursor, at or above the SER and has a significant impact greater than the Class II SIL on another designated area must

also meet the requirements for demonstrating net air quality benefit under OAR 340-224-0510 and OAR 340-224-0540 for designated areas other than ozone designated areas.

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.035, 468A.040, 468A.050, 468A.055 & 468A.070

Stats. Implemented: ORS 468A

### **Net Air Quality Benefit Emission Offsets**

#### **OAR 340-224-0500**

##### **Net Air Quality Benefit for Sources Locating Within or Impacting Designated Areas**

OAR 340-224-0510 through 340-224-0540 are the requirements for demonstrating net air quality benefit using offsets.

**NOTE:** This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-020-0040.

Stat. Auth.: ORS 468.020, 468A.025, 468A.035, 468A.040, 468A.050, 468A.055 & 468A.070

Stats. Implemented: ORS 468A

#### **340-224-0510**

##### **Common Offset Requirements**

The purpose of these rules is to demonstrate reasonable further progress toward achieving or maintaining the ambient air quality standards for sources locating within or impacting designated areas. A source may make such demonstration by providing emission offsets to balance the level of projected emissions by the source at the applicable ratios described in this division.

(1) Unless otherwise specified in the rules, offsets required under this rule must meet the requirements of OAR 340 division 268, Emission Reduction Credits, and, when applicable, of OAR 340-240-0550, Requirements for New Sources When Using Residential Wood Fuel-Fired Device Offsets.

(2) Except as provided in section (3), the emission reductions used as offsets must be of the same type of regulated pollutant as the emissions from the new source or modification. Sources of PM10 must be offset with particulate in the same size range.

(3) For PM2.5; inter-pollutant offsets are allowed at the following ratios:

(a) 1 ton of direct PM2.5 may be used to offset 40 tons of SO2;

(b) 1 ton of direct PM2.5 may be used to offset 100 tons of NOx;

(c) 40 tons of SO2 may be used to offset 1 ton of direct PM2.5;

(d) 100 tons of NOx may be used to offset 1 ton of direct PM2.5.

(4) Emission reductions used as offsets must be equivalent to the emissions being offset in terms of short term, seasonal, and yearly time periods to mitigate the effects of the proposed emissions.

(5) If the complete permit application or permit that is issued based on that application is amended due to changes to the proposed project, the owner or operator may continue to use the original offsets and any additional offsets that may become necessary for the project provided that the changes to the project do not result in a change to the two digit Standard Industrial Classification (SIC) code associated with the source and that the offsets will continue to satisfy the offset criteria.

**NOTE:** This rule, except section (3), is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-020-0040.

Stat. Auth.: ORS 468.020, 468A.025, 468A.035, 468A.040, 468A.050, 468A.055 & 468A.070

Stats. Implemented: ORS 468A

## **OAR 340-224-0520**

### **Requirements for Demonstrating Net Air Quality Benefit for Ozone Areas**

~~(1) Ozone areas (VOC and NOx emissions).~~ When directed by the Major and State NSR rules, the owner or operator must comply with this rule. ~~For sources capable of impacting a designated ozone nonattainment or maintenance area;~~

~~(1a)~~ Offsets for VOC and NOx are required if the source will be located within the an ozone designated area or closer to the nearest boundary of an ozone designated area than within the Ozone Precursor impact D distance as defined in section (2).

~~(210)~~ "Ozone Precursor impact D distance" means the distance in kilometers from the nearest boundary of an ~~designated~~ designated ~~nonattainment or maintenance~~ area within which a ~~major new or modified~~ source of VOC or NOx is considered to significantly affect that designated area. The determination of significance is made by either the formula method or the demonstration method.

(a) The Formula Method.

(A) For sources with complete permit applications submitted before Jan.uary 1, 2003:  $D = 30 \text{ km}$

(B) For sources with complete permit applications submitted on or after Jan.uary 1, 2003:  $D = (Q/40) \times 30 \text{ km}$

(C) D is the ~~Ozone Precursor impact D~~ distance in kilometers. The value for D is 100 kilometers when D is calculated to exceed 100 kilometers. Q is the larger of the NOx or VOC emissions increase above the netting basis from the source being evaluated in tons per /year, ~~and is quantified relative to the netting basis.~~

(D) If a source is located ~~at a distance less~~ closer than D from the nearest ozone designated area boundary, the source must obtain ~~is offsets under sections (3) and (4).~~ ~~considered to have a significant effect on the designated~~

~~area.~~ If the source is located at a distance equal to or greater than D from the nearest ozone designated area boundary then the source is not required to obtain offsets,~~it is not considered to have a significant effect.~~

(b) The Demonstration Method. An applicant may demonstrate to ~~the Department~~DEQ that the source or proposed source would not have a material effect on~~significantly impact an ozone designated nonattainment area other than attainment or unclassified areas or maintenance area.~~ This demonstration may be based on an analysis of major topographic features, dispersion modeling, meteorological conditions, or other factors. If ~~the Department~~DEQ determines that the source or proposed source would not have a material effects~~significantly impact on the designated nonattainment area or maintenance area~~ under high ozone conditions, the ~~Ozone Precursor impact D~~distance is zero kilometers.

~~(3b)~~ The required ratio of offsetting emissions reductions from other sources (offsets) to the emissions increase from the proposed source or modification (emissions) and the location of sources that may provide offsets is as follows:~~The amount and location of offsets must be determined in accordance with this subsection:~~

~~(aA)~~ For new or modified sources locating within an ozone ~~designated~~ nonattainment area, the offset ratio is 1.1:1~~(offsets:emissions)~~. These offsets must come from sources within either the same designated ~~nonattainment~~ area as the new or modified source or from sources in another ozone nonattainment area ~~(with equal or higher nonattainment classification)~~ that contributes to a violation of the NAAQS-ozone ambient air quality standards in the same ozone designated ~~nonattainment~~ area as the new or modified source.

~~(bB)~~ For new or modified sources locating within an ozone ~~designated~~ maintenance area, the offset ratio is 1.1:1~~(offsets:emissions)~~. These offsets may come from sources within either the ~~designated maintenance~~ area or from a source that is closer to the nearest maintenance area boundary than that source's ozone impact distance~~the ozone precursor distance.~~

~~(cC)~~ For new or modified sources locating outside the designated area not including attainment or unclassified areas, but ~~within~~ closer than the ozone ~~precursor impact~~ distance of the nearest boundary of the designated area, the offset ratio is 1:1. These offsets may come from within either the designated area or from a source that is closer to the nearest maintenance area boundary than that source's ozone impact distance~~the ozone precursor distance.~~

~~(D)~~ ~~Offsets from outside the designated area but within the Ozone Precursor Distance must be from sources affecting the designated area in a comparable manner to the proposed emissions increase. Methods for determining offsets are described in the Ozone Precursor Offsets definition (OAR 340-225-0020(11)).~~

~~(414)~~ The amount of required offsets and the amount of provided offsets from contributing sources varies based on whether the proposed source or modification and the sources contributing offsets are located outside the ozone designated area other than attainment or unclassified areas. "Ozone Precursor Offsets" means the emission reductions required to offset emission increases from a major new or modified source located inside the designated nonattainment or maintenance area or within the Ozone Precursor Distance. Emission reductions must come from within the designated area or from within the Ozone Precursor Distance of the offsetting source as described in OAR 340-225-0090. The required offsets and the provided offsets are calculated using determination is made by either the formula method or the demonstration method, as follows, except that sources located inside an ozone nonattainment area must use the formula method.

(a) The Formula Method.

(A) Required offsets (RO) for new or modified sources are determined as follows:

(i) For sources with complete permit applications submitted before January 1, 2003:  $RO = SQ$ ; ~~and~~

(ii) For sources with complete permit applications submitted on or after January 1, 2003:  $RO = (SQ \text{ minus } (SD \text{ multiplied by } 40/30 - *SD))$

(B) Contributing sources may provide offsets (PO) calculated as follows:  $PO = CQ \text{ minus } (CD \text{ multiplied by } 40/30 - *CD)$

(C) Multiple sources may contribute to the required offsets of a new source. For the formula method to be satisfied, total provided offsets (PO) must equal or exceed ~~the~~ required offsets (RO) by the ratio described in section (3).

(D) Definitions of factors used in paragraphs (A) (B) and (C) ~~of this subsection:~~

(i) RO is the required offset of NO<sub>x</sub> or VOC in tons per year as a result of the source emissions increase. If RO is calculated to be negative, RO is set to zero.;

(ii) SQ (source quantity) is the source's emissions increase of NO<sub>x</sub> or VOC in tons per year above the netting basis.;

(iii) SD is the source distance in kilometers to the nearest boundary of the designated nonattainment or maintenance area except attainment or unclassified areas. SD is zero for sources located within the designated nonattainment, or maintenance area except attainment or unclassified areas.

(iv) PO is the provided offset from a contributing source and must be equal to or greater than zero;

(v) CQ (contributing quantity) is the contributing source's emissions reduction in tons per year quantified calculated as relative to the contemporaneous pre-reduction actual emissions less the post-reduction allowable emissions from the contributing source (as provided in OAR 340-268-0030(1)(b)).

(vi) CD is the contributing source's distance in kilometers ~~to from~~ the nearest boundary of the designated nonattainment or maintenance area except attainment or unclassified areas. For a contributing source located within the designated nonattainment or maintenance area except attainment or unclassified areas, CD equals zero.

(b) The Demonstration Method. An applicant may demonstrate to ~~the Department~~ DEQ using dispersion modeling or other analyses the level and location of offsets that would be sufficient to provide actual reductions in concentrations of VOC or NO<sub>x</sub> in the designated area during high ozone conditions as the ratio described in section (3). The modeled reductions of ambient VOC or NO<sub>x</sub> concentrations resulting from the emissions offset must be demonstrated over a greater area and over a greater period of time within the designated area as compared to the modeled ambient VOC or NO<sub>x</sub> concentrations resulting from the emissions increase from the source subject to this rule. If ~~the Department~~ DEQ determines that the demonstration is acceptable, then ~~the Department~~ DEQ will approve the offsets proposed by the applicant. ~~The demonstration method does not apply to sources located inside an ozone nonattainment area.~~

(c) Offsets obtained for a previous PSEL increase that did not involve resetting the netting basis can be credited toward offsets currently required for a PSEL increase.

(5e) In lieu of obtaining offsets, the owner or operator may obtain an allocation at the rate of 1:1 from a growth allowance, if available, in an applicable maintenance plan.

~~(d) Sources within or affecting the Medford Ozone Maintenance Area are exempt from the requirement for NO<sub>x</sub> offsets relating to ozone formation.~~

~~(e) Sources within or affecting the Salem Ozone Maintenance Area are exempt from the requirement for VOC and NO<sub>x</sub> offsets relating to ozone formation.~~

NOTE: This rule was moved verbatim from OAR 340-225-0010(10) and (11) and OAR 340-225-0090(1) and amended in redline/strikeout. This note will not become part of OAR 340-224-0520.

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-020-0040.

Stat. Auth.: ORS 468.020, 468A.025, 468A.035, 468A.040, 468A.050, 468A.055 & 468A.070

Stats. Implemented: ORS 468A

## **OAR 340-224-0530**

### **Requirements for Demonstrating Net Air Quality Benefit for Non-Ozone Areas**

(1) When directed by the Major and State NSR rules, the owner or operator of the source must comply with sections (2) through (5), as applicable. For purposes of this rule, priority sources are sources identified in OAR 340-204-0320 for the designated area.

(2) The ratio of offsets compared to the source's potential emissions increase is 1.2:1. If the offsets include offsets from priority sources, the ratio will be decreased by the offsets obtained from priority sources as a percentage of the source's potential emissions increase. For example, if the owner or operator obtains offsets from priority sources equal to 10% of its potential emissions increase, then the offset ratio is reduced by 0.10, to 1.1:1. In no event, however, will the offset ratio be less than 1.0:1, even if more than 20% of offsets are from priority sources.

(3) The ratio of offsets compared to the source's potential emissions increase is 1.0:1. If the offsets include offsets from priority sources, the ratio will be decreased by the offsets obtained from priority sources as a percentage of the source's potential emissions increase. For example, if the owner or operator obtains offsets from priority sources equal to 20% of its potential emissions increase, then the offset ratio is reduced by 0.2, to 0.8:1. In no event, however, will the offset ratio be less than 0.5:1, even if more than 50% of offsets are from priority sources.

(4) The ratio of offsets compared to the source's potential emissions increase is 0.1:1. If the offsets include offsets from priority sources, the ratio will be decreased by the offsets obtained from priority sources as a percentage of the source's potential emissions increase. For example, if the owner or operator obtains offsets from priority sources equal to 2% of its potential emissions increase, then the offset ratio is reduced by 0.02, to 0.08:1. In no event, however, will the offset ratio be less than 0.05:1, even if more than 5% of offsets are from priority sources.

(5) Except as provided in section (6), the owner or operator must conduct an air quality analysis in compliance with OAR 340-225-0030 and 340-225-0040, of the total impacts from the proposed new emissions and offsets that demonstrates either:

(a) The impacts from the emission increases above the source's netting basis are less than the Class II SIL at all receptors within the designated area; or

(b)(A) The impacts from the emission increases above the source's netting basis are less than the Class II SIL at an average of receptors within an area as designated by DEQ representing a neighborhood scale, as specified in 40 CFR Part 58, Appendix D, a reasonably homogeneous urban area with dimensions of a few kilometers that represent air quality where people commonly live and work in a representative neighborhood, centered on the DEQ approved ambient monitoring sites; and

(B) The impacts of the emission increases above the source's netting basis, plus the impacts of emission increases or decreases since the date of the current area designation of all other sources within the designated area or having a significant impact on the designated area are less than 10 percent of the AAQS at all receptors within the designated area, determined as follows:

(i) Subtract the offsets from priority sources from the new or modified source's emission increase;

(ii) If the source's emissions are not offset 100 percent by priority sources, conduct dispersion modeling of the source's remaining emission increases after subtracting the priority source offsets specified in subparagraph (i); and the emission increases or decreases from all other sources since the date the area was designated, including offsets used for the proposed project, but excluding offsets from priority sources; and

(iii) If the source's emissions are offset 100 percent by priority sources, no further analysis is required.

(6) Small scale local energy projects and any infrastructure related to that project located in the same area are not subject to the requirements in section (5) provided that the proposed source or modification would not cause or contribute to a violation of an ambient air quality standard or otherwise pose a material threat to compliance with air quality standards in a nonattainment area.

**NOTE:** This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-020-0040.

Stat. Auth.: ORS 468.020, 468A.025, 468A.035, 468A.040, 468A.050, 468A.055 & 468A.070

Stats. Implemented: ORS 468A

## **OAR 340-224-0540**

### **Sources in a Designated Area Impacting Other Designated Areas**

(1) When directed by the Major and State NSR rules, the owner or operator of a source locating outside, but impacting any designated area other than an attainment or unclassified area must:

(a) Obtain offsets sufficient to reduce impacts to less than the Class II SIL at all receptors within the designated area as demonstrated using an air quality analysis under OAR 340 division 225; or



(b) Obtain offsets in accordance with OAR 340-224-0510 and 340-224-0530(3), provided the offsets are demonstrated to have a significant impact on the designated area.

(2) When directed by the Major and State NSR rules, sources locating outside, but impacting any attainment and unclassified areas must comply with OAR 340-225-0050(1) and (2) for each regulated pollutant for which emissions will exceed the netting basis by the SER or more due to the proposed source or modification.

**NOTE:** This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-020-0040.

Stat. Auth.: ORS 468.020, 468A.025, 468A.035, 468A.040, 468A.050, 468A.055 & 468A.070

Stats. Implemented: ORS 468A

**DIVISION 225**  
**AIR QUALITY ANALYSIS REQUIREMENTS**

**340-225-0010**

**Purpose and Jurisdiction**

(1) This division contains the definitions and requirements for air quality analysis ~~referred to in OAR 340 divisions 200 through 268. It~~ This division does not apply unless a rule in another division refers to this division or a rule in this division ~~the reader here~~. For example, divisions ~~222 (Stationary Source Plant Site Emissions Limits) and 224 (Major New Source Review)~~ refers the reader to provisions in this division for specific air quality analysis requirements.

(2) Subject to the requirements in this division, LRAPA is designated by the EQC to implement this division within its area of jurisdiction. The requirements and procedures contained in this division must be used by LRAPA unless LRAPA has adopted or adopts rules which are at least as strict as this division.

**NOTE:** This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-020-0040.

Stat. Auth.: ORS 468.020 & 468A

Stats. Implemented: ORS 468A

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

**340-225-0020**

**Definitions**

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

(1) "Allowable ~~E~~missions" means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

(a) The applicable standards as set forth in 40 CFR Parts 60, 61, 62 and 63;

(b) The applicable ~~State Implementation Plan~~ SIP emissions limitation, including those with a future compliance date; or

(c) The emissions rate specified as a federally enforceable permit condition.

~~(2) "Background Light Extinction" means the reference levels (Mm-1) shown in the estimates of natural conditions as referenced in the FLAG to be representative of the PSD Class I or Class II area being evaluated.~~

~~(32)~~ "Baseline ~~C~~concentration" means:

(a) Except as provided in subsection (c), the ambient concentration level for sulfur dioxide and PM10 that existed in an area during the calendar year 1978. Actual emission increases or decreases occurring before January 1, 1978 must be included in the baseline calculation, except that actual emission increases from any major source or major modification on which construction commenced after January 6, 1975 must not be included in the baseline calculation;

(b) The ambient concentration level for nitrogen oxides that existed in an area during the calendar year 1988.

(c) For the area of northeastern Oregon within the boundaries of the Umatilla, Wallowa-Whitman, Ochoco, and Malheur National Forests, the ambient concentration level for PM10 that existed during the calendar year 1993. ~~The Department~~DEQ may allow the source to use an earlier time period if ~~the Department~~DEQ determines that it is more representative of normal emissions.

(d) For PM10 in the Medford-Ashland AQMA: the ambient PM10 concentration levels that existed during the calendar year 2006, the year that EPA redesignates~~d~~ed that~~e~~e AQMA to attainment for PM10.

(e) The ambient concentration level for PM2.5 that existed in an area during the calendar year 2007.

(f) If no ambient air quality data is available in an area, the baseline concentration may be estimated using modeling based on actual emissions for the years specified in subsections (a) through (e) ~~of this section.~~

(3) "Baseline concentration year" means the calendar year used to determine the baseline concentration for a particular regulated pollutant in a particular designated area.

(4) "Competing PSD ~~I~~increment ~~C~~onsuming ~~S~~source ~~I~~mpacts" means the total modeled concentration above the modeled ~~B~~baseline ~~C~~oncentration resulting from increased and decreased emissions of all other sources since the baseline concentration year ~~that are within the Range of Influence of the source in question. that are expected to cause a significant concentration gradient in the vicinity of the source. Determination of significant concentration gradient may take into account factors including but not limited to ROI formula, spatial distribution of existing emission sources, topography, and meteorology.~~ Allowable ~~E~~missions may be used as a conservative estimate of increased emissions, in lieu of ~~A~~actual ~~E~~missions, in this analysis.

(5) "Competing ~~N~~AAQS ~~S~~source ~~I~~mpacts" means total modeled concentrations of the subject pollutant resulting from allowable emissions of all other sources expected to cause a significant concentration gradient in the vicinity of the source or sources under consideration~~that are within the Range of Influence of the source in question. Determination of significant concentration gradient may take into account factors including but not limited to ROI formula, spatial distribution of existing emission sources, topography, and meteorology.~~

(6) "FLAG" refers to the Federal Land Managers' Air Quality Related Values Work Group Phase I Report — REVISED, published at ~~See~~ 75 Federal Register 66125, Oct.~~ober~~ber 27, 2010.

(7) "General ~~B~~background ~~C~~oncentration" means impacts from natural sources and unidentified sources that were not explicitly modeled, and ~~The Department~~ may be determined based on either this as site-specific ambient monitoring or, with DEQ approval, on representative ambient monitoring from another location.

~~(8) "Predicted Maintenance Area Concentration" means the future year ambient concentration predicted by the Department in the applicable maintenance plan as follows:~~

~~(a) The future year (2015) concentrations for the Grants Pass UGB are 89 µg/m<sup>3</sup> (24-hour average) and 21 µg/m<sup>3</sup> (annual average).~~

~~(b) The future year (2015) concentrations for the Klamath Falls UGB are 114 µg/m<sup>3</sup> (24-hour average) and 25 µg/m<sup>3</sup> (annual average).~~

~~(c) The future year (2025) concentrations for the Lakeview UGB are 126 µg/m<sup>3</sup> (24-hour average) and 27 µg/m<sup>3</sup> (annual average).~~

~~(89)~~ "Nitrogen ~~D~~eposition" means the sum of anion and cation nitrogen deposition expressed in terms of the mass of total elemental nitrogen being deposited. As an example, ~~N~~itrogen ~~D~~eposition for NH<sub>4</sub>NO<sub>3</sub> is 0.3500 times the weight of NH<sub>4</sub>NO<sub>3</sub> being deposited.

~~(10) "Ozone Precursor Distance" means the distance in kilometers from the nearest boundary of a designated ozone nonattainment or maintenance area within which a major new or modified source of VOC or NO<sub>x</sub> is considered to significantly affect that designated area. The determination of significance is made by either the formula method or the demonstration method.~~

~~(a) The Formula Method:~~

~~(A) For sources with complete permit applications submitted before January 1, 2003:  $D = 30$  km~~

~~(B) For sources with complete permit applications submitted on or after January 1, 2003:  $D = (Q/40) \times 30$  km~~

~~(C) D is the Ozone Precursor Distance in kilometers. The value for D is 100 kilometers when D is calculated to exceed 100 kilometers. Q is the larger of the NO<sub>x</sub> or VOC emissions increase from the source being evaluated in tons/year, and is quantified relative to the netting basis.~~

~~(D) If a source is located at a distance less than D from the designated area, the source is considered to have a significant effect on the designated area. If the source is located at a distance equal to or greater than D, it is not considered to have a significant effect.~~

~~(b) The Demonstration Method. An applicant may demonstrate to the Department that the source or proposed source would not significantly impact a nonattainment area or maintenance area. This demonstration may be based on an analysis of major topographic features, dispersion modeling, meteorological conditions, or other factors. If the Department determines that the source or proposed source would not significantly impact the nonattainment area or maintenance area under high ozone conditions, the Ozone Precursor Distance is zero kilometers.~~

~~(11) "Ozone Precursor Offsets" means the emission reductions required to offset emission increases from a major new or modified source located inside the designated nonattainment or maintenance area or within the Ozone Precursor Distance. Emission reductions must come from within the designated area or from within the Ozone Precursor Distance of the offsetting source as described in OAR 340-225-0090. The offsets determination is made by either the formula method or the demonstration method.~~

~~(a) The Formula Method:~~

~~(A) Required offsets (RO) for new or modified sources are determined as follows:~~

~~(i) For sources with complete permit applications submitted before January 1, 2003:  $RO = SQ$~~

~~(ii) For sources with complete permit applications submitted on or after January 1, 2003:  $RO = (SQ \text{ minus } (40/30 * SD))$~~

~~(B) Contributing sources may provide offsets (PO) calculated as follows:  $PO = CQ \text{ minus } (40/30 * CD)$~~

~~(C) Multiple sources may contribute to the required offsets of a new source. For the formula method to be satisfied, total provided offsets (PO) must equal or exceed the required offset (RO).~~

~~(D) Definitions of factors used in paragraphs (A) (B) and (C) of this subsection:~~

~~(i) RO is the required offset of NO<sub>x</sub> or VOC in tons per year as a result of the source emissions increase. If RO is calculated to be negative, RO is set to zero;~~

~~(ii) SQ is the source emissions increase of NO<sub>x</sub> or VOC in tons per year above the netting basis;~~

~~(iii) SD is the source distance in kilometers to the nonattainment or maintenance area. SD is zero for sources located within the nonattainment or maintenance area.~~

~~(iv) PO is the provided offset from a contributing source and must be equal to or greater than zero;~~

~~(v) CQ is the contributing emissions reduction in tons per year quantified relative to contemporaneous pre-reduction actual emissions (OAR 340-268-0030(1)(b)).~~

~~(vi) CD is the contributing source distance in kilometers to the nonattainment or maintenance area. For a contributing source located within the nonattainment or maintenance area, CD equals zero.~~

~~(b) The Demonstration Method. An applicant may demonstrate to the Department using dispersion modeling or other analyses the level and location of offsets that would be sufficient to provide actual reductions in concentrations of VOC or NO<sub>x</sub> in the designated area during high ozone conditions. The modeled reductions of ambient VOC or NO<sub>x</sub> concentrations resulting from the emissions offset must be demonstrated over a greater area and over a greater period of time within the designated area as compared to the modeled ambient VOC or NO<sub>x</sub> concentrations resulting from the emissions increase from the source subject to this rule. If the Department determines that the demonstration is acceptable, then the Department will approve the offsets proposed by the applicant. The demonstration method does not apply to sources located inside an ozone nonattainment area.~~

(9) "Predicted maintenance area concentration" means the future year ambient concentration predicted by DEQ in the applicable maintenance plan as follows:

(a) The future year (2015) PM<sub>10</sub> concentrations for the Grants Pass UGB are 89 µg/m<sup>3</sup> (24-hour average) and 21 µg/m<sup>3</sup> (annual average).

(b) The future year (2015) PM<sub>10</sub> concentrations for the Klamath Falls UGB are 114 µg/m<sup>3</sup> (24-hour average) and 25 µg/m<sup>3</sup> (annual average).

(c) The future year (2025) PM<sub>10</sub> concentrations for the Lakeview UGB are 126 µg/m<sup>3</sup> (24-hour average) and 27 µg/m<sup>3</sup> (annual average).

(102) "Range of Influence ~~formula or "(ROI formula)"~~" means the calculation of the distance in kilometers from the source impact area of the new or modified source to other emission sources that could impact that area. If there is no source impact area, the distance is calculated from the new or modified source. Any location that is closer to the source than the ROI may be considered to be "within the range of influence" of the source. The ROI formula is as follows:

(a) For PSD Class II and Class III areas, the Range of Influence formula of a competing source (in kilometers) is defined by:

(A)  $ROI (km) = Q (tons/year) / K (tons/year km)$ .

(B) Definition of factors used in paragraph (a) ~~of this subsection:~~

(i) ~~ROI is the distance a source has an effect on an area and is compared to the distance from a potential competing source to the Significant Impact Area of a proposed new source. Maximum ROI is 50 km, however the Department may request that sources at a distance greater than 50 km be included in a competing source analysis.~~

(ii) Q is the emission rate of the potential competing source in tons per year.

(iii) K (tons/year km) is a regulated pollutant specific constant as follows ~~defined in the table below:~~

(i) For PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>x</sub> and NO<sub>x</sub>, K = 5;

(ii) For CO, K = 40; and

(iii) For lead, K = 0.15.

(b) For PSD Class I areas, the Range of Influence formula of a competing source includes emissions from all sources that occur within the modeling domain of the source being evaluated. The Department determines the modeling domain on a case-by-case basis.

(11) "Single source impact" means the modeled impacts from an increase in emissions of regulated pollutants from a source without including the impacts from other sources.

(123) "Source ~~I~~mpact ~~A~~rea" means an an ~~circular~~ area, or locations, ~~with a radius extending from the source to the largest distance to~~ where predicted impacts from the source or modification equal or exceed the Class II ~~S~~ignificant ~~Air Quality I~~mpact levels set out in OAR 340-200-0020 ~~Table 1~~. This definition only applies to PSD Class II areas and is not intended to limit the distance for PSD Class I modeling.

(134) "Sulfur ~~D~~eposition" means the sum of anion and cation sulfur deposition expressed in terms of the total mass of elemental sulfur being deposited. As an example, sulfur deposition for (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> is 0.2427 times the weight of (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> being deposited.

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-020-0040.

~~[ED. NOTE: Tables referenced are not included in rule text. Click here for PDF copy of table(s).]~~

Stat. Auth.: ORS 468.020 [& 468A](#)

Stats. Implemented: ORS 468A

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 12-2002(Temp), f. & cert. ef. 10-8-02 thru 4-6-03; Administrative correction 11-10-03; DEQ 1-2004, f. & cert. ef. 4-14-04; DEQ 1-2005, f. & cert. ef. 1-4-05; DEQ 9-2005, f. & cert. ef. 9-9-05; DEQ 10-2010(Temp), f. 8-31-10, cert. ef. 9-1-10 thru 2-28-11; Administrative correction, 3-29-11; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

## 340-225-0030

### Procedural Requirements

When required to conduct an air quality analysis under this division:

(1) The owner or operator of a source must submit a modeling protocol to DEQ and have it approved before submitting a permit application; and

~~Information Required.~~ (2) In addition to the requirements defined in OAR 340-216-0040 for permit applications, the owner or operator of a source ~~(where required by divisions 222 or 224)~~ must submit all information necessary to perform any analysis or make any determination required under ~~these rules~~ this division. Such information ~~must~~ may include, but is not limited to:

(a) Emissions data for all existing and proposed emission points from the source or modification. This data must represent maximum emissions for the averaging times by regulated pollutant consistent with the ambient air quality standards in OAR 340 division 202.

(b) Stack parameter data, ~~(~~height above ground, exit diameter, exit velocity, and exit temperature, ~~data~~ for all existing and proposed emission points from the source or modification;

(c) An analysis of the air quality and visibility impact of the source or modification, including meteorological and topographical data, specific details of models used, and other information necessary to estimate air quality impacts; and

(d) An analysis of the air quality and visibility impacts, and the nature and extent of all commercial, residential, industrial, and other source emission growth, that has occurred since the baseline concentration year January 1, 1978; in the area the source or modification would significantly affect.

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-020-0040.

Stat. Auth.: ORS 468.020 [& 468A.070](#)

Stats. Implemented: ORS 468A

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 10-2010(Temp), f. 8-31-10, cert. ef. 9-1-10 thru 2-28-11; Administrative correction, 3-29-11; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

## 340-225-0040

## Air Quality Models

All modeled estimates of ambient concentrations required under this ~~rule~~[division](#) must be based on the applicable air quality models, data bases, and other requirements specified in 40 CFR Part 51, Appendix W, "Guidelines on Air Quality Models (Revised)." ~~(July 1, 2000).~~ Where an air quality impact model specified in 40 CFR Part 51, Appendix W is inappropriate, the methods published in the FLAG are generally preferred for analyses in PSD Class I areas. Where an air quality impact model [other than that](#) specified in 40 CFR Part 51, Appendix W is ~~in~~appropriate in PSD Class II and III areas, the model may be modified or another model substituted. Any change or substitution from models specified in 40 CFR Part 51, Appendix W is subject to notice and opportunity for public comment and must receive prior written approval from ~~the Department~~[DEQ](#) and the EPA. ~~Where necessary, methods like those outlined in the "Interim Procedures for Evaluating Air Quality Models (Revised)" (U.S. Environmental Protection Agency, 1984) provide guidance in determining the comparability of models.~~

~~[Publications: The publications referenced in this rule are available from the agency.]~~

**NOTE:** This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-020-0040.

Stat. Auth.: ORS 468.020 [& 468A.070](#)

Stats. Implemented: ORS 468A

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## 340-225-0045

### Requirements for Analysis in Maintenance Areas

Modeling: For determining compliance with the [maintenance area](#) limits established in OAR 340-~~202-0225~~[224-0060\(2\)\(c\) and \(2\)\(d\)](#), ~~NAAQS, and PSD Increments,~~ the following methods must be used:

(1) For each maintenance pollutant ~~and its precursors~~, a single source impact analysis is sufficient to show compliance with ~~standards, PSD increments, and~~ [the maintenance area](#) limits if:

[\(a\) The](#) modeled impacts from emission increases equal to or greater than a ~~significant emission rate~~[SER](#) above the netting basis due to the proposed source or modification being evaluated are less than the Class II Significant ~~Air Quality~~ Impact Levels specified in OAR 340-200-0020; ~~Table 1, and~~

[\(b\) The owner or operator provides an assessment of factors that may impact the air quality conditions in the area showing that the SIL by itself is protective of the maintenance area limits. The assessment must take into consideration but is not limited to the emission increases and decreases since the baseline concentration year from other sources that are expected to cause a significant concentration gradient in the vicinity of the source. Determination of significant concentration gradient may take into account factors including but not limited to ROI formula, spatial distribution of existing emission sources, topography, and meteorology.](#)

(2) If the requirement in section (1) ~~of this rule~~ is not satisfied, ~~the owner or operator of a proposed source or modification being evaluated must perform competing source modeling as follows:~~



~~(a) For demonstrating compliance with the maintenance area limits established in OAR 340-224-0060(2)(c) and (2)(d),~~ the owner or operator of a proposed source or modification must [complete a competing source analysis to demonstrate](#) that modeled impacts from the proposed increased emissions plus ~~Competing~~ ~~Source~~ ~~Impacts~~, plus [the](#) predicted maintenance area concentration are less than the [maintenance area](#) limits [in OAR 340-202-0225](#) for all averaging times.

~~(b) For demonstrating compliance with the NAAQS, the owner or operator of a proposed source or modification must show that the total modeled impacts plus total Competing NAAQS Source Impacts plus General Background Concentrations are less than the NAAQS for all averaging~~

~~(c) For demonstrating compliance with the PSD Increments (as defined in OAR 340-202-0210, Table 1), the owner or operator of a proposed source or modification must show that modeled impacts from the proposed increased emissions (above the baseline concentration) plus competing PSD Increment Consuming Source Impacts (above the baseline concentration) are less than the PSD increments for all averaging times.~~

~~[ED. NOTE: Tables referenced are available from the agency.]~~

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-020-0040.](#)

Stat. Auth.: ORS 468.020 [& 468A.070](#)

Stats. Implemented: ORS 468A, ~~468A.025 & 468A.035~~

Hist.: DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 1-2005, f. & cert. ef. 1-4-05; DEQ 10-2010(Temp), f. 8-31-10, cert. ef. 9-1-10 thru 2-28-11; Administrative correction, 3-29-11; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

## 340-225-0050

### Requirements for Analysis in PSD Class II and Class III Areas

Modeling: For determining compliance with the ~~NAAQS~~, ~~and~~ ~~PSD~~ ~~increments~~, [and other requirements](#) in PSD Class II and Class III areas, the following methods must be used:

(1) For each [regulated](#) pollutant ~~and its precursors~~, a single source impact analysis is sufficient to show compliance with [the AAQS](#) ~~standards~~ and PSD increments if:

[\(a\) The](#) modeled impacts from emission increases equal to or greater than a ~~significant emission rate~~ [SER](#) above the netting basis due to the proposed source or modification being evaluated are less than the Class II ~~Significant Air Quality Impact~~ ~~Levels~~ specified in OAR 340-200-0020; ~~and, Table 1.~~

[\(b\) The owner or operator provides an assessment of factors that may impact the air quality conditions in the area showing that the SIL by itself is protective of the AAQS and PSD increments. The assessment must take into consideration but is not limited to the following factors:](#)

[\(A\) The background ambient concentration relative to the AAQS;](#)

[\(B\) The emission increases and decreases since the baseline concentration year from other sources that are expected to cause a significant concentration gradient in the vicinity of the source. Determination of significant](#)

concentration gradient may take into account factors including but not limited to ROI formula, spatial distribution of existing emission sources, topography, and meteorology.

(2) If the requirement in section (1) ~~of this rule~~ is not satisfied, the owner or operator of a proposed source ~~or modification~~ being evaluated must ~~perform complete a~~ competing source ~~modeling analysis~~ as follows:

(a) For demonstrating compliance with the PSD ~~Class II and III~~ Hincrements (as defined in OAR 340-202-0210, ~~Table 1~~), the owner or operator of ~~a proposed the~~ source or modification must show that modeled impacts from the proposed increased emissions, ~~(above the modeled Bbaseline Cconcentration.)~~ plus ~~C~~competing PSD ~~H~~increment ~~C~~consuming ~~S~~source ~~H~~impacts ~~(above the modeled Bbaseline Cconcentration)~~ are less than the PSD increments for all averaging times; ~~and~~.

(b) For demonstrating compliance with the ~~NAAQS~~, the owner or operator of ~~a proposed the~~ source must show that the total modeled impacts plus total ~~C~~competing ~~NAAQS S~~source ~~H~~impacts plus ~~G~~general ~~B~~background ~~C~~concentrations are less than the ~~NAAQS~~ for all averaging times.

(3) The owner or operator of the source or modification must demonstrate that the proposed source or modification will not cause or contribute to a new violation of an AAQS or PSD increment even if the single source impact is less than the significant impact level, in accordance with OAR 340-202-0050(2).

#### ~~(43) Additional Impact Modeling:~~

~~(a) When referred to this rule by divisions 222 or 224, t~~The owner or operator of a source or modification must also provide an analysis of:

~~(a) t~~The impairment to visibility, soils and vegetation that would occur as a result of the source or modification, and general commercial, residential, industrial and other growth associated with the source or modification. As a part of this analysis, deposition modeling analysis is required for sources emitting heavy metals above the ~~SERs~~significant emission rates as defined in OAR 340-200-0020, ~~Table 2~~. Concentration and deposition modeling may also be required for sources emitting other compounds on a case-by-case basis; and

(b) The ~~owner or operator must provide an analysis of the~~ air quality concentration projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.

#### ~~(4) Air Quality Monitoring:~~

~~(a)(A) When referred to this rule by division 224, the owner or operator of a source must submit with the application an analysis of ambient air quality in the area impacted by the proposed project. This analysis, which is subject to the Department's approval, must be conducted for each pollutant potentially emitted at a significant emission rate by the proposed source or modification. The analysis must include continuous air quality monitoring data for any pollutant that may be emitted by the source or modification, except for volatile organic compounds. The data must relate to the year preceding receipt of the complete application and must have been gathered over the same time period. The Department may allow the owner or operator to demonstrate that data gathered over some other time period would be adequate to determine that the source or modification would not cause or contribute to a violation of an ambient air quality standard or any applicable pollutant increment. Pursuant to the requirements of these rules, the owner or operator must submit for the Department's approval, a preconstruction air quality monitoring plan. This plan must be submitted in writing at least 60 days prior to the planned beginning of monitoring and approved in writing by the Department before monitoring begins.~~

~~(B) Required air quality monitoring must be conducted in accordance with 40 CFR 58 Appendix B, "Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring" (July 1, 2000) and with other methods on file with the Department.~~

~~(C) The Department may exempt the owner or operator of a proposed source or modification from preconstruction monitoring for a specific pollutant if the owner or operator demonstrates that the air quality impact from the emissions increase would be less than the amounts listed below or that modeled competing source concentration (plus General Background Concentration) of the pollutant within the Source Impact Area are less than the following significant monitoring concentrations:~~

~~(i) Carbon monoxide; 575 ug/m<sup>3</sup>, 8 hour average;~~

~~(ii) Nitrogen dioxide; 14 ug/m<sup>3</sup>, annual average;~~

~~(iii) PM<sub>10</sub>; 10 ug/m<sup>3</sup>, 24 hour average;~~

~~(iv) PM<sub>2.5</sub>; 4 ug/m<sup>3</sup>, 24 hour average;~~

~~(v) Sulfur dioxide; 13 ug/m<sup>3</sup>, 24 hour average;~~

~~(vi) Ozone; Any net increase of 100 tons/year or more of VOCs from a source or modification subject to PSD requires an ambient impact analysis, including the gathering of ambient air quality data. However, requirement for ambient air monitoring may be exempted if existing representative monitoring data shows maximum ozone concentrations are less than 50% of the ozone NAAQS based on a full season of monitoring;~~

~~(vii) Lead; 0.1 ug/m<sup>3</sup>, 24 hour average;~~

~~(viii) Fluorides; 0.25 ug/m<sup>3</sup>, 24 hour average;~~

~~(ix) Total reduced sulfur; 10 ug/m<sup>3</sup>, 1 hour average;~~

~~(x) Hydrogen sulfide; 0.04 ug/m<sup>3</sup>, 1 hour average;~~

~~(xi) Reduced sulfur compounds; 10 ug/m<sup>3</sup>, 1 hour average.~~

~~(D) The Department may allow the owner or operator of a source (where required by divisions 222 or 224) to substitute post construction monitoring for the requirements of (4)(a)(A) for a specific pollutant if the owner or operator demonstrates that the air quality impact from the emissions increase would not cause or contribute to an exceedance of any air quality standard. This analysis must meet the requirements of 340-225-0050(2)(b) and must use representative or conservative General Background Concentration data.~~

~~(E) When PM<sub>10</sub> preconstruction monitoring is required by this section, at least four months of data must be collected, including the season(s) the Department judges to have the highest PM<sub>10</sub> levels. PM<sub>10</sub> must be measured in accordance with 40 CFR part 50, Appendix J (July 1, 1999). In some cases, a full year of data will be required.~~

~~(b) After construction has been completed, the Department may require ambient air quality monitoring as a permit condition to establish the effect of emissions, other than volatile organic compounds, on the air quality of any area that such emissions could affect.~~

~~[ED. NOTE: Tables referenced are available from the agency.]~~

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

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-020-0040.

Stat. Auth.: ORS 468.020 & 468A.070

Stats. Implemented: ORS 468A

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 1-2004, f. & cert. ef. 4-14-04; DEQ 10-2010(Temp), f. 8-31-10, cert. ef. 9-1-10 thru 2-28-11; Administrative correction, 3-29-11; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

### 340-225-0060

#### Requirements for Demonstrating Compliance with Standards and Increments in PSD Class I Areas

For determining compliance with ~~standards~~ AAQS and PSD increments in PSD Class I areas, the following methods must be used:

(1) Before January 1, 2003, the owner or operator of a source ~~(where required by divisions 222 or 224)~~ must model impacts and demonstrate compliance with standards and increments on all PSD Class I areas that may be affected by the source or modification.

(2) On or after January 1, 2003, the owner or operator of a source ~~(where required by divisions 222 or 224)~~ must meet the following requirements:

(a) For each regulated pollutant ~~and its precursors~~, a single source impact analysis ~~will be~~ is sufficient to show compliance with PSD increments if modeled impacts from emission increases equal to or greater than a ~~significant emission rate~~ SER above the netting basis due to the proposed source or modification being evaluated are demonstrated to be less than the Class I significant impact levels specified in OAR 340-200-0020, ~~Table 1~~.

~~(b) If the~~ is requirement ~~in subsection (a) of this section~~ is not satisfied, the owner or operator must ~~also complete a competing source analysis to demonstrate~~ show that the increased source impacts ~~(above B~~ baseline ~~C~~ concentration) plus ~~C~~ competing PSD ~~I~~ increment ~~C~~ consuming ~~S~~ source ~~I~~ impacts are less than the PSD Class I increments for all averaging times.

~~(b)~~ (c) For each regulated pollutant ~~and its precursors~~, a single source impact analysis ~~will be~~ is sufficient to show compliance with ~~standards~~ AAQS if modeled impacts from emission increases equal to or greater than a ~~significant emission rate~~ SER above the netting basis due to the proposed source or modification being evaluated are demonstrated to be less than the Class ~~I~~ II significant impact levels specified in OAR 340-200-0020, ~~Table 1~~. If this requirement is not satisfied, the owner or operator must complete a competing source analysis to demonstrate compliance with the AAQS by showing that its total modeled impacts plus total modeled competing source impacts plus general background concentrations are less than the AAQS for all averaging times.

~~(d) If the requirement of subsection (2)(a) of this section is not satisfied, and background monitoring data for each PSD Class I area shows that the NAAQS is more controlling than the PSD increment then the source must~~

~~also demonstrate compliance with the NAAQS by showing that their total modeled impacts plus total modeled Competing NAAQS Source Impacts plus General Background Concentrations are less than the NAAQS for all averaging times.~~

(c) The owner or operator also must demonstrate that the proposed source or modification will not cause or contribute to a new violation of an ambient air quality standard or PSD increment even if the single source impact is less than the significant impact levels under subsections (a) and (c), in accordance with OAR 340-202-0050(2).

~~[ED. NOTE: Table referenced is available from the agency.]~~

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-020-0040.

Stat. Auth.: ORS 468.020 & 468A.070

Stats. Implemented: ORS 468A

Hist.: DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 10-2010(Temp), f. 8-31-10, cert. ef. 9-1-10 thru 2-28-11; Administrative correction, 3-29-11; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

### 340-225-0070

#### Requirements for Demonstrating Compliance with Air Quality Related Values Protection

(1) Sources that are not ~~F~~federal ~~M~~major ~~S~~sources are exempt from the requirements of ~~the remainder of~~ this rule.

(2) When directed by OAR 340 division 224, the requirements of this rule apply to each emissions unit that increases the actual emissions of a regulated pollutant above the portion of the netting basis attributable to that emissions unit.

(3) DEQ must provide N~~otice~~otice of permit applications involving AQRV analysis to EPA and Federal Land Managers as follows~~for actions subject to the requirements of divisions 222 and 224:~~

(a) If a proposed ~~major source or major modification~~ could impact air quality related values, ~~(including visibility,)~~ deposition, and ozone impacts within a Class I area, ~~the Department~~DEQ will provide written notice to the EPA and to the appropriate Federal Land Manager within 30 days of receiving such permit application. The notice will include a copy of all information relevant to the permit application, including analysis of anticipated impacts on Class I area air quality related values ~~(including visibility)~~. ~~The Department~~DEQ will also provide at least 30 days notice to EPA and the appropriate Federal Land Manager of any scheduled public hearings and preliminary and final actions taken on the application;

(b) If ~~the Department~~DEQ receives advance notice of a permit application for a source that may affect Class I area visibility, ~~the Department~~DEQ will notify all affected Federal Land Managers within 30 days of receiving the advance notice;

(c) During its review of source impacts on Class I area air quality related values, ~~(including visibility)~~ pursuant to this rule, ~~the Department~~DEQ will consider any analysis performed by the Federal Land Manager that is received by ~~the Department~~DEQ within 30 days of the date that DEQ sent the notice required by subsection (a). If ~~the Department~~DEQ disagrees with the Federal Land Manager's demonstration, ~~the Department~~DEQ will include a discussion of the disagreement in the Notice of Public Hearing;

(d) As a part of the notification required in OAR 340-209-0060, ~~the Department~~DEQ will provide the Federal Land Manager an opportunity to demonstrate that the emissions from the proposed source ~~or modification~~ would have an adverse impact on air quality related values, ~~(including visibility)~~ of any federal mandatory Class I area. This adverse impact determination may be made even if there is no demonstration that a Class I ~~maximum allowable~~PSD increment has been exceeded. If ~~the Department~~DEQ agrees with the demonstration, it will not issue the permit.

~~(43)~~ Visibility impact analysis requirements:

(a) If divisions ~~222 or~~ 224 requires a visibility impact analysis, the owner or operator must demonstrate that the potential to emit any regulated pollutant at a ~~significant emission rate~~SER in conjunction with all other applicable emission increases or decreases, including secondary emissions, permitted since January 1, 1984 and other increases or decreases in emissions, will not cause or contribute to significant impairment of visibility on any Class I area.

~~(b) The Department also encourages +~~ The owner or operator ~~to~~ must conduct a visibility analysis demonstrate that these same emission increases or decreases will not cause or contribute to significant impairment of visibility on the Columbia River Gorge National Scenic Area ~~(if it is affected by the source);~~

~~(b)~~ The owner or operator must submit all information necessary to perform any analysis or demonstration required by these rules ~~pursuant to OAR 340-224-0030(1).~~

~~(e)~~ Determination of significant impairment: The results of the modeling must be sent to the affected Federal Land Managers and ~~the Department~~DEQ. The land managers may, within 30 days following receipt of the source's visibility impact analysis, determine whether or not significant impairment of visibility in a Class I area would result. ~~The Department~~DEQ will consider the comments of the Federal Land Manager in its consideration of whether significant impairment will result. If ~~the Department~~DEQ determines that significant impairment would result, it will not issue a permit for the proposed source.

~~(45) Types of visibility modeling required. For receptors in PSD Class I areas within the PSD Class I Range of Influence, In consultation with the Federal Land Managers under FLAG, DEQ may require a plume blight analysis or regional haze analysis, or both is required.~~

~~(65)~~ Criteria for visibility impacts:

(a) The owner or operator of a source, ~~(where required by divisions 222 or 224,)~~ is encouraged to demonstrate that their impacts on visibility satisfy the guidance criteria as referenced in the FLAG.

(b) If visibility impacts are a concern, ~~the Department~~DEQ will consider comments from the Federal Land Manager when deciding whether significant impairment will result. Emission offsets may also be considered. If ~~the Department~~DEQ determines that significant impairment would result, it will not issue a permit for the proposed source.

(76) Deposition modeling ~~may be~~ is required for receptors in PSD Class I areas and the Columbia River Gorge National Scenic Area where visibility modeling is required. This may include, but is not limited to an analysis of ~~N~~nitrogen ~~D~~deposition and ~~S~~sulfur ~~D~~deposition.

(87) Visibility monitoring:

(a) If divisions ~~222 or~~ 224 requires visibility monitoring data, the owner or operator must use existing data to establish existing visibility conditions within Class I areas as summarized in the FLAG Report.

(b) After construction has been completed the owner or operator must conduct such visibility monitoring ~~as the Department if DEQ~~ requires visibility monitoring as a permit condition to establish the effect of the regulated pollutant on visibility conditions within the impacted Class I area.

(98) Additional impact analysis: ~~t~~The owner or operator subject to OAR 340-224-0060(23) or OAR 340-224-0070(32) must provide an analysis of the impact to visibility that would occur as a result of the proposed source ~~or modification~~ and general commercial, residential, industrial, and other growth associated with the source ~~or major modification~~.

(109) If the Federal Land Manager recommends and ~~the Department~~ DEQ agrees, ~~the Department~~ DEQ may require the owner or operator to analyze the potential impacts on other Air Quality Related Values and how to protect them. Procedures from the FLAG report should be used in this recommendation. Emission offsets may also be used. If the Federal Land Manager finds that significant impairment would result from the proposed activities and ~~Department~~ DEQ agrees, ~~the Department~~ DEQ will not issue a permit for the proposed source.

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-020-0040.

Stat. Auth.: ORS 468.020 & 468A.070

Stats. Implemented: ORS 468A

Hist.: DEQ 18-1984, f. & ef. 10-16-84; DEQ 14-1985, f. & ef. 10-16-85; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0276; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 26-1996, f. & cert. ef. 11-26-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-2000; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01, Renumbered from 340-224-0110

## **~~340-225-0090~~**

### **~~Requirements for Demonstrating a Net Air Quality Benefit~~**

~~Demonstrations of net air quality benefit for offsets must include the following:~~

~~(1) Ozone areas (VOC and NOx emissions). For sources capable of impacting a designated ozone nonattainment or maintenance area;~~

~~(a) Offsets for VOC and NOx are required if the source will be located within the designated area or within the Ozone Precursor Distance;~~

~~(b) The amount and location of offsets must be determined in accordance with this subsection;~~



~~(A) For new or modified sources locating within a designated nonattainment area, the offset ratio is 1:1:1. These offsets must come from within either the same designated nonattainment area as the new or modified source or another ozone nonattainment area (with equal or higher nonattainment classification) that contributes to a violation of the NAAQS in the same designated nonattainment area as the new or modified source.~~

~~(B) For new or modified sources locating within a designated maintenance area, the offset ratio is 1:1:1. These offsets may come from within either the designated area or the ozone precursor distance.~~

~~(C) For new or modified sources locating outside the designated area, but within the ozone precursor distance, the offset ratio is 1:1. These offsets may come from within either the designated area or the ozone precursor distance.~~

~~(D) Offsets from outside the designated area but within the Ozone Precursor Distance must be from sources affecting the designated area in a comparable manner to the proposed emissions increase. Methods for determining offsets are described in the Ozone Precursor Offsets definition (OAR 340-225-0020(11)).~~

~~(c) In lieu of obtaining offsets, the owner or operator may obtain an allocation at the rate of 1:1 from a growth allowance, if available, in an applicable maintenance plan.~~

~~(d) Sources within or affecting the Medford Ozone Maintenance Area are exempt from the requirement for NO<sub>x</sub> offsets relating to ozone formation.~~

~~(e) Sources within or affecting the Salem Ozone Maintenance Area are exempt from the requirement for VOC and NO<sub>x</sub> offsets relating to ozone formation.~~

~~(2) Non-Ozone areas (PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, CO, NO<sub>x</sub>, and Lead emissions):~~

~~(a) For a source locating within a designated nonattainment area, the owner or operator must comply with paragraphs (A) through (E) of this subsection:~~

~~(A) Obtain offsets from within the same designated nonattainment area for the nonattainment pollutant(s);~~

~~(B) Except as provided in paragraphs (C) of this subsection, provide a minimum of 1:1 offsets for each nonattainment pollutant and precursor with emission increases over the Netting Basis;~~

~~(C) For PM<sub>2.5</sub>; inter-pollutant offsets are allowed as follows:~~

~~(i) 1 ton of direct PM<sub>2.5</sub> may be used to offset 40 tons of SO<sub>2</sub>;~~

~~(ii) 1 ton of direct PM<sub>2.5</sub> may be used to offset 100 tons of NO<sub>x</sub>;~~

~~(iii) 40 tons of SO<sub>2</sub> may be used to offset 1 ton of direct PM<sub>2.5</sub>;~~

~~(iv) 100 tons of NO<sub>x</sub> may be used to offset 1 ton of direct PM<sub>2.5</sub>.~~

~~(D) Except as provided in section (7) of this rule, provide a net air quality benefit within the designated nonattainment area. "Net Air Quality Benefit" means:~~



~~(i) Offsets obtained result in a reduction in concentration at a majority of the modeled receptors and the emission increases from the proposed source or modification will result in less than a significant impact level increase at all modeled receptors; or~~

~~(ii) For a small scale local energy project and any infrastructure related to that project located in the same area, a reduction of the nonattainment pollutant emissions equal to the ratio specified in this subsection, provided that the proposed major source or major modification would not cause or contribute to a violation of the national ambient air quality standard or otherwise pose a material threat to compliance with air quality standards in the nonattainment area.~~

~~(E) Provide offsets sufficient to demonstrate reasonable further progress toward achieving the NAAQS.~~

~~(b) For a source locating outside a designated nonattainment area but causing a significant air quality impact on the area, the owner or operator must provide offsets sufficient to reduce the modeled impacts below the significant air quality impact level (OAR 340-200-0020) at all receptors within the designated nonattainment area. These offsets may come from within or outside the designated nonattainment area. This requirement only applies to the emissions remaining after first deducting the offsets obtained in accordance with section (7) of this rule.~~

~~(c) For a source locating inside or causing a significant air quality impact on a designated maintenance area, the owner or operator must either provide offsets sufficient to reduce modeled impacts below the significant air quality impact level (OAR 340-200-0020) at all receptors within the designated maintenance area or obtain an allocation from an available growth allowance as allowed by an applicable maintenance plan. These offsets may come from within or outside the designated maintenance area.~~

~~(A) Medford-Ashland AQMA: Proposed new major PM10 sources or major PM10 modifications locating within the AQMA that are required to provide emission offsets under OAR 340-224-0060(2)(a) must provide reductions in PM10 emissions equal to 1.2 times the emissions increase over the netting basis from the new or modified source, and must provide a net air quality benefit within the AQMA. "Net Air Quality Benefit" means:~~

~~(i) A reduction in concentration at a majority of the modeled receptors and less than a significant impact level increase at all modeled receptors; or~~

~~(ii) For a small scale local energy project and any infrastructure related to that project located in the same area, a reduction of the maintenance pollutant emissions equal to the ratio specified in this paragraph, provided that the proposed major source or major modification would not cause or contribute to a violation of the national ambient air quality standard or otherwise pose a material threat to compliance with air quality standards in the maintenance area.~~

~~(B) Medford-Ashland AQMA: Proposed new major PM10 sources or major PM10 modifications located outside the Medford-Ashland AQMA that cause a significant air quality impact on the AQMA must provide reductions in PM10 emissions sufficient to reduce modeled impacts below the significant air quality impact level (OAR 340-200-0020) at all receptors within the AQMA.~~

~~(3) Except as provided in paragraph (2)(a)(C) of this rule, the emission reductions used as offsets must be of the same type of pollutant as the emissions from the new source or modification. Sources of PM10 must be offset with particulate in the same size range.~~

~~(4) The emission reductions used as offsets must be contemporaneous, that is, the reductions must take effect before the time of startup but not more than two years before the submittal of a complete permit application for the new source or modification. This time limitation may be extended through banking, as provided for in OAR 340 division 268, Emission Reduction Credit Banking. In the case of replacement facilities, the DEQ may allow simultaneous operation of the old and new facilities during the startup period of the new facility, if net emissions are not increased during that time period. Any emission reductions must be federally enforceable at the time of the issuance of the permit.~~

~~(5) Offsets required under this rule must meet the requirements of Emissions Reduction Credits in OAR 340 division 268.~~

~~(6) Emission reductions used as offsets must be equivalent in terms of short term, seasonal, and yearly time periods to mitigate the effects of the proposed emissions.~~

~~(7) Offsets obtained in accordance with OAR 340-240-0550 and 340-240-0560 for sources locating within or causing significant air quality impact on the Klamath Falls PM<sub>2.5</sub> nonattainment or PM<sub>10</sub> maintenance areas are exempt from the requirements of paragraph (2)(a)(E) and sub-sections (2)(b) and (2)(c) of this rule provided that the proposed major source or major modification would not cause or contribute to a new violation of the national ambient air quality standard. This exemption only applies to the direct PM<sub>2.5</sub> or PM<sub>10</sub> offsets obtained from residential wood-fired devices in accordance with 340-240-0550 and 340-240-0560. Any remaining emissions from the source that are offset by emission reductions from other sources are subject to the requirements of paragraph (2)(a)(E) or sub-sections (2)(b) or (2)(c) of this rule, as applicable.~~

~~**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 25-1981, f. & cert. ef. 9-8-81; DEQ 5-1983, f. & cert. ef. 4-18-83; DEQ 8-1988, f. & cert. ef. 5-19-88 (and corrected 5-31-88); DEQ 22-1989, f. & cert. ef. 9-26-89; DEQ 27-1992, f. & cert. ef. 11-12-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0260; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 4-1995, f. & cert. ef. 2-17-95; DEQ 26-1996, f. & cert. ef. 11-26-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1970; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0111; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01, Renumbered from 340-224-0090 & 340-240-0260; DEQ 11-2002, f. & cert. ef. 10-8-02; DEQ 12-2002(Temp), f. & cert. ef. 10-8-02 thru 4-6-03; Administrative correction 11-10-03; DEQ 1-2004, f. & cert. ef. 4-14-04; DEQ 1-2005, f. & cert. ef. 1-4-05; DEQ 3-2007, f. & cert. ef. 4-12-07; DEQ 10-2010(Temp), f. 8-31-10, cert. ef. 9-1-10 thru 2-28-11; Administrative correction, 3-29-11; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11; DEQ 10-2012, f. & cert. ef. 12-11-12~~

**Table 1**

**Constand K for Range of Influence Calculation**

| Pollutant | PM <sub>2.5</sub> /PM <sub>10</sub> | SO <sub>x</sub> | NO <sub>x</sub> | CO | Lead |
|-----------|-------------------------------------|-----------------|-----------------|----|------|
| K         | 5                                   | 5               | 5               | 40 | 0.15 |

## DIVISION 226

### GENERAL EMISSION STANDARDS

~~[NOTE: Administrative Order DEQ-16 repealed previous rules OAR 340-021-0005 through 340-021-0031 (consisting of AP 1, filed 1-14-57; and SA 16, filed 2-13-62).]~~

#### 340-226-0005

##### Applicability and Jurisdiction

(1) This division applies in all areas of the state.

(2) Subject to the requirements in this division, LRAPA is designated by the EQC to implement this division within its area of jurisdiction. The requirements and procedures contained in this division must be used by LRAPA unless LRAPA has adopted or adopts rules which are at least as strict as this division.

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

Stat. Auth.: ORS 468A

Stats. Implemented: ORS 468 & 468A

#### **340-226-0010**

##### **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) "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;~~

~~(13)~~ "Refuse" means unwanted matter.

~~(24)~~ "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.~~

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

~~[Publications: The publication(s) referenced in this rule is available from the agency.]~~

Stat. Auth.: ORS 468.[020](#) & ~~ORS~~ 468A.[025](#)

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

Hist.: DEQ 16, f. 6-12-70, ef. 7-11-70; DEQ 1-1984, f. & ef. 1-16-84; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 3-1996, f. & cert. ef. 1-29-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0005; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## 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~~ [installed, constructed, or modified after June 1, 1970](#), 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~~ [The EQC](#) 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, [regulated](#) 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~~ [the EQC](#); or
  - (c) Necessary to address the cumulative impact of sources on air quality.
- (4) ~~The Commission~~ [The EQC](#) 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~~[DEQ](#) revokes or modifies the term or condition by a permit revision.

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

Stat. Auth.: ORS 468.[020](#) & ~~ORS~~-468A.[025](#)

Stats. Implemented: ORS ~~468 & ORS~~-468A.[025](#)

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0001; DEQ 19-1993, f. 11-4-93 & cert. ef. 1-1-94; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-0600; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-226-0110

#### Pollution Prevention

The owner ~~and~~[or](#) operator of a source ~~are~~[is](#) 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.

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

~~Stat. Auth.~~[020](#): ORS 468 & ~~ORS~~-468A.[025](#)

Stats. Implemented: ORS ~~468 & ORS~~-468A.[025](#)

Hist.: DEQ 19-1993, f. 11-4-93 & cert. ef. 1-1-94; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-0610; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-226-0120

#### Operating and Maintenance Requirements

(1) Operational, Maintenance and Work Practice Requirements:

(a) Where ~~the Department~~[DEQ](#) 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~~devices and emission reduction processes at the highest reasonable efficiency and effectiveness to minimize emissions, ~~the Department~~DEQ will establish such requirements by permit condition or notice of construction approval;

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

(A) Flow rates, temperatures, pressure drop, ammonia slip, and other physical or chemical parameters related to the operation of air pollution control ~~equipment~~devices 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~~devices be functioning properly.

(2) Emission Action Levels:

(a) Where ~~the Department~~DEQ 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~~devices and emission reduction processes at the highest reasonable efficiency and effectiveness, ~~the Department~~DEQ 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~~device 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~~DEQ during normal business hours; and

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

(c) ~~The Department~~DEQ 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~~devices 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~~DEQ considers operational variability and the capability of air pollution control ~~equipment~~devices and emission reduction processes. If the performance of air pollution control ~~equipment~~devices and emission reduction processes during start-up or shut-down differs from the performance under normal operating conditions, ~~the Department~~DEQ determines the highest reasonable efficiency and effectiveness separately for these operating modes.

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

Stat. Auth.: ORS 468.~~020, & ORS~~ 468A.025, 468A.040 & 468A.055

Stats. Implemented: ORS ~~468 & ORS~~ 468A.025, 468A.040 & 468A.055

Hist.: DEQ 19-1993, f. 11-4-93 & cert. ef. 1-1-94; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-0620; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-226-0130

#### Typically Achievable Control Technology (TACT)

For existing sources, the emission limit established will be typical of the emission level achieved by emissions units similar in type and size. For new and modified sources, the emission limit established will be typical of the emission level achieved by well controlled new or modified emissions units similar in type and size that were recently installed. TACT determinations will be based on information known to DEQ while considering pollution prevention, impacts on other environmental media, energy impacts, capital and operating costs, cost effectiveness, and the age and remaining economic life of existing emission control devices. DEQ may consider emission control technologies typically applied to other types of emissions units where such technologies could be readily applied to the emissions unit. If an emission limitation is not feasible, a design, equipment, work practice, operational standard, or combination thereof, may be required.

(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 for the regulated pollutant under OAR 340 divisions 224, 230, OAR 340-232-0010 through 340-232-0240, OAR 340 ~~D~~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~~DEQ determines that air pollution control ~~equipment devices~~ 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~~Major NSR requirements in OAR 340 division 224, a Type A State NSR action under 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 regulated 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 PM10 equal to or greater than 500 pounds per year in a PM10 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 PM10 equal to or greater than 500 pounds per year in a PM10 nonattainment area; and

(d) ~~The Department~~[DEQ](#) determines that the proposed air pollution control ~~equipment~~[devices](#) and emission reduction processes do not represent TACT.

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

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

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

Stat. Auth.: ORS ~~468.020, & ORS~~ [468A.025, 468A.040 & 468A.070](#)

Stats. Implemented: ORS ~~468.020 & ORS~~ [468A.025, 468A.040 & 468A.070](#)

Hist.: DEQ 19-1993, f. 11-4-93 & cert. ef. 1-1-94; DEQ 22-1996, f. & cert. ef. 10-22-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-0630; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## **340-226-0140**

### **Additional Control Requirements for Stationary Sources of Air Contaminants**

In addition to other applicable requirements, ~~the Department~~[DEQ](#) 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~~[DEQ](#) will conduct monitoring to confirm a violation of an ~~A~~[a](#)mbient ~~A~~[a](#)ir ~~Q~~[q](#)uality ~~S~~[s](#)tandard-.

(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~~[DEQ](#) 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~~the EQC.

(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 OAR~~OAR 340, divisions 200 through 268:

(a) Chemical weapons; and

(b) Combustion and degradation by-products of chemical weapons.

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

Stat. Auth.: ORS 468.020, ~~& ORS~~ 468A.025 & 468A.040

Stats. Implemented: ORS ~~468 & ORS~~ 468A.025 & 468A.040

Hist.: DEQ 19-1993, f. 11-4-93 & cert. ef. 1-1-94; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-0640; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 15-2001, f. & cert. ef. 12-26-01

## Grain Loading Standards

### ~~340-226-0200~~

#### ~~Applicability~~

~~OAR 340-226-0200 through 340-226-0210 apply in all areas of the state.~~

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

~~Stat. Auth.: ORS 468 & ORS 468A~~

~~Stats. Implemented: ORS 468A.025~~

~~Hist.: DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0012~~

### 340-226-0210

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

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

~~(a) 0.2 grains per standard cubic foot for existing sources, or~~

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

~~(2) This rule does not apply to fuel or refuse burning equipment or to fugitive emissions.~~

(1) This rule does not apply to fugitive emissions sources, fuel burning equipment, refuse burning equipment, or to solid fuel burning devices certified under OAR 340-262-0500.

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

(a) For sources installed, constructed, or modified before June 1, 1970:

(A) If representative compliance source test data prior to [INSERT SOS FILING DATE OF RULES] is less than or equal to 0.080 grains per dry standard cubic foot, then the limit is 0.10 grains per dry standard cubic foot;

(B) If representative compliance source test data prior to [INSERT SOS FILING DATE OF RULES] is greater than 0.080 grains per dry standard cubic foot, then the limit is:

(i) 0.2 grains per dry standard cubic foot prior to Dec. 31, 2019; and

(ii) 0.15 grains per dry standard cubic foot on or after Jan. 1, 2020; and

(C) For equipment or a mode of operation that is used less than 876 hours per calendar year, the limit is 0.20 grains per standard cubic foot on or after Jan. 1, 2020.

(b) For sources installed, constructed, or modified on or after June 1, 1970 but prior to [INSERT SOS FILING DATE OF RULES]:

(A) If representative compliance source test data prior to [INSERT SOS FILING DATE OF RULES] is less than or equal to 0.080 grains per dry standard cubic foot, then the limit is 0.10 grains per dry standard cubic foot;

(B) If representative compliance source test data prior to [INSERT DATE OF EQC ADOPTION OF RULES] is greater than 0.080 grains per dry standard cubic foot, then the limit is:

(i) 0.1 grains per dry standard cubic foot prior to Dec. 31, 2019; and

(ii) 0.14 grains per dry standard cubic foot on or after Jan. 1, 2020.

(c) For sources installed, constructed or modified after [INSERT SOS FILING DATE OF RULES], the limit is 0.10 grains per dry standard cubic foot.

(d) The owner or operator of a source installed, constructed or modified before [INSERT SOS FILING DATE OF RULES] who is unable to comply with the compliance dates specified in subparagraphs (a)(B)(ii) and (b)(B)(ii) may request that DEQ grant an extension allowing the source up to one additional year to comply with the standard. The request for an extension must be submitted no later than Oct. 1, 2019.

(3) Compliance with the emissions standards in section (2) is determined using:

(a) Oregon Method 5;

(b) DEQ Method 8, as approved by DEQ for sources with exhaust gases at or near ambient conditions;

(c) DEQ Method 7 for direct heat transfer sources; or

(d) An alternative method approved by DEQ.

(e) For purposes of this rule, representative source test data is data that is obtained when a source is operating and maintaining air pollution control devices and emission reduction processes at the highest reasonable efficiency and effectiveness to minimize emissions based on the current configuration of the emissions unit and pollution control equipment.

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

Stat. Auth.: ORS 468.~~020, & ORS~~ 468A.025 & 468A.070

Stats. Implemented: ~~ORS 468.020 & ORS~~ 468A.025 & 468A.070.

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 3-1996, f. & cert. ef. 1-29-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0030; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## **Particulate Emissions from Process Equipment**

### **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 OAR 340-226-8010~~Table 1~~, for the process weight rate allocated to such process.

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

[ED. NOTE: ~~The~~ Table referenced ~~to in this rule is not printed in the OAR Compilation. Copies~~ are available from the agency. [Click here for PDF copy of tables.](#)]

Stat. Auth.: ORS 468.020, & ORS 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0040; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### **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~~ [DEQ](#).

(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.

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

Stat. Auth.: ORS 468.020, 468A.025 & ~~ORS~~ 468A.070

Stats. Implemented: ~~ORS 468.020 &~~ ORS 468A.025 & 468A.070;

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 3-1996, f. & cert. ef. 1-29-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0045; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## Alternative Emission Controls

### 340-226-0400

#### Alternative Emission Controls (Bubble)

(1) [DEQ may approve](#) ~~A~~ 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 [total](#) emissions for each [regulated](#) pollutant [from all emissions units involved \(i.e., “under the bubble”\)](#) are not increased above the PSEL.

(c) [The owner or operator of the source demonstrates](#) ~~T~~ the net air quality ~~impact is not increased as demonstrated by procedures required by~~ [benefit under](#) OAR 340-224-~~0520~~0090, ~~Requirements for Net Air Quality Benefit~~.

(d) No other ~~pollutants~~ [air contaminants](#) 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 ([NSR](#)), ~~NSPS~~ (OAR 340 division 238 ([NSPS](#)), and ~~NESHAP~~ (OAR 340 division 244 ([NESHAP](#)), where required, are not relaxed;

(f) Specific emission limits are established for each emission unit involved ([“under the bubble”](#)) such that compliance with the PSEL can be readily determined;

(g) [The owner or operator of the source applies](#) ~~Application is made~~ for a permit [or permit](#) modification and such ~~modification application~~ is approved by ~~the Department~~ [DEQ](#).

(h) The emissions unit that reduces its emissions achieves the reductions by~~reducing emission source~~ reduces~~ing~~ its allowable emission rate, and not by~~Merely~~ reducing production, throughput, or hours of operation ~~is~~ insufficient.

(2) The permit will include a net~~Total~~ emissions limit on total emissions from ~~the all~~ devices or emissions sources~~units involved~~ (“under the bubble”) ~~will be established in the permit~~.

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

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

Stat. Auth.: ORS 468.020, ~~& ORS~~ 468A.025, 468A.040 & 468A.310

Stats. Implemented: ~~ORS 468 &~~ ORS 468A

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 12-1993, f. & cert. ef. 9-24-93; Renumbered from 340-020-0315; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1030; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

#### 340-226-8010

| Table #4<br><del>OAR 340-226-0310</del><br>Particulate Matter Emissions Standards for Process Equipment |                     |                   |                     |                   |                     |  |
|---------------------------------------------------------------------------------------------------------|---------------------|-------------------|---------------------|-------------------|---------------------|--|
| Process<br>lbs/hr                                                                                       | Emissions<br>lbs/hr | Process<br>lbs/hr | Emissions<br>lbs/hr | Process<br>lbs/hr | Emissions<br>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               |  |

| Table #4<br>OAR 340-226-0310<br>Particulate Matter Emissions Standards for Process Equipment |                     |                   |                     |                   |                     |  |
|----------------------------------------------------------------------------------------------|---------------------|-------------------|---------------------|-------------------|---------------------|--|
| Process<br>lbs/hr                                                                            | Emissions<br>lbs/hr | Process<br>lbs/hr | Emissions<br>lbs/hr | Process<br>lbs/hr | Emissions<br>lbs/hr |  |
| 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                | 100000            | 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 data for process unit weight rates in excess of ~~60,000~~600,000 ~~lb/hr~~pounds/hour 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~~pounds/hour, and

P = process weight in tons/hour;

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

Stat. Auth.: ORS 468.020 & 468A.025

Stats. Implemented: ORS 468A.025

## DIVISION 228

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

#### 340-228-0010

##### Applicability and Jurisdiction

(1) This division applies in all areas of the state.

(2) Subject to the requirements in this division, LRAPA is designated by the EQC to implement this division within its area of jurisdiction. The requirements and procedures contained in this division must be used by LRAPA unless LRAPA has adopted or adopts rules which are at least as strict as this division.

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

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0012

#### 340-228-0020

##### Definitions

The definitions in OAR 340-200-0020, 340-204-0010 and this rule apply to this division. If the same term is defined in this rule and OAR 340-200-0020 or 340-204-0010, 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)~~ 1 "Distillate ~~F~~fuel ~~O~~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)~~ 2 "Residual ~~F~~fuel ~~O~~oil" means any oil meeting the specifications of ASTM Grade 4, 5, or 6 fuel oils.

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

~~(7) "Standard cubic foot" means the amount of gas that would occupy a volume of one cubic foot, if the gas were free of uncombined water at standard conditions. When applied to combustion flue gases from fuel or refuse burning, "standard cubic foot" also implies adjustment of gas volume to that which would result at a concentration of 12% carbon dioxide or 50% excess air.~~

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

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

Stat. Auth.: ORS 468.[020](#) & 468A

Stats. Implemented: ORS ~~468.020~~, 468A.025 & ~~468A.035~~

Hist.: [DEQ 16, f. 6-12-70, ef. 7-11-70; DEQ 1-1984, f. & ef. 1-16-84; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 3-1996, f. & cert. ef. 1-29-96]; [DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93]; [DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93]; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0005, 340-022-0005, 340-022-0050; DEQ 8-2007, f. & cert. ef. 11-8-07; DEQ 7-2011(Temp), f. & cert. ef. 6-24-11 thru 12-19-11; Administrative correction, 2-6-12; DEQ 1-2012, f. & cert. ef. 5-17-12

## **Sulfur Content of Fuels**

### **340-228-0100**

#### **Residual Fuel Oils**

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

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

Stat. Auth.: ORS 468.[020](#) & ~~ORS~~ 468A.[025](#)

Stats. Implemented: ORS 468A.025

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

### **340-228-0110**

#### **Distillate Fuel Oils**

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

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

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



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

Stat. Auth.: ORS 468.020 & ~~ORS~~-468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0015

## 340-228-0120

### Coal

(1) Except as provided in section (2) ~~of this rule~~, no person ~~shall~~must 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, n~~No person ~~shall~~must 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~~must keep records for a five year period which ~~shall~~must be available for DEQ inspection and which:

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

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

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

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

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

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

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

Stat. Auth.: ORS 468.[020](#) & ~~ORS~~-468A.[025](#)

Stats. Implemented: ORS 468A.025

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

## 340-228-0130

### Exemptions

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

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

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

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

Stat. Auth.: ORS 468.[020](#) & ~~ORS~~-468A.[025](#)

Stats. Implemented: ORS 468A.025

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0025

## General Emission Standards for Fuel Burning Equipment

### 340-228-0200

#### Sulfur Dioxide Standards

The following emission standards are [only](#) applicable to sources installed, constructed, or modified after January 1, 1972 ~~only~~[except recovery furnaces regulated in division 234](#):

(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.~~[pounds](#) per million BTU heat input, maximum three-hour average, when liquid fuel is burned;

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

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

- (a) 0.8 ~~lb.~~pound per million BTU heat input, maximum three-hour average, when liquid fuel is burned;
- (b) 1.2 ~~lb.~~pounds per million BTU heat input, maximum three-hour average, when solid fuel is burned.

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

Stat. Auth.: ORS 468.020 & 468A.025

Stats. Implemented: ORS ~~468.020~~, 468A.025, ~~468A.035 & 468A.055~~

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 22-1996, f. & cert. ef. 10-22-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0055; DEQ 8-2007, f. & cert. ef. 11-8-07; DEQ 7-2011(Temp), f. & cert. ef. 6-24-11 thru 12-19-11; Administrative correction, 2-6-12; DEQ 1-2012, f. & cert. ef. 5-17-12

### 340-228-0210

#### Grain Loading Standards

~~(1) Except as provided in sections (2) and (3) of this rule, no person shall cause, suffer, allow, or permit the emission of particulate matter, from any fuel burning equipment in excess of:~~

~~(a) 0.2 grains per standard cubic foot for sources installed, constructed, or modified on or before June 1, 1970;~~

~~(b) 0.1 grains per standard cubic foot for sources installed, constructed, or modified after June 1, 1970.~~

~~(2) For sources burning salt laden wood waste on July 1, 1981, where salt in the fuel is the only reason for failure to comply with the above limits and when the salt in the fuel results from storage or transportation of logs in salt water, the resulting salt portion of the emissions shall be exempted from subsection (1)(a) or (b) of this rule and OAR 340-208-0110. In no case shall sources burning salt laden wood waste exceed 0.6 grains per standard cubic foot.~~

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

~~(b) Sources which utilize this exemption, to demonstrate compliance otherwise with subsection (1)(a) or (b) of this rule, shall submit the results of a particulate emissions source test of the boiler stacks bi-annually.~~

~~(3) This rule does not apply to solid fuel burning devices that have been certified under OAR 340-262-0500.~~

(1) This rule applies to fuel burning equipment, except solid fuel burning devices that have been certified under OAR 340-262-0500.

(2) No person may cause, suffer, allow, or permit particulate matter emission from any fuel burning equipment in excess of the following amounts:

(a) For sources installed, constructed, or modified before June 1, 1970:

(A) 0.10 grains per dry standard cubic foot unless representative compliance source test data collected prior to [INSERT SOS FILING DATE OF RULES] demonstrates emissions greater than 0.080 grains per dry standard cubic foot;

(B) If representative compliance source test data collected prior to [INSERT DATE OF EQC ADOPTION OF RULES] demonstrates emissions greater than 0.080 grains per dry standard cubic foot, then:

(i) 0.2 grains per dry standard cubic foot until Dec. 31, 2019; and

(ii) 0.15 grains per dry standard cubic foot on and after Jan. 1, 2020; and

(C) For equipment or a mode of operation (e.g., backup fuel) that is used less than 876 hours per calendar year, 0.20 grains per standard cubic foot on and after Jan. 1, 2020.

(b) For sources installed, constructed, or modified on or after June 1, 1970 but prior to [INSERT SOS FILING DATE OF RULES]:

(A) 0.10 grains per dry standard cubic foot unless representative compliance source test data prior to [INSERT SOS FILING DATE OF RULES] demonstrates emissions greater than 0.080 grains per dry standard cubic foot;  
or

(B) If representative compliance source test data collected prior to [INSERT DATE OF EQC ADOPTION OF RULES] demonstrates emissions greater than 0.080 grains per dry standard cubic foot, then:

(i) 0.1 grains per dry standard cubic foot until Dec. 31, 2019; and

(ii) 0.14 grains per dry standard cubic foot on and after Jan. 1, 2020.

(c) For sources installed, constructed or modified after [INSERT SOS FILING DATE OF RULES], 0.10 grains per dry standard cubic foot.

(d)(A) The owner or operator of a source installed, constructed or modified before June 1, 1970 who is unable to comply with the standard in paragraph (a)(B)(ii) may request that DEQ set a source specific limit of 0.17 grains per dry standard cubic foot. The owner or operator must submit an application for a permit modification to request the alternative limit by no later than Oct. 1, 2019 that demonstrates, based on a signed report prepared by a registered professional engineer that specializes in boiler/multiclone operation, that the fuel burning equipment will be unable to comply with the standard in paragraph (a)(B)(ii) after either:

(i) Maintenance and upgrades to an existing multiclone system; or

(ii) Conducting a boiler tune-up if the boiler does not have a control system.

(B) If a source qualifies under paragraph (A), DEQ will add the 0.17 grains per dry standard cubic foot source specific limit as a significant permit modification (simple fee) for sources with an Oregon Title V Operating Permit or a Simple Technical Modification for sources with an Air Contaminant Discharge Permit.

(e) The owner or operator of a source installed, constructed or modified before June 1, 1970 may request that DEQ grant an extension allowing the source up to one additional year to comply with the standard provided that the owner or operator demonstrates, based on an engineering report signed by a registered professional engineer that specializes in boiler/multiclone operation, that the source cannot comply with the standard without making

significant changes to the equipment or control equipment or adding control equipment. The request for an extension must be submitted no later than Oct. 1, 2019.

(3) Compliance with the emissions standards in section (2) is determined using Oregon Method 5, or an alternative method approved by DEQ.

(a) For indirect heat transfer fuel burning equipment that burn wood fuel by itself or in combination with any other fuel, the emission results are corrected to 12% CO<sub>2</sub>.

(b) For indirect heat transfer fuel burning equipment that burn fuels other than wood, the emission results are corrected to 50% excess air.

(c) For purposes of this rule, representative source test data is data that is obtained when a source is operating and maintaining air pollution control devices and emission reduction processes at the highest reasonable efficiency and effectiveness to minimize emissions based on the current configuration of the fuel burning equipment and pollution control equipment.

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

Stat. Auth.: ORS 468.020, ~~&~~ 468A.025 & 468A.070

Stats. Implemented: ORS ~~468.020~~, 468A.025 & 468A.070~~35~~

Hist.: DEQ 16, f. 6-12-70, ef. 7-11-70; DEQ 12-1979, f. & ef. 6-8-79; DEQ 6-1981, f. & ef. 2-17-81; DEQ 18-1982, f. & ef. 9-1-82; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 3-1996, f. & cert. ef. 1-29-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0020; DEQ 8-2007, f. & cert. ef. 11-8-07; DEQ 7-2011(Temp), f. & cert. ef. 6-24-11 thru 12-19-11; Administrative correction, 2-6-12; DEQ 1-2012, f. & cert. ef. 5-17-12

## **Federal Acid Rain Program**

**340-228-0300**

### **Federal Regulations Adopted by Reference**

(1) 40 CFR Parts 72, 75, and 76 ~~(July 2, 2010)~~ are by this reference adopted and incorporated herein, for purposes of implementing an acid rain program that meets the requirements of title IV of the ~~FCAA~~ Clean Air Act. The term "permitting authority" means the Oregon ~~Department of Environmental Quality~~ DEQ and the term "Administrator" ~~shall~~ means the Administrator of the United States ~~Environmental Protection Agency~~ EPA.

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

~~{Publications: Publications referenced are available from the agency.}~~

Stat. Auth.: ORS 468.020, 468A.025, 468A.040 & 468A.310~~(2)~~

Stats. Implemented: ORS 468A.025, 468A.040 & 468A.310

Hist.: DEQ 32-1994, f. & cert. ef. 12-22-94; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-

0075; DEQ 22-2000, f. & cert. ef. 12-18-00; DEQ 13-2006, f. & cert. ef. 12-22-06; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

### **340-228-0400**

#### **Purpose**

~~(1) OAR 340-228-0400 through 340-228-0530 implement the Western Backstop (WEB) Sulfur Dioxide (SO<sub>2</sub>) Trading Program provisions in accordance with the federal Regional Haze Rule, 40 CFR 51.309 (2003), and Section 5.5.2.3 of the State Implementation Plan, titled "Sulfur Dioxide Milestones and Backstop Trading Program," incorporated under 340-200-0040.~~

~~(2) Nothing in OAR 340-228-0400 through 340-228-0530 waives any requirement otherwise in effect or subsequently required under another program, including Rules governing new sources.~~

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

~~Stat. Auth.: ORS 468.020~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03~~

### **340-228-0410**

#### **Definitions**

~~The definitions in OAR 340-200-0020 and this rule apply to 340-228-0400 through 340-228-0530. If the same term is defined in this rule and 340-200-0020, the definition in this rule applies to 340-228-0400 through 340-228-0530.~~

~~(1) "Account Certificate of Representation" means the completed and signed submission required to designate an Account Representative for a WEB source or an Account Representative for a general account.~~

~~(2) "Account Representative" means the individual who is authorized through an Account Certificate of Representation to represent owners and operators of the WEB source with regard to matters under the WEB Trading Program or, for a general account, who is authorized through an Account Certificate of Representation to represent the persons having an ownership interest in allowances in the general account with regard to matters concerning the general account.~~

~~(3) "Actual Emissions" means total annual SO<sub>2</sub> emissions determined in accordance with OAR 340-228-0480, or determined in accordance with SO<sub>2</sub> emission inventory requirements of 340-214-0400 through 340-214-0430 for sources that are not subject to 340-228-0480.~~

~~(4) "Allocate" means to assign allowances to a WEB source through State Implementation Plan section 5.5.2.3.3.a.~~

- ~~(5) "Allowance" means the limited authorization under the WEB Trading Program to emit one ton of SO<sub>2</sub> during a specified control period or any control period thereafter subject to the terms and conditions for use of unused allowances as established by OAR 340-228-0400 through 340-228-0530.~~
- ~~(6) "Allowance Limitation" means the tonnage of SO<sub>2</sub> emissions authorized by the allowances available for compliance deduction for a WEB source for a control period under OAR 340-228-0510(1) on the allowance transfer deadline for that control period.~~
- ~~(7) "Allowance Tracking System" means the system where allowances under the WEB Trading Program are recorded, held, transferred, and deducted.~~
- ~~(8) "Allowance Tracking System account" means an account in the Allowance Tracking System established for purposes of recording, holding, transferring, and deducting allowances.~~
- ~~(9) "Allowance transfer deadline" means the deadline established in OAR 340-228-0490(2) when allowances must be submitted for recording in a WEB source's compliance account in order to demonstrate compliance for that control period.~~
- ~~(10) "Compliance account" means an account established in the Allowance Tracking System under OAR 340-228-0470(1) for the purpose of recording allowances that a WEB source might hold to demonstrate compliance with its allowance limitation.~~
- ~~(11) "Compliance certification" means a submission to the Department by the Account Representative as required under OAR 340-228-0510(2) to report a WEB source's compliance or noncompliance with this rule.~~
- ~~(12) "Control period" means the period beginning January 1 of each year and ending on December 31 of the same year, inclusive.~~
- ~~(13) "Emission unit" means any part of a stationary source that emits or would have the potential to emit any pollutant submitted to regulations under the Clean Air Act.~~
- ~~(14) "Emissions tracking database" means the central database where SO<sub>2</sub> emissions for WEB sources as recorded and reported in accordance with OAR 340-228-0400 through 340-228-0530 are tracked to determine compliance with allowance limitations.~~
- ~~(15) "Existing source" means a stationary source that commenced operation before the Program Trigger Date.~~
- ~~(16) "Fugitive emissions" are those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.~~
- ~~(17) "General account" means an account established in the Allowance Tracking System under OAR 340-228-0470 for the purpose of recording allowances held by a person that are not to be used to show compliance with an allowance limitation.~~
- ~~(18) "Milestone" means the maximum level of stationary source regional sulfur dioxide emissions for each year from 2003 to 2018, established according to the procedures in State Implementation Plan Section 5.5.2.3.1.~~
- ~~(19) "New WEB Source" means a WEB source that commenced operation on or after the Program Trigger Date.~~

- (20) ~~"New Source Set-aside" means a pool of allowances that are available for allocation to new sources in accordance with the provisions of State Implementation Plan Section 5.5.2.3.3.a(2).~~
- (21) ~~"Owner or operator" means any person who is an owner or who operates, controls or supervises a WEB source and includes but is not be limited to any holding company, utility system, or plant manager.~~
- (22) ~~"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 limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, will be treated as part of its design if the limitation is enforceable by the EPA Administrator.~~
- (23) ~~"Program trigger date" means the date that the Department determines that the WEB Trading Program has been triggered in accordance with the State Implementation Plan Section 5.5.2.3.1(1)(b).~~
- (24) ~~"Program trigger years" means the years shown in Table 5.5.2-4, column 3, of the State Implementation Plan for the applicable milestone if the WEB Trading Program is triggered as described in State Implementation Plan Section 5.5.2.3.1 c.~~
- (25) ~~"Renewable Energy Resource" means a resource that generates electricity by non-nuclear and non-fossil technologies that results in low or no air emissions. The term includes electricity generated by wind-energy technologies; solar photovoltaic and solar thermal technologies; geothermal technologies; technologies based on landfill gas and biomass sources; waste-to-energy facilities that meet maximum achievable control technology (MACT) requirements, and new low-impact hydropower that meets the Low-Impact Hydropower Institute criteria. Biomass includes agricultural, food and wood wastes. The term does not include pumped storage, black liquor, or treated wood.~~
- (26) ~~"Retired source" means a WEB source that has received a retired source exemption as provided in OAR 340-228-0430(4).~~
- (27) ~~"Serial number" means, when referring to allowances, the unique identification number assigned to each allowance by the Tracking Systems Administrator, in accordance with OAR 340-228-0460(2).~~
- (28) ~~"SO<sub>2</sub> emitting unit" means any equipment that is located at a WEB source and that emits SO<sub>2</sub>.~~
- (29) ~~"Stationary source" means any building, structure, facility or installation that emits or may emit any air pollutant subject to regulation under the Clean Air Act.~~
- (30) ~~"Submit" means to send to the appropriate authority under the signature of the Account Representative. For purposes of determining when something is submitted, an official U.S. Postal Service postmark or equivalent electronic time stamp will establish the date of submittal.~~
- (31) ~~"Ton" means 2000 pounds. For any control period, any fraction of a ton equaling 1000 pounds or more will be treated as one ton, and any fraction of a ton equaling less than 1000 pounds will be treated as zero tons.~~
- (32) ~~"Tracking System Administrator" means the person designated by the Department as the administrator of the Allowance Tracking System and the emission tracking database.~~
- (33) ~~"WEB source" means a stationary source that meets the applicability requirements of OAR 340-228-0430.~~



~~(34) "Web Trading Program" means OAR 340-228-0400 through 340-228-0530, the Western Backstop SO<sub>2</sub> Trading Program, triggered as a backstop in accordance with the provisions in the SO<sub>2</sub> Milestones and Backstop Trading Program Implementation Plan, if necessary, to ensure that regional SO<sub>2</sub> emissions are reduced.~~

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

~~Stat. Auth.: ORS 468.020~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03~~

### **340-228-0420**

#### **WEB Trading Program Trigger**

~~(1) OAR 340-228-0400 through 340-228-0530 becomes effective on the program trigger date established by the procedures outlined in the SO<sub>2</sub> Milestones and Backstop Trading Program Implementation Plan.~~

~~(2) Exception. Special Penalty Provisions for Year 2018, OAR 340-228-0520 becomes effective on January 1, 2018 and remains effective until the requirements of 340-228-0520 have been met.~~

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

~~Stat. Auth.: ORS 468.020~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03~~

### **340-228-0430**

#### **WEB Trading Program Applicability**

~~(1) General Applicability. Except as provided in section (2) of this rule, OAR 340-228-0400 through 340-228-0530 apply to any stationary source or group of stationary sources that are located on one or more contiguous or adjacent properties and that are under the control of the same person or persons under common control, belong to the same industrial grouping, and are described in subsections (a) through (c) of this section. A stationary source or group of stationary sources is considered part of a single industrial grouping if all of the pollutant emitting activities at such source or group of sources on contiguous or adjacent properties belong to the same Major Group (i.e., all have the same two-digit code) as described in the Standard Industrial Classification Manual, 1987.~~

~~(a) All BART-eligible sources as defined in 40 CFR 51.301 (2003) that are BART-eligible due to SO<sub>2</sub> emissions.~~

~~(b) All stationary sources not meeting the criteria of subsection (a) of this rule that have actual SO<sub>2</sub> emissions of 100 tons or more per year in the program trigger years or any subsequent year. The fugitive emissions of a stationary source are not considered in determining whether the source is subject to OAR 340-228-0400 through 340-228-0530 unless the source belongs to one of the following categories of stationary source:~~

~~(i) Coal cleaning plants (with thermal dryers);~~

~~(ii) Kraft pulp mills;~~

~~(iii) Portland cement plants;~~

~~(iv) Primary zinc smelters;~~

~~(v) Iron and steel mills;~~

~~(vi) Primary aluminum ore reduction plants;~~

~~(vii) Primary copper smelters;~~

~~(viii) Municipal incinerators capable of charging more than 250 tons of refuse per day;~~

~~(ix) Hydrofluoric, sulfuric, or nitric acid plants;~~

~~(x) Petroleum refineries;~~

~~(xi) Lime plants;~~

~~(xii) Phosphate rock processing plants;~~

~~(xiii) Coke oven batteries;~~

~~(xiv) Sulfur recovery plants;~~

~~(xv) Carbon black plants (furnace process);~~

~~(xvi) Primary lead smelters;~~

~~(xvii) Fuel conversion plants;~~

~~(xviii) Sintering plants;~~

~~(xix) Secondary metal production plants;~~

~~(xx) Chemical process plants;~~

~~(xxi) Fossil fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;~~

~~(xxii) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;~~

~~(xxiii) Taconite ore processing plants;~~

~~(xxiv) Glass fiber processing plants;~~

~~(xxv) Charcoal production plants;~~

~~(xxvi) Fossil-fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;  
or~~

~~(xxvii) Any other stationary source category, that is being regulated under Section 111 or 112 of the Act as of August 7, 1980.~~

~~(c) A new source that begins operation after the program trigger date and has the potential to emit 100 tons or more of SO<sub>2</sub> per year.~~

~~(2) The Department may determine on a case-by-case basis, with concurrence from the EPA Administrator, that a source is not a WEB source if the source:~~

~~(a) had actual sulfur dioxide emissions of 100 tons or more in a single year and in each of the previous five years had actual SO<sub>2</sub> emissions of less than 100 tons per year, and~~

~~(A)(i) the emissions increase that was caused by a sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner and that the source took timely and reasonable action to minimize the temporary emission increase. A temporary emission increase due to poor maintenance or careless operation does not meet the criteria of this section; and~~

~~(ii) has corrected the failure of air pollution control equipment, process equipment, or process by the time of the Department's determination under this section; or~~

~~(B) had to switch fuels or feedstocks on a temporary basis as a result of an emergency situation or unique and unusual circumstances besides the cost of such fuels or feedstocks.~~

~~(3) Duration of Applicability. Except as provided for in section (4) of this rule, once a source is subject to the WEB Trading Program (OAR 340-228-0400 through 340-228-0530), it is subject to the requirements every year thereafter.~~

~~(4) Retired Source Exemption.~~

~~(a) Application. Any WEB that is permanently retired must apply for a retired source exemption. The WEB source may only be considered permanently retired if all SO<sub>2</sub> emitting units at the source are permanently retired. The application must contain the following information:~~

~~(A) Identification of the WEB source, including the plant name and an appropriate identification code in a format specified by the Department.~~

~~(B) Name of Account Representative.~~

~~(C) Description of the status of the WEB source, including the date that the WEB source was permanently retired.~~

~~(D) Signed certification that the WEB source is permanently retired and will comply with the requirements of section (4) of this rule.~~

~~(E) Verification that the WEB source has a general account where any unused allowances or future allocations will be recorded.~~

~~(b) Notice. The retired source exemption becomes effective when the Department notifies the source that the Department has granted the retired source exemption.~~

~~(c) Responsibilities of Retired Sources:~~

~~(A) A retired source is exempt from OAR 340-228-0480 and 340-228-0510, except as provided below.~~

~~(B) A retired source may not emit any SO<sub>2</sub> after the date the Department issues a retired source exemption.~~

~~(C) A WEB source must submit SO<sub>2</sub> emissions reports, as required by OAR 340-228-0480 for any time period the source was operating before the effective date of the retired source exemption. The retired source is subject to the compliance provisions of OAR 340-228-0510, including the requirement to hold allowances in the source's compliance account to cover all SO<sub>2</sub> emissions before the date the source was permanently retired.~~

~~(D) A retired source that is still in existence but no longer emitting SO<sub>2</sub> must, for a period of five years from the date the records are created, retain records demonstrating the effective date of the retired source exemption for purposes of this rule.~~

~~(d) Resumption of Operations:~~

~~(A) Before resuming operation, the retired source must submit registration materials as follows:~~

~~(i) If the source is required to obtain a new source review permit or operating permit under OAR 340, division 224 or division 218, before resuming operation, then registration information as described in 340-228-0450(1) and a copy of the retired source exemption must be submitted with the application required under OAR 340, division 224 or division 218.~~

~~(ii) If the source does not meet the criteria under subparagraph (i) of this rule, then registration information as described in OAR 340-228-0450 and a copy of the retired source exemption must be submitted to the Department at least ninety days before the source resumes operation.~~

~~(B) The retired source exemption automatically expires on the day the source resumes operation.~~

~~(e) Loss of Future Allowances. A WEB source that is permanently retired and that does not apply to the Department for a retired source exemption within ninety days of the date that the source is permanently retired forfeits any unused and future allowances. The Tracking System Administrator must retire the abandoned allowances.~~

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

~~Stat. Auth.: ORS 468.020~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03~~

### **Account Representative for WEB Sources**

~~(1) Each WEB source must identify one Account Representative and may also identify an alternate Account Representative who may act on behalf of the Account Representative. Any representation, action, inaction, or submission by the alternate Account Representative will be deemed to be a representation, action, inaction, or submission by the Account Representative.~~

~~(2) Identification and Certification of an Account Representative.~~

~~(a) The Account Representative and any Alternate Account Representative must be appointed by an agreement that makes the representations, actions, inactions, or submissions of the Account Representative and any alternate binding on the owners and operators of the WEB source.~~

~~(b) The Account Representative must submit to the Department and the Tracking System Administrator a signed and dated Account Certificate of Representation (Certificate) that contains the following elements:~~

~~(A) Identification of the WEB source by plant name, state and an appropriate identification code in a format specified by the Department;~~

~~(B) The name, address, e-mail (if available), telephone, and facsimile number of the Account Representative and any alternate;~~

~~(C) A list of owners and operators of the WEB source;~~

~~(D) Information to be part of the emission tracking system database in accordance with the State Implementation Plan. The Department will specify specific data elements that are consistent with the data system structure, including basic facility information that appears in other reports and notices submitted by the WEB source, such as county location, industrial classification codes, and similar general facility information.~~

~~(E) The following certification statement: "I certify that I was selected as the Account Representative or alternate Account Representative, as applicable, by an agreement binding on the owners and operators of the WEB source. I certify that I have all the necessary authority to carry out my duties and responsibilities under the WEB Trading Program on behalf of the owners and operators of the WEB source, and that each such owner and operator will be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the Department regarding the WEB Trading Program."~~

~~(c) Once the Department receives the complete Certificate, the Account Representative and any alternate Account Representative represents and, by his or her representations, actions, inactions, or submissions, legally binds each owner and operator of the WEB source in all matters pertaining to the WEB Trading Program. Any order issued by the Department regarding the WEB Trading Program is binding on the owners and operators, subject to the provisions of ORS Chapter 183.~~

~~(d) No WEB Allowance Tracking System account may be established for the WEB source until the Tracking System Administrator has received a complete Certificate. Once the account is established, the Account Representative must make all submissions concerning the account, including the deduction or transfer of allowances.~~

### ~~(3) Requirements and Responsibilities.~~

~~(a) The Account Representative's responsibilities include, but are not limited to, transferring allowances; submitting monitoring plans, registrations, certification applications, SO<sub>2</sub> emissions data, and compliance reports as required by OAR 340-228-0400 through 340-228-0530; and representing the source in all matters pertaining to the WEB Trading Program.~~

~~(b) Each submission under this program must be signed and certified by the Account Representative for the WEB source. Each submission must include the following truth and accuracy certification statement by the Account Representative: "I am authorized to make this submission on behalf of the owners and operators of the WEB source for which the submission is made. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."~~

### ~~(4) Changing the Account Representative or Owners and Operators.~~

~~(a) Changing the Account Representative or the Alternate Account Representative. The Account Representative or alternate Account Representative may be changed at any time by sending a complete superseding Certificate to the Department and the Tracking System Administrator under OAR 340-228-0440(2)(b). The change will be effective when the Tracking System Administrator receives it. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous Account Representative or alternate before the Tracking System Administrator receives the superseding Certificate are binding on the new Account Representative and the owners and operators of the WEB source.~~

### ~~(b) Changes in Owners and Operators.~~

~~(A) Within thirty days of any change in the owners and operators of the WEB source, including the addition of a new owner or operator, the Account Representative must submit a revised Certificate amending the list of owners and operators to include such change.~~

~~(B) If a new owner or operator of a WEB source is not included in the list of owners and operators submitted in the Certificate, such new owner or operator is subject to and bound by the Certificate, the representations, actions, inactions, and submissions of the Account Representative of the WEB source, and the decisions, orders, actions, and inactions of the Department as if the new owner or operator were included in the list.~~

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

~~Stat. Auth.: ORS 468.020~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03~~

**340-228-0450**

## **Registration**

### **(1) Deadlines:**

~~(a) Each source that is a WEB source on or before the Program Trigger Date must register by submitting the initial Certificate required in OAR 340-228-0440(2) to the Department no later than 180 days after the program trigger date.~~

~~(b) Any existing source that becomes a WEB source after the program trigger date must register by submitting the initial Certificate required in OAR 340-228-0440(2) to the Department no later than September 30 of the year following the inventory year in which the source exceeded the emission threshold.~~

~~(c) Any new WEB source must register by submitting the initial Certificate required in OAR 340-228-0440(2) to the Department before commencing operation.~~

~~(2) Any allocation, transfer or deduction of allowance to or from the compliance account of a WEB source does not require revision of the WEB source's operating permit.~~

~~(3) Whether or not a WEB source is not required to have a permit under OAR 340-218 or 340-224 at any time after this Rule is effective, it must at all times possess a permit that includes the requirements of 340-228-0400 through 340-228-0530. If it does not possess a Title V permit under this rule, it must satisfy this paragraph's requirements by obtaining or modifying a permit under OAR 340, division 216, to incorporate the requirements of 340-228-0400 through 340-228-0530. The source must at all times possess a permit that includes these requirements.~~

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

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.035

Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03

## **340-228-0460**

### **Allowance Allocations**

~~(1) The Tracking System Administrator must record the allowances for each WEB source in the compliance account for a WEB source after the Department allocates the allowances under Section 5.5.2.3.3(a) of the State Implementation Plan. If applicable, the Tracking System Administrator must record a portion of the SO<sub>2</sub> allowances for a WEB source in a WEB source's special reserve compliance account assigned to the Department to account for any allowances to be held by the Department in accordance with OAR 340-228-0480(1)(b).~~

~~(2) The Tracking System Administrator must assign a serial number to each allowance in accordance with State Implementation Plan Section 5.5.2.3.3(f).~~

~~(3) All allowances must be allocated, recorded, transferred, or used as whole allowances. To determine the number of whole allowances, the number of allowances must be rounded down for decimals less than 0.50 and rounded up for decimals of 0.50 or greater.~~

~~(4) An allowance is not a property right. It is a limited authorization to emit one ton of SO<sub>2</sub> for the purpose of meeting the requirements of this Rule. No provision of this WEB Trading Program or other law should be construed to limit the authority of the United States or the Department to terminate or limit such authorization.~~

~~(5) Early Reduction Bonus Allocation. Any WEB source that reduces its permitted annual SO<sub>2</sub> emissions to a level that is below the floor level allocation established for that source in State Implementation Plan Section 5.5.2.3.3.a between 2003 and the program trigger year may apply to the Department for an early reduction bonus allocation. The application must be submitted no later than ninety days after the Program Trigger Date. Any WEB source that applies and receives early reduction bonus allocations must retain the records referenced below for a minimum of five years after the early reduction bonus allowance is certified in accordance with Section 5.5.2.3.3(a)(c) of the State Implementation Plan. The application for an early reduction bonus allocation must contain the following information:~~

~~(a) Copies of all permits or other enforceable documents that include annual SO<sub>2</sub> emissions limits for the WEB source during the period the WEB source was generating the early reductions. Such permits or enforceable documents require monitoring for SO<sub>2</sub> emissions that meets the requirements in OAR 340-228-0480(1)(a) and 340-228-0480(1)(c).~~

~~(b) Copies of emissions monitoring reports for the period the WEB source was generating the early reductions that document the actual annual SO<sub>2</sub> emissions and demonstrates that the actual annual SO<sub>2</sub> emissions were below the floor level allocation established for that source in Section 5.5.2.3.3.a of the State Implementation Plan.~~

~~(c) Demonstration that the floor level established for the source in accordance with Section 5.5.2.3.3.a of the State Implementation Plan was calculated using data that are consistent with the new monitoring methodology. If new monitoring techniques will change the floor level for the source, then a demonstration of the new floor level based on new monitoring techniques must be included in the application.~~

~~(6) Request for allowances for new WEB sources or modified WEB Sources.~~

~~(a) A new WEB source or an existing WEB source that has increased production capacity through a permitted change in operations OAR 340, division 224 may apply to the Department for an allocation from the new source set aside, as outlined in Section 5.5.2.3.3.c. of the State Implementation Plan.~~

~~(A) A new WEB source is eligible to apply for an annual allocation equal to the permitted annual SO<sub>2</sub> emission limit for that source after the source has commenced operation.~~

~~(B) An existing WEB source is eligible to apply for an annual allocation equal to the permitted annual SO<sub>2</sub> emission limit for that source that is attributable to any amount of production capacity that is greater than the permitted production capacity for that source as of January 1, 2003.~~

~~(C) A source that has received a retired source exemption under OAR 340-228-0430(4) is not eligible to apply for an allocation from the new source set aside.~~



~~(b) The application for an allocation from the new source set aside must contain the following information:~~

~~(A) for an existing WEB source, documentation of the production capacity before and after the new permit;~~

~~(B) for new WEB sources, documentation of the actual date and a copy of the permit.~~

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

~~Stat. Auth.: ORS 468.020~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03~~

### **~~340-228-0470~~**

#### **~~Establishment of Accounts~~**

~~(1) Allowance Tracking System Accounts. All WEB sources must open a compliance account. Any person may open a general account for the purpose of holding and transferring allowances. In addition, if a WEB source conducts monitoring under OAR 340-228-480(1)(b), the WEB source must open a special reserve compliance account for allowances associated with units monitored under those provisions. Allowances may not be transferred out of the special reserve account by the WEB source or account representative. The Department shall allocate allowances to the account in accordance with 340-228-0480(1)(b)(E) and all such allowances for each control period shall be retired each year for compliance in accordance with 340-228-0510. To open either type of account, an application that contains the following information must be submitted to the TSA:~~

~~(a) The Account Representative's name, mailing address, e-mail address, telephone number, and facsimile number. For a compliance account, include a copy of the Account Certificate of Representation of the Account Representative and any alternate as required in OAR 340-228-0440(2)(b). For a general account, include the Account Certificate of Representation of the Account Representative and any alternate as required in OAR 340-228-0470(3)(b).~~

~~(b) The WEB source or organization name;~~

~~(c) The type of account to be opened; and~~

~~(d) A signed certification of truth and accuracy by the Account Representative according to OAR 340-228-0440(3)(b) for compliance accounts and certification of truth and accuracy by the Account Representative according to 340-228-0470(4) for general accounts.~~

~~(2) Account Representative for General Accounts. For a general account, one Account Representative must be identified and an alternate Account Representative may be identified and may act on behalf of the Account Representative. Any representation, action, inaction, or submission by the alternate Account Representative is a representation, action, inaction, or submission by the Account Representative.~~

~~(3) Identification and Certification of an Account Representative for General Accounts.~~

~~(a) The Account Representative must be appointed by an agreement that makes the representations, actions, inactions, or submissions of the Account Representative binding on all persons who have an ownership interest with respect to allowances held in the general account.~~

~~(b) The Account Representative must submit to the Tracking System Administrator a signed and dated Account Certificate of Representation (Certificate) that contains the following elements:~~

~~(A) The name, address, e-mail (if available), telephone, and facsimile number of the Account Representative and any alternate;~~

~~(B) The organization's name;~~

~~(C) The following certification statement: "I certify that I was selected as the Account Representative or alternate Account Representative, as applicable, by an agreement binding on all persons who have an ownership interest in allowances in the general account with regard to matters concerning the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the WEB Trading Program on behalf of said persons, and that each such person will be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the Department regarding the general account."~~

~~(c) When the Department receives the complete Certificate, the Account Representative represents and, by his or her representations, actions, inactions, or submissions, legally binds each person who has an ownership interest in allowances held in the general account with regard to all matters concerning the general account. Such persons will be bound by any decision or order issued by the Department.~~

~~(d) A WEB Allowance Tracking System general account may not be established until the Tracking System Administrator has received a complete Certificate. Once the account is established, the Account Representative must make all submissions concerning the account, including the deduction or transfer of allowances.~~

~~(4) Requirements and Responsibilities for General Accounts. Each submission for the general account must be signed and certified by the Account Representative for the general account. Each submission must include the following truth and accuracy certification statement by the Account Representative: "I am authorized to make this submission on behalf of all person who have an ownership interest in allowances held in the general account. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."~~

~~(5) Changing the Account Representative. The Account Representative or alternate Account Representative may be changed at any time by sending a complete superseding Certificate to the Department and the Tracking System Administrator, according to OAR 340-228-0470(3)(b). The change will take effect when the Department receives the Certificate. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous Account Representative or alternate before the Department receives the superseding Certificate are binding on the new Account Representative and all persons having ownership interest with respect to allowances held in the general account.~~

~~(6) Changes to the Account. Any change to the information required in the application for an existing account under OAR 340-228-0470(1) requires a revision of the application.~~

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

~~Stat. Auth.: ORS 468.020~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03~~

## **340-228-0480**

### **Monitoring, Recordkeeping and Reporting**

#### ~~(1) General Requirements on Monitoring Methods.~~

~~(a) For each SO<sub>2</sub> emitting unit at a WEB source the owner or operator must comply with the following, as applicable, to monitor and record SO<sub>2</sub> mass emissions:~~

~~(A) If a unit is subject to 40 CFR Part 75 (2003) under a requirement separate from the WEB Trading Program, the unit must meet the requirements contained in Part 75 with respect to monitoring, recording and reporting SO<sub>2</sub> mass emissions.~~

~~(B) If a unit is not subject to 40 CFR Part 75 (2003) under a requirement separate from the WEB Trading Program, a unit must use one of the following monitoring methods, as applicable:~~

~~(i) A continuous emission monitoring system (CEMS) for SO<sub>2</sub> and flow that complies with all applicable monitoring provisions in 40 CFR Part 75;~~

~~(ii) If the unit is a gas or oil fired combustion device, the excepted monitoring methodology in Appendix D to 40 CFR Part 75, or, if applicable, the low mass emissions (LME) provisions (with respect to SO<sub>2</sub> mass emissions only) of section 75.19 of 40 CFR Part 75; or~~

~~(iii) One of the optional WEB protocols, if applicable, in Appendix A to this Rule; or~~

~~(iv) A monitoring plan for site-specific monitoring that the source submits for approval by the Department and by the U.S. Environmental Protection Agency in accordance with OAR 340-228-0480(8)(e).~~

~~(C) A permanently retired unit is not required to monitor under this rule if such unit was permanently retired and had no emissions for the entire period for which the WEB source implements this paragraph (C) of this rule and the Account Representative certifies in accordance with OAR 340-228-0510(2) that these conditions were met. In the event that a permanently retired unit recommences operation, the WEB source shall meet the requirements of this rule in the same manner as if the unit was a new unit.~~

~~(b) Notwithstanding OAR 340-228-0480(1)(a), the owner or operator of a unit that meets one of the conditions of 340-228-0480(1)(b)(A) may elect to have the provisions of this 340-228-0480(1)(b) apply to that unit.~~

~~(A) Any of the following units may implement OAR 340-228-0480(1)(b):~~

- ~~(i) Any smelting operation where all of the emissions from the operation are not ducted to a stack; or~~
- ~~(ii) Any flare, except to the extent such flares are used as a fuel gas combustion device at a petroleum refinery.~~
- ~~(iii) Any other type of unit without add-on SO<sub>2</sub> control equipment, if no control level was assumed for the WEB source in establishing the floor level (and reducible allocation) provided in Section 5.5.2.3.3.a of the State Implementation Plan.~~
- ~~(B) For each unit covered by OAR 340-228-0480(1)(b), the Account Representative must submit a notice to request that 340-228-0480(1)(b) applies to one or more SO<sub>2</sub> emitting units at a WEB source. The notice must be submitted in accordance with the compliance dates specified in 340-228-0480(6)(a) and include the following information (in a format specified by the Department with such additional, related information as may be requested):~~
  - ~~(i) A notice of all units at the applicable source, specifying which of the units are covered by OAR 340-228-0480(1)(b);~~
  - ~~(ii) Consistent with the emission estimation methodology used to determine the floor level (and reducible allocation) for the source in accordance with State Implementation Plan Section 5.5.2.3.3.a, the portion of the WEB source's overall allowance allocation that is attributable to any unit(s) covered by OAR 340-228-0480(1)(b); and~~
  - ~~(iii) An identification of any such units that are permanently retired.~~
- ~~(C) For each new unit at an existing WEB source for which the owner or operator seeks to comply with this OAR 340-228-0480(1)(b) and for which the Account Representative applies for an allocation under the new source set aside provisions of 340-228-0460(6), the Account Representative must submit a modified notice under 340-228-0480(1)(b)(B) that includes such new SO<sub>2</sub> emitting unit(s). The modified notice must be submitted in accordance with the deadlines in 340-228-0480, but no later than the date on which a request is submitted under 340-228-0460(6) for allocations from the set aside.~~
- ~~(D) The Department will evaluate the information submitted by the WEB source in paragraphs (B) and (C) of this subsection and may issue a notice to the source to exclude any units that do not qualify under OAR 340-228-0480(1)(b) or to adjust the portion of allowances attributable to units that do qualify to be consistent with the emission estimation methodology used to establish the floor level and reducible allocation for the source.~~
- ~~(E) The Department will allocate allowances equal to the adjusted portion of the WEB source's allowances under paragraphs (B), (C), and (D) of this subsection in a special reserve compliance account, provided that no such treatment of the WEB source's allocation will be required for any unit that is permanently retired and had no emissions for the entire period for which the WEB source implements subsection (b) of this rule and the Account Representative certifies in accordance with OAR 340-228-0510 that these conditions were met. In the event that a permanently retired unit recommences operation, the WEB source shall meet the requirements of this 340-228-0480 in the same manner as if the unit was a new unit.~~
- ~~(F) The Account Representative for a WEB source must submit an annual emissions statement for each unit under OAR 340-228-0480(1)(b) pursuant to 340-228-0480(8). The WEB source must maintain operating records sufficient to estimate annual emissions in a manner consistent with the emission estimation methodology used to establish the floor level (and reducible allocation) for the source. In addition, if the~~

~~estimated emissions from all such units at the WEB source are greater than the allowances for the current control year held in the special reserve account under 340-228-0480(1)(b)(E) for the WEB source, the Account Representative must report the extra amount as part of the annual report for the WEB source under 340-228-0510 and be required to use other allowances in the standard compliance account to account for such emissions, in accordance with 340-228-0510.~~

~~(G) The remaining provisions of OAR 340-228-0480 do not apply to units covered by this subsection except where otherwise noted.~~

~~(H) A WEB source may modify the monitoring for an SO<sub>2</sub> emitting unit by using monitoring under OAR 340-228-0480(1)(a), but any such monitoring change must take effect on January 1 of the next compliance year. In addition, the Account Representative must submit an initial monitoring plan at least 180 days before the date on which the new monitoring will take effect and a detailed monitoring plan in accordance with 340-228-0480(2). The Account Representative must also submit a revised notice under 340-228-0480(1)(b)(B) with the initial monitoring plan.~~

~~(c) For any monitoring method that the owner or operator uses under this rule (including OAR 340-228-0480(1)(a)(B)) the owner or operator (and, as applicable, the Account Representative) must install, certify, and operate such monitoring in accordance with this rule and record and report the data from such monitoring as required in this rule. In addition, the owner or operator (and, as applicable, the Account Representative) may not:~~

~~(A) Except for an alternative approved by the U.S. EPA Administrator for a WEB source that implements monitoring under OAR 340-228-0480(1)(a)(A), use an alternative monitoring system, alternative reference method, or another alternative for the required monitoring method without having obtained prior written approval in accordance with 340-228-0480(8)(c) (relating to petitions);~~

~~(B) Operate an SO<sub>2</sub> emitting unit so as to discharge, or allow to be discharged, SO<sub>2</sub> emissions to the atmosphere without accounting for these emissions in accordance with the applicable provisions of this rule;~~

~~(C) Disrupt the approved monitoring method or any portion thereof and thereby avoid monitoring and recording SO<sub>2</sub> mass emissions discharged into the atmosphere, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of this rule; or~~

~~(D) Retire or permanently discontinue use of an approved monitoring method, except under one of the following circumstances:~~

~~(i) During a period when the unit is exempt from the requirements of this rule, including retirement of a unit as addressed in OAR 340-228-0480(1)(a)(3);~~

~~(ii) The owner or operator is monitoring emissions from the unit with another certified monitoring method approved under this rule for use at the unit that provides data for the same parameter as the retired or discontinued monitoring method; or~~

~~(iii) The Account Representative notifies the Department of the date of certification testing of a replacement monitoring system in accordance with this rule, and the owner or operator recertifies thereafter a replacement monitoring system in accordance with the applicable provisions of this rule.~~

## ~~(2) Monitoring Plan:~~

~~(a) General Provisions. The owner or operator of an SO<sub>2</sub>-emitting unit that uses a monitoring method under OAR 340-228-0480(1)(a)(A) must meet the following requirements:~~

~~(A) Prepare and submit to the Department an initial monitoring plan for each monitoring method that the owner or operator uses to comply with this rule. In accordance with OAR 340-228-0480(2)(c), the plan must contain sufficient information on the units involved, the applicable method, and the use of data derived from that method to demonstrate that all unit SO<sub>2</sub> emissions are monitored and reported. The plan must be submitted in accordance with the compliance deadlines specified in OAR 340-228-0480(6).~~

~~(B) Prepare, maintain and submit to the Department a detailed monitoring plan before the first day of certification testing, in accordance with the compliance deadline specified in OAR 340-228-0480(5). The plan must contain the applicable information required by 340-228-0480(2)(d). The Department may require that the monitoring plan (or portions thereof) be submitted electronically. The Department also may require that the plan be submitted on an ongoing basis in electronic format as part of the quarterly report submitted under 340-228-0480(8)(a) of this Rule or resubmitted separately within 30 days after any change is made to the plan in accordance with 340-228-0480(2)(a)(C).~~

~~(C) Whenever the owner or operator makes a replacement, modification, or change in one of the systems or methodologies provided for in OAR 340-228-0480(1)(a)(B), including a change in the automated data acquisition and handling system or in the flue gas handling system, that affects information reported in the monitoring plan (e.g., a change to serial number for a component of a monitoring system), then the owner or operator must update the monitoring plan in accordance with the compliance deadline specified in OAR 340-228-0480(5).~~

~~(b) The owner or operator of an SO<sub>2</sub>-emitting unit that uses a method under OAR 340-228-0480(1)(a)(A) (a unit subject to 40 CFR Part 75 (2003) under a program other than this WEB Trading Program) must meet the requirements of 340-228-0480(2)(a) (f) by preparing, maintaining, and submitting a monitoring plan in accordance with the requirements of 40 CFR Part 75 (2003), provided that the owner or operator also submits the entire monitoring plan to the Department upon request.~~

~~(c) Initial Monitoring Plan. The Account Representative must submit an initial monitoring plan for each SO<sub>2</sub> emitting unit (or group of units sharing a common methodology) that, except as otherwise specified in the permit monitoring requirements that, except as otherwise specified in an applicable provision in Appendix A, contains the following information:~~

~~(A) For all SO<sub>2</sub>-emitting units involved in the monitoring plan:~~

~~(i) Plant name and location (street address, legal address, county, city);~~

~~(ii) Plant and unit identification numbers assigned by the Department;~~

~~(iii) Type of unit (or units for a group of units using a common monitoring methodology);~~

~~(iv) Identification of all stacks or pipes associated with the monitoring plan;~~

~~(v) Types of fuel(s) fired (or sulfur-containing process materials used in the SO<sub>2</sub>-emitting unit) and the fuel classification of the unit if combusting more than one type of fuel and using a 40 CFR Part 75 (2003) methodology;~~

~~(vi) Type(s) of emissions controls installed or to be installed, including specifications of whether such controls are pre-combustion, post-combustion, or integral to the combustion process;~~

~~(vii) Maximum hourly heat input capacity, or process throughput capacity, if applicable;~~

~~(viii) Identification of all units using a common stack; and~~

~~(ix) Indication of whether any stack identified in the plan is a bypass stack.~~

~~(B) For each unit and parameter required to be monitored, identification of monitoring methodology information monitoring methodology, monitor locations, substitute data approach for the methodology, and general identification of quality assurance procedures. If the proposed methodology is a site-specific methodology submitted pursuant to OAR 340-228-0480(1)(a)(B)(iv), the description under this paragraph must describe fully all aspects of the monitoring equipment, installation locations, operating characteristics, certification testing, ongoing quality assurance and maintenance procedures, and substitute data procedures.~~

~~(C) If the WEB source intends to petition for a change to any specific monitoring requirement otherwise required under OAR 340-228-0480, such petition may be submitted as part of the initial monitoring plan.~~

~~(D) The Department may issue a notice of approval or disapproval of the initial monitoring plan based on the compliance of the proposed methodology with the requirements for monitoring in this rule.~~

~~(d) Detailed Monitoring Plan. The Account Representative must submit a detailed monitoring plan that, except as otherwise specified in an applicable provision in Appendix A, contains the following information:~~

~~(A) Identification and description of each monitoring component (including each monitor and its identifiable components, such as analyzer and/or probe) in a CEMS (e.g., SO<sub>2</sub> pollutant concentration monitor, flow monitor, moisture monitor), a 40 CFR Part 75, Appendix D monitoring system (e.g., fuel flowmeter, data acquisition and handling system), or a protocol in or a protocol in Appendix A, including:~~

~~(i) Manufacturer, model number, and serial number;~~

~~(ii) Component/system identification code assigned by the facility to each identifiable monitoring component, such as the analyzer and/or probe;~~

~~(iii) Designation of the component type and method of sample acquisition or operation (e.g., in-situ pollutant concentration monitor or thermal flow monitor);~~

~~(iv) Designation of the system as a primary or backup system;~~

~~(v) First and last dates the system reported data;~~

~~(vi) Status of the monitoring component; and~~

~~(vii) Parameter monitored.~~

~~(B) Identification and description of all major hardware and software components of the automated data acquisition and handling system, including:~~

~~(i) Hardware components that perform emission calculations or store data for quarterly reporting purposes (provide the manufacturer and model number); and~~

~~(ii) Software components (provide the identification of the provider and model/version number).~~

~~(C) Explicit formulas for each measured emissions parameter, using component/system identification codes for the monitoring system used to measure the parameter that links the system observations with the reported concentrations and mass emissions. The formulas must contain all constants and factors required to derive mass emissions from component/system code observations and an indication of whether the formula is being added, corrected, deleted, or is unchanged. The owner or operator of a low mass emissions unit for which the owner or operator is using the optional low mass emissions excepted methodology in 40 CFR section 75.19(c) (2003) is not required to report such formulas.~~

~~(D) for units with flow monitors only, include the inside cross-sectional area (ft<sup>2</sup>) at flow monitoring location.~~

~~(E) If using CEMS for SO<sub>2</sub> and flow, for each parameter monitored, include the scale, maximum potential concentration (and method of calculation), maximum expected concentration (if applicable) (and method of calculation), maximum potential flow rate (and method of calculations), span value, full scale range, daily calibration units of measure, span effective date/hour, span inactivation date/hour, indication of whether dual spans are required, default high range value, flow rate span, and flow rate span value and full scale value (in scfh) for each unit or stack using SO<sub>2</sub> or flow component monitors.~~

~~(F) If the monitoring system or excepted methodology provides for use of a constant, assumed, or default value for a parameter under specific circumstances, then include the following information for each value of such parameter:~~

~~(i) Identification of the parameter;~~

~~(ii) Default, maximum, minimum, or constant value, and units of measure for the value;~~

~~(iii) Purpose of the value;~~

~~(iv) Indicator of use during controlled/uncontrolled hours;~~

~~(v) Types of fuel;~~

~~(vi) Source of the value;~~

~~(vii) Value effective date and hour;~~

~~(viii) Date and hour value is no longer effective (if applicable); and~~

~~(ix) For units using the excepted methodology under 40 CFR section 75.19 (2003), the applicable SO<sub>2</sub> emission factor.~~

~~(G) Unless otherwise specified in section 6.5.2.1 of Appendix A to 40 CFR Part 75 (2003), for each unit or common stack on which hardware CEMS are installed:~~



- ~~(i) The upper and lower boundaries of the range of operation (as defined in section 6.5.2.1 of Appendix A to 40 CFR Part 75), or thousand of lb/hr of steam, or ft/sec (as applicable);~~
- ~~(ii) The load or operating level(s) designated as normal in section 6.5.2.1 of Appendix A to 40 CFR Part 75, or thousands of lb/hr of steam, or ft/sec (as applicable);~~
- ~~(iii) The two load or operating levels (i.e., low, mid, or high) identified in section 6.5.2.1 of Appendix A to 40 CFR Part 75 as the most frequently used;~~
- ~~(iv) The date of the data analysis used to determine the normal load (or operating) level(s) and the two most frequently used load (or operating) levels; and~~
- ~~(v) Activation and deactivation dates when the normal load or operating level(s) change and are updated.~~
- ~~(H) For each unit that is complying with 40 CFR Part 75 (2003) for which the optional fuel flow-to-load test in section 2.1.7 of appendix D to 40 CFR Part 75 is used:~~
  - ~~(i) The upper and lower boundaries of the range of operation (as defined in section 6.5.2.1 of Appendix A to 40 CFR Part 75), expressed in thousand of lb/hr of steam;~~
  - ~~(ii) The load level designated as normal, pursuant to section 6.5.2.1 of Appendix A to 40 CFR Part 75, expressed in thousands of lb/hr of steam; and~~
  - ~~(iii) The date of the load analysis used to determine the normal load level.~~
- ~~(I) Information related to quality assurance testing, including (as applicable): identification of the test strategy; protocol for the relative accuracy test audit; other relevant test information; calibration gas levels (percent of span) for the calibration error test and linearity check; calculations for determining maximum potential concentration, maximum expected concentration (if applicable), maximum potential flow rate, and span;~~
- ~~(J) If applicable, apportionment strategies under 40 CFR sections 75.10 through 75.18 (2003).~~
- ~~(K) Description of site locations for each monitoring component in a monitoring system, including schematic diagrams and engineering drawings and any other documentation that demonstrates each monitor location meets the appropriate siting criteria. For units monitored by a continuous emission monitoring system, diagrams must include:~~
  - ~~(i) A schematic diagram identifying entire gas handling system from unit to stack for all units, using identification numbers for units, monitor components, and stacks corresponding to the identification numbers provided in the initial monitoring plan and OAR 340-228-0480(2)(d)(A) and (C). The schematic diagram must depict the height of any monitor locations. Comprehensive and/or separate schematic diagrams must be used to describe groups of units using a common stack.~~
  - ~~(ii) Stack and duct engineering diagrams showing the dimensions and locations of fans, turning vanes, air preheaters, monitor components, probes, reference method sampling ports, and other equipment that affects the monitoring system location, performance, or quality control checks.~~
- ~~(L) A data flow diagram denoting the complete information handling path from output signals of CEMS components to final reports.~~

~~(e) In addition to supplying the information in OAR 340-228-0480(2)(c) and (d), the owner or operator of an SO<sub>2</sub>-emitting unit using either of the methodologies in OAR 340-228-0480(1)(a)(B)(ii) must include the following information in its monitoring plan for the specific situations described:~~

~~(A) For each gas-fired or oil-fired SO<sub>2</sub>-emitting unit for which the owner or operator uses the optional protocol in appendix D to 40 CFR Part 75 for SO<sub>2</sub> mass emissions, the Account Representative must include the following information in the monitoring plan:~~

~~(i) Parameter monitored;~~

~~(ii) Type of fuel measured, maximum fuel flow rate, units of measure, and basis of maximum fuel flow rate (i.e., upper range value or unit maximum) for each fuel flowmeter;~~

~~(iii) Test method used to check the accuracy of each fuel flowmeter;~~

~~(iv) Submission status of the data;~~

~~(v) Monitoring system identification code;~~

~~(vi) The method used to demonstrate that the unit qualifies for monthly GCV sampling or for daily or annual fuel sampling for sulfur content, as applicable;~~

~~(vii) A schematic diagram identifying the relationship between the unit, all fuel supply lines, the fuel flowmeter(s), and the stack(s). The schematic diagram must depict the installation location of each fuel flowmeter and the fuel sampling location(s). Comprehensive and/or separate schematic diagrams will be used to describe groups of units using a common pipe;~~

~~(viii) For units using the optional default SO<sub>2</sub> emission rate for "pipeline natural gas" or "natural gas" in appendix D to 40 CFR Part 75 (2003), the information on the sulfur content of the gaseous fuel used to demonstrate compliance with either section 2.3.1.4 or 2.3.2.4 of appendix D to 40 CFR Part 75;~~

~~(ix) For units using the 720-hour test under section 2.3.6 of appendix D to 40 CFR Part 75 to determine the required sulfur sampling requirements, report the procedures and results of the test; and~~

~~(x) For units using the 720-hour test under section 2.3.5 of appendix D to 40 CFR Part 75 to determine the appropriate fuel gross calorific value (GCV) sampling frequency, report the procedures used and the results of the test.~~

~~(B) For each SO<sub>2</sub>-emitting unit for which the owner or operator uses the low mass emission excepted methodology of section 75.19 to 40 CFR Part 75, the Account representative must include the following information in the monitoring plan that accompanies the initial certification application:~~

~~(i) The results of the analysis performed to qualify as a low mass emissions unit under 40 CFR section 75.19(c) (2003). This report must include either the previous three years actual or projected emissions. The following items must be included:~~

~~(I) Current calendar year of application;~~

~~(II) Type of qualification;~~

~~(III) Years one, two, and three;~~

~~(IV) Annual measured, estimated, or projected SO<sub>2</sub> mass emissions for years one, two, and three; and~~

~~(V) Annual operating hours for years one, two, and three.~~

~~(ii) A schematic diagram identifying the relationship between the unit, all fuel supply lines and tanks, any fuel flowmeter(s), and the stack(s). Comprehensive separate schematic diagrams must be used to describe groups of units using a common pipe;~~

~~(iii) For units which use the long term fuel flow methodology under 40 CFR section 75.19(c)(3) (2003), a diagram of the fuel flow to each unit or group of units and a detailed description of the procedures used to determine the long term fuel flow for a unit or group of units for each fuel combusted by the unit or group of units;~~

~~(iv) A statement that the unit burns only gaseous fuel(s) and/or fuel oil and a list of the fuels that are burned or a statement that the unit is projected to burn only gaseous fuel(s) and/or fuel oil and a list of the fuels that are projected to be burned;~~

~~(v) A statement that the unit meets the applicability requirements in 40 CFR 75.19(a) and (b) with respect to SO<sub>2</sub> emissions; and~~

~~(vi) Any unit historical actual, estimated and projected SO<sub>2</sub> emissions data and calculated SO<sub>2</sub> emissions data demonstrating that the unit qualifies as a low mass emissions unit under 40 CFR 75.19(a) and (b).~~

~~(C) For each gas-fired unit the Account Representative will include the following in the monitoring plan: current calendar year, fuel usage data as specified in the definition of gas-fired in 40 CFR section 72.2 (2003), and an indication of whether the data are actual or projected data.~~

~~(f) The specific elements of a monitoring plan under OAR 340-228-0480(2) must not be part of an operating permit for a WEB source issued in accordance with Title V of the Clean Air Act, and modifications to the elements of the plan must not require a permit modification.~~

### ~~(3) Certification/Recertification~~

~~(a) All monitoring systems are subject to initial certification and recertification testing as specified in 40 CFR Part 75 (2003) or Appendix A to this Rule as applicable. Certification or recertification of a monitoring system by the U.S. Environmental Protection Agency for a WEB source that is subject to 40 CFR Part 75 under a requirement separate from this division constitutes certification under the WEB Trading Program.~~

~~(b) The owner or operator of an SO<sub>2</sub> emitting unit not otherwise subject to 40 CFR Part 75 that monitors SO<sub>2</sub> mass emissions in accordance with 40 CFR Part 75 to satisfy the requirements of this rule must perform all of the tests required by that regulation and must submit the following to the Department:~~

~~(A) A test notice not later than 21 days before the certification testing of the monitoring system, provided that the Department may establish additional requirements for adjusting test dates after this notice as part of the approval of the initial monitoring plan under OAR 340-228-0480(2)(c); and~~

~~(B) An initial certification application within 45 days after testing is complete. A monitoring system will be considered provisionally certified while the application is pending.~~

~~(c) A monitoring system is provisionally certified while the application is pending, and the system shall be deemed certified if the Department does not approve or disapprove the system within six months after the date on which the application is submitted.~~

~~(d) Whenever an audit of any monitoring certified under OAR 340-228-0400 through 340-228-0530, and a review of the initial certification or recertification application, reveal that any system or component should not have been certified or recertified because it did not meet a particular performance specification or other requirement of 340-228-0400 through 340-228-0530, both at the time of the initial certification or recertification application submission and at the time of the audit, the Department will issue a notice of disapproval of the certification status of such system or component. For the purposes of this subsection, an audit shall be either a field audit of the facility or an audit of any information submitted to the Department regarding the facility. By issuing the notice of disapproval, the certification status is revoked prospectively, and the data measured and recorded shall not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the WEB source completes subsequently approved initial certification or recertification tests in accordance with the procedures in 340-228-0480(3). The WEB source shall apply the substitute data procedures in 340-228-0480(5)(b) to replace, prospectively, all of the invalid, non-quality-assured data for each disapproved system or component.~~

~~(4) Ongoing Quality Assurance and Quality Control. The WEB source must satisfy the applicable quality assurance and quality control requirements contained in 40 CFR Part 75 (2003) or, if the WEB source is subject to a WEB protocol in Appendix A, the applicable quality assurance and quality control requirements in Appendix A on and after the date that certification testing commences.~~

~~(5) Substitute Data Procedures.~~

~~(a) For any period after certification testing is complete in which quality-assured, valid data are not being recorded by a monitoring system certified and operating in accordance with OAR 340-228-0400 through 0530, missing or invalid data must be replaced with substitute data in accordance with 40 CFR Part 75 (2003) or, if the WEB source is subject to a WEB protocol in Appendix A, with substitute data in accordance with Appendix A.~~

~~(b) For an SO<sub>2</sub> emitting unit that does not have a certified (or provisionally certified) monitoring system in place as of the beginning of the first control period for which the unit is subject to the WEB Trading Program, the owner or operator must:~~

~~(A) If the owner or operator will use a CEMS to comply with OAR 340-228-0400 through 340-228-0530, substitute the maximum potential concentration of SO<sub>2</sub> for the unit and the maximum potential flow rate, as determined in accordance with 40 CFR Part 75 (2003). The procedures for conditional data validation under 40 CFR section 75.20(b)(3) may be used for any monitoring system under this Rule that uses these 40 CFR Part 75 procedures, as applicable;~~

~~(B) If the owner or operator will use the 40 CFR Part 75 Appendix D methodology, substitute the maximum potential sulfur content, density, or gross calorific value for the fuel and the maximum potential fuel flow rate, in accordance with section 2.4 of Appendix D to 40 CFR Part 75;~~

~~(C) If the owner or operator will use the 40 CFR Part 75 low mass emissions units, substitute the SO<sub>2</sub> emission factor required for the unit as specified in 40 CFR section 75.19 and the maximum rated hourly heat input, as defined in 40 CFR section 72.2.~~

~~(D) If using a protocol in Appendix A to this Rule, follow the procedures in the applicable protocol.~~

~~(6) Compliance Deadlines.~~

~~(a) The initial monitoring plan must be submitted by the following dates:~~

~~(A) For each source that is a WEB source on or before the Program Trigger Date, the monitoring plan must be submitted 180 days after such Program Trigger Date.~~

~~(B) For any existing source that becomes a WEB source after the Program Trigger Date, the monitoring plan must be submitted by September 30 of the year following the inventory year in which the source exceeded the emissions threshold.~~

~~(C) For any new WEB source, the monitoring plan must be included with the permit application for New Source Review.~~

~~(b) A detailed monitoring plan under OAR 340-228-0480(2)(b) must be submitted no later than 45 days prior to commencing certification testing in accordance with (c) below.~~

~~(c) Emission monitoring systems must be installed, operational and meet all of the certification testing requirements of this OAR 340-228-0480 (including any referenced in Appendix A) by the following dates:~~

~~(A) For each source that is a WEB source on or before the Program Trigger Date, two years before the start of the first control period as described in OAR 340-228-0510.~~

~~(B) For any existing source that becomes a WEB source after the Program Trigger Date, one year after the due date for the monitoring plan OAR 340-228-0480(6)(a)(B).~~

~~(C) For any new WEB source (or any new unit at a WEB source under OAR 340-228-0480(c)(A) or (c)(B)), the earlier of 90 unit operating days or 180 calendar days after the date the new source commences operation.~~

~~(d) The owner or operator must submit test notices and certification applications in accordance with the deadlines set forth in OAR 340-228-0480(3)(b).~~

~~(e) For each applicable control period, the WEB source must submit each quarterly report under OAR 340-228-0480(8) by no later than 30 days after the end of each calendar quarter and must submit the annual report under OAR 340-228-0480(8) no later than 60 days after the end of each calendar year.~~

~~(7) Recordkeeping.~~

~~(a) Except as provided in OAR 340-228-0480(7)(b), the WEB source must keep copies of all reports, registration materials, compliance certifications, sulfur dioxide emissions data, quality assurance data, and other submissions under 340-228-0400 through 340-228-0530 for a period of five years. In addition, the WEB source shall keep a copy of all Account Certificates of Representation for the duration of the program. Unless otherwise requested by the WEB source and approved by the Department, the copies must be kept on site.~~

~~(b) The WEB source must keep records of all operating hours, quality assurance activities, fuel sampling measurements, hourly averages for SO<sub>2</sub>, stack flow, fuel flow, or other continuous measurements, as applicable, and any other applicable data elements specified in this rule or in Appendix A to this Rule. The WEB source must maintain the applicable records specified in 40 CFR Part 75 for any SO<sub>2</sub> emitting unit that uses a Part 75 monitoring method to meet the requirements of this rule.~~

~~(8) Reporting:~~

~~(a) Quarterly Reports. For each SO<sub>2</sub> emitting unit, the Account Representative must submit a quarterly report within thirty days after the end of each calendar quarter. The report must be in a format specified by the Department to include hourly and quality assurance activity information and must be submitted in a manner compatible with the emissions tracking database designed for the WEB Trading Program. If the owner or operator submits a quarterly report under 40 CFR Part 75 to the U.S. EPA Administrator, no additional report under this paragraph (a) are required; provided, however, that the Department may require that a copy of that report (or a separate statement of quarterly and cumulative annual SO<sub>2</sub> mass emissions) be submitted separately to the Department.~~

~~(b) Annual Report. Based on the quarterly reports, each WEB source must submit an annual statement of total annual SO<sub>2</sub> emissions for all SO<sub>2</sub> emitting units at the source. The annual report must identify total emissions for all units monitored in accordance with OAR 340-228-0480(1)(a) and the total emissions for all units with emissions estimated in accordance with 340-228-0480(1)(b). The annual report must be submitted within 60 days after the end of a control period.~~

~~(c) If the Department so directs, that any monitoring plan, report, certification or recertification, or emissions data required to be submitted under this rule, will be submitted to the Tracking System Administrator.~~

~~(d) The Department may review and reject any report submitted under this OAR 340-228-0480(7) that contains errors or fails to satisfy the requirements of this rule, and the Account Representative must resubmit the report to correct any deficiencies.~~

~~(e) Petitions. A WEB source may petition for an alternative to any requirement specified in OAR 340-228-0480(1)(a)(B). The petition requires approval by the Department and the U.S. EPA Administrator. Any petition submitted under this paragraph must include sufficient information for evaluating the petition, including, at a minimum, the following information:~~

~~(A) Identification of the WEB source and applicable SO<sub>2</sub> emitting unit(s);~~

~~(B) A detailed explanation of why the proposed alternative is being suggested in lieu of the requirement;~~

~~(C) A description and diagram of any equipment and procedures used in the proposed alternative, if applicable;~~

~~(D) A demonstration that the proposed alternative is consistent with the purposes of the requirement for which the alternative is proposed is consistent with the purposes of OAR 340-228-0400 through 340-228-0530, and that any adverse effect of approving such alternative will be de minimis; and~~

~~(E) Any other relevant information that the Department may require.~~

~~(f) Consistency of Identifying Information. For any monitoring plans, reports, or other information submitted under OAR 340-228-0400 through 340-228-0530, the Account Representative must ensure that, where~~

applicable, identifying information is consistent with the identifying information provided in the most recent certificate of representation for the WEB source submitted under 340-228-0440.

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

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.035

Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03

### **340-228-0490**

#### **Allowance Transfers**

(1) Procedure. To transfer allowances, the Account Representative must submit the following information to the Tracking System Administrator:

- (a) The transfer account number(s) identifying the transferor account;
- (b) The transfer account number(s) identifying the transferee account;
- (c) The serial number of each allowance to be transferred; and
- (d) The transferor's Account Representative's name, signature, and the date of submission.

(2) Allowance Transfer Deadline. The allowance transfer deadline is midnight Pacific Standard Time March 1 of each year (or if this date is not a business day, midnight of the first business day thereafter) following the end of the control period. By this time, the transfer of the allowances into the WEB source's compliance account must be correctly submitted to the Tracking System Administrator in order to demonstrate compliance under OAR 340-228-0510(1) for that control period.

(3) Retirement of Allowances. To permanently retire allowances, the transferor's account representative must submit the following information to the Tracking System Administrator:

- (a) The transfer account number(s) identifying the transferor account;
- (b) The serial number of each allowance to be retired; and
- (c) The transferor's Account Representative's name, signature, and the date of submission accompanied by a signed statement acknowledging that each retired allowance is no longer available for future transfers from or to any account.

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

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.035

Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03

## **340-228-0500**

### **Use of Allowances from a Previous Year**

- (1) Any allowance that is held in a compliance account or general account remains in the account until the allowance is either deducted in conjunction with the compliance process or transferred to another account.
- (2) In order to demonstrate compliance under OAR 340-228-0510(1) for a control period, WEB sources may use allowances allocated for that control period or any previous year. Because all allowances held in a special reserve compliance account for a WEB source that monitors certain units in accordance with 340-228-0480(1)(b) will be deducted for compliance for each control period, no banking of such allowances for use in a subsequent year is permitted by 340-228-0400 through 340-228-0530.
- (3) If flow control procedures for the current control period have been triggered as outlined in Section 5.5.2.3.3(h)(2) of the State Implementation Plan, then the use of allowances that were allocated for any previous year will be limited as follows:
- (a) The number of allowances that are held in each compliance account and general account as of the allowance transfer deadline for the immediately previous year and that were allocated for any previous year will be determined by the Department.
- (b) The number determined in OAR 340-228-0500(3)(a) will be multiplied by the flow control ratio established in accordance with Section 5.5.2.3.3(k)(1) of the State Implementation Plan to determine the number of allowances that were allocated for a previous year that can be used without restriction for the current control period.
- (c) Allowances that were allocated for a previous year in excess of the number determined in OAR 340-228-0500(3)(b) may also be used for the current control period. If such allowances are used to make a deduction, two allowances must be deducted for each deduction of one allowance required under 340-228-0510.
- (4) Special provisions for the year 2018. After the Department has determined compliance with the 2017 allowance limitation in accordance with OAR 340-228-0510(1), allowances allocated for any year before 2018 may not be used for determining compliance with the 2018 allowance limitation or any future allowance limitation.

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

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.035

Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03

## **340-228-0510**

### **Compliance**



~~(1) Compliance with Allowance Limitations:~~

~~(a) The WEB source must hold allowances, in accordance with OAR 340-228-0510(1)(b) and 340-228-0500, as of the allowance transfer deadline in the WEB source's compliance account, (together with any current control year allowances held in the WEB source's special reserve compliance account under 340-228-0480(1)(b)) in an amount not less than the total SO<sub>2</sub> emissions for the control period from the WEB source, as determined under the monitoring and reporting requirements of 340-228-0480.~~

~~(A) For each source that is a WEB source on or before the Program Trigger Date, the first control period is the calendar year that is six years following the calendar year for which SO<sub>2</sub> emissions exceeded the milestone in accordance with procedures in Section 5.5.2.3.1 of the State Implementation Plan.~~

~~(B) For any existing source that becomes a WEB source after the Program Trigger Date, the first control period is the calendar year that is four years following the inventory year in which the source became a WEB source.~~

~~(C) For any new WEB source after the Program Trigger Date, the first control period is the first full calendar year that the source is in operation.~~

~~(D) If the WEB Trading Program is triggered in accordance with the year 2013 review procedures in section 5.5.2.3.1(d) of the State Implementation Plan, the first control period for each source that is a WEB source on or before the Program Trigger Date is the year 2018.~~

~~(b) An allowance may be deducted from the WEB source's compliance account only if:~~

~~(A) the allowance was allocated for the current control period or meets the requirements in OAR 340-228-0500 for use of allowances from a previous control period, and~~

~~(B) the allowance was held in the WEB source's compliance account as of the allowance transfer deadline for the current control period, or the allowance was transferred into the compliance account by an allowance transfer correctly submitted for recording by the allowance transfer deadline for the current control period.~~

~~(c) Compliance with allowance limitations must be determined as follows:~~

~~(A) The total annual SO<sub>2</sub> emissions for all SO<sub>2</sub> emitting units at the source that are monitored under OAR 340-228-0480(1)(b), as reported by the source in 340-228-0480(8)(b) or (d), and recorded in the emissions tracking database shall be compared to the allowances held in the source's special reserve compliance account as of the allowance transfer deadline for the current control period, adjusted in accordance with 340-228-0500. If the emissions are equal to or less than the allowances in such account, all such allowances shall be retired to satisfy the obligation to hold allowances for such emissions. If the total emissions from such units exceeds the allowances in such special reserve account, the WEB source shall account for such excess emissions in the following paragraph (A) of this subsection.~~

~~(B) The total annual SO<sub>2</sub> emissions for all SO<sub>2</sub> emitting units at the source that are monitored under OAR 340-228-0480(1)(a), as reported by the source in 340-228-0480(8)(b) or (d), and recorded in the emissions tracking database, together with any excess emissions as calculated in the preceding paragraph (A) of this subsection, shall be compared to the allowances held in the source's compliance account as of the allowance transfer deadline for the current control period, adjusted in accordance with 340-228-0500.~~

~~(d) Deduction of Allowances. Other than allowances in a special reserve compliance account for units monitored under OAR 340-228-0480(1)(b) to the extent consistent with 340-228-0500, allowances must be deducted for a WEB source for compliance with the allowance limitation as directed by the WEB source's Account Representative. Deduction of any other allowances as necessary for compliance with the allowance limitation must be on a first-in, first-out accounting basis in the order of the date and time of their recording in the WEB source's compliance account, beginning with the allowances allocated to the WEB source and continuing with the allowances transferred to the WEB source's compliance account from another compliance account or general account. The allowances held in a special reserve compliance account pursuant to 340-228-0480(1)(b) shall be deducted as specified in 340-228-0510(1)(c)(A).~~

~~(e) SO<sub>2</sub> emissions violations by a source subject to (c) and (d) of this rule:~~

~~(A) Each ton of SO<sub>2</sub> by a source in excess of its allowance limitation for a control period is a violation.~~

~~(B) Each day of the control period is a separate violation, and each ton of SO<sub>2</sub> emissions in excess of a source's allowance limitation is a separate violation.~~

~~(2) Certification of Compliance.~~

~~(a) For each control period in which a WEB source is subject to the allowance limitation, the Account Representative of the source must submit to the Department a Compliance Certification report for the source.~~

~~(b) The Compliance Certification report must be submitted no later than the allowance transfer deadline of each control period and must contain the following:~~

~~(A) Identification of each WEB source;~~

~~(B) At the Account Representative's option, the serial numbers of the allowances that are to be deducted from a source's compliance account for compliance with the allowance limitation; and~~

~~(C) The Compliance Certification report according to OAR 340-228-0510(2)(c).~~

~~(c) In the Compliance Certification report, the Account Representative must certify, based on reasonable inquiry of those persons with primary responsibility for operating the WEB source in compliance with the WEB Trading Program, whether the WEB source for which the compliance certification is submitted was operated in compliance with the requirements of the WEB Trading Program applicable to the source during the control period covered by the report, including:~~

~~(A) Whether the WEB source operated in compliance with the SO<sub>2</sub> allowance limitation;~~

~~(B) Whether SO<sub>2</sub> emissions data was submitted to the Department in accordance with OAR 340-228-0480(8) and other applicable requirements, for review, revision as necessary, and finalization;~~

~~(C) Whether the monitoring plan for the WEB source has been maintained to reflect the actual operation and monitoring of the source and contains all information necessary to attribute SO<sub>2</sub> emissions to the source, in accordance with OAR 340-228-0480(1);~~

~~(D) Whether all the SO<sub>2</sub> emissions from the WEB source, were monitored or accounted for either through the applicable monitoring or through application of the appropriate missing data procedures;~~

~~(E) If applicable, whether any SO<sub>2</sub>-emitting unit for which the WEB-source is not required to monitor in accordance with OAR 340-228-0480(1)(a)(C) remained permanently retired and had no emissions for the entire applicable period; and~~

~~(F) Whether there were any changes in the method of operating or monitoring the WEB-source that required monitor recertification. If there were any such changes, the report must specify the nature, reason, and date of the change, the method to determine compliance status subsequent to the change, and specifically, the method to determine SO<sub>2</sub>-emissions.~~

~~(3) Penalties for any WEB-source exceeding its allowance limitations.~~

~~(a) Allowance deduction penalties.~~

~~(A) An allowance deduction penalty will be assessed equal to two times the number of the WEB-source's tons of SO<sub>2</sub>-emissions in excess of its allowance limitation for a control period, determined in accordance with OAR 340-228-0510(1). Allowances allocated for that control period in the amount of the allowance deduction penalty will be deducted from the source's compliance account. If the compliance account does not have sufficient allowances allocated for that control period, the required number of allowances will be deducted from the WEB-source's compliance account regardless of the control period for which they were allocated, once allowances are recorded in the account.~~

~~(B) Any allowance deduction required under OAR 340-228-0510(1)(c) will not affect the liability of the owners and operators of the WEB-source for any fine, penalty, or assessment or their obligation to comply with any other remedy for the same violation as ordered under the Clean Air Act, implementing regulations, or applicable state or tribal law. Accordingly, a violation can be assessed each day of the control period for each ton of SO<sub>2</sub>-emissions in excess of its allowance limitation or for each other violation of OAR 340-228-0400 through 340-228-0530.~~

~~(4) Enforcement.~~

~~(a) WEB-Source liability for non-compliance. In addition to any allowance deduction, a WEB-source that violates any requirement of this rule, including those listed under (1)(c) of this section, is subject to civil and criminal penalties, including but not limited to penalties under ORS 468, 468A, the Clean Air Act, and under OAR 340-012.~~

~~(b) General liability.~~

~~(A) Any provision of the WEB-Trading Program that applies to a source or an Account Representative also applies to the owners and operators of such source.~~

~~(B) Any person who violates any requirement or prohibition of the WEB-Trading Program is subject to enforcement pursuant to OAR 340, division 12.~~

~~(C) Any person who knowingly makes a false material statement in any record, submission, or report under this WEB-Trading Program is subject to criminal enforcement pursuant to ORS 468.953.~~

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

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.035

Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03

### **340-228-0520**

#### **Special Penalty Provisions for 2018 Milestone**

~~(1) If the WEB Trading Program is triggered as outlined in Section 5.5.2.3.1 of the State Implementation Plan, and the first control period will not occur until after the year 2018, the following provisions will apply for the 2018 emissions year:~~

~~(a) All WEB sources will register, and will open a compliance account within 180 days after the Program Trigger Date, in accordance with OAR 340-228-0450(1) and 340-228-0470.~~

~~(b) The Tracking System Administrator will record the allowances for the 2018 control period for each WEB source in the source's compliance account once the Department allocates the 2018 allowances under Section 5.5.2.3.3(a) of the State Implementation Plan.~~

~~(c) The allowance transfer deadline is midnight Pacific Standard Time on May 30, 2021. WEB sources may transfer allowances as provided in OAR 340-228-0490(1) until the allowance transfer deadline.~~

~~(d) A WEB source must hold allowances allocated for 2018 including those transferred into the compliance account or a special reserve account by an allowance transfer correctly submitted by the allowance transfer deadline, in an amount not less than the WEB source's total SO<sub>2</sub> emissions for 2018. Emissions will be determined using the pre-trigger monitoring provisions in Section 5.5.2.3.2 of the State Implementation Plan, and OAR 340-214-0400 through 340-214-0530.~~

~~(e) An allowance deduction and penalty for violation of SO<sub>2</sub> allowance limitation will be assessed and levied in accordance with OAR 340-228-0500(4), 340-228-0510(1)(d) and (e), and 340-228-0510(3) and (4), except that SO<sub>2</sub> emissions will be determined under 340-228-0520(1)(d).~~

~~(2) If the program has been triggered and OAR 340-228-0520(1) is implemented, the provisions of 340-228-0520(3) will apply for each year after the 2018 emission year until:~~

~~(a) The first control period under the WEB trading program; or~~

~~(b) The Department determined, in accordance with section 5.5.2.3.1(c)(10) of the Implementation Plan, that the 2018 SO<sub>2</sub> milestone has been met.~~

~~(3) If OAR 340-228-0520(1) was implemented, the following will apply to each emissions year after the 2018 emissions year:~~

~~(a) The Tracking System Administrator will record the allowances for the control period for the specific year for each WEB source in the source's compliance account once the Department allocates the allowances under Section 5.5.2.3.3.a of the State Implementation Plan.~~

~~(b) The allowance transfer deadline is midnight Pacific Standard Time on March 1 of each year (or if this date is not a business day, midnight of the first business day thereafter) following the end of the specific emissions year. WEB sources may transfer allowances as provided in OAR 340-228-0490(1) until the allowance transfer deadline.~~

~~(c) A WEB source must hold allowances allocated for that specific emissions year, or any year after 2018, including those transferred into the compliance account by an allowance transfer correctly submitted by the allowance transfer deadline, in an amount not less than the WEB source's total SO<sub>2</sub> emissions for the specific emissions year. Emissions are determined using the pre-trigger monitoring provisions in Section 5.5.2.3.2 of the State Implementation Plan, and OAR 340-214-0400 through 0530.~~

~~(d) An allowance deduction and penalty for violation of SO<sub>2</sub> allowance limitation will be assessed and levied in accordance with OAR 340-228-0500(4), 340-228-0510(1)(d) and (e), and 340-228-0510(3) and (4), except that SO<sub>2</sub> emissions shall be determined under 340-228-0520(3)(c).~~

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

~~Stat. Auth.: ORS 468.020~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03~~

## **~~340-228-0530~~**

### **~~Integration into Permits~~**

~~Any WEB source that is not subject to OAR 340, division 218 at any time after 340-228-0400 through 340-228-0530 becomes effective must obtain a permit under OAR 340, division 216 or modify an existing permit issued under that division that incorporates the requirements of 340-228-0400 through 340-228-0530.~~

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

~~Stat. Auth.: ORS 468.020~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03~~

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## **~~APPENDIX A: WEB MODEL RULE MONITORING PROTOCOLS~~**

### **~~Protocol WEB-1: SO<sub>2</sub> Monitoring of Fuel Gas Combustion Devices~~**

#### **~~1. Applicability.~~**

~~(a) The provisions of this protocol are applicable to fuel gas combustion devices at petroleum refineries.~~

~~(b) Fuel gas combustion devices include boilers, process heaters, and flares used to burn fuel gas generated at a petroleum refinery.~~

~~(c) Fuel gas means any gas which is generated and combusted at a petroleum refinery. Fuel gas does not include: (1) natural gas, unless combined with other gases generated at a petroleum refinery, (2) gases generated by a catalytic cracking unit catalyst regenerator, (3) gases generated by fluid coking burners, (4) gases combusted to produce sulfur or sulfuric acid, or (5) process upset gases generated due to startup, shutdown, or malfunctions.~~

## ~~2. Monitoring Requirements.~~

~~(a) Except as provided in paragraphs (b) and (c) of this Section 2, fuel gas combustion devices shall use a continuous fuel gas monitoring system (CFGMS) to determine the total sulfur content (reported as H<sub>2</sub>S) of the fuel gas mixture prior to combustion, and continuous fuel flow meters to determine the amount of fuel gas burned.~~

~~(1) Fuel gas combustion devices having a common source of fuel gas may be monitored for sulfur content at one location, if monitoring at that location is representative of the sulfur content of the fuel gas being burned in any fuel gas combustion device.~~

~~(2) The CFGMS shall meet the performance requirements in Performance Specification 2 in Appendix B to 40 CFR Part 60, and the following:~~

~~(i) Continuously monitor and record the concentration by volume of total sulfur compounds in the gaseous fuel reported as ppmv H<sub>2</sub>S.~~

~~(ii) Have the span value set so that the majority of readings fall between 10 and 95% of the range.~~

~~(iii) Record negative values of zero drift.~~

~~(iv) Calibration drift shall be 5.0% of the span.~~

~~(v) Methods 15A, 16, or approved alternatives for total sulfur, are the reference methods for the relative accuracy test. The relative accuracy test shall include a bias test in accordance with paragraph 4(c) of this section.~~

~~(3) All continuous fuel flow meters shall comply with the applicable provisions of Appendix D to 40 CFR Part 75.~~

~~(4) The hourly mass SO<sub>2</sub> emissions shall be calculated using the following equation:~~

$$E = (CS)(Q_f)(K)$$

~~where: E = SO<sub>2</sub> emissions in lbs/hr~~

~~CS = Sulfur content of the fuel gas as H<sub>2</sub>S(ppmv)~~

~~Q<sub>f</sub> = Fuel gas flow rate (scfh)~~

~~K = 1.660 x 10<sup>-7</sup> (lb/scf)/ppmv~~

~~(b) In place of a CFGMS in paragraph (a) of this Section 2, fuel gas combustion devices having a common source of fuel gas may be monitored with an SO<sub>2</sub> CEMS and flow CEMS at only one location, if the CEMS monitoring at that location is representative of the SO<sub>2</sub> emission rate (lb SO<sub>2</sub>/scf fuel gas burned) of all applicable fuel gas combustion devices. Continuous fuel flow meters shall be used in accordance with paragraph (b), and the fuel gas combustion device monitored by a CEMS shall have separate fuel metering.~~

~~(1) Each CEMS for SO<sub>2</sub> and flow shall comply with the operating requirements, performance specifications, and quality assurance requirements of 40 CFR Part 75.~~

~~(2) All continuous fuel flow meters shall comply with the applicable provisions of Appendix D to 40 CFR Part 75.~~

~~(3) The SO<sub>2</sub> mass emissions for all the fuel gas combustion devices monitored by this approach shall be determined by the ratio of the amount of fuel gas burned by the CEMS-monitored fuel gas combustion device to the total fuel gas burned by all applicable fuel gas combustion devices using the following equation:~~

$$Et = (Em)(Qt)/(Qm)$$

~~where: Et = Total SO<sub>2</sub> emissions in lbs/hr from applicable fuel gas combustion devices.~~

~~Em = SO<sub>2</sub> emissions in lbs/hr from the CEMS-monitored fuel gas combustion device.~~

~~Qt = Fuel gas flow rate (scfh) from applicable fuel gas combustion devices.~~

~~Qm = Fuel gas flow rate (scfh) from the CEMS-monitored fuel gas combustion device.~~

~~(c) In place of a CFGMS in paragraph (a) of this section, fuel gas combustion devices having a common source of fuel gas may be monitored with an SO<sub>2</sub>—diluent CEMS at only one location, if the CEMS monitoring at that location is representative of the SO<sub>2</sub> emission rate (lb SO<sub>2</sub>/mmBtu) of all applicable fuel gas combustion devices. If this option is selected, the owner or operator shall conduct fuel gas sampling and analysis for gross calorific value (GCV), and shall use continuous fuel flow metering in accordance with paragraph (a) of this Section 2, with separate fuel metering for the CEMS-monitored fuel gas combustion device.~~

~~(1) Each SO<sub>2</sub>—diluent CEMS shall comply with the applicable provisions for SO<sub>2</sub> monitors and diluent monitors in 40 CFR Part 75, and shall use the procedures in section 3 of Appendix F to Part 75 for determining SO<sub>2</sub> emission rate (lb/mmBtu) by substituting the term SO<sub>2</sub> for NO<sub>x</sub> in that section.~~

~~(2) All continuous fuel flow meters and fuel gas sampling and analysis for GCV to determine the heat input rate from the fuel gas shall comply with the applicable provisions of Appendix D to 40 CFR Part 75.~~

~~(3) The SO<sub>2</sub> mass emissions for all the fuel gas combustion devices monitored by this approach shall be determined by the ratio of the fuel gas heat input to the CEMS-monitored fuel gas combustion device to the total fuel gas heat input to all applicable fuel gas combustion devices using the following equation:~~

$$Et = (Em)(Ht)/(Hm)$$

~~where: Et = Total SO<sub>2</sub> emissions in lbs/hr from applicable fuel gas combustion devices.~~

~~Em = SO<sub>2</sub> emissions in lb/mmBtu from the CEMS—monitored fuel gas combustion device.~~

~~H<sub>t</sub> = Fuel gas heat input (mmBtu/hr) from applicable fuel gas combustion devices.~~

~~H<sub>m</sub> = Fuel gas heat input (mmBtu/hr) from the CEMS—monitored fuel gas combustion device.~~

### ~~3. Certification/Recertification Requirements.~~

~~All monitoring systems are subject to initial certification and recertification testing as follows:~~

- ~~(a) The owner or operator shall comply with the initial testing and calibration requirements in Performance Specification 2 in Appendix B of 40 CFR Part 60 and paragraph 2 (a)(2) of this section for each CFGMS.~~
- ~~(b) Each CEMS for SO<sub>2</sub> and flow or each SO<sub>2</sub>-diluent CEMS shall comply with the testing and calibration requirements specified in 40 CFR Part 75, section 75.20 and Appendices A and B, except that each SO<sub>2</sub>-diluent CEMS shall meet the relative accuracy requirements for a NO<sub>x</sub>-diluent CEMS (lb/mmBtu).~~
- ~~(c) A continuous fuel flow meter shall comply with the testing and calibration requirements in 40 CFR Part 75, Appendix D.~~

### ~~4. Quality Assurance/Quality Control Requirements.~~

- ~~(a) A quality assurance/quality control (QA/QC) plan shall be developed and implemented for each CEMS for SO<sub>2</sub> and flow or the SO<sub>2</sub>-diluent CEMS in compliance with Appendix B of 40 CFR Part 75.~~
- ~~(b) A QA/QC plan shall be developed and implemented for each continuous fuel flow meter and fuel sampling and analysis in compliance with Appendix B of 40 CFR Part 75.~~
- ~~(c) A QA/QC plan shall be developed and implemented for each CFGMS in compliance with sections 1 and 1.1 of Appendix B of 40 CFR Part 75, and the following:~~
  - ~~(1) Perform a daily calibration error test of each CFGMS at two gas concentrations, one low level and one high level. Calculate the calibration error as described in Appendix A to 40 CFR Part 75. An out of control period occurs whenever the error is greater than 5.0% of the span value.~~
  - ~~(2) In addition to the daily calibration error test, an additional calibration error test shall be performed whenever a daily calibration error test is failed, whenever a monitoring system is returned to service following repairs or corrective actions that may affect the monitor measurements, or after making manual calibration adjustments.~~
  - ~~(3) Perform a linearity test once every operating quarter. Calculate the linearity as described in Appendix A to 40 CFR Part 75. An out of control period occurs whenever the linearity error is greater than 5.0 percent of a reference value, and the absolute value of the difference between average monitor response values and a reference value is greater than 5.0 ppm.~~
  - ~~(4) Perform a relative accuracy test audit once every four operating quarters. Calculate the relative accuracy as described in Appendix A to 40 CFR Part 75. An out of control period occurs whenever the relative accuracy is greater than 20.0% of the mean value of the reference method measurements.~~
  - ~~(5) Using the results of the relative accuracy test audit, conduct a bias test in accordance with Appendix A to 40 CFR Part 75, and calculate and apply a bias adjustment factor if required.~~

### ~~5. Missing Data Procedures.~~



- ~~(a) For any period in which valid data are not being recorded by an SO<sub>2</sub> CEMS or flow CEMS specified in this section, missing or invalid data shall be replaced with substitute data in accordance with the requirements in Subpart D of 40 CFR Part 75.~~
- ~~(b) For any period in which valid data are not being recorded by an SO<sub>2</sub> diluent CEMS specified in this section, missing or invalid data shall be replaced with substitute data on a rate basis (lb/mmBtu) in accordance with the requirements for SO<sub>2</sub> monitors in Subpart D of 40 CFR Part 75.~~
- ~~(c) For any period in which valid data are not being recorded by a continuous fuel flow meter or for fuel gas GCV sampling and analysis specified in this section, missing or invalid data shall be replaced with substitute data in accordance with missing data requirements in Appendix D to 40 CFR Part 75.~~
- ~~(d) For any period in which valid data are not being recorded by the CEMS specified in this section, hourly missing or invalid data shall be replaced with substitute data in accordance with the missing data requirements for units performing hourly gaseous fuel sulfur sampling in section 2.4 of Appendix D to 40 CFR Part 75.~~

#### ~~6. Monitoring Plan and Reporting Requirements.~~

~~In addition to the general monitoring plan and reporting requirements of Section I of this Rule, the owner or operator shall meet the following additional requirements:~~

- ~~(a) The monitoring plan shall identify each group of units that are monitored by a single monitoring system under this Protocol WEB-1, and the plan shall designate an identifier for the group of units for emissions reporting purposes. For purpose of submitting emissions reports, no apportionment of emissions to the individual units within the group is required.~~
- ~~(b) If the provisions of paragraphs 2(b) or (c) are used, provide documentation and an explanation to demonstrate that the SO<sub>2</sub> emission rate from the monitored unit is representative of the rate from non-monitored units.~~

### **Protocol WEB-2: Predictive Flow Monitoring Systems for Kilns with Positive Pressure Fabric Filter**

#### **1. Applicability.**

~~The provisions of this protocol are applicable to cement kilns or lime kilns that (1) are controlled by a positive pressure fabric filter, and (2) have operating conditions upstream of the fabric filter that the WEB source documents would reasonably prevent reliable flow monitor measurements.~~

#### **2. Monitoring Requirements.**

- ~~(a) A cement or lime kiln with a positive pressure fabric filter shall use a predictive flow monitoring system (PFMS) to determine the hourly kiln exhaust gas flow.~~
- ~~(b) A PFMS is the total equipment necessary for the determination of exhaust gas flow using process or control device operating parameter measurements and a conversion equation, a graph, or computer program to produce results in cubic feet per hour.~~
- ~~(c) The PFMS shall meet the following performance specifications:~~

~~(1) The PFMS must allow for the automatic or manual determination of failed monitors. At a minimum a daily determination must be performed.~~

~~(2) The PFMS shall have provisions to check the calibration error of each parameter that is individually measured. The owner or operator shall propose appropriate performance specifications in the initial monitoring plan for all parameters used in the PFMS comparable to the degree of accuracy required for other monitoring systems used to comply with this Rule. The parameters shall be tested at two levels, low: 0 to 20% of full scale, and high: 50 to 100% of full scale. The reference value need not be certified.~~

~~(3) The relative accuracy of the PFMS must be  $<10.0\%$  of the reference method average value, and include a bias test in accordance with paragraph 4(c) of this section.~~

### ~~3. Certification Requirements.~~

The PFMS is subject to initial certification testing as follows:

~~(a) Demonstrate the ability of the PFMS to identify automatically or manually a failed monitor.~~

~~(b) Provide evidence of calibration testing of all monitoring equipment. Any tests conducted within the previous 12 months of operation that are consistent with the QA/QC plan for the PFMS are acceptable for initial certification purposes.~~

~~(c) Perform an initial relative accuracy test over the normal range of operating conditions of the kiln. Using the results of the relative accuracy test audit, conduct a bias test in accordance with Appendix A to 40 CFR Part 75, and calculate and apply a bias adjustment factor if required.~~

### ~~4. Quality Assurance/Quality Control Requirements.~~

~~A QA/QC plan shall be developed and implemented for each PFMS in compliance with sections 1 and 1.1 of Appendix B of 40 CFR Part 75, and the following:~~

~~(a) Perform a daily monitor failure check.~~

~~(b) Perform calibration tests of all monitors for each parameter included in the PFMS. At a minimum, calibrations shall be conducted prior to each relative accuracy test audit.~~

~~(c) Perform a relative accuracy test audit and accompanying bias test once every four operating quarters. Calculate the relative accuracy (and bias adjustment factor) as described in Appendix A to 40 CFR Part 75. An out of control period occurs whenever the flow relative accuracy is greater than 10.0% of the mean value of the reference method.~~

### ~~5. Missing Data.~~

~~For any period in which valid data are not being recorded by the PFMS specified in this section, hourly missing or invalid data shall be replaced with substitute data in accordance with the flow monitor missing data requirements for non-load based units in Subpart D of 40 CFR Part 75.~~

### ~~6. Monitoring Plan Requirements.~~

~~In addition to the general monitoring plan requirements of Section I of this Rule, the owner or operator shall meet the following additional requirements:~~

~~(a) The monitoring plan shall document the reasons why stack flow measurements upstream of the fabric filter are unlikely to provide reliable flow measurements over time.~~

~~(b) The initial monitoring plan shall explain the relationship of the proposed parameters and stack flow, and discuss other parameters considered and the reasons for not using those parameters in the PFMS. The [state or tribe] may require that the subsequent monitoring plan include additional explanation and documentation for the reasonableness of the proposed PFMS.~~

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

~~Stat. Auth.: ORS 468.020~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03~~

## DIVISION 232

### EMISSION STANDARDS FOR VOC POINT SOURCES

#### 340-232-0010

##### Introduction

(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 Salem-Keizer in the ~~Salem-SK~~ATS listed in subsections (a) through (m) ~~of this section, including~~ below:

- (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 ~~F~~lexographic printing;
- (m) Automotive ~~G~~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 before add-on controls are subject to OAR 340-232-0040.

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

Stat. Auth.: ORS 468.020 & 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0100; DEQ 15-2001, f. & cert. ef. 12-26-01; DEQ 3-2007, f. & cert. ef. 4-12-07; DEQ 8-2007, f. & cert. ef. 11-8-07

## 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).~~

~~(12)~~ All new and existing sources inside the following areas ~~shall~~must comply with the applicable requirements in this division~~General Emission Standards for Volatile Organic Compounds:~~

- (a) Portland-Vancouver Air Quality Maintenance Area;
- (b) Medford-Ashland Air Quality Maintenance Area;
- (c) Salem-Keizer Area Transportation Study (SKATS) Area.

~~(23)~~ VOC sources located outside the areas cited in section ~~(12)~~ ~~of this rule~~ are exempt from the requirements in this division~~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.~~

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

Stat. Auth.: ORS 468.020 & 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 13-1995, f. & cert. ef. 5-25-95; DEQ 7-1997(Temp), f. & cert. ef. 4-28-97; DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0104; DEQ 3-2007, f. & cert. ef. 4-12-07

## 340-232-0030

### 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) "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 DEQ](#), or which has been certified by other air pollution control agencies and approved by ~~the~~ [Department DEQ](#).
- (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.~~

(178) "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.~~

(1820) "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.

(1924) "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.

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

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

(224) "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.

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

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

(275) "Gas ~~F~~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.

(286) "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.

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

(2830) "Gaseous 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.~~

(2932) "Hardwood plywood" is plywood whose surface layer is a veneer of hardwood.

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

(314) "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.

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

(336) "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~~ [DEQ](#). 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.

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

(358) "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.

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

(3740) "Loading event" means the loading or lightering of gasoline or other volatile organic compound liquids with a true vapor pressure greater than 10.5 kPa (kilopascals) (1.52 psia) at actual monthly average ambient temperatures 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 or other volatile organic compound liquids with a true vapor pressure greater than 10.5 kPa (kilopascals) (1.52 psia) at actual monthly average ambient temperatures. 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.~~

(3844) "Marine ~~T~~ank ~~V~~yessel" means any marine vessel constructed or converted to carry liquid bulk cargo that transports gasoline.



- (3945) "Marine ~~T~~terminal" means any facility or structure used to load or unload any fuel product cargo into or from marine tank vessels.
- (406) "Marine ~~V~~yessel" means any tugboat, tanker, freighter, passenger ship, barge or other boat, ship or watercraft.
- (417) "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.
- (428) "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.
- (439) "Natural finish hardwood plywood panels" means panels whose original grain pattern is enhanced by essentially transparent finishes frequently supplemented by fillers and toners.
- (4450) "Operator" means any person who leases, operates, controls, or supervises a facility at which gasoline is dispensed.
- (4554) "Oven-~~d~~dried" means a coating or ink which is dried, baked, cured, or polymerized at temperatures over 90°C (194°F).
- (4652) "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.
- (4753) "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.~~
- (4855) "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.~~

(49~~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.

~~(50~~64~~) "Prime coat" means the first of two or more films of coating applied in an operation.~~

(51~~9~~) "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.

(52~~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.~~

(53~~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.

(54~~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.

(55~~64~~) "Roll printing" means the application of words, designs and pictures to a substrate by means of hard rubber or steel rolls.

(56~~65~~) "Sealant" means a coating applied for the purpose of filling voids and providing a barrier against penetration of water, fuel or other fluids or vapors.

(57~~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.~~

(58~~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~~ means 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.~~

(59~~72~~) "Thirty-day rolling average" means any value arithmetically averaged over any consecutive thirty days.

(~~6073~~) "Tileboard" means paneling that has a colored waterproof surface coating.

(~~6174~~) "Topcoat" means a coating applied over a primer or intermediate coating for purposes such as appearance, identification or protection.

(~~6275~~) "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.

(~~6376~~) "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.

(~~6477~~) "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.

(~~6578~~) "Vapor ~~T~~ight" 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 not exceed 10,000 ppm (expressed as methane) above background.

**NOTE:** This rule is included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the Environmental Quality Commission~~ that EQC adopted under OAR 340-200-00240.

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

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 13-1995, f. & cert. ef. 5-25-95; DEQ 6-1996, f. & cert. ef. 3-29-96; DEQ 9-1997, f. & cert. ef. 5-9-97; DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 6-1999, f. & cert. ef. 5-21-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0102; DEQ 2-2000, f. 2-17-00, cert. ef. 6-1-01; DEQ 15-2001, f. & cert. ef. 12-26-01

## 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(~~21~~)(a) or (~~21~~)(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~~must have RACT requirements developed on a case-by-case basis by ~~the Department~~DEQ. Sources that have complied with ~~New Source Review~~NSR 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~~DEQ that ~~their~~its potential emissions before add-on controls are ~~below~~less than 100 tons per year. Once a source becomes subject to RACT requirements under this section, it ~~shall~~will continue to be subject to RACT, unless VOC emissions fall ~~below~~less than 100 tons per year

and the source requests that RACT be removed, by demonstrating to ~~the Department~~DEQ 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~~DEQ of the applicability of this rule, or, for good cause shown, up to an additional three months as approved by ~~the Department~~DEQ, the source ~~shall~~must submit to ~~the Department~~DEQ 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~~DEQ ~~shall~~will be incorporated in the source's Air Contaminant Discharge Permit, and ~~shall not~~will become effective ~~until~~upon approval ~~ed~~ by EPA as a source specific SIP revision. The source ~~shall~~must ~~comply with the applicable RACT requirements beginning~~have one year from the date of notification by ~~the Department~~DEQ 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~~does not ~~relieve~~excuse the source ~~of~~from the obligation to comply~~ing~~ with a RACT determination established by ~~the Department~~DEQ.

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

Stat. Auth.: ORS 468.020 & ~~ORS~~-468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 13-1995, f. & cert. ef. 5-25-95; DEQ 7-1997(Temp), f. & cert. ef. 4-28-97; DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0104

## 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~~DEQ 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.

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

Stat. Auth.: ORS 468.020 & ~~ORS~~-468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0106

## 340-232-0060

### Compliance Determination

- (1) Certification and test procedures required by this division ~~shall~~must be conducted ~~in accordance with~~using the ~~Department's~~ DEQ 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) DEQ ~~A~~ 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.

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

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

Stat. Auth.: ORS 468.020, ~~& ORS~~ 468A.025 & 468A.070

Stats. Implemented: ORS 468A.025& 468A.070

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; Renumbered from 340-22-106(3) & (4); DEQ 23-1980, f. & ef. 9-26-80; DEQ 12-1981(Temp), f. & ef. 4-29-81; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0107

## 340-232-0080

### Bulk Gasoline Plants

- (1) No person ~~shall~~may 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~~must 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~~must 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~~must report the spillage in accordance with OAR 340-214-0300 to 340-214-0350.

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

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

Stat. Auth.: ORS 468.020, ~~& ORS~~ 468A.025 & 468A.050

Stats. Implemented: ORS 468A.025 & 468A.050

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 12-1981(Temp), f. & ef. 4-29-81; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0120

### 340-232-0085

#### Gasoline Delivery Vessel(s)

(1) No person ~~shall~~may 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 DEQ~~. All equipment associated with the vapor balance system ~~shall~~must be maintained to be vapor tight and in good working order.

(2) Gasoline ~~shall~~must 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~~must report the spillage in accordance with OAR 340-214-0300 to 340-214-0350.

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

(4) Compliance with subsection (1)(b) ~~of this rule~~ shallmust be determined by verification of use of equipment approved by DEQ and/or by testing and monitoring in accordance with applicable portions of OAR 340-232-0100 and/or Method 31 and/or 32 on file with DEQ.

(5) The owner or operator of a gasoline delivery vessel ~~shall~~must 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) ~~of this rule~~.

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

Stat. Auth.: ORS 468.020, ~~&~~ 468A.025, 468A.050 & 468A.070

Stats. Implemented: ORS 468A.025, 468A.050 & 468A.070

Hist.: DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0125; DEQ 4-2013, f. & cert. ef. 3-27-13

## **340-232-0090**

### **Bulk Gasoline Terminals**

- (1) No terminal owner or operator, ~~shall~~may 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~~must 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~~must 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~~must 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~~must be maintained to be vapor tight and in good working order.
- (2) Compliance with section (1) ~~of this rule shall~~must be determined by testing in accordance with Method 33 on file with ~~the Department~~DEQ. 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~~must 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~~must be vented only to the vapor control system;
  - (b) The loading device must not leak when in use. The loading device ~~shall~~must 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~~must be equipped with fittings which make vapor-tight connections and which close automatically and immediately when disconnected;



- (d) All vapor lines ~~shall~~must 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~~must 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~~must report the spillage in accordance with OAR 340-214-0300 through 340-214-0350;
- (f) The vapor balance system ~~shall~~must be operated in a manner to prevent the pressure therein from exceeding the tank truck or trailer pressure relief settings.

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

Stat. Auth.: ORS 468.020, ~~& ORS~~ 468A.025, 468A.050 & 468A.070

Stats. Implemented: ~~ORS 468.020 &~~ ORS 468A.025, 468A.050 & 468A.070

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 12-1981(Temp), f. & ef. 4-29-81; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91; Sections (2) and (3) renumbered from 340-22-133 and 340-22-136; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 25-1994, f. & cert. ef. 11-22-94; DEQ 26-1995, f. & cert. ef. 12-6-95; DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0130

## **340-232-0100**

### **Testing Vapor Transfer and Collection Systems**

- (1) No person ~~shall~~may 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~~DEQ, 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<sub>2</sub>O) in five minutes when pressurized to a gauge pressure of 4,500 pascals (18 inches of H<sub>2</sub>O) or evacuated to a gauge pressure of 1,500 pascals (6 inches of H<sub>2</sub>O) 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~~must 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<sub>2</sub>O) and vacuum from exceeding 1,500 pascals (6 inches of H<sub>2</sub>O) 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~~DEQ, 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~~DEQ may, at any time, monitor a gasoline tank truck, vapor collection system, or vapor control system, by the methods on file with ~~the Department~~DEQ, 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~~must 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~~must be submitted to ~~the Department~~DEQ within 30 days of certification testing.

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

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

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

Stat. Auth.: ORS 468.020, ~~& ORS~~ 468A.025, 468A.050 & 468A.070

Stats. Implemented: ORS 468A.025, 468A.050 & 468A.070

Hist.: DEQ 23-1980, f. & ef. 9-26-80; DEQ 12-1981(Temp), f. & ef. 4-29-81; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 25-1994, f. & cert. ef. 11-2-94; DEQ 25-1994, f. & cert. ef. 11-22-94; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0137

**340-232-0110**

**Loading Gasoline or Volatile Organic Compound Liquids onto Marine Tank Vessels**

(1) Applicability.

(a) -This rule applies to loading events at any location within the Portland ~~ozone air quality maintenance area AQMA~~ when gasoline or other volatile organic compound liquids with a true vapor pressure greater than 10.5 kPa (kilopascals) (1.52 psia), at actual monthly average ambient temperatures, 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 or other volatile organic compound liquids with a true vapor pressure greater than 10.5 kPa (kilopascals) (1.52 psia) at actual monthly average ambient temperatures. The owner or operator of each marine terminal and marine tank vessel is responsible for and must comply with this rule.

(b) The provisions of this rule that apply to volatile organic compounds liquids other than gasoline become effective on [INSERT SOS FILING DATE OF RULES].

(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 or other volatile organic compound liquids with a true vapor pressure greater than 10.5 kPa (kilopascals) (1.52 psia) at actual monthly average ambient temperatures.

(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 ~~pounds~~<sub>lbs.</sub> per 1000 ~~barrels~~<sub>bbls</sub>) 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 or other volatile organic compound liquids with a true vapor pressure greater than 10.5 kPa (kilopascals) (1.52 psia) at actual monthly average ambient temperatures, 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~~ DEQ 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~~DEQ 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~~DEQ staff is a violation of this rule.

(6) Monitoring and ~~R~~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~~DEQ declares a Clean Air Action (~~CAA~~) day. If ~~the Department~~DEQ declares a second ~~CAA~~clean air action 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~~clean air action 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~~clean air action day and ending at 2 a.m. on the third ~~CAA~~clean air action day. Uncontrolled lightering must be curtailed from 2 a.m. until 2 p.m. on the third ~~CAA~~clean air action day. If ~~the Department~~DEQ continues to declare ~~CAA~~clean air action days consecutively after the third day, the curtailment and loading pattern used for the third ~~CAA~~clean air action 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.

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

Stat. Auth.: [468.020](#), [468A.025](#), ~~ORS~~ 468A.035 & [468A.070](#)

Stats. Implemented: ORS 468A.025 & [468A.070](#)

Hist.: DEQ 2-2000, f. 2-17-00, cert. ef. 6-1-01

## 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.

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

Stat. Auth.: ORS 468.~~020~~ ~~& ORS~~ 468A.025 & 468A.070

Stats. Implemented: ORS 468A.025 & 468A.070

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0140

## **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.

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

Stat. Auth.: ORS 468.~~020~~, & ~~ORS~~ 468A.~~025~~

Stats. Implemented: ORS 468A.025

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 8-1991, f. & cert. ef. 5-16-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99,  
Renumbered from 340-022-0150

## 340-232-0140

### Petroleum Refinery Leaks

(1) All persons operating petroleum refineries ~~shall~~must 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~~must:

(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~~may 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~~must be marked in some manner that will be readily obvious to both refinery personnel performing monitoring and ~~the Department~~DEQ.

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

(3) Monitoring, Recordkeeping, Reporting:

(a) The owner or operator of a petroleum refinery ~~shall~~must 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~~must:

(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~~must 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~~must 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~~must:
- (A) Submit a report to ~~the Department~~DEQ 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~~must maintain a leaking component monitoring log ~~which shall~~that contains, 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~~must be retained by the owner or operator for a minimum of ~~two~~five 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~~must immediately be made available to ~~the Department~~DEQ upon verbal or written request at any reasonable time;

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

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

Stat. Auth.: ORS 468.~~020~~, ~~& ORS~~ 468A.025, 468A.050 & 468A.070

Stats. Implemented: ORS 468A.025, 468A.050 & 468A.070

Hist.: DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0153

## 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-~~P~~pascals) (1.52 psia), at actual monthly average storage temperatures, and having a capacity greater than 150,000 liters (approximately 39,000 gallons) ~~shall~~must 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; or~~

(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~~may not 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~~must 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); ~~that~~:

(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~~ [DEQ](#); 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~~ [may](#) 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~~ [DEQ](#).

(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~~ [must](#) not exceed 21.2 cm<sup>2</sup> per meter of tank diameter (1.0 in<sup>2</sup> 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~~ must:

(i) Perform routine inspections semi-annually in order to ensure compliance with paragraphs (A) through (F) ~~of this subsection~~ and the inspections ~~shall~~ must 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~~ must 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~~ must submit to ~~the Department~~ DEQ, 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~~ must be retained by the owner or operator for a minimum of ~~two~~ five 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~~ must immediately be made available to ~~the Department~~ DEQ, upon verbal or written request, at any reasonable time;

(L) ~~The Department~~ DEQ 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~~ must 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~~ must notify ~~the Department~~ DEQ of the intent to test not less than 30 days before the proposed initiation of the tests so ~~the~~

~~Department~~DEQ may observe the test. The notification ~~shall~~must contain the information required by, and be in a format approved by ~~the Department~~DEQ;

(C) Compliance with subparagraph (4)(c)(B)(iii) ~~of this rule shall be~~is 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.

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

Stat. Auth.: ORS 468.020, ~~& ORS~~ 468A.025, 468A.050 & 468A.070

Stats. Implemented: ORS 468A.025, 468A.050 & 468A.070

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0160

## 340-232-0160

### Surface Coating in Manufacturing

(1) No person ~~shall~~may 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~~DEQ 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 VOC potential to emit before add on controls from activities identified in section (5) ~~of this rule of volatile organic compounds~~ are less than 10 tons per year (or 3 pounds~~lb.~~ VOC/hour or 15 pounds~~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~~ DEQ 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~~ devices; and

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

(c) The alternative emission limit approved by ~~the Department~~ DEQ ~~shall~~ will be incorporated into the source's Air Contaminant Discharge Permit, or Title V operating permit, and ~~shall not~~ will become effective ~~until~~ upon approval ed 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~~ must be based on a daily average except subsection (5)(e) ~~of this rule shall~~ must 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~~ must 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~~ pounds/gallon;

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

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

(D) End sealing compound 3.7 pounds/gallon ~~lb/gal~~;

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

(b) Fabric Coating 2.9 pounds/gallon ~~lb/gal~~;

(c) Vinyl Coating 3.8 pounds/gallon ~~lb/gal~~;

(d) Paper Coating 2.9 pounds/gallon ~~lb/gal~~;

(e) Existing Coating of Paper and Film in the Medford-Ashland AQMA 55 pounds ~~lb.\*~~

~~[NOTE: \*55 lb~~ VOC per 1000 square yards ~~sq. yds.~~ of material per pass;:]

(f) Auto and Light Duty Truck Coating:

- (A) Prime 1.9 ~~pounds/gallon~~<sup>lb/gal</sup>;
- (B) Topcoat 2.8 ~~pounds/gallon~~<sup>lb/gal</sup>;
- (C) Repair 4.8 ~~pounds/gallon~~<sup>lb/gal</sup>;
- (g) Metal Furniture Coating 3.0 ~~pounds/gallon~~<sup>lb/gal</sup>;
- (h) Magnet Wire Coating 1.7 ~~pounds/gallon~~<sup>lb/gal</sup>;
- (i) Large Appliance Coating 2.8 ~~pounds/gallon~~<sup>lb/gal</sup>;

(j) Miscellaneous Metal Parts and Products:

- (A) Clear Coatings 4.3 ~~pounds/gallon~~<sup>lb/gal</sup>;
- (B) Forced ~~d~~ Air Dried or Air Dried 3.5 ~~pounds/gallon~~<sup>lb/gal</sup>;
- (C) Extreme Performance Coatings 3.5 ~~pounds/gallon~~<sup>lb/gal</sup>;
- (D) Other Coatings (i.e., Powder, oven dried) 3.0 ~~pounds/gallon~~<sup>lb/gal</sup>;
- (E) High Performance Architectural Coatings 3.5 ~~pounds/gallon~~<sup>lb/gal</sup>.

(6) Compliance Determination: Compliance with this rule ~~shall~~<sup>must</sup> 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~~<sup>DEQ</sup>. 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~~<sup>DEQ</sup> for approval.

(7) Reduction Method: Compliance with F~~the~~ emission limits of sections (3) and (5) ~~of this rule shall~~<sup>must</sup> 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~~<sup>DEQ</sup> and will be incorporated in the source's Air Contaminant Discharge Permit or Title V Permit, and ~~shall not will~~<sup>become</sup> effective ~~until~~<sup>upon</sup> approval<sup>ed</sup> by EPA as a source-specific SIP revision. Other alternative emission controls approved by ~~the Department~~<sup>DEQ</sup> 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~~<sup>must</sup> 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~~must be maintained indicating the type and amount of solvent used for cleanup and surface preparation;

(c) Such records ~~shall~~must be retained and available for inspection by ~~the Department~~DEQ for a period of ~~two~~five years.

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

Stat. Auth.: ORS 468.020, ~~& ORS~~ 468A.025 & 468A.070

Stats. Implemented: ~~ORS 468.020 &~~ ORS 468A.025 & 468A.070

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91; Section (5) Renumbered from 340-22-173; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 22-1996, f. & cert. ef. 10-22-96; DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0170

## 340-232-0170

### Aerospace Component Coating Operations

(1) No owner or operator of an aerospace component coating facility ~~shall~~may 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~~DEQ 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 pounds/gallon~~lb./gal.~~;
- (b) Interior Topcoat -- 2.8 pounds/gallon~~lb./gal.~~;
- (c) Electric or Radiation Effect Coating -- 6.7 pounds/gallon~~lb./gal.~~;
- (d) Extreme Performance Interior Topcoat -- 3.5 pounds/gallon~~lb./gal.~~;
- (e) Fire Insulation Coating -- 5.0 pounds/gallon~~lb./gal.~~;
- (f) Fuel Tank Coating -- 6.0 pounds/gallon~~lb./gal.~~;
- (g) High Temperature Coating\* for conditions between 350° F. - 500° F. -- 6.0 pounds/gallon~~lb./gal.~~;
- (h) Sealant -- 5.0 pounds/gallon~~lb./gal.~~;

- (i) Self-Priming Topcoat -- 3.5 ~~pounds/gallon~~lb./gal.;
- (j) Topcoat -- 3.5 ~~pounds/gallon~~lb./gal.;
- (k) Pretreatment Wash Primer -- 3.5 ~~pounds/gallon~~lb./gal.;
- (l) Sealant Bonding Primer -- 6.0 ~~pounds/gallon~~lb./gal.;
- (m) Temporary Protective Coating -- 2.1 ~~pounds/gallon~~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 ~~pounds~~lb. VOC/hour or 15 ~~pounds~~lb. VOC/day actual);
- (c) The use of separate coating formulations in volumes of less than 20 gallons per calendar year. No source ~~shall~~may use more than a combined total of 250 gallons per calendar year of exempt coatings. Records of coating usage ~~shall~~must 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~~DEQ 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~~devices; and
  - (B) Justify the alternative emission limit sought by the source.
- (c) The alternative emission limit approved by ~~the Department~~DEQ ~~shall~~will be incorporated into the source's Air Contaminant Discharge Permit and ~~shall not~~will become effective ~~until~~upon approval ~~ed~~ 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 dryer(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~~must be applied.

(5) Solvent Evaporation Minimization:

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

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

(c) Organic compounds ~~shall~~may 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~~may not be left open to the atmosphere when not in use.

(6) Stripper Limitations: No stripper ~~shall~~may 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~~may 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 ~~pounds/gallon~~lbs./gal.) of coating excluding water, as applied.

(8) Compliance determination: Compliance with this rule ~~shall~~must 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~~must 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~~DEQ and on file with ~~the Department~~DEQ. 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~~DEQ and EPA for approval.

(9) Reduction Method: The emission limits of section (1) ~~of this rule~~ ~~shall~~must 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~~DEQ and will be incorporated in the source's Air Contaminant Discharge Permit or Title V Operating Permit, and ~~shall not~~will become effective ~~until~~upon approval by EPA as a source-specific SIP revision. Other alternative emission controls approved by ~~the Department~~DEQ 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~~must 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~~must be maintained indicating the type and amount of solvent used for cleanup and surface preparation;
- (c) A monthly record ~~shall~~must be maintained indicating the amount of stripper used;
- (d) Such records ~~shall~~must be retained and available for inspection by ~~the Department~~DEQ for a period of ~~two~~five years.

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

Stat. Auth.: ORS 468.020, ~~& ORS~~ 468A.025 & 468A.070

Stats. Implemented: ORS 468A.025 & 468A.070

Hist.: DEQ 8-1991, f. & cert. ef. 5-16-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0175

### 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~~must 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 drain rack, 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~~must follow~~ing~~ the required operating parameters and work practices. The owner ~~shall~~must 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~~may not be above the fill line;
  - (b) The spraying of parts to be cleaned ~~shall~~must be performed only within the confines of the cold cleaner;
  - (c) The cover of the cold cleaner ~~shall~~must be closed when not in use or when parts are being soaked or cleaned by solvent agitation;

- (d) Solvent-cleaned parts ~~shall~~must be rotated to drain cavities or blind holes and then set to drain until dripping has stopped;
- (e) Waste solvent ~~shall~~must 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~~DEQ's solid and Hazardous Waste Rules, OAR ~~Chapter~~ 340, ~~D~~ivision 100.
- (3) The owner or operator ~~shall~~must 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.

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

Stat. Auth.: ORS 468.020, ~~& ORS~~ 468A.025 & 468A.070

Stats. Implemented: ORS 468A.025 & 468A.070

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0180

### 340-232-0190

#### Open Top Vapor Degreasers

- (1) The owner or operator of all open top vapor degreasers ~~shall~~must 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~~must be located below the lip exhaust. The cover ~~shall~~must move horizontally or slowly so as not to agitate and spill the solvent vapor. The degreaser ~~shall~~must 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~~must be turned on before the sump heater when starting up a cold vapor degreaser. The sump heater ~~shall~~must 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~~may not be visible in the solvent stream from the water separator.

(2) A routine inspection and maintenance program ~~shall~~must 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~~must be carried out using threaded or other leakproof couplings.

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

(5) Waste solvent ~~shall~~must 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~~DEQ's Solid and Hazardous Waste Rules, OAR ~~Chapter~~ 340, ~~D~~ivision 100.

(6) Exhaust ventilation ~~shall~~may not exceed 20 ~~cubic meters~~m<sup>3</sup>/minute per ~~square meter~~m<sup>2</sup> (65 ~~cubic feet per minute~~cfm per ~~square~~ foot<sup>2</sup>) of degreaser open area, unless necessary to meet OSHA requirements. Ventilation fans ~~shall~~may not be used near the degreaser opening.

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

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0183

## 340-232-0200

### Conveyorized Degreasers

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

(a) Exhaust ventilation should not exceed 20 cubic meters per minute ~~per~~of square meter (65 ~~cubic feet per minute~~cfm per ~~square~~ foot<sup>2</sup>) 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 conveyed parts to less than 3.35 meters per minute (11 feet/minute);

(C) The condenser water ~~shall~~must be turned on before the sump heater when starting up a cold vapor degreaser. The sump heater ~~shall~~must 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~~must 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~~must be carried out using threaded or other leakproof couplings.

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

(5) Waste solvent ~~shall~~must 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~~DEQ's Solid and Hazardous Waste Rules, OAR ~~Chapter~~340, ~~D~~ivision 100.

(6) All conveyorized cold cleaners and conveyorized vapor degreasers with air/vapor interfaces of 2.0 m<sup>2</sup> or greater ~~shall~~must 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<sup>3</sup>/minutes per m<sup>2</sup> 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~~.

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

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0186

### **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.

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

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 8-

## 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~~may emit volatile organic compounds from a coating application system in excess of:
  - (a) 2.9 ~~kilograms~~kg per 100 square meters of coated finished product (6.0 ~~pounds~~lb/1,000 square feet) from printed interior panels, regardless of the number of coats applied;
  - (b) 5.8 ~~kilograms~~kg per 100 square meters of coated finished product (12.0 ~~pounds~~lb/1,000 square feet) from natural finish hardwood plywood panels, regardless of the number of coats applied; and
  - (c) 4.8 ~~kilograms~~kg per 100 square meters of coated finished product (10.0 ~~pounds~~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~~must 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~~DEQ. The time period used to determine equivalency ~~shall~~may not exceed 24 hours.
- (5) A capture system must be used in conjunction with the ~~emission control system~~control devices 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~~must 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~~must demonstrate compliance by the methods of subsection (c) ~~of this section~~, or an alternative method approved by ~~the Department~~DEQ;
- (b) A person proposing to conduct a volatile organic compound emissions test ~~shall~~must notify ~~the Department~~DEQ of the intent to test not less than 30 days before the proposed initiation of the tests so ~~the Department~~DEQ may observe the test;
- (c) Test procedures in 40 CFR, Part 60, EPA Method 18, 24, or 25 ~~shall~~must be used to determine compliance with section (3) ~~of this rule~~;
- (d) ~~The Department~~DEQ 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 an add-on control ~~equipment device~~ is used, continuous monitors of the following parameters ~~shall~~must be installed, periodically calibrated, and operated at all times that the associated control ~~equipment device~~ 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.

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

Stat. Auth.: ORS 468.020, ~~& ORS~~ 468A.025 & 468A.070

Stats. Implemented: ORS 468A.025 & 468A.070

Hist.: DEQ 23-1980, f. & ef. 9-26-80; DEQ 8-1991, f. & cert. ef. 5-16-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0200

## 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 before add on controls greater than ~~90 mg/year~~ (100 tons/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 ~~of~~f 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~~ pollution control device demonstrated to have at least a 90.0 percent ~~reduction removal~~ efficiency, measured across the air pollution control devices ~~system~~, ~~and that~~ has been approved by ~~the Department~~ DEQ.

(2) A capture system must be used in conjunction with the ~~emission~~ air pollution control systems ~~devices~~ 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~~ must provide for ~~an overall reduction~~ control efficiency 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~~ DEQ, the owner or operator of a volatile organic compound source ~~shall~~ must demonstrate compliance by the methods of this section or an alternative method approved by ~~the Department~~ DEQ. All tests ~~shall~~ must 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~~ must notify ~~the Department~~ DEQ of the intent to test not less than 30 days before the proposed initiation of the tests so ~~the Department~~ DEQ may observe the test. The notification ~~shall~~ must contain the information required by, and be in a format approved by, ~~the Department~~ DEQ;

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

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

(B) ~~The Department~~ DEQ 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 an add-on control ~~equipment~~ device is used, continuous monitors of the following parameters ~~shall~~ must be installed, periodically calibrated, and operated at all times that the associated control ~~equipment~~ device 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.

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

Stat. Auth.: ORS 468.[020](#), ~~& ORS~~ 468A.[025](#) & [468A.070](#)

Stats. Implemented: ORS 468A.025 ~~&~~ [468A.070](#)

Hist.: DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0210

**DIVISION 234**  
**EMISSION STANDARDS FOR WOOD PRODUCTS**  
**INDUSTRIES**

~~[NOTE: Administrative Order DEQ 37 repealed applicable portions of SA 22, filed 6-7-68.]~~

**340-234-0005**

**Applicability and Jurisdiction**

(1) This division applies in all areas of the state.

(2) Subject to the requirements in this division, LRAPA is designated by the EQC to implement this division within its area of jurisdiction. The requirements and procedures contained in this division must be used by LRAPA unless LRAPA has adopted or adopts rules which are at least as strict as this division.

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

Stat. Auth.: ORS 468.020, 468A.025 & 468A.135

Stats. Implemented: ORS 468A.025 & 468A.135

**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.~~

~~(3) "Average Daily Emission" means the total weight of sulfur oxides emitted in each month divided by the number of days of production that month.~~

~~(4) "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.~~

~~(5) "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.~~

(16) "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.

~~(7) "Blow System" means the storage chest, tank, or pit to which the digester pulp is discharged following the cook.~~

(28) "BLS" means ~~B~~black ~~L~~liquor ~~S~~solids, dry weight.

~~(9) "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.~~

(340) "Continuous monitoring" means instrumental sampling of a gas stream on a continuous basis, excluding periods of calibration.

~~(11) "Continuous Flow Conveying Methods" means methods which transport materials at uniform rates of flow, or at rates generated by the production process.~~

(412) "Daily ~~A~~arithmetic ~~A~~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 ~~in accordance with~~ using the ~~Department~~DEQ 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.

(5) "Dry standard 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 dry standard cubic foot.

~~(13) "Department" means the Department of Environmental Quality.~~

~~(14) "Emission" means a release into the atmosphere of air contaminants.~~

~~(15) "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).~~

~~(16) "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 ASTM D4442-84 during compliance source testing.~~

~~(17) "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.~~

~~(18) "Hardboard" means a flat panel made from wood that has been reduced to basic wood fibers and bonded by adhesive properties under pressure.~~

~~(619)~~ "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.

~~(720)~~ "Lime Kiln" means any production device in which calcium carbonate is thermally converted to calcium oxide.

~~(21) "Maximum Opacity" means the opacity as determined by EPA Method 9 (average of 24 consecutive observations).~~

~~(22) "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.~~

~~(23) "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.~~

~~(824)~~ "Non-Condens<sup>i</sup>ables" mean gases and vapors, contaminated with TRS compounds, from the digestion and multiple-effect evaporation processes of a mill.

~~(925)~~ "Operations" includes plant, mill, or facility.

~~(1026)~~ "Other Sources:"

~~(a)~~ As used in OAR 340-234-0200 through 340-234-0270 means sources of TRS emissions in a kraft mill other than recovery furnaces, lime kilns, smelt dissolving tanks, sewers, drains, categorically insignificant activities and wastewater treatment facilities including but not limited to:

~~(Aa)~~ 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

~~(Bb)~~ 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 (340-234-0410).~~

~~(27) "Particleboard" means matformed flat panels consisting of wood particles bonded together with synthetic resin or other suitable binder.~~

~~(28) "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.~~

~~(29) "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).~~

~~(30) "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.~~

~~(31) "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.~~

~~(32) "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.~~

~~(1133) "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~~ [DEQ](#) 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.~~

(1234) "Recovery ~~F~~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~~ includes ~~a~~the direct contact evaporator, ~~if present~~.

(1335) "Recovery ~~S~~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.

~~(36) "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.~~

(1437) "Smelt dissolving tank vent" means the vent serving the vessel used to dissolve the molten smelt produced by the recovery furnace.

(1538) "Special ~~P~~problem ~~A~~area" means the formally designated Portland, Eugene-Springfield, and Medford AQMAs and other specifically defined areas that the ~~Environmental Quality Commission~~EQC 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.

~~(39) "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.~~

~~(40) "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.~~

(1641) "Tempering ~~O~~oven" means any facility used to bake hardboard following an oil treatment process.

~~(42) "Sulfite Mill" or "Mill" means a pulp mill producing cellulose pulp using a cooking liquor consisting of sulfurous acid and/or a bisulfite salt.~~

~~(43) "Sulfur Oxides" means sulfur dioxide, sulfur trioxide, and other sulfur oxides.~~

~~(44) "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 (H2S).~~

~~(45) "Veneer" means a single flat panel of wood not exceeding 1/4 inch in thickness formed by slicing or peeling from a log.~~

(1746) "Wigwam ~~W~~waste ~~B~~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.

~~(47) "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.~~

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

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

Stat. Auth.: ORS 468.020 & 468A-025

Stats. Implemented: ORS 468A.025

Hist.: [DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93]; [DEQ 50, f. 2-9-73, ef. 3-1-73; DEQ 137, f. & ef. 6-10-77; DEQ 2-1990, f. & cert. ef. 1-24-90; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 22-1995, f. & cert. ef. 10-6-95]; [DEQ 2-1990, f. & cert. ef. 1-24-90; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 22-1995, f. & cert. ef. 10-6-95]; [DEQ 26, f. 3-31-71, ef. 4-25-71; DEQ 132, f. & ef. 4-11-77; DEQ 7-1979, f. & ef. 4-20-79; DEQ 22-1991, 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 32, f. 11-23-71, ef. 12-15-71; DEQ 15-1980, f. & ef. 5-23-80; DEQ 4-1993, f. & cert. ef. 3-10-93]; [DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93]; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0005, 340-025-0150, 340-025-0220, 340-025-0305, 340-025-0350, 340-025-0410; DEQ 8-2007, f. & cert. ef. 11-8-07

## **Wigwam Waste Burners**

### **340-234-0100**

#### **Wigwam Waste Burners**

(1) Operation of wigwam waste burners is prohibited.

(2) Emissions from wigwam waste burners included in a source's netting basis as of October 18, 2007 shall not be subtracted from the netting basis, except as provided in OAR 340-222-00465.

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

Stat. Auth.: ORS 468.020 & 468A-025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0010; DEQ 8-2007, f. & cert. ef. 11-8-07

### **340-234-0140**

#### **Existing Administrative Agency Orders**

The provisions of OAR 340-234-0100 supersede any specific existing agency orders directed against specific parties or persons to abate air pollution.

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

Stat. Auth.: ORS 468.[020](#) & 468A [.025](#)

Stats. Implemented: ORS 468A.025

Hist.: SA 30 f. 6-7-68, ef. 8-1-68; DEQ 4-1993, f. & cert. ef. 3-10-93, Renumbered from 340-025-0080; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0027; DEQ 8-2007, f. & cert. ef. 11-8-07

## Kraft Pulp Mills

~~[NOTE: Administrative Order DEQ 50 repealed previous OAR 340-025-0155 through 340-025-0195 (consisting of SA 38, filed 4-4-69).]~~

### 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~~[DEQ](#) 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~~[DEQ](#) 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.

~~[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission that EQC adopted under OAR 340-200-0040 with the exception of references to Total Reduced Sulfur.]~~



Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 50, f. 2-9-73, ef. 3-1-73; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0155

## 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~~may not exceed 10 ppm and 0.15 Kg/metric ton (0.30 ~~pound~~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~~must be controlled such that the emissions of TRS ~~shall~~may not exceed 5 ppm and 0.075 Kg/metric ton (0.150 ~~pound~~lb/ton) of production as daily arithmetic averages.

(b) Lime Kilns. Lime kilns ~~shall~~must be operated and controlled such that emissions of TRS ~~shall~~may not exceed 20 ppm as a daily arithmetic average and 0.05 Kg/metric ton (0.10 ~~pound~~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. TRS emissions from each smelt dissolving tank ~~shall~~may not exceed 0.0165 gram/Kg BLS (0.033 ~~pound~~lb/ton BLS) as a daily arithmetic average.

(d) Non-Condensables. Non-condensables from digesters, multiple-effect evaporators and contaminated condensate stripping ~~shall~~must be continuously treated to destroy TRS gases by thermal incineration in a lime kiln or incineration device capable of subjecting the non-condensables 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~~must be available in the event adequate incineration in the primary device cannot be accomplished. Venting of TRS gases during changeover ~~shall~~must be minimized but in no case ~~shall~~may the time exceed one-hour~~;~~.

##### (e) Other Sources:

(A) The total emission of TRS from other sources ~~shall~~may not exceed 0.078 Kg/metric ton (0.156 ~~pound~~lb/ton) of production as a daily arithmetic average;

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

#### (2) Particulate Matter:

(a) Recovery Furnaces. The emissions of particulate matter from each recovery furnace stack ~~shall~~may 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~~may 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~~may 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 or modification or a rebuild of an existing particulate 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, equipment after July 1, 1988 ~~shall~~will result in more restrictive standards as follows:
- (A) Recovery Furnaces:
- (i) The emission of particulate matter from each affected recovery furnace stack ~~shall~~may 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~~may 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~~may not exceed 0.15 kilogram per metric ton (0.30 pound per ton) of production as a daily arithmetic average.

(3) Sulfur Dioxide (SO<sub>2</sub>). Emissions of sulfur dioxide from each recovery furnace stack ~~shall~~may 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~~must not exceed the sulfur content of residual and distillate oil established in OAR 340-228-0100 and 340-228-0110, respectively.

(4) Emissions from each~~All~~ kraft mill sources, with the exception of the mill's emissions attributable to a recovery furnaces, ~~shall~~may not equal or exceed ~~an opacity equal to or greater than~~ 20 percent opacity for a period exceeding three minutes in any one hour~~as a six minute average~~.

(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.

**NOTE:** Except for OAR 340-234-0210(1), this rule is included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the Environmental Quality Commission~~that EQC adopted under OAR 340-200-0040.

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

Stat. Auth.: ORS 468.020 & 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 50, f. 2-9-73, ef. 3-1-73; DEQ 137, f. & ef. 6-10-77; DEQ 2-1990, f. & cert. ef. 1-24-90; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0165; DEQ 8-2007, f. & cert. ef. 11-8-07

## **340-234-0220**

### **More Restrictive Emission Limits**

The ~~Department~~DEQ 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~~DEQ 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 ~~the Department~~DEQ may require the mill to undertake an odor emission reduction study program; or

(3) Other rules which are more stringent apply.

**NOTE:** This rule is included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the Environmental Quality Commission~~that EQC adopted under OAR 340-200-0040 with the exception of references to Total Reduced Sulfur.

Stat. Auth.: ORS 468.020 & 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 50, f. 2-9-73, ef. 3-1-73; DEQ 137, f. & ef. 6-10-77; DEQ 2-1990, f. & cert. ef. 1-24-90; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0170; DEQ 8-2007, f. & cert. ef. 11-8-07

## **340-234-0240**

### **Monitoring**

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

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

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

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

(d) Smelt dissolving tank vents ~~shall~~must 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 ~~pound~~lb./ton BLS) ~~using~~using EPA Method 16, 16A, 16B or continuous emission monitors. Sampling using these EPA methods ~~shall~~must consist of three separate consecutive runs of one-hour each ~~in accordance with~~using the ~~Department~~DEQ Source Sampling Manual.

(2) Particulate Matter:

(a) Each mill ~~shall~~must sample the recovery furnace(s), lime kiln(s) and smelt dissolving tank vent(s) for particulate emissions as measured by EPA Method 5 or 17 ~~in accordance with~~using the ~~Department~~DEQ Source Sampling Manual. Particulate matter emission determinations by EPA Method 5 must 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.

(A) When applied to recovery furnace gases "dry standard 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%.

(B) When applied to lime kiln gases "dry standard 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%.

(C) The mill must demonstrate that oxygen concentrations are below the values in (A) and (B) above or furnish oxygen levels and corrected data.

(b) Each mill ~~shall~~must provide continuous monitoring of opacity of emissions discharged to the atmosphere from each recovery furnace stack ~~in accordance with~~using the ~~Department~~DEQ Continuous Monitoring Manual.

(c) Recovery furnace particulate source tests ~~shall~~must 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);

(d) Lime kiln source tests ~~shall~~must be performed semi-annually;

(e) Smelt dissolving tank vent source tests ~~shall~~must 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.

(3) Sulfur Dioxide (SO<sub>2</sub>). Representative sulfur dioxide emissions from each recovery furnace ~~shall~~must be determined at least once each month by the average of three one-hour source tests ~~in accordance with~~using the ~~Department~~DEQ Source Sampling Manual or from continuous emission monitors. If continuous emission monitors are used, the monitors ~~shall~~must be operated for three consecutive hours ~~in accordance with~~using the ~~Department~~DEQ Continuous Monitoring Manual.

(4) Combined Monitoring. ~~The Department~~DEQ 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~~DEQ may establish more stringent emission limits for the combined emission stream.

(5) New Source Performance Standards Monitoring. New or modified sources that are subject to the New Source Performance Standards, 40 CFR Part 60, Subpart BB, ~~shall~~must conduct monitoring or source testing as required by Subpart BB. In addition, when ~~it is~~these rules are more stringent than Subpart BB, ~~the~~ ~~Department~~DEQ may require some or all of the relevant monitoring in this section.

**NOTE:** This rule is included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the Environmental Quality Commission~~that EQC adopted under OAR 340-200-0040 with the exception of references to Total Reduced Sulfur.

~~{Publications: Publications referenced are available from the agency.}~~

Stat. Auth.: ORS 468.020 & 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 50, f. 2-9-73, ef. 3-1-73; DEQ 137, f. & ef. 6-10-77; DEQ 2-1990, f. & cert. ef. 1-24-90; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0180; DEQ 8-2007, f. & cert. ef. 11-8-07

## 340-234-0250

### Reporting

If required by ~~the Department~~DEQ or by permit, each mill must report data ~~shall be reported by each mill for~~ each calendar month by the last day of the subsequent calendar month as follows:

(1) Applicable daily average emissions of TRS gases expressed in parts per million of H<sub>2</sub>S 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<sub>2</sub>S, for each source included in the approved monitoring program.

(3) Maximum daily three-hour average emission of SO<sub>2</sub> based on all samples collected 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 approved by the Department.~~

(7) Unless otherwise approved in writing, all periods of non-condens~~ible~~able gas bypass ~~shall~~must be reported.

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

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

(10) Oxygen concentrations used to correct regulated pollutant data ~~shall~~must reflect oxygen concentrations at the point of measurement of regulated pollutants.

**NOTE:** This rule is included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the Environmental Quality Commission~~that EQC adopted under OAR 340-200-0040 with the exception of references to Total Reduced Sulfur.

Stat. Auth.: ORS 468.020, ~~&~~ 468A.025 & 468A.050

Stats. Implemented: ORS 468A.025 & 468A.050

Hist.: DEQ 50, f. 2-9-73, ef. 3-1-73; DEQ 132, f. & ef. 6-10-77; DEQ 2-1990, f. & cert. ef. 1-24-90; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0185; DEQ 8-2007, f. & cert. ef. 11-8-07

## **340-234-0270**

### **Chronic Upset Conditions**

If ~~the Department~~[DEQ](#) determines that an upset condition is chronic and correctable by installing new or modified process or control procedures or equipment, [the owner or operator must submit to DEQ](#) 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.

**[NOTE:** This rule is included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the Environmental Quality Commission~~[that EQC adopted](#) under OAR 340-200-0040 with the exception of references to Total Reduced Sulfur.**]**

Stat. Auth.: ORS 468.[020](#) & ~~ORS~~-468A.[025](#)

Stats. Implemented: ORS 468A.025

Hist.: DEQ 50, f. 2-9-73, ef. 3-1-73; DEQ 2-1990, f. & cert. ef. 1-24-90; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0205

### **~~Neutral Sulfite Semi-Chemical (NSSC) Pulp Mills~~**

#### **~~340-234-0300~~**

#### **~~Applicability~~**

~~OAR 340-234-0300 through 340-234-0360 apply to existing and new neutral sulfite semi-chemical (NSSC) pulp mills.~~

**[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 468A~~

~~Stats. Implemented: ORS 468 & ORS 468A~~

~~Hist.: DEQ 14-1999, f. & cert. ef. 10-14-99~~

#### **~~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 (SO<sub>2</sub>):~~

~~(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.~~

~~[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 with the exception of references to Total Reduced Sulfur.]~~

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

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 2-1990, f. & cert. ef. 1-24-90; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0224

## **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.~~

~~[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 with the exception of references to Total Reduced Sulfur.]~~

~~Stat. Auth.: ORS 468 & ORS 468A~~

~~Stats. Implemented: ORS 468A.025~~

~~Hist.: DEQ 2-1990, f. & cert. ef. 1-24-90; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0226~~

### **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.~~

~~[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 with the exception of references to Total Reduced Sulfur.]~~

~~Stat. Auth.: ORS 468 & ORS 468A~~

~~Stats. Implemented: ORS 468A.025~~

~~Hist.: DEQ 2-1990, f. & cert. ef. 1-24-90; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0228~~

### **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<sub>2</sub>). 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.~~

~~[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 with the exception of references to Total Reduced Sulfur.]~~

~~Stat. Auth.: ORS 468 & ORS 468A~~

~~Stats. Implemented: ORS 468A.025~~

~~Hist.: DEQ 2-1990, f. & cert. ef. 1-24-90; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0230~~

## **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<sub>2</sub>S 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.~~

~~[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 with the exception of references to Total Reduced Sulfur.]~~

~~Stat. Auth.: ORS 468 & ORS 468A~~

~~Stats. Implemented: ORS 468A.025~~

~~Hist.: DEQ 2-1990, f. & cert. ef. 1-24-90; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0232~~

## **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<sub>2</sub>;~~

~~(D) Opacity.~~

~~(b) Acid Absorption Tower:~~

~~(A) SO<sub>2</sub>;~~

~~(B) Opacity.~~

~~[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 with the exception of references to Total Reduced Sulfur.]~~

~~Stat. Auth.: ORS 468 & ORS 468A~~

~~Stats. Implemented: ORS 468A.025~~

~~Hist.: DEQ 2 1990, f. & cert. ef. 1-24-90; DEQ 4 1993, f. & cert. ef. 3-10-93; DEQ 14 1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0234~~

## **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.~~

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

~~Stat. Auth.: ORS 468 & ORS 468A~~

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

~~Hist.: DEQ 32, f. 11-23-71, ef. 12-15-71; DEQ 15-1980, f. & ef. 5-23-80; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0355~~

## **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<sub>2</sub>) 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.~~

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

~~Stat. Auth.: ORS 468 & ORS 468A~~

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

~~Hist.: DEQ 32, f. 11-23-71, ef. 12-15-71; DEQ 15-1980, f. & ef. 5-23-80; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0360~~

### **~~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.~~

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

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

~~Stat. Auth.: ORS 468 & 468A~~

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

~~Hist.: DEQ 32, f. 11-23-71, ef. 12-15-71; DEQ 15-1980, f. & ef. 5-23-80; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0370~~

### **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.~~

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

~~Stat. Auth.: ORS 468 & ORS 468A~~

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

~~Hist.: DEQ 32, f. 11-23-71, ef. 12-15-71; DEQ 15-1980, f. & ef. 5-23-80; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0380~~

## **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) Each affected veneer, plywood, particleboard, and hardboard plant ~~shall~~must proceed with a progressive and timely program of air pollution control. Each plant ~~shall~~must, at the request of ~~the Department~~DEQ 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.

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

Stat. Auth.: ORS 468.~~020~~, & 468A.~~025~~ & 468A.~~050~~

Stats. Implemented: ORS 468A.025 & 468A.050

Hist.: DEQ 26, f. 3-31-71, ef. 4-25-71; DEQ 132, f. & ef. 4-11-77; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 17-1993, f. & cert. ef. 11-4-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0500; DEQ 8-2007, f. & cert. ef. 11-8-07

## 340-234-0510

### Veneer and Plywood Manufacturing Operations

#### (1) Veneer Dryers:

(a) Consistent with OAR 340-234-0500(1) through (34), it is the object of this section to control air contaminant emissions, including, but not limited to, condensable 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~~may operate any veneer dryer such that visible air contaminants emitted from any dryer stack or emission point exceed:

(A) A ~~an~~ daily average operating opacity of ~~ten~~ 10 percent on more than two days within any 12-month period, with the days separated from each other by at least 30 days, as measured by EPA Method 9; and

(B) A maximum opacity of 20 percent at any time as measured by EPA Method 9.

(c) Particulate emissions from wood fired veneer dryers ~~shall~~may 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 equal to or less than ~~by weight of~~ 20 percent by weight or less on a wet basis as measured by ASTM D4442-84;

(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 by weight on a wet basis as measured by ASTM D4442-84; or

(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~~must be maintained and operated at all times such that air contaminant generating processes and all contaminant control ~~equipment devices~~ shall must be at full efficiency and effectiveness so that the emission of air contaminants are kept at the lowest practicable levels;
- (f) No person ~~shall~~may 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~~DEQ 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~~DEQ 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~~EQC 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) The combined particulate emissions 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 must not exceed a plant specific average hourly emission rate (~~pounds/hour~~lbs/hr) determined by multiplying the plant production capacity by one pound per 1,000 square feet. The plant production capacity is the maximum production in terms of 1,000 square feet on a 3/8 inch basis of finished product for a typical operating shift divided by the number of hours in the operating shift.

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

(c) Compliance with the average hourly emission rate is determined by summing the emissions from the affected sources as determined by emission factor calculations or actual emissions data for a 24 hour period divided by 24.

(3) Monitoring and Reporting: ~~The Department~~DEQ 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 must~~ be ~~subject to~~reviewed and ~~approved~~ed by ~~the Department~~DEQ and ~~shall must~~ 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 must~~ be recorded on copies of a "Veneer Dryer Visual Emissions Monitoring Form" ~~which shall be~~ provided by ~~the Department~~DEQ of Environmental Quality or on an alternative form which is approved by ~~the Department~~DEQ; and

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

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

Stat. Auth.: ORS 468.020, ~~&~~ 468A.025 & 468A.050

Stats. Implemented: ORS 468A.025 & 468A.050

Hist.: DEQ 26, f. 3-31-71, ef. 4-25-71; DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 43(Temp), f. & ef. 5-5-72 thru 9-1-72; DEQ 48, f. 9-20-72, ef. 10-1-72; DEQ 52, f. 4-9-73, ef. 5-1-73; DEQ 83, f. 1-30-75, ef. 2-25-75; DEQ 132, f. & ef. 4-11-77; DEQ 7-1979, f. & ef. 4-20-79; DEQ 10-1985, f. & ef. 8-8-85; DEQ 22-1991, 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 340-025-0510; DEQ 8-2007, f. & cert. ef. 11-8-07

## 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~~must ~~cause~~allenclose 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~~DEQ of ~~Environmental Quality~~ and receives written approval for said storage:

(A) When authorized by ~~the Department~~DEQ of Environment Quality, temporary storage areas ~~shall~~must 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~~DEQ ~~shall~~may 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~~must apply to ~~the Department~~DEQ for written authorization to utilize alternative controls. The application ~~shall~~must 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) The combined particulate emissions 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 must not exceed a plant specific average hourly emission rate (~~lbs/hr~~pounds per hour) determined by multiplying the plant production capacity by three

pounds per 1000 square feet. The plant production capacity is the maximum production in terms of 1,000 square feet on a 3/4 inch basis of finished product for a typical operating shift divided by the number of hours in the operating shift.

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

(c) Compliance with the average hourly emission rate is determined by summing the emissions from the affected sources as determined by emission factor calculations or actual emissions data for a 24 hour period divided by 24.

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

Stat. Auth.: ORS 468.020 & 468A.025

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

Hist.: DEQ 26, f. 3-31-71, ef. 4-25-71; DEQ 130, f. & ef. 3-22-77; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 4-1995, f. & cert. ef. 2-17-95; DEQ 3-1996, f. & cert. ef. 1-29-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0320; DEQ 8-2007, f. & cert. ef. 11-8-07

### 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~~must ~~cause~~ enclose 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~~ DEQ of ~~Environmental Quality~~ and receives written approval:

(A) When authorized by ~~the Department~~ DEQ ~~of Environmental Quality~~, temporary storage areas ~~shall~~must 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~~ DEQ ~~shall~~may 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~~must first apply to ~~the Department~~ DEQ for written authorization to utilize alternative controls. The application ~~shall~~must 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) For hardboard plants that did not exist during the baseline period, the combined particulate emissions from all emissions sources at the plant must not exceed a plant specific hourly average emission rate ~~(lbs/hr)~~ pounds per hour determined by multiplying the plant production capacity by one pound per 1,000 square feet of production. The plant production capacity is the maximum production in terms of 1000 square feet on a 1/8 inch finished basis for a typical operating shift divided by the number of hours in the operating shift.

(b) For hardboard plants that existed during the baseline period, the combined particulate emissions from the plant must not exceed the lesser of:

(A) A plant specific hourly average emission rate ~~(lbs/hr)~~ pounds per hour determined by multiplying the plant production capacity by two pounds per 1,000 square feet of production. The plant production capacity is the maximum production in terms of 1,000 square feet on a 1/8 inch finished basis for a typical operating shift divided by the number of hours in the operating shift, or

(B) The sum of the baseline emissions rate ~~(lbs/hr)~~ pounds per hour of the press/cooling vent and the lesser of:

(i) The baseline emissions rate ~~(lbs/hr)~~ pounds per hour from all sources at the plant, excluding the press/cooling vents; or

(ii) A plant specific hourly average emission rate ~~(lbs/hr)~~ pounds per hour determined by multiplying the plant production capacity by one pound per 1,000 square feet of production. The plant production capacity is the maximum production in terms of 1,000 square feet on a 1/8 inch finished basis for a typical operating shift divided by the number of hours in the operating shift.

(c) Excepted from subsections (a) and (b) ~~of this section~~ are truck dump and storage areas, fuel burning equipment, and refuse burning equipment.

(d) Compliance with the average hourly emission rate is determined by summing the emissions from the affected sources as determined by emission factor calculations or actual emissions data for a 24 hour period divided by 24.

(3) Emissions from Hardboard Tempering Ovens:

(a) No person ~~shall~~ may 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 except as allowed by paragraph (b);

(b) Specific operating temperatures lower than 1500° F. may be approved by ~~the Department~~ DEQ ~~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~~ using 40 CFR Part 63, Subpart DDDD, NESHAP for Plywood and Composite Wood Products.;

~~(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.~~

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

Stat. Auth.: ORS 468.[020](#) & 468A.[025](#)

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

Hist.: DEQ 26, f. 3-31-71, ef. 4-25-71; DEQ 130, f. & ef. 3-22-77; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 4-1995, f. & cert. ef. 2-17-95; DEQ 3-1996, f. & cert. ef. 1-29-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0325; DEQ 8-2007, f. & cert. ef. 11-8-07

### 340-234-0540

#### Testing and Monitoring

All source tests must be done using the DEQ Source Sampling Manual.

(1) Veneer dryers, wood particle dryers, fiber dryers and press/cooling vents must be tested using DEQ Method 7.

(2) Air conveying systems must be tested using DEQ Method 8.

(3) Fuel burning equipment must be tested using DEQ Method 5. When combusting wood fuel by itself or in combination with any other fuel, the emission results are corrected to 12% CO<sub>2</sub>. When combusting fuels other than wood, the emission results are corrected to 50% excess air.

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

**Stat. Auth.:** ORS 468.020, 468A.025 & 468A.070

**Stats. Implemented:** 468A.025 & 468A.070

## DIVISION 236

### EMISSION STANDARDS FOR SPECIFIC INDUSTRIES

~~NOTE: Administrative Order DEQ 60 repealed previous OAR 340-025-0255 through 340-025-0290 (consisting of DEQ 19, filed 7-14-70 and effective 8-10-70).~~

#### 340-236-0005

##### Applicability and Jurisdiction

(1) This division applies in all areas of the state.

(2) Subject to the requirements in this division, LRAPA is designated by the EQC to implement this division within its area of jurisdiction. The requirements and procedures contained in this division must be used by LRAPA unless LRAPA has adopted or adopts rules which are at least as strict as this division.

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

Stat. Auth.: ORS 468.020, 468A.025 & 468A.135

Stats. Implemented: ORS 468A.025 & 468A.135

#### **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) "Annual Average" means the arithmetic average of the monthly averages reported to the Department during the twelve most recent consecutive months.~~

~~(3) "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.~~

- ~~(4) "Anode Plant" means all operations directly associated with the preparation of anode carbon except the anode baking operation.~~
- ~~(5) "Average Dry Laterite Ore Production Rate" means the average amount of dry laterite ore produced per hour based upon annual production records.~~
- ~~(6) "Collection Efficiency" means the overall performance of the air cleaning device in terms of ratio of material collected to total weight of input to the collector.~~
- ~~(7) "Commission" means Environmental Quality Commission.~~
- ~~(8) "Cured Forage" means hay, straw, ensilage that is consumed or is intended to be consumed by livestock.~~
- ~~(9) "Department" means Department of Environmental Quality.~~
- (10) "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.
- ~~(11) "Dry Laterite Ore" means laterite ore free of uncombined water or as it is discharged from an ore drying equipment or process.~~
- ~~(12) "Emission" means a release into the outdoor atmosphere of air contaminants.~~
- ~~(13) "Emission Standards" means the limitation on the release of contaminant or multiple contaminants to the ambient air.~~
- ~~(14) "Ferronickel" means a metallic alloy containing about 50 percent nickel and 50 percent iron.~~
- ~~(15) "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.~~
- ~~(16) "Forage" means grasses, pasture, and other vegetation that is consumed or is intended to be consumed by livestock.~~
- ~~(17) "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.~~
- (218) "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.
- ~~(19) "Laterite Ore" means a red residual soil containing commercially valuable amounts of nickel, about one percent to two percent by weight.~~
- ~~(20) "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.~~
- ~~(21) "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.~~

~~(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.~~

~~(22) "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).~~

~~(323)~~ "Portable ~~H~~hot ~~M~~mix ~~A~~asphalt ~~P~~plants" means those hot mix asphalt plants which are designed to be dismantled and are transported from one job site to another job site.

~~(24) "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.~~

~~(425)~~ "Process ~~W~~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.

~~(26) "Regularly Scheduled Monitoring" means sampling and analyses in compliance with a program and schedule approved pursuant to OAR 340-236-0140.~~

~~(27) "Source test" means the average of at least three test runs conducted in accordance with the Department's Source Sampling Manual.~~

~~(28) "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.~~

~~(529)~~ "Special ~~C~~ontrol ~~A~~reas" 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.

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

~~{Publications: Publications referenced are available from the agency.}~~



Stat. Auth.: ORS 468.020 [& 468A.025](#)

Stats. Implemented: ORS 468A.025

Hist.: [DEQ 49, f. 2-9-73, ef. 3-1-73; DEQ 4-1993, f. & cert. ef. 3-10-93]; [DEQ 60, f. 12-5-73, ef. 12-25-73; DEQ 10-1982, f. & ef. 6-18-82; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 26-1995, f. & cert. ef. 12-6-95; DEQ 18-1998, f. & cert. ef. 10-5-98]; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0105, 340-025-0260; DEQ 8-2007, f. & cert. ef. 11-8-07

## **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.~~

~~**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 with the exception of fluoride requirements.~~

~~Stat. Auth.: ORS 468 & ORS 468A~~

~~Stats. Implemented: ORS 468A.025~~

~~Hist.: DEQ 60, f. 12-5-73, ef. 12-25-73; DEQ 10-1982, f. & ef. 6-18-82; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0255~~

### **340-236-0110**

#### **Applicability**

~~OAR 340-236-0100 through 340-236-0150 apply to existing and new primary aluminum plants.~~

~~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 468A~~

~~Stats. Implemented: ORS 468 & ORS 468~~

~~Hist.: DEQ 14-1999, f. & cert. ef. 10-14-99~~

## **~~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 340-244-0220.~~

~~[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 with the exception of fluoride requirements.]~~

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 60, f. 12-5-73, ef. 12-25-73; DEQ 4-1980, f. & ef. 1-28-80; DEQ 10-1982, f. & ef. 6-18-82; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 26-1995, f. & cert. ef. 12-06-96; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 26-1995, f. & cert. ef. 12-6-95; DEQ 2-1999, f. & cert. ef. 2-5-99; DEQ 14-1999, f. & cert. ef. 10-14-99; Renumbered from 340-025-0265

### **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.~~

~~[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 with the exception of fluoride requirements.]~~

~~Stat. Auth.: ORS 468 & ORS 468A~~

~~Stats. Implemented: ORS 468A.025~~

~~Hist.: DEQ 60, f. 12-5-73, ef. 12-25-73; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0270~~

## **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.~~

~~[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 with the exception of fluoride requirements.]~~

~~Stat. Auth.: ORS 468.020~~

~~Stats. Implemented: ORS 468A.025~~

~~Hist.: DEQ 60, f. 12-5-73, ef. 12-25-73; DEQ 10-1982, f. & ef. 6-18-82; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 26-1995, f. & cert. ef. 12-06-95; DEQ 18-1998, f. & cert. ef. 10-5-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0280~~

### **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.~~

~~[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 with the exception of fluoride requirements.]~~

~~Stat. Auth.: ORS 468 & ORS 468A~~

~~Stats. Implemented: ORS 468A.025~~

~~Hist.: DEQ 60, f. 12-5-73, ef. 12-25-73; DEQ 10-1982, f. & ef. 6-18-82; DEQ 4-1993, f. & cert. ef. 3-10-93;  
DEQ 18-1998, f. & cert. ef. 10-5-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0285~~

## ~~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.~~

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

~~Stat. Auth.: ORS 468 & ORS 468A~~

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

~~Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 22-1995, f. & cert. ef. 10-6-95;  
DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0405~~

### ~~340-236-0210~~

#### ~~Applicability~~

~~OAR 340-236-0200 through 340-236-0230 apply to laterite ore production of ferronickel.~~

~~[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 468A~~

~~Stats. Implemented: ORS 468 & ORS 468A~~

~~Hist.: DEQ 14-1999, f. & cert. ef. 10-14-99~~

### ~~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.~~

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

~~Stat. Auth.: ORS 468 & ORS 468A~~

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

~~Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0415~~

### ~~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.~~

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

~~Stat. Auth.: ORS 468 & ORS 468A~~

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

~~Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0430~~

## **Reduction of Animal Matter**

### **340-236-0310**

#### **Control Facilities Required**

(1) A person ~~shall~~may not operate or use any article, machine, equipment or other contrivance for the reduction of animal matter unless all gases, vapors and gas-entrained effluents from such an article, machine, equipment or other contrivance are:

(a) Incinerated at temperatures of not less than 1,200° Fahrenheit for a period of not less than 0.3 seconds; or

- (b) Processed in such a manner determined by ~~the Department~~[DEQ](#) to be equally, or more, effective for the purpose of air pollution control than section (1) ~~of this rule~~.
- (2) A person incinerating or processing gases, vapors or gas-entrained effluents pursuant to this rule ~~shall~~[must](#) provide, properly install and maintain in calibration, in good working order and in operation, devices as specified by ~~the Department~~[DEQ](#), for indicating temperature, pressure or other operating conditions.
- (3) For the purpose of OAR 340-236-0300 through 340-236-0330, "reduction" is defined as any heated process, including rendering, cooking, drying, dehydrating, digesting, evaporating and protein concentrating.
- (4) The provisions of OAR 340-236-0300 through 340-236-0330 ~~shall~~[do](#) not apply to any article, machine, equipment, or other contrivance used exclusively for the processing of food for human consumption.

Stat. Auth.: ORS 468.[020](#) & ~~ORS~~ 468A.[025](#)

Stats. Implemented: ORS 468A.025

Hist.: SA 30, f. 6-7-68, ef. 8-1-68; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0055

## 340-236-0320

### Monitoring of Reduction Facilities

- (1)(a) When requested by ~~the Department~~[DEQ](#) for the purpose of formulating plans in conjunction with industries who are or may be sources of air pollution, and to investigate sources of air pollution, monitoring data ~~shall~~[must](#) be submitted for plant operational periods and ~~shall~~[must](#) include:
- (A) Continuous or at least hourly influent and effluent temperature readings on the condenser;
  - (B) Continuous or at least hourly temperature readings on the after-burner;
  - (C) Estimated weights of finished products processed in pounds per hour;
  - (D) Hours of operation per day; and
  - (E) A narrative description to accurately portray control practices, including the housekeeping measures employed.
- (b) [Except as otherwise required under the Oregon Public Records Law, ORS 192.410 to 192.505](#), ~~W~~when requested by the plant manager any information relating to processing or production ~~shall~~[must](#) be kept confidential by ~~the Department~~[DEQ](#) and ~~shall~~[may](#) not be disclosed or made available to competitors or their representatives in the rendering industry.
- (2) Whenever a breakdown of operating facilities occurs or unusual loads or conditions are encountered that cause or may cause release of excessive and malodorous gases or vapors, ~~the Department~~[DEQ](#) ~~shall~~[must](#) be immediately notified.

Stat. Auth.: ORS 468.[020](#), & ~~ORS~~ 468A.[025](#), [468A.050](#) & [468A.070](#)

Stats. Implemented: ORS 468A.025, [468A.050](#) & [468A.070](#)



Hist.: SA 30, f. 6-7-68, ef. 8-1-68; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0060

### 340-236-0330

#### Housekeeping of Plant and Plant Area

The plant facilities and premises are to be kept clean and free of accumulated raw material, products, and waste materials. The methods used for housekeeping ~~shall~~must include, but not be limited to:

- (1) A washdown at least once each working day, of equipment, facilities and building interiors that come in contact with raw or partially processed material, with steam or hot water and detergent or equivalent additive.
- (2) All solid wastes ~~shall~~must be stored in covered containers and disposed of daily in an incinerator or fill, approved by ~~the Department~~DEQ; or by contract with a company or municipal department providing such service.
- (3) Disposal of liquid and liquid-borne waste in a manner approved by ~~the Department~~DEQ.

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.025

Stats. Implemented: ORS 468A.025

Hist.: SA 30, f. 6-7-68, ef. 8-1-68; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0065

#### Hot Mix Asphalt Plants

~~[NOTE: Administrative Order DEQ 49 repealed previous OAR 340-025-0105 through 340-025-0130 (consisting of SA 32, filed 8-5-68, effective 4-1-69).]~~

### 340-236-0400

#### Applicability

OAR 340-236-0400 through 340-236-0440 apply to hot mix asphalt plants.

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

Stat. Auth.: ORS 468.020 & 468A.025

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

Hist.: DEQ 14-1999, f. & cert. ef. 10-14-99

### 340-236-0410

#### Control Facilities Required

(1) No person ~~shall~~may 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 hot mix asphalt plant are controlled by ~~subjected to a air cleaning control~~ device or devices with a having a particulate collection~~removal~~ efficiency for particulate matter of at least 80 percent by weight. To determine compliance with this standard, the owner or operator must conduct a particulate matter source test using DEQ Method 5 at the inlet and outlet of the control device. If it is not feasible to conduct a particulate matter source test at the inlet to the control device, the owner or operator must provide documentation demonstrating that the control device is designed to meet the standard and prepare and implement an operation and maintenance plan for ensuring that the control device will have at least an 80 percent removal efficiency when operated.

(2) No person ~~shall~~may 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~~OAR 340-236-8010, attached herewith and by reference made a part of this rule. Compliance is determined using DEQ Method 5. All source tests must be done using the DEQ Source Sampling Manual.

(3) Hot mix asphalt plants are subject to the emission limitations in OAR 340-208-0110~~(21)~~and (3), ~~and~~ 340-226-0210, and 340-238-0060, as applicable.

(4) If requested by DEQ, the owner or operator must develop a fugitive emission control plan.

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

[ED. NOTE: Tables referenced are available from the agency. [Click here for PDF copy of tables.](#)]

Stat. Auth.: ORS 468.020, ~~&~~ 468A.025 & 468A.070

Stats. Implemented: ORS 468A.025 & 468A.070

Hist.: DEQ 49, f. 2-9-73, ef. 3-1-73; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0110; DEQ 8-2007, f. & cert. ef. 11-8-07

## **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~~EQC, unless otherwise provided by rule ~~or regulation~~.

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

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 49, f. 2-9-73, ef. 3-1-73; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0115

### 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.

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

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 49, f. 2-9-73, ef. 3-1-73; DEQ 5-1983, f. & ef. 4-18-83; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0120

### 340-236-0440

#### **Ancillary Sources of Emission -- Housekeeping of Plant Facilities**

(1) Ancillary air contamination sources from ~~the a hot mix asphalt~~ 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~~must 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 truck traffic ~~shall~~must be conducted at all times so as to minimize emissions into the atmosphere.

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

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 49, f. 2-9-73, ef. 3-1-73; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0125

### **Solid Waste Landfills**

### 340-236-0500

#### **Emission Standards for Municipal Solid Waste Landfills**

(1) Applicability. This rule applies to small and large municipal solid waste landfills in the following categories:

(a) Landfills that have accepted waste since 11/08/87;

(b) Landfills with no modifications after 5/30/91;

(c) Landfills that closed after 11/08/87 with no modifications after 5/30/91.

(2) General Requirements. Landfills subject to this rule must comply with 40 CFR Section 60.751 through 60.759, ~~July 1, 1998~~ as adopted under OAR 340-238-0060, except as noted in Section 4 of this rule.

(3) Permitting requirements. Landfills subject to this rule must comply with Oregon Title V Operating Permit program requirements (Title V) as specified in OAR 340 divisions 218 and 220 except as noted in (c) ~~of this subsection~~:

(a) Existing large landfills must submit a complete Oregon Title V Operating Permit application one year after EPA approves the 111(d) State Plan associated with this rule;

(b) Existing small landfills that are major sources as defined in OAR 340-200-0020 must submit a complete ~~Federal~~ Title V Operating Permit application within one year of becoming a major source;

(c) The exemption from the Oregon Title V Operating Permit program in OAR 340-218-0020 for sources that are not major does not apply to sources subject to this rule.

(4) Reporting requirements. Landfills subject to this rule must comply with the following:

(a) Large landfills listed in Subsection (1)(a) through (c) ~~of this rule~~ must comply with the following:

(A) Submit an Initial Design Capacity Report and an Initial Nonmethane Organic Compound Report within 90 days of the effective date of this rule; and

(B) Submit an annual Nonmethane Organic Compound Report until nonmethane emissions are 50 Mg/yr.

(b) Small landfills listed in ~~S~~ubsection (1)(a) through (c) ~~of this rule~~ must submit an Initial Design Capacity Report and an Initial Nonmethane Organic Compound Report within 90 days of the effective date of this rule.

(5) Definitions. As used in this rule:

(a) "Closed municipal solid waste landfill" (closed landfill) means a landfill in which solid waste is no longer being placed, and in which no additional solid wastes will be placed without first filing a notification of modification as prescribed under 40 CFR 60.7(a)(4). Once a notification of modification has been filed, and additional solid waste is placed in the landfill, the landfill is no longer closed. A landfill is considered closed after meeting the criteria of 40 CFR 258.60;

(b) "Effective date" means the date this rule is filed with the Secretary of State;

(c) "Existing municipal solid waste landfill" (existing landfill) means a municipal solid waste landfill that began construction, reconstruction or modification before 5/30/91 and has accepted waste at any time since 11/08/87 or has additional design capacity available for future waste deposition;

(d) "Large municipal solid waste landfill" (large landfill) means a municipal solid waste landfill with a design capacity greater than or equal to 2.5 million megagrams or 2.5 million cubic meters;

(e) "Modification" means an action that results in an increase in the design capacity of the landfill;

(f) "Municipal solid waste landfill" (landfill) means an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. A municipal solid waste landfill may also receive other types of RCRA Subtitle D wastes such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of a municipal solid waste landfill may be separated by access roads and may be publicly or privately owned. A municipal solid waste landfill may be a new municipal solid waste landfill, an existing municipal solid waste landfill, or a lateral expansion (modification);

(g) "New municipal solid waste landfill" (new landfill) means a municipal solid waste landfill that began construction, reconstruction or modification or began accepting waste on or after 5/30/91; [and](#)

(h) "Small municipal solid waste landfill" (small landfill) means a municipal solid waste landfill with a design capacity less than 2.5 million megagrams or 2.5 million cubic meters.

Stat. Auth.: ORS 468.020, ~~&~~ 468A.025, [468A.040 & 468A.050](#)

Stats. Implemented: ORS [468A.025](#), 468A.040 [& 468A.050](#)

Hist.: DEQ 8-1997, f. & cert. ef. 5-6-97; DEQ 22-1998, f. & cert. ef. 10-21-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0745

**TABLE I**  
**(~~OAR 340-236-0410~~)**

**PROCESS WEIGHT TABLE**

| <i>Process<br/>Wt/hr (lbs)</i> | <i>Maximum Weight<br/>Disch/hr (lbs)</i> | <i>Process<br/>Wt/hr (lbs)</i> | <i>Maximum Weight<br/>Disch/hr (lbs)</i> |
|--------------------------------|------------------------------------------|--------------------------------|------------------------------------------|
| 50                             | 0.24                                     | 3400                           | 5.44                                     |
| 100                            | 0.46                                     | 3500                           | 5.52                                     |
| 150                            | 0.66                                     | 3600                           | 5.61                                     |
| 200                            | 0.85                                     | 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                                     |

**TABLE I**  
**(OAR 340-236-0410)**

**PROCESS WEIGHT TABLE**

| <i>Process<br/>Wt/hr (lbs)</i> | <i>Maximum Weight<br/>Disch/hr (lbs)</i> | <i>Process<br/>Wt/hr (lbs)</i> | <i>Maximum Weight<br/>Disch/hr (lbs)</i> |
|--------------------------------|------------------------------------------|--------------------------------|------------------------------------------|
| 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                                    |

**TABLE I**  
**(~~OAR 340-236-0410~~)**

**PROCESS WEIGHT TABLE**

| <i>Process<br/>Wt/hr (lbs)</i> | <i>Maximum Weight<br/>Disch/hr (lbs)</i> | <i>Process<br/>Wt/hr (lbs)</i> | <i>Maximum Weight<br/>Disch/hr (lbs)</i> |
|--------------------------------|------------------------------------------|--------------------------------|------------------------------------------|
| 3200                           | 5.27                                     | or                             |                                          |
| 3300                           | 5.36                                     | more                           |                                          |



**DIVISION 240**  
**RULES FOR AREAS WITH UNIQUE AIR QUALITY NEEDS**

**340-240-0010**

**Purpose**

The purpose of this division is to address the 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), the Lakeview UGB (340-240-0400 through 340-240-0440), and the Klamath Falls Nonattainment Area (340-240-0500 through 340-240-0630).

**NOTE:** These rules are included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the Environmental Quality Commission~~ that EQC adopted under OAR 340-200-0040.

Stat. Auth.: ORS 468.020 & 468A.025

Stats. Implemented: ORS 468A.025 & 468A.035

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 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0005; DEQ 10-2012, f. & cert. ef. 12-11-12

**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.

**NOTE:** These rules are included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the Environmental Quality Commission~~ that EQC adopted under OAR 340-200-0040.

Stat. Auth.: ORS 468.020, ~~& ORS~~ 468A.025 & 468A.070

Stats. Implemented: ~~ORS 468.020 &~~ ORS 468A.025 & 468A.070

Hist.: DEQ 3-1996, f. & cert. ef. 1-29-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0007; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

**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.~~

(21) "Air ~~C~~onveying ~~S~~ystem" 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.~~

(27) "Design ~~C~~riteria" 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.

(38) "Domestic ~~W~~aste" 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.~~

(413) "Fireplace" is defined in OAR 340-262-0450.

~~(14) "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.~~

~~(15) "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.~~

~~(16) "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.~~

~~(17) "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.~~

~~(518)~~ "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.

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

~~(620)~~ "Klamath Falls Nonattainment Area" means the area as defined in OAR 340-204-0010.

~~(724)~~ "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.

~~(822)~~ "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.

~~(23) "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."~~

~~(24) "Lowest Achievable Emission Rate" or "LAER" is defined in OAR 340-200-0020.~~

~~(25) "Maximum Opacity" means the opacity as determined by EPA Method 9 (average of 24 consecutive observations).~~

~~(26) "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.

~~(27) "Modified Source" means any source with a major modification as defined in OAR 340-200-0020.~~

~~(28) "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.~~

~~(29) "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.~~

~~(30) "Odor" means that property of an air contaminant that affects the sense of smell.~~

~~(31) "Offset" is defined in OAR 340-200-0020.~~

~~(32) "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 DEQ, in accordance with the Source Sampling Manual.~~

(933) "Open ~~B~~urning" 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.

~~(34) "Particleboard" means matformed flat panels consisting of wood particles bonded together with synthetic resin or other suitable binders.~~

~~(35) "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).~~

~~(36) "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.~~

~~(37) "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.~~

(~~1038~~) "Rebuilt ~~B~~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.

(~~1139~~) "Refuse" means unwanted material.

(~~1240~~) "Refuse burning equipment" means a device designed to reduce the volume of solid, liquid, or gaseous refuse by combustion.

~~(41) "Wood Fuel Fired Device" means a device or appliance designed for wood fuel combustion, including cordwood stoves, wood stoves and fireplace stove inserts, fireplaces, wood fuel fired cook stoves, pellet stoves and combination fuel furnaces or boilers, which burn wood fuels.~~

~~(42) "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.~~

~~(43) "Standard Conditions" means a temperature of 68° Fahrenheit (20° Celsius) and a pressure of 14.7 pounds per square inch absolute (1.03 Kilograms per square centimeter).~~

~~(44) "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.~~

~~(45) "Veneer" means a single flat panel of wood not exceeding 1/4 inch in thickness formed by slicing or peeling from a log.~~

~~(46) "Veneer Dryer" means equipment in which veneer is dried.~~

~~(47) "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.~~

(~~1348~~) "Wigwam ~~Fired-waste B~~urner" 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.

(~~1449~~) "Wood ~~W~~waste ~~B~~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~~ that EQC adopted under OAR 340-200-0040.

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

Stat. Auth.: ORS 468.020 & 468A.025

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; DEQ 10-2012, f. & cert. ef. 12-11-12

### 340-240-0050

#### Compliance Testing Requirements

(1) For demonstrating compliance with the standards in this division, testing must be done in accordance with the DEQ Source Sampling Manual.

(2) For demonstrating compliance with particulate standards, testing must be conducted using the following test methods:

(a) For wood waste boilers – DEQ Method 5. Results must be corrected to 12% CO<sub>2</sub>, as follows

(A)  $C(12\% \text{ CO}_2) = C \times 12\% \text{ CO}_2$

(B) As used in paragraph (A):

$C(12\% \text{ CO}_2) = \text{Particulate matter emission concentration corrected to 12\% CO}_2$ ;

$C = \text{Particulate matter emission concentration as measured by Oregon DEQ Method 5; and}$

$\% \text{ CO}_2 = \text{Percent CO}_2 \text{ in the exhaust gas, as measured by EPA Method 3 (or equivalent) during each particulate matter test run.}$

(b) For veneer dryers, wood material dryers, press and other process vents – DEQ Method 7; and

(c) For air conveying systems - DEQ Method 5 or 8.

(3) For demonstrating compliance with opacity standards, observations must be made in accordance with EPA Method 9 or continuous opacity monitoring systems certified in accordance with the DEQ Continuous Monitoring Manual.

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

Stat. Auth.: ORS 468.020, 468A.025 & 468A.070

Stats. Implemented: ORS 468A.025 & 468A.070

## **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~~ that EQC adopted under OAR 340-200-0040.

Stat. Auth.: ORS 468.020 & 468A.025

Stats. Implemented: ORS 468A.025 & 468A.035

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

## 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~~ devices which:

(a) Limits emissions of particulate matter to LAER as defined by ~~the Department~~ DEQ at the time ~~the Department~~ DEQ 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~~ as a six minute average, 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~~ as a six minute average. Specific opacity limits will be included in the ~~P~~ permit for each affected source.

(2) For boilers existing in the ~~B~~ baseline ~~P~~ 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~~ 222-0046 will be based on particulate matter emissions of 0.030 grains per dry standard cubic foot, corrected to 12% CO<sub>2</sub>.

(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~~ DEQ 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~~ that EQC adopted under OAR 340-200-0040.

Stat. Auth.: ORS 468.020 & 468A.025

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

## 340-240-0120

### Veneer Dryer Emission Limitations

(1) No person ~~is allowed to~~may 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 ~~(b) through (f) of this section~~:

(a)(A) ~~A~~ daily average operating opacity of five percent on more than two days within any 12-month period, with the days separated from each other by at least 30 days, as measured by EPA Method 9; and

~~(B)~~ A maximum opacity of ~~ten~~10 percent at any time as measured by EPA Method 9, unless the permittee demonstrates by source test that it can achieve the emission limits in subsections ~~(b) through (f) 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 ~~P~~permit for each affected source;

~~(b)~~ 0.30 pounds per 1,000 square feet of veneer dried (3/8" basis) for direct natural gas or propane fired veneer dryers;

~~(c)~~ 0.30 pounds per 1,000 square feet of veneer dried (3/8" basis) for steam heated veneer dryers;

~~(d)~~ 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 ~~equal to or by weight~~ less than 20 percent by weight on a wet basis as measured by ASTM D4442-84;

~~(e)~~ 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 by weight on a wet basis as measured by ASTM D4442-84; or

~~(f)~~ In addition to subsections (e) and (f) ~~of this section~~, 0.20 pounds per 1,000 pounds of steam generated in any boilers ~~which that~~ exhausts its 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~~may 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~~DEQ as being capable of complying with subsections

(1)(a) through ~~(f) of this rule~~;



- (b) The veneer dryer is equipped with an emission-control system which has been approved in writing by ~~the Department~~[DEQ](#) and is capable of complying with subsections (1)(a) through ~~(f)~~[g](#)~~-of this rule~~; or
- (c) The owner or operator has demonstrated and ~~the Department~~[DEQ](#) has agreed in writing that the dryer is capable of being operated and is operated in continuous compliance with subsections (1)(a) through ~~(f)~~[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~~[devices](#) 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~~[may](#) 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~~[DEQ](#) 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~~[that EQC adopted](#) under OAR 340-200-0040.

Stat. Auth.: ORS 468.[020](#), ~~&~~ 468A.[025](#) & 468A.[070](#)

Stats. Implemented: ORS 468A.025 & 468A.070

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

### 340-240-0130

#### Air Conveying Systems (Medford-Ashland AQMA Only)

All air conveying systems emitting greater than ~~ten~~[10](#) tons per year of particulate matter to the atmosphere must, with the prior written approval of ~~the Department~~[DEQ](#), be equipped with a [particulate emissions control device or devices](#)~~system~~ with [a design collectionremoval](#) 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~~[that EQC adopted](#) under OAR 340-200-0040.

Stat. Auth.: ORS 468.[020](#) & 468A.[025](#)

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

## 340-240-0140

### Wood Particle Dryers at Particleboard Plants

(1) No person ~~is allowed to~~may 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~~may cause or permit the visible emissions from the wood particle dryers at a particleboard plant to exceed ~~ten~~10 percent opacity as a six minute average, 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 as a six minute average. Specific opacity limits will be included in the ~~P~~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~~that EQC adopted under OAR 340-200-0040.

Stat. Auth.: ORS 468.020 & 468A.025

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

## 340-240-0150

### Hardboard Manufacturing Plants

(1) Emissions from ~~H~~hardboard plants excluding press vents. No person ~~is allowed to~~may 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 ~~H~~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~~that EQC adopted under OAR 340-200-0040.

Stat. Auth.: ORS 468.020 & 468A.025

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

### 340-240-0160

#### Wigwam Waste Burners

No person owning or controlling any wigwam [waste](#) burner is allowed to cause or permit the operation of the wigwam [waste](#) burner.

**NOTE:** These rules are included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the Environmental Quality Commission~~ [that EQC adopted](#) under OAR 340-200-0040.

Stat. Auth.: ORS 468.[020](#) & 468A.[025](#)

Stats. Implemented: ORS 468A.025

Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 29-1980, f. & ef. 10-29-80; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0035; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### ~~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.~~

**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 1986, f. & ef. 6 20 86; 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 0040; DEQ 6 2001, f. 6 18 01, cert. ef. 7 1 01~~

### 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~~[DEQ](#), 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 [suitable](#) 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~~en material, dirt, dust,~~ 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~~[DEQ](#) prior to or within 60 days of permit issuance or renewal. ~~The Department~~[DEQ](#) 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~~[that EQC adopted](#) under OAR 340-200-0040.]

Stat. Auth.: ORS 468.020-, [468A.025 & 468A.040](#)

Stats. Implemented: ORS 468A.025 [& 468A.040](#)

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

### **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 ~~P~~<sup>Per</sup>mits 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~~<sup>that EQC adopted</sup> under OAR 340-200-0040.

Stat. Auth.: ORS 468.020 & 468A.025

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

### **340-240-0210**

## Continuous Monitoring

(1) ~~The Department~~[DEQ](#) 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 devices~~ 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~~[DEQ](#). Continuous monitoring equipment and operation must be in accordance with ~~continuous emission monitoring systems guidance~~[the DEQ Continuous Monitoring Manual](#) ~~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~~[DEQ](#) 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 device~~ 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~~[DEQ](#) to be equal or better indicators of proper operation of the wet scrubber used as pollution control ~~equipment device~~ for any wood-waste fired boiler, veneer dryer, particle dryer, or fiber dryer; ~~and~~

(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~~[that EQC adopted](#) under OAR 340-200-0040.

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

Stat. Auth.: ORS 468.[020](#), [468A.025](#), [468A.050](#) & 468A.[070](#)

Stats. Implemented: ORS ~~468.020 &~~ 468A.025, [468A.050](#) & [468A.070](#)

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

**340-240-0220**

## Source Testing

(1) The ~~person responsible for~~[owner or operator of](#) 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~~ using the DEQ Source Sampling Manual at the following frequencies:

- (a) Wood Waste Boilers with heat input capacity greater than 35 million Btu/hour: -- Once every year;
- (b) Veneer Dryers -- Once every ~~year during 1991, 1992, and 1993 and once every 3~~ three years ~~thereafter~~;
- (c) Wood Particle Dryers at Hardboard and Particleboard Plants -- Once every year;
- ~~(d) Charcoal Producing Plants -- Once every year.~~

~~(d)~~ Wood Waste Boilers with heat input capacity equal to or less than 35 million BTU/hour with dry emission control ~~equipment~~ devices -- Once ~~in 1992 and once every 3~~ three 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~~ DEQ 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~~ that EQC adopted under OAR 340-200-0040.

Stat. Auth.: ORS 468.020, 468A.025 & 468A.070

Stats. Implemented: ORS ~~468.020 &~~ 468A.025 & 468A.070

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

## **~~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~~

## **340-240-0250**

### **Open Burning**

~~No~~ Open burning of domestic waste is ~~allowed~~ prohibited on any day or at any time when ~~the Department~~ DEQ advises fire permit issuing agencies that open burning is not allowed because of adverse meteorological or air quality conditions.

**NOTE:** These rules are included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the Environmental Quality Commission~~ that EQC adopted under OAR 340-200-0040.

Stat. Auth.: ORS 468.020, 468A.025 & 468A.085

Stats. Implemented: ORS 468A.025 & 468A.085

Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0070; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## **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.

**NOTE:** These rules are included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the Environmental Quality Commission~~ that EQC adopted under OAR 340-200-0040.

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A

Stats. Implemented: ORS 468A.025 & 468A.035

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 340-030-0200

## **~~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.~~

~~**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 & ORS 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 340-030-0205; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01~~

## 340-240-0320

### Wood-Waste Boilers

No person ~~is allowed to~~may 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~~10 percent opacity as a six minute average, 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~~may emissions equal or exceed 20 percent opacity as a six minute average~~for more than an aggregate of three minutes in any one hour allowed~~. Specific opacity limits will be included in the ~~P~~permit for each affected source.

(2) Particulate matter in excess of 0.05 grains per standard cubic foot, corrected to 12 percent CO<sub>2</sub>.

**NOTE:** These rules are included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the Environmental Quality Commission~~that EQC adopted under OAR 340-200-0040.

Stat. Auth.: ORS 468.020 & ~~ORS~~-468A.025

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 340-030-0210; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## 340-240-0330

### Wood Particle Dryers at Particleboard Plants

(1) No person ~~is allowed to~~may 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~~may cause or permit the visible emissions from the wood particle dryers at a particleboard plant to exceed ~~ten~~10 percent opacity as a six minute average, 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~~may emissions equal or exceed 20 percent opacity as a six minute average~~allowed~~. Specific opacity limits will be included in the ~~P~~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~~that EQC adopted under OAR 340-200-0040.

Stat. Auth.: ORS 468.020 & ~~ORS~~-468A.025

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 340-030-0330; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-240-0340

#### Hardboard Manufacturing Plants

No person ~~is allowed to~~ may 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.

**NOTE:** These rules are included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the Environmental Quality Commission~~ that EQC adopted under OAR 340-200-0040.

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.025

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 340-030-0220; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-240-0350

#### Air Conveying Systems

(1) No person is allowed to cause or permit the emission of particulate matter in excess of 0.10 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 except as allowed by section (2).

(2) The owner or operator of an existing source who is unable to comply with OAR 340-226-0210(1)(a)(B) or (b)(C) may request that DEQ grant an extension allowing the source up to one year to comply with the standard, and DEQ may grant such extension if it determines that such period is necessary for the installation of controls.

(32) All air conveying systems emitting greater than ~~ten~~ 10 tons of particulate matter to the atmosphere during any 12-month period beginning on or after January 1, 1990 must be equipped with a particulate emissions control device or devices ~~system~~ with a rated collection control efficiency of at least 98.5 percent ~~or equivalent control as approved by the Department.~~

(43) No person ~~is allowed to~~ may cause or permit the emission of any air contaminant which is equal to or greater than five percent opacity as a six minute average from any air conveying system subject to section (32) ~~of this rule.~~

**NOTE:** These rules are included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the Environmental Quality Commission~~ that EQC adopted under OAR 340-200-0040.

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.025

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 340-030-0225; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-240-0360

#### Fugitive Emissions

The owner or operator of ~~any large~~ sawmill, ~~any~~ plywood mill or veneer manufacturing plant, particleboard plant, ~~or~~ hardboard plant, ~~or charcoal manufacturing plant~~ that is located in the La Grande Urban Growth Area must comply with OAR 340-240-0180.

**NOTE:** These rules are included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the Environmental Quality Commission~~ [that EQC adopted](#) under OAR 340-200-0040.

Stat. Auth.: ORS 468.[020](#) & ~~ORS~~ 468A.[025](#)

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 340-030-0230; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### The Lakeview Urban Growth Area

### 340-240-0400

#### Applicability

OAR 340-240-0400 through 340-240-0440 apply to the Lakeview Urban Growth Area.

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

Stat. Auth.: ORS 468.[020](#) & ~~ORS~~ 468A.[025](#)

Stats. Implemented: ORS 468A.025 & [468A.035](#)

Hist.: DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0300; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-240-0410

#### Control of Fugitive Emissions

(1) [All](#) ~~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 must 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 create 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, material, dirt, dust, or other material which does or may become airborne.

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

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0310; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## 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.~~ With the exception of basic and general permit holders, a permit holder must prepare and implement operation and maintenance plans for non-fugitive sources of particulate matter.

(2) The purposes of the operation and maintenance plans are to:

(a) Reduce the number of upsets and breakdowns in particulate control ~~equipment~~ devices;

(b) Reduce the duration of upsets and downtimes; and

(c) Improve the efficiency of control ~~equipment~~ devices 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~~ devices 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~~ that EQC adopted under OAR 340-200-0040.

Stat. Auth.: ORS 468.~~020~~, ~~& ORS~~ 468A.~~025~~ & 468A.~~050~~

Stats. Implemented: ORS 468.020, ~~& ORS~~ 468A.025 & 468A.~~050~~

Hist.: 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 340-030-0320; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-240-0430

#### Source Testing

The owner or operator of ~~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's~~ using the DEQ Source Sampling Manual at the following frequency: ~~W~~wood ~~W~~waste ~~B~~boilers with total heat input capacity equal to or greater than 35 million Btu/hour; -- Once every three years.

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

Stat. Auth.: ORS 468.~~020~~, ~~& ORS~~ 468A.~~025~~ & 468A.~~070~~

Stats. Implemented: ORS 468.020, ~~& ORS~~ 468A.025 & 468A.~~070~~

Hist.: 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 340-030-0330; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 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.

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

Stat. Auth.: ORS 468.020, 468A.025 & ~~ORS~~-468A.085

Stats. Implemented: ORS 468A.025 & 468A.085

Hist.: DEQ-10-1995, f. & cert. ef. 5-1-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0340; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

## Klamath Falls Nonattainment Area

### 340-240-0510

#### Opacity Standard

(1) Except as provided in section (2) ~~of this rule~~, no person conducting a commercial or industrial activity may cause or permit the emission of any air contaminant into the atmosphere from any stationary source including fuel or refuse burning equipment, that exhibits equal to or greater than 20% opacity as a six minute average~~for a period or periods aggregating more than three minutes in any one hour.~~

(2) Exceptions to section (1) include the following~~of this rule:~~

(a) This rule does not apply to fugitive emissions.

~~(b) This rule does not apply where the presence of uncombined water is the only reason for failure of any source to meet the requirements of this rule.~~

~~(b)~~ For wood-fired boilers that were constructed or installed prior to June 1, 1970 and not modified since that time, visible emissions during grate cleaning operations must not equal or exceed 40% opacity as a six minute average except that:~~for a period or periods aggregating more than three minutes in any one hour.~~

(A) Beginning June 30, 2013, this exception will only apply if the owner or operator conducts the grate cleaning in accordance with a grate cleaning plan that has been approved by DEQ; and

(B) The owner or operator must prepare a grate cleaning plan in consultation with DEQ and submit the plan to DEQ by June 1, 2013.

~~(3) Opacity is determined in accordance with EPA Method 9 of Appendix A to 40 CFR Part 60 or a continuous opacity monitoring system (COMS) installed and operated in accordance with Performance Specification 1 of Appendix B to 40 CFR Part 60.~~

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

Stat. Auth.: ORS 468.020 & 468A.025

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

Hist.: DEQ 10-2012, f. & cert. ef. 12-11-12

## 340-240-0550

### Requirements for New Sources When Using Residential Wood Fuel-Fired Device Offsets

(1) All new or modified sources subject to OAR 340 [division 224](#) ~~-224-0050 or 340-224-0060~~ may opt to use wood fuel-fired device emission reductions from within the nonattainment or maintenance area to satisfy the offset requirements of [OAR 340-224-0050 or OAR 340-224-0250](#) ~~340-225-0090(2)~~:

(a) Offsets for decommissioning fireplaces and non-certified woodstoves (including fireplace inserts) are obtained at a ratio of at least 1:1 (i.e., one ton of emission reductions from fireplaces and non-certified wood stoves offsets one ton of emissions from a proposed new or modified industrial point source proposed to be located inside or impacting the non-attainment area or maintenance area);

(b) Offsets must be obtained from within the Klamath Falls Nonattainment Area and Maintenance Area; and

(c) The emission reductions offsets must be approved by the DEQ and comply with OAR 340-240-0560.

(2) The net air quality benefit analysis specified in OAR [340-224-0530\(4\)](#) ~~340-225-0090(2)(a)(E)~~ is not applicable to offsets meeting the criteria in [subsections \(1\)\(a\) through \(c\)](#) ~~of section (1) of this rule~~.

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

Stat. Auth.: ORS 468.[020](#), ~~&~~ 468A.[025](#) & 468A.[040](#)

Stats. Implemented: ORS ~~468.020 &~~ 468A.025, [468A.035 & 468A.040](#)

Hist.: DEQ 10-2012, f. & cert. ef. 12-11-12

## 340-240-0560

### Real and Permanent PM<sub>2.5</sub> and PM<sub>10</sub> Offsets

(1) Annual emissions reductions offsets (PM<sub>2.5</sub> and PM<sub>10</sub>) are determined as follows:

(a) For fireplaces, the emission reductions offsets for decommissioning the fireplace and replacing it with a:

(A) Certified fireplace insert is 0.02 tons for each replaced device;

(B) Pellet stove insert is 0.03 tons for each replaced device; or

(C) Alternative non-wood burning heating system is 0.04 tons for each replaced device.

**NOTE:** ~~As used in this rule, "Certified" includes catalytic and non-catalytic designs, unless otherwise specified.~~

(b) For non-certified fireplace inserts, the emission reduction for replacing the heating device with a:

(A) Certified fireplace insert is 0.02 tons for each replaced device;

(B) Pellet stove is 0.04 tons for each replaced device; or



(C) Alternative non-wood burning heating system is 0.04 tons for each replaced device.

(c) For conventional (non-certified) woodstoves, the emission reduction for replacing the heating device with a:

(A) Certified woodstove (including both catalytic and non-catalytic designs) or certified fireplace insert is 0.03 tons for each replaced device; or

(B) Pellet stove is 0.05 tons for each replaced device; or

(C) Alternative non-wood burning heating system is 0.06 tons for each replaced device.

(d) For certified woodstoves (including both catalytic and non-catalytic designs), the emission reduction for replacing the heating device with a:

(A) Pellet stove is 0.03 tons for each replaced device; or

(B) Alternative non-wood burning heating system is 0.04 tons for each replaced device

(2) For the emission reductions identified in section (1) to be considered permanent, the person responsible for taking credit for the emission reductions must obtain and maintain the following records for at least 5 years from the date that the proposed industrial point source commences operation:

(a) The address of the residence where the emission reduction occurred;

(b) The date that the emission reduction was achieved;

(c) Purchase and installation records for certified woodstoves, certified inserts, or alternative non-wood burning heating systems;

(d) Records for permanently decommissioning fireplaces, if applicable; and

(e) Disposal records for non-certified woodstoves or fireplace inserts removed.

(3) The records identified in section (2) may be provided by a third party authorized and monitored by the DEQ to procure the emission reductions identified in section (1).

(4) All emission reductions must be achieved prior to startup of the proposed source using the emission

**NOTE:** As used in this rule, “Certified” includes catalytic and non-catalytic designs, unless otherwise specified.

reductions as offsets in the permitting action specified in OAR 340 ~~division 224-224-0050 or 340-224-0060~~.

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.040 & 468A.050

Stats. Implemented: ORS ~~468.020 &~~ 468A.025, 468A.040 & 468A.050

Hist.: DEQ 10-2012, f. & cert. ef. 12-11-12

## Klamath Falls Nonattainment Area Contingency Measures

340-240-0610

### Continuous Monitoring for Industrial Sources

(1) The owner or operator of an Oregon Title V Operating Permit program source, as defined in OAR 340-200-0020 must install and operate instrumentation for measuring and recording emissions or the parameters that affect the emission of particulate matter from wood-fired boilers by June 1, 2015, to ensure that the sources and the air pollution control ~~equipment~~ devices are operated at all times at their full efficiency and effectiveness so that the emission of particulate matter is kept at the lowest practicable level. Continuous monitoring equipment and operation must be in accordance with the ~~Department's~~ DEQ Continuous Monitoring Manual.

(2) At a minimum, the monitoring required under paragraph (1) ~~of this section~~ must include:

(a) Continuous monitoring of control device parameters for any wood-fired boiler.

(b) Continuous monitoring of opacity for any wood- 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~~ that EQC adopted under OAR 340-200-0040.

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

Stat. Auth.: ORS 468.020, 468A.025 & 468A.070

Stats. Implemented: ORS ~~468.020 &~~ 468A.025 & 468A.070

Hist.: DEQ 10-2012, f. & cert. ef. 12-11-12

## DIVISION 242

### RULES APPLICABLE TO THE PORTLAND AREA

#### Industrial Emission Management Program

##### 340-242-0400

##### Applicability

(1) OAR 340-242-0430 through 340-242-0440 apply to all new sources or modifications at existing sources that have increases of VOC or NOx equal to or greater than the SER ~~that are required to provide a net air quality benefit under the provisions of 340-225-0090 for~~ and are located in the Portland Air Quality Maintenance Area (AQMA).

(2) OAR 340-242-0430 and 340-242-0440 apply to new ~~major~~ sources and ~~major~~ modifications at existing sources that have increases of ~~that emit~~ CO equal to or greater than the SER and are located within the Portland Metro ~~A~~area or, including new major sources and major modifications outside the Portland Metro ~~A~~area but that will have a significant air quality impact within ~~this area~~ the Portland Metro area.

**NOTE:** These rules are included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the Environmental Quality Commission~~ that EQC adopted under OAR 340-200-0040.

Stat. Auth.: ORS 468.020 & 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 17-1996, f. & cert. ef. 8-14-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0700; DEQ 3-2007, f. & cert. ef. 4-12-07

##### 340-242-0410

##### Definition of Terms

The definitions in OAR 340-200-0020, 340-204-0010 and this rule apply in OAR 340-242-0400 through 340-242-0440. If the same term is defined in this rule and OAR 340-200-0020 or 340-204-0010, the definition in this rule applies in OAR 340-242-0400 through 340-242-0440.

(1) "PSEL" means the Plant Site Emission Limit of an individual ~~air~~regulated pollutant specified in an Air Contaminant Discharge Permit or Title V permit issued to a source by ~~the Department~~DEQ, pursuant to OAR 340 division 216 or 218.

(2) "Unused PSEL" means the difference between a source's actual emissions and its permitted level or PSEL in 1990 or 1992, whichever is lower, as determined through ~~the Department~~DEQ's emission inventory data.

(3) "Unused PSEL Donation Source" means any source that voluntarily returned to ~~the Department~~DEQ unused PSEL, as part of the Unused PSEL Donation Program in OAR 340-242-0420.

**NOTE:** These rules are included in the State of Oregon Clean Air Act Implementation ~~Plan as adopted by the Environmental Quality Commission~~ that EQC adopted under OAR 340-200-0040.

Stat. Auth.: ORS 468.020 & [468A.025](#)

Stats. Implemented: ORS 468A.025

Hist.: DEQ 17-1996, f. & cert. ef. 8-14-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0710; DEQ 3-2007, f. & cert. ef. 4-12-07

## 340-242-0420

### Unused PSEL Donation Program

(1) This program encourages owners or operators of VOC and NOx sources identified in OAR 340-242-0400(1) to donate unused PSEL to ~~the Department~~ [DEQ](#). Under this program, donations can be either permanent or temporary. For a source to participate in this program it must have entered into an agreement with ~~the Department~~ [DEQ](#) prior to January 1, 2006.

(2) VOC sources donating at least 35 percent of their unused PSEL and NOx sources donating at least 50 percent of their unused PSEL will receive the following incentives and considerations from ~~the Department~~ [DEQ](#) for participating in this program:

(a) Exemption from the Employee Commute Options (ECO) Program in OAR 340-242-0010 through 340-242-0290 for the duration of the Portland Ozone Maintenance plan;

(b) Priority permit processing for any required air quality permit;

(c) In accordance with OAR 340-242-0430 and 340-242-0440(1), priority use of up to 50 percent of any remaining growth allowance. This applies only to sources making permanent donations, pursuant to section (3) ~~of this rule~~; and

(d) Other considerations may be added to the donation agreement on a case-by-case basis, consistent with ~~the Department~~ [DEQ](#)'s rules and statutes.

(3) ~~The Department~~ [DEQ](#) will adjust the PSEL of sources providing permanent donations to reflect the emissions donated. Permanent donations will result in adjustment to the source's baseline emission rate and PSEL, consistent with the definition of "major modification" under OAR 340-~~200-0020~~ [224-0025](#) and changes to PSELs required ~~by rule~~ under 340-222-00~~40~~ [35](#).

(4) Sources participating in this program must enter into a donation agreement with ~~the Department~~ [DEQ](#) that identifies the commitments of both parties. Any such agreement is legally binding and enforceable.

**NOTE:** These rules are included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the Environmental Quality Commission~~ [that EQC adopted](#) under OAR 340-200-0040.

Stat. Auth.: ORS 468.020, [468A.025](#) & [468A.040](#)

Stats. Implemented: ORS 468A.025 & [468A.040](#)

Hist.: DEQ 17-1996, f. & cert. ef. 8-14-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0720; DEQ 3-2007, f. & cert. ef. 4-12-07

## 340-242-0430

### Industrial Growth Allowances

(1) This rule establishes industrial growth allowances for sources identified in OAR 340-242-0400. The amount of each growth allowance is defined in the ~~State Implementation Plan~~[SIP](#) and is on file with ~~the Department~~[DEQ](#).

(2) The owner or operator of a ~~proposed new major source or major modification emitting VOCs, NOx, or CO~~[source subject to this division](#) may obtain a portion of the respective growth allowance pursuant to OAR 340-242-0440.

(3) If no emissions remain in the respective growth allowance, the owner or operator ~~of the proposed major source or major modification shall~~[must](#) provide offsets ~~for CO emissions at a 1 to 1 ratio, and for VOC and NOx emissions at a 1.1 to 1 ratio (i.e., demonstrate a 10% new reduction)~~[as required under OAR 340 division 224](#).

**NOTE:** These rules are included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the Environmental Quality Commission~~[that EQC adopted](#) under OAR 340-200-0040.

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

Stat. Auth.: ORS 468.020, [468A.025 & 468A.040](#)

Stats. Implemented: ORS 468A.025 [& 468A.040](#)

Hist.: DEQ 17-1996, f. & cert. ef. 8-14-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0730; DEQ 3-2007, f. & cert. ef. 4-12-07

## 340-242-0440

### Industrial Growth Allowance Allocation

(1) The owner or operator of a ~~proposed new major source or major modification emitting VOCs, NOx, or CO, as identified in OAR 340-242-0400,~~[source subject to this division](#) may obtain a portion of any remaining emissions in the respective growth allowance in accordance with procedures described in the ~~State Implementation Plan~~[SIP](#) that is on file with ~~the Department~~[DEQ](#), and based on the following conditions:

(a) Access is on a first-come-first-served basis, based on the submittal date of a complete permit application;

(b) Unused PSEL donation sources that meet the donation criteria specified in OAR 340-242-0420(2) have priority access to their respective growth allowance as a "tie-breaker" over non-donation sources;

(c) Except as provided below, no single source may receive an emissions allocation of more than 1,000 tons of either VOC or NOx or more than 50% of any remaining growth allowance; and

(d) A single source must apply to the ~~Environmental Quality Commission~~[EQC](#) to receive more than 1,000 tons of VOC or NOx, but in no case more than 50% of the remaining growth allowance. To apply, sources must submit air quality and other information as required by ~~the Department~~[DEQ](#) justifying its request and must include information on significant economic, employment, or other benefits to the Portland area that will result

from the proposed ~~new major source or major modification~~, and the availability of emissions offsets. DEQ will evaluate ozone levels and expected trends to determine whether the proposed facility poses any risk to maintaining compliance with the ozone air quality standard prior to making a recommendation to the EQC regarding the source application.

(2) The amount of the CO growth allowance that can be allocated is identified in the Portland Area Carbon Monoxide Maintenance Plan, Section 4.58 of Volume 2 of the ~~State Implementation Plan~~[SIP](#) on file with ~~the Department~~[DEQ](#).

**NOTE:** These rules are included in the State of Oregon Clean Air Act Implementation Plan ~~as adopted by the Environmental Quality Commission~~[that EQC adopted](#) under OAR 340-200-0040.

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

Stat. Auth.: ORS 468.020, [468A.025 & 468A.040](#)

Stats. Implemented: ORS 468A.025 [& 468A.040](#)

Hist.: DEQ 17-1996, f. & cert. ef. 8-14-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0740; DEQ 10-2004, f. & cert. ef. 12-15-04; DEQ 3-2007, f. & cert. ef. 4-12-07

## Gasoline Vapors from Gasoline Transfer and Dispensing Operations

### 340-242-0500

#### Purpose and Applicability

(1) Gasoline vapors contribute to the formation of ozone. OAR 340-242-0500 through 340-242-0520 require the control of gasoline vapors from gasoline dispensing operations.

(2) OAR 340-242-0500 through 340-242-0520 apply to gasoline dispensing facilities located within Clackamas, Multnomah and Washington Counties.

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

Stat. Auth.: ORS 468.020 & 468A.025

Stats. Implemented: ORS 468A.025~~40~~

Hist.: DEQ 7-1991, f. & cert. ef. 5-7-91 (and corrected 6-7-91); DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 16-1996, f. & cert. ef. 8-14-96; DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0400; DEQ 1-2011, f. & cert. ef. 2-24-11

### 340-242-0510

#### Definitions

The definitions in OAR 340-200-0020, 340-204-0010 and this rule apply in OAR 340-242-0500 through 340-242-0520. If the same term is defined in this rule and OAR 340-200-0020 or 340-204-0010, the definition in this rule applies in OAR 340-242-0500 through 340-242-0520.

- (1) "Equivalent control" means the use of alternate operational and/or equipment controls for the reduction of gasoline vapor emissions, that have been approved by ~~the Department~~[DEQ](#), such that the aggregate emissions of gasoline vapor from the facility do not exceed those from the application of defined reasonably available control technology.
- (2) "Gasoline" means any petroleum distillate having a Reid vapor pressure of four pounds per square inch (28 kilopascals) or higher, used as a motor fuel.
- (3) "Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle, boat, or airplane gasoline tanks from stationary storage tanks.
- (4) "Annual throughput" means the amount of gasoline transferred into or dispensed from a gasoline dispensing facility during 12 consecutive months.
- (5) "Stage I vapor collection system" means a system where gasoline vapors are forced from a tank into a vapor-tight holding system or vapor control system through direct displacement by the gasoline being loaded.
- (6) "Stage II vapor collection system" means a system where at least 90 percent, by weight, of the gasoline vapors that are displaced or drawn from a vehicle fuel tank during refueling are transferred to a vapor-tight holding system or vapor control system.
- (7) "Substantially modified" means a modification of an existing gasoline-dispensing facility which involves the addition of one or more new stationary gasoline storage tanks or the repair, replacement or reconditioning of an existing tank.
- (8) "Vapor control systems" means a system that prevents emissions to the outdoor atmosphere from exceeding 4.7 grains per gallon (80 grams per 1,000 liters) of petroleum liquid loaded.

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

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 7-1991, f. & cert. ef. 5-7-91 (and corrected 6-7-91); DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 16-1996, f. & cert. ef. 8-14-96; DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 14-1999, f. & cert. ef. 10-14-99,

Renumbered from 340-022-0401

## 340-242-0520

### General Provisions

- (1) No owner and/or operator of a gasoline-dispensing facility ~~shall~~[may](#) transfer or allow the transfer of gasoline into a motor vehicle fuel tank at gasoline-dispensing facilities located in Clackamas, Multnomah or Washington

Counties whose annual throughput exceeds 600,000 gallons, unless the gasoline-dispensing facility is equipped with a stage II vapor collection system which must be approved by ~~the Department~~[DEQ](#) before it is installed.

[NOTES: ~~1~~—Underground piping requirements are described in OAR 340-150-03001 through ~~340-150-0003~~ and 40 CFR 280.20(d). Systems installed according to ~~American Petroleum Institute Publication 1615,~~ "Installation of Underground Petroleum Storage System" or Petroleum Equipment Institute Publication RP100, "Recommended Practices for Installation of Underground Liquid Storage Systems" or American ~~National Standards Institute~~[Society of Mechanical Engineers](#) Standard B31.4 "~~Liquid Petroleum Pipeline~~ Transportation Piping Systems [for Liquid Hydrocarbons and Other Liquids](#)" are considered approved systems.

~~2~~—Above-ground stage II equipment requirements are based on systems recently approved in other states with established stage II program. See the Oregon Department of Environmental Quality, Air Quality Division, for the list of approved equipment. Any other proposed equivalent systems must be submitted to the Department of Environmental Quality, Air Quality Division, for approval before installation.]

(2) Owners and/or operators of gasoline-dispensing facilities subject to stage II vapor collection requirements must:

- (a) Install all necessary stage II vapor collection and control systems, and make any modifications necessary to comply with the requirements;
- (b) Provide adequate training and written instructions to the operator of the affected gasoline-dispensing facility and the gasoline transport vehicle;
- (c) Replace, repair or modify any worn or ineffective component or design element to ensure the vapor-tight integrity and efficiency of the stage II vapor collection systems; and
- (d) Connect and ensure proper operation of the stage II vapor collection systems whenever gasoline is being loaded, unloaded or dispensed.

(3) Approval of a stage II vapor collection system by ~~the Department~~[DEQ](#) does not relieve the owner and/or operator of the responsibility to comply with other applicable codes and regulations pertaining to fire prevention, weights and measures and safety matters.

(4) Regarding installation and testing of piping for stage II vapor collection systems:

- (a) Piping ~~shall~~[must](#) be installed in accordance with standards in OAR 340 division 150;
- (b) Piping ~~shall~~[must](#) be installed by a licensed installation service provider pursuant to OAR 340 division 160; and
- (c) Piping ~~shall~~[must](#) be tested prior to being placed into operation by an installation or tank tightness testing service provider licensed pursuant to OAR 340 division 160.

**NOTE:** ~~(5)~~ Test methods are based on methods used in other states with established stage II programs. See ~~the Oregon Department of Environmental Quality~~[DEQ](#), ~~Air Quality~~[Operations](#) Division, for copies of the approved test methods.



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

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

Stat. Auth.: ORS 468.020 & 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 7-1991, f. & cert. ef. 5-7-91 (and corrected 6-7-91); DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 25-1994, f. & cert. ef. 11-22-94; DEQ 16-1996, f. & cert. ef. 8-14-96; DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0402; DEQ 15-2008, f. & cert. ef. 12-31-08

## Motor Vehicle Refinishing

### 340-242-0600

#### Applicability

OAR 340-242-0600 through 340-242-0630 apply to any person who owns, leases, operates or controls a motor vehicle refinishing facility in the Portland AQMA.

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

Stat. Auth.: ORS 468.020 & 468A.02~~3~~5

Stats. Implemented: ORS 468A.025 & 468A.035

Hist.: DEQ 13-1995, f. & cert. ef. 5-25-95; DEQ 7-1999, f. 5-21-99, cert. ef. 7-12-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0700

### 340-242-0610

#### Definitions

The definitions in OAR 340-200-0020, 340-204-0010 and this rule apply in 340-242-0600 through 340-242-0630. If the same term is defined in this rule and OAR 340-200-0020 or 340-204-0010, the definition in this rule applies in 340-242-0600 through 340-242-0630.

~~(1) "Department" means the Oregon Department of Environmental Quality.~~

~~(12)~~ "High ~~V~~yolume, ~~L~~low ~~P~~pressure ~~S~~spray", or "HVLP" means equipment used to apply coatings with a spray device which operates at a nozzle air pressure between 0.1 and 10 pounds per square inch gravity (psig).

~~(23)~~ "Motor ~~V~~yehicle" means a vehicle that is self-propelled or designed for self-propulsion as defined in ORS 801.360.

(34) "Motor ~~V~~ehicle ~~R~~efinishing" means the application of surface coating to on-road motor vehicles or non-road motor vehicles, or their existing parts and components, except Original Equipment Manufacturer (OEM) coatings applied at manufacturing plants.

(45) "Motor ~~V~~ehicle ~~R~~efinishing ~~C~~oating" means any coating designed for, or represented by the manufacturer as being suitable for motor vehicle refinishing.

(56) "Motor ~~V~~ehicle ~~R~~efinishing ~~F~~acility" means a location at which motor vehicle refinishing is performed.

(67) "Non-~~R~~oad ~~M~~otor ~~V~~ehicle" means any motor vehicle other than an on-road motor vehicle. "Non-Road Motor Vehicle" includes, but is not limited to, fixed load vehicles, farm tractors, farm trailers, all-terrain vehicles, and golf carts as these vehicles are defined in ORS Chapter 801.

(78) "On-~~R~~oad ~~M~~otor ~~V~~ehicle" means any motor vehicle which is required to be registered under ORS 803.300 or exempt from registration under 803.305(5), 803.305(6), or 803.305(15) through 803.305(19). "On-Road Motor Vehicle" includes, but is not limited to: passenger cars, trucks, vans, motorcycles, mopeds, motor homes, truck tractors, buses, tow vehicles, trailers other than farm trailers, and camper shells.

~~(9) "Person" means the federal government, any state, individual, public or private corporation, political subdivision, governmental agency, municipality, partnership, association, firm, trust, estate, or any other legal entity whatsoever.~~

~~(10) "Portland Air Quality Maintenance Area" or "Portland AQMA" is defined in OAR 340-204-0010. (The Portland AQMA includes portions of Clackamas, Multnomah and Washington Counties.)~~

(814) "Public ~~H~~ighway" means every public way, road, street, thoroughfare and place, including bridges, viaducts and other structures open, used or intended for use of the general public for vehicles or vehicular traffic as a matter of right.

(912) "Vehicle" means any device in, upon or by which any person or property is or may be transported or drawn upon a public highway and includes vehicles that are propelled or powered by any means.

~~(13) "Volatile Organic Compound" or "VOC" means those compounds of carbon defined in OAR 340-200-0020.~~

~~[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission~~that [EQC adopted](#) under OAR 340-200-0040.}

Stat. Auth.: ORS 468.020 [& 468A.025](#)

Stats. Implemented: ORS 468A.025

Hist.: DEQ 13-1995, f. & cert. ef. 5-25-95; DEQ 16-1996, f. & cert. ef. 8-14-96; DEQ 7-1999, f. 5-21-99, cert. ef. 7-12-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0710

**340-242-0620**

## **Requirements for Motor Vehicle Refinishing in Portland AQMA**

Except as provided in section (3) ~~of this rule~~, persons performing motor vehicle refinishing of on-road motor vehicles within the Portland AQMA ~~shall~~must:

(1) Clean any spray equipment, including paint lines, in a device which:

(a) Minimizes solvent evaporation during the cleaning, rinsing, and draining operations;

(b) Recirculates solvent during the cleaning operation so the solvent is reused; and

(c) Collects spent solvent to be available for proper disposal or recycling; and

(2) Apply motor vehicle refinishing coatings by one of the following methods:

(a) High Volume Low Pressure spray equipment, operated and maintained in accordance with the manufacturer's recommendations;

(b) Electrostatic application equipment, operated and maintained in accordance with the manufacturer's recommendations;

(c) Dip coat application;

(d) Flow coat application;

(e) Brush coat application;

(f) Roll coat application;

(g) Hand-held aerosol cans; or

(h) Any other coating application method which can be demonstrated to effectively control VOC emissions, and which has been approved in writing by ~~the Department~~DEQ.

(3) This rule ~~shall~~is not appliicabley to any person who performs motor vehicle refinishing without compensation, and who performs refinishing on two or fewer on-road motor vehicles, or portions thereof, in any calendar year.

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

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.0235

Stats. Implemented: ORS 468A.025 & 468A.035

Hist.: DEQ 13-1995, f. & cert. ef. 5-25-95; DEQ 7-1999, f. 5-21-99, cert. ef. 7-12-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0740

**340-242-0630**

## **Inspecting and Testing Requirements**

The owner or operator of any facility subject to OAR 340-242-0600 through 340-242-0630 ~~shall~~must, at any reasonable time, make the facility available for inspection by ~~the Department~~DEQ.

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

Stat. Auth.: ORS 468.020 & ~~ORS~~ 468A.0235

Stats. Implemented: ORS 468.095, 468A.025 & 468A.035

Hist.: DEQ 13-1995, f. & cert. ef. 5-25-95; DEQ 7-1999, f. 5-21-99, cert. ef. 7-12-99; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0760

## **Spray Paint**

### **340-242-0700**

#### **Applicability**

~~OAR 340-242-0700 through 340-242-0750 apply to any manufacturer, distributor, retailer or commercial applicator of spray paint for sale or use in the Portland AQMA.~~

~~[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 468.020 & ORS 468A.035~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 13-1995, f. & cert. ef. 5-25-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0900~~

### **340-242-0710**

#### **Definitions**

~~The definitions in OAR 340-200-0020, 340-204-0010 and this rule apply in 340-242-0700 through 340-242-0750. If the same term is defined in this rule and 340-200-0020 or 340-204-0010, the definition in this rule applies in 340-242-0700 through 340-242-0750.~~

~~(1) "Adhesive" means a product used to bond one surface to another.~~

~~(2) "Anti-Static Spray" means a product used to prevent or inhibit the accumulation of static electricity.~~

~~(3) "Art Fixative or Sealant" means a clear coating, including art varnish, workable art fixative, and ceramic coating, which is designed and labeled exclusively for application to paintings, pencil, chalk, or pastel drawings, ceramic art pieces, or other closely related art uses, to provide a final protective coating or to fix preliminary stages of art work while providing a workable surface for subsequent revisions.~~

~~(4) "ASTM" means the American Society for Testing and Materials.~~

- (5) ~~"Auto Body Primer" means an automotive primer or primer surfacer coating designed and labeled exclusively to be applied to a vehicle body substrate for the purpose of corrosion resistance and building a repair area which can be sanded to a smooth condition after drying.~~
- (6) ~~"Automotive Bumper and Trim Product" means a product, including adhesion promoters and chip sealants, designed and labeled exclusively to repair and refinish automotive bumpers and plastic trim parts.~~
- (7) ~~"Automotive Underbody Coating" means a flexible coating which contains asphalt or rubber and is labeled exclusively for use on the underbody of motor vehicles to resist rust, abrasion and vibration, and to deaden sound.~~
- (8) ~~"Aviation Propeller Coating" means a coating designed and labeled exclusively to provide abrasion resistance and corrosion protection for aircraft propellers.~~
- (9) ~~"Aviation or Marine Primer" means a coating designed and labeled exclusively to meet federal specification TT-P-1757.~~
- (10) ~~"Belt Dressing" means a product applied on auto fan belts, water pump belting, power transmission belting, industrial equipment belting, or farm machinery belting to prevent slipping, and to extend belt life.~~
- (11) ~~"Cleaner" means a product designed and labeled primarily to remove soil or other contaminants from surfaces.~~
- (12) ~~"Clear Coating" means a coating which is colorless, containing resins but no pigments, except flatting agents, and is designed and labeled to form a transparent or translucent solid film.~~
- (13) ~~"Coating Solids" means the nonvolatile portion of a spray paint, consisting of the film forming ingredients, including pigments and resins.~~
- (14) ~~"Complying spray paint" means a spray paint which complies with the VOC content limits in OAR 340-242-0720.~~
- (15) ~~"Consumer" means any person who purchases or acquires any spray paint for personal, family, or household use. Persons acquiring a spray paint product for resale are not considered consumers of that product.~~
- (16) ~~"Commercial Applicator" means any person who purchases, acquires, applies, or contracts for the application of spray paint for commercial, industrial or institutional uses, or any person who applies spray paint in the course of an activity from which compensation is derived.~~
- (17) ~~"Corrosion Resistant Brass, Bronze, or Copper Coating" means a clear coating formulated and labeled exclusively to prevent tarnish and corrosion of uncoated brass, bronze or copper metal surfaces.~~
- (18) ~~"Department" means the Oregon Department of Environmental Quality.~~
- (19) ~~"Distributor" means any person who sells or supplies spray paint for the purposes of resale or distribution in commerce. "Distributor" includes activities of a self-distributing retailer related to the distribution of products to individual retail outlets. "Distributor" does not include manufacturers except for a manufacturer who sells or supplies spray paint products directly to a retail outlet. "Distributor" does not include consumers.~~

~~(20) "Dye" means a product containing no resins which is used to color a surface or object without building a film.~~

~~(21) "Electrical Coating" means a coating designed and labeled to be used exclusively to coat electrical components such as electric motor windings to provide electrical insulation or corrosion protection.~~

~~(22) "Enamel" means a coating which cures by chemical cross-linking of its base resin and is not resolvable in its original solvent.~~

~~(23) "Engine Paint" means a coating designed and labeled exclusively as such, which is used exclusively to coat engines and their components.~~

~~(24) "Environmental Protection Agency" or "EPA" means the United States Environmental Protection Agency.~~

~~(25) "Exact Match Finish, Automotive" means a topcoat which meets all of the criteria in subsections (a) through (c) of this section:~~

~~(a) The product is designed and labeled exclusively to exactly match the color of an original, factory applied automotive coating during the touch-up of automobile finishes;~~

~~(b) The product is labeled with the original equipment manufacturer's name for which it was formulated; and~~

~~(c) The product is labeled with one of the following:~~

~~(A) The original equipment manufacturer's (OEM) color code;~~

~~(B) The color name; or~~

~~(C) Other designation identifying the specific OEM color to the purchaser.~~

~~(d) Notwithstanding subsections (a) through (c) of this section, automotive clear coatings designed and labeled exclusively for use over automotive exact match finishes to replicate the original factory applied finish shall be considered to be automotive exact match finishes.~~

~~(26) "Exact Match Finish, Engine Paint" means a coating which meets all of the criteria in subsections (a) through (c) of this section:~~

~~(a) The product is designed and labeled exclusively to exactly match the color of an original, factory applied engine paint;~~

~~(b) The product is labeled with the original equipment manufacturer's name for which it was formulated; and~~

~~(c) The product is labeled with one of the following:~~

~~(A) The original equipment manufacturer's (OEM) color code;~~

~~(B) The color name; or~~

~~(C) Other designation identifying the specific OEM color to the purchaser.~~

~~(27) "Exact Match Finish, Industrial" means a coating which meets all of the criteria in sub-sections (a) through (c) of this section:~~

~~(a) The product is designed and labeled exclusively to exactly match the color of an original, factory-applied industrial coating during the touch-up of manufactured products;~~

~~(b) The product is labeled with the original equipment manufacturer's name for which it was formulated; and~~

~~(c) The product is labeled with one of the following:~~

~~(A) The original equipment manufacturer's (OEM) color code;~~

~~(B) The color name; or~~

~~(C) Other designation identifying the specific OEM color to the purchaser.~~

~~(28) "Exempt compounds" means compounds of carbon specifically excluded from the definition of VOC.~~

~~(29) "Flat Paint Product" means a coating which, when fully dry, registers specular gloss less than or equal to 15 on an 85° gloss meter, or less than or equal to 5 on a 60° gloss meter, or which is labeled as a flat coating.~~

~~(30) "Flatting Agent" means a compound added to a coating to reduce the gloss of the coating without adding color to the coating.~~

~~(31) "Floral Spray" means a coating designed and labeled exclusively for use on fresh flowers, dried flowers, or other items in a floral arrangement for the purpose of coloring, preserving or protecting their appearance.~~

~~(32) "Fluorescent Coating" means a coating labeled as such which converts absorbed incident light energy into emitted light of a different hue.~~

~~(33) "Glass Coating" means a coating designed and labeled exclusively to be applied to glass or other transparent material, to create a soft, translucent light effect, or to create a tinted or darkened color while retaining transparency.~~

~~(34) "Ground/Traffic Marking Coating" means a coating designed and labeled exclusively to be applied to dirt, gravel, grass, concrete, asphalt, warehouse floors, or parking lots. Such coatings must be in a container equipped with a valve and sprayhead designed to direct the spray downward when the can is held in an inverted position.~~

~~(35) "High Temperature Coating" means a coating, excluding engine paint, which is designed and labeled exclusively for use on substrates which will, in normal use, be subjected to temperatures in excess of 400° Fahrenheit.~~

~~(36) "Hobby/Model/Craft Coating" means a coating which is designed and labeled exclusively for hobby applications and is sold in aerosol containers of 6 ounces in weight or less.~~

~~(37) "Ink" means a fluid or viscous substance used in the printing industry to produce letters, symbols or illustrations, but not to coat an entire surface.~~

~~(38) "Lacquer" means a thermoplastic film-forming finish dissolved in organic solvent, which dries primarily by solvent evaporation, and is resolvable in its original solvent.~~

~~(39) "Layout Fluid" or "Toolmaker's Ink" means a coating designed and labeled exclusively to be sprayed on metal, glass or plastic, to provide a glare-free surface on which to scribe designs, patterns or engineering guide lines prior to shaping the piece.~~

~~(40) "Leather Preservative" means a leather treatment material applied exclusively to clean, condition or preserve leather.~~

~~(41) "Lubricant" means a substance such as oil, petroleum distillates, grease, graphite, silicone, lithium, etc., that is applied to surfaces to reduce friction, heat, or wear when applied between surfaces.~~

~~(42) "Manufacturer" means the company, firm or establishment which is listed on the product container or package. If the product container or package lists two companies, firms or establishments, the manufacturer is the party which the product was "manufactured for" or "distributed by", as noted on the product container or package.~~

~~(43) "Marine Spar Varnish" means a coating designed and labeled to be exclusively used as a protective sealant for marine wood products.~~

~~(44) "Maskant" means a coating applied directly to a component to protect surfaces during chemical milling, anodizing, aging, bonding, plating, etching, or other chemical operations.~~

~~(45) "Metallic Coating" means a topcoat which contains at least 0.5 percent by weight elemental metallic pigment in the formulation, including propellant, and is labeled as "metallic", or with the name of a specific metallic finish such as "gold", "silver", or "bronze".~~

~~(46) "Mold Release" means a coating applied to molds to prevent products from sticking to mold surfaces.~~

~~(47) "Multi-Component Kit" means a spray paint system which requires the application of more than one component, (e.g. foundation coat and top coat), where both components are sold together in one package.~~

~~(48) "Noncomplying spray paint" means a spray paint which does not comply with the VOC content limits in OAR 340-242-0720.~~

~~(49) "Non-Flat Paint Product" means a coating which, when fully dry, registers a specular gloss greater than 15 on an 85° gloss meter or greater than 5 on a 60° gloss meter.~~

~~(50) "Photograph Coating" means a coating designed and labeled exclusively to be applied to finished photographs to allow corrective retouching, protection of the image, changes in gloss level, or to cover fingerprints.~~

~~(51) "Pleasure Craft" means privately owned boats used for noncommercial purposes.~~

~~(52) "Pleasure Craft Finish Primer/Surfacer/Undercoat" means any coating designed and labeled exclusively to be applied before the application of a pleasure craft topcoat for the purpose of corrosion resistance and adhesion of a topcoat, and which promotes a uniform surface by filling in surface imperfections.~~



~~(53) "Pleasure Craft Topcoat" means a coating designed and labeled exclusively to be applied to a pleasure craft as a final coat above the water line and above and below the water line when stored out of water. This category does not include clear coatings.~~

~~(54) "Portland Air Quality Maintenance Area" or "Portland AQMA" is defined in OAR 340-204-0010. (The Portland AQMA includes portions of Clackamas, Multnomah and Washington Counties.)~~

~~(55) "Primer" means a coating labeled as such, which is designed to be applied to a surface to promote a bond between that surface and subsequent coats.~~

~~(56) "Propellant" means a liquefied or compressed gas that is used in whole or in part, such as a cosolvent, to expel a liquid or other material from a container.~~

~~(57) "Retailer" means any person who sells, supplies, or offers spray paint for sale directly to consumers or commercial applicators.~~

~~(58) "Retail Outlet" means any establishment where spray paints are sold, supplied, or offered for sale directly to consumers or commercial applicators.~~

~~(59) "Rust Converter" means a product which is designed and labeled exclusively to convert rust to an inert material, and which has a minimum acid content of 0.5 percent by weight, and which has a maximum coating solids content of 0.5 percent by weight.~~

~~(60) "Shellac Sealer" means a clear or pigmented coating formulated solely with the resinous secretion of the lac beetle (Laccifer lacca), thinned with alcohol, and formulated to dry by evaporation without a chemical reaction.~~

~~(61) "Slip-Resistant Coating" means a coating designed and labeled exclusively as such which is formulated with synthetic grit, and used as a safety coating.~~

~~(62) "Spatter Coating/Multicolor Coating" means a coating labeled exclusively as such in which spots, globules, or spatters of contrasting colors appear on or within the surface of a contrasting or similar background.~~

~~(63) "Spray Paint" means a pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand-held application, or for use in specialized equipment for ground traffic/marketing applications.~~

~~(64) "Spray Paint Category" means the applicable category which best describes a spray paint listed in this rule.~~

~~(65) "Stain" means a coating labeled as such which is designed and labeled to change the color of a surface without concealing the surface from view.~~

~~(66) "Topcoat" means a coating applied over any coating, for the purpose of appearance, identification, or protection.~~

~~(67) "Vinyl/Fabric/Polycarbonate Coating" means a coating designed and labeled exclusively to coat vinyl, fabric, or polycarbonate substrates.~~

~~(68) "Volatile Organic Compound" or "VOC" means those compounds of carbon defined in division 200. For purposes of determining compliance with VOC content limits, VOC shall be measured by an applicable method identified in OAR 340-242-0750.~~

~~(69) "VOC Content" means the ratio of the weight of VOC to the total weight of the product contents expressed as follows: [Equation not included. See ED. NOTE.]~~

~~(70) "Webbing/Veiling Coating" means a spray product designed and labeled exclusively to produce a stranded or spider-webbed decorative effect.~~

~~(71) "Weld Through Primer" means a coating designed and labeled exclusively to provide a bridging or conducting effect to provide corrosion protection following welding.~~

~~(72) "Wood Stain" means a coating which is formulated to change the color of a wood surface without concealing the surface from view.~~

~~(73) "Wood Touch-Up/Repair/Restoration Coatings" mean coatings designed and labeled exclusively to provide an exact color or sheen match on finished wood products.~~

~~[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.]~~

~~[ED. NOTE: Equations referenced are available from the agency.]~~

~~Stat. Auth.: ORS 468.020~~

~~Stats. Implemented: ORS 468A.025~~

~~Hist.: DEQ 13-1995, f. & cert. ef. 5-25-95; DEQ 16-1996, f. & cert. ef. 8-14-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0910~~

## **~~340-242-0720~~**

### **~~Spray Paint Standards and Exemptions~~**

~~(1) Where required by OAR 340-242-0730, spray paint shall not exceed the VOC content limits in Table F, as modified by the special conditions and exemptions in sections (2) and (3) of this rule. [Table not included. See ED. NOTE.]~~

~~(2) Special Conditions. The following conditions shall apply to spray paint subject to VOC content limits under section (1) of this rule:~~

~~(a) The total weight of VOC contained in a multi-component kit shall not exceed the total weight of VOC that would be allowed in the multi-component kit had each component product met the applicable VOC standards.~~

~~(b)(A) Except as provided in paragraph (B) of this subsection, if anywhere on the principal display panel of any spray paint or in any promotion of the product, any representation is made that the product may be used as, or is suitable for use as a spray paint for which a lower VOC standard is specified in section (1) of this rule, then the lower VOC standard shall apply.~~

~~(B) If a spray paint is subject to both general coating limit and a specialty coating limit under section (1) of this rule, and the product meets all the criteria of the applicable specialty coating category as specified in OAR 340-242-0710, then the specialty coating limit shall apply instead of the general coating limit.~~

~~(3) Exemption. Section (1) of this rule shall not apply to aerosol lubricants, mold releases, automotive underbody coating, electrical coatings, cleaners, belt dressings, anti-static sprays, layout fluids and removers, adhesives, maskants, rust converters, dyes, inks, leather preservatives, or spray paint assembled by adding bulk paint to aerosol containers of propellant and solvent used for minor finish repairs during the original manufacture of products.~~

~~[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.]~~

~~[ED. NOTE: The Table(s) referenced in this rule is not printed in the OAR Compilation. Copies are available from the agency.]~~

~~Stat. Auth.: ORS 468.020 & ORS 468A.035~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 13-1995, f. & cert. ef. 5-25-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0920~~

## **340-242-0730**

### **Requirements for Manufacture, Sale and Use of Spray Paint**

~~(1) Manufacturers. Except as provided in section (6) of this rule, any person who manufactures spray paint after July 1, 1996 which is sold, offered for sale, supplied or distributed, directly or indirectly, to a retail outlet in the Portland AQMA shall:~~

~~(a) Manufacture complying spray paint for spray paint marketed in the Portland AQMA;~~

~~(b) Clearly display the following information on each product container such that it is readily observable upon hand-held inspection without removing or disassembling any portion of the product container or packaging:~~

~~(A) The maximum VOC content of the spray paint, expressed as a percentage by weight;~~

~~(B) The spray paint category as defined in OAR 340-242-0710, or an abbreviation of the spray paint category; and~~

~~(C) The date on which the product was manufactured, or a code indicating such date; and~~

~~(c) Notify direct purchasers of products manufactured for sale within the Portland AQMA upon determining that any noncomplying spray paint has been supplied in violation of this rule.~~

~~(2) Distributors. Except as provided in section (6) of this rule, any distributor of spray paint manufactured after July 1, 1996 which is sold, offered for sale, supplied or distributed to a retail outlet within the Portland AQMA shall:~~

~~(a) Distribute to the Portland AQMA only spray paints that are labeled as required under subsection (1)(b) of this rule;~~

~~(b) Distribute to the Portland AQMA only spray paints labeled with VOC contents that meet the VOC limits specified in OAR 340-242-0720; and~~

~~(c) Notify direct purchasers of products distributed for sale within the Portland AQMA upon determining that any noncomplying spray paint has been supplied in violation of this rule.~~

~~(3) Retailers.~~

~~(a) Except as provided in section (6) of this rule, no retailer shall knowingly sell within the Portland AQMA any noncomplying spray paint manufactured after July 1, 1996.~~

~~(b) Upon notification by the Department, a manufacturer, or a distributor that any noncomplying spray paint has been supplied, a retailer shall remove noncomplying spray paint from consumer accessible areas of retail outlets within the Portland AQMA.~~

~~(4) Commercial Applicators. Except as provided in section (6) of this rule, no commercial applicator shall, within the Portland AQMA, knowingly use or contract for the use of any noncomplying spray paint manufactured after July 1, 1996.~~

~~(5) Label Alteration. No person shall remove, alter, conceal or deface the information required in subsection (1)(b) of this rule prior to final sale of the product.~~

~~(6) Exception. For spray paint which has been granted a compliance extension under OAR 340-242-0770, this rule applies to spray paint manufactured after the date specified in the compliance extension.~~

~~[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]~~

~~Stat. Auth.: ORS 468A~~

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

~~Hist.: DEQ 13-1995, f. & cert. ef. 5-25-95; DEQ 22-1996, f. & cert. ef. 10-22-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0930~~

## **~~340-242-0740~~**

### **~~Recordkeeping and Reporting Requirements~~**

~~(1) Recordkeeping. Manufacturers subject to OAR 340-242-0730 shall maintain the following records for at least 2 years after a product is sold, offered for sale, supplied or distributed by the manufacturer, directly or indirectly, to a retail outlet in the Portland AQMA.~~

~~(a) VOC content records of spray paint based methods provided in OAR 340-242-0750;~~

~~(b) An explanation of any code indicating the date of manufacture of any spray paint; and~~

~~(c) Information used to substantiate an application for a compliance extension OAR 340-242-0770.~~

~~(2) Reporting. Following request and within a reasonable period of time, records, specified in section (1) of this rule shall be made available to the Department.~~

~~(3) Exemption from disclosure. If a person claims that any writing, as that term is define in ORS 192.410(5), is confidential or otherwise exempt from disclosure, in whole or in part, the person shall comply with the procedures specified in OAR 340-242-0780.~~

~~[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 468.020 & ORS 468A.035~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 13-1995, f. & cert. ef. 5-25-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0940~~

### **340-242-0750**

#### **Inspection and Testing Requirements**

~~(1) The owner or operator of a facility subject to OAR 340-242-0700 through 340-242-0750 shall, at any reasonable time, make the facility available for inspection by the Department.~~

~~(2) Upon request of the Department, any person subject to OAR 340-242-0700 through 340-242-0750 shall furnish samples of spray paint products selected by the Department from available stock for testing by the Department to determine compliance with 340-242-0720.~~

~~(3) Except as provided in section (5) of this rule, testing to determine compliance with OAR 340-242-0720 shall be performed using:~~

~~(a) VOC Content. The VOC content shall be determined by:~~

~~(A) The procedures set forth in Bay Area Air Quality Management District Manual of Procedures, Volume III, Laboratory Procedures, Method 35, "Determination of Volatile Organic Compounds, (VOC) in Solvent Based Aerosol Paints," as amended January 19, 1994, and, for water-containing spray paints, by ASTM D 5325-92, "Standard Test Method for Determination of Weight Percent Volatile Content of Water Borne Aerosol Paints", November 15, 1992; or~~

~~(B) Calculation of VOC content from records amounts of constituents used to manufacture the product and the chemical compositions of the individual product constituents.~~

~~(b) Exempt Compounds. If a method specified in subsection (a) of this section to measure VOC also measures exempt compounds, the exempt compounds may be excluded from the VOC content if the amount of such compounds is accurately quantified. The Department may require a manufacturer to provide methods and results demonstrating, to the satisfaction of the Department, the amount of exempt compounds in the spray paint of the spray paint's emissions.~~

~~(4) Except as provided in section (5) of this rule, testing to establish the spray paint category as defined in OAR 340-242-0710 shall be performed using:~~

~~(a) Metal Content. The metal content of metallic aerosol coating products shall be determined by South Coast Air Quality Management District Test Method 311 (SCAQMD "Laboratory Methods of Analysis for Enforcement Samples" manual), June 1, 1991, after removal of the propellant following the procedure in ASTM Method 5325-92, "Standard Test Method for Determination of Weight Percent Volatile Content of Water-Borne Aerosol Paints", November 15, 1992.~~

~~(b) Specular Gloss. Specular gloss of flat and non-flat coatings shall be determined by ASTM Method D 523-89, March 31, 1989.~~

~~(c) Acid Content. The acid content of rust converters shall be determined by ASTM Method D 1613-85, "Standard Test Method for Acidity in Volatile Solvents and Chemical Inter-mediate used in Paint, Varnish, Lacquer, and Related Products", May 31, 1985, after removal of the propellant following the procedure in ASTM Method 5325-92, "Standard Test Method for Determination of Weight Percent Volatile Content of Water-Borne Aerosol Paints", November 15, 1992.~~

~~(5) Alternative test methods which are shown to accurately determine the VOC content, exempt compounds, metal content, specular gloss, or acid content in a spray paint may also be used if approved in writing by EPA and the Department.~~

~~[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 468.020 & ORS 468A.035~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 13-1995, f. & cert. ef. 5-25-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0950~~

## **~~Area Source Common Provisions~~**

### **~~340-242-0760~~**

#### **~~Applicability~~**

~~OAR 340-242-0760 through 340-242-0790 apply to 340-242-0600 through 340-242-0750. [Repealed](#)~~

~~[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 468.020 & ORS 468A.035~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 13-1995, f. & cert. ef. 5-25-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-1100~~

## **340-242-0770**

### **Compliance Extensions**

~~Any manufacturer, as defined in OAR 340-242-0710, who cannot comply with the requirements specified in 340-242-0700 to 340-242-0750 by the applicable compliance date because of conditions specified in section (4) of this rule may apply in writing to the Department for a compliance extension of up to 3 years in renewable 1 year increments.~~

~~(1) A manufacturer shall apply in writing to the Department for any compliance extension under this section. Information claimed by the applicant as confidential or otherwise exempt from disclosure shall be submitted in accordance with OAR 340-242-0780. The application shall include:~~

~~(a) An explanation of the specific grounds addressing each subsection under section (4) of this rule on which the compliance extension is sought;~~

~~(b) The requested terms and conditions;~~

~~(c) The specific method(s) by which compliance with the requested terms and conditions will be achieved;~~

~~(d) Any interim measures which may be taken during the period of the compliance extension to limit the amount of emissions in excess of the rule limits; and~~

~~(e) If applicable, any compliance extension, alternate control requirement or variance order granted by another local, state or federal air pollution control agency.~~

~~(2) Within 30 days of receipt of the compliance extension application, the Department shall determine whether an application is complete.~~

~~(3) Within 90 days after an application has been deemed complete, the Department shall determine whether, under what conditions, and to what extent, a compliance extension shall be approved. The applicant and the Department may mutually agree to extend the period for making a determination, and additional supporting documentation may be submitted by the applicant before the determination is reached.~~

~~(4) In considering whether to approve a compliance extension, the Department shall consider the following:~~

~~(a) Conditions beyond the control of the applicant;~~

~~(b) Special circumstances which render strict compliance unreasonable, burdensome or impractical due to special physical conditions or cause;~~

~~(c) Strict compliance would result in substantial curtailment or closing down of a business, plant or operation;  
or~~

~~(d) No other alternative facility or method of handling is yet available.~~

~~(5) Any compliance extension order shall specify terms and conditions, including a date by which final compliance shall be achieved. The final compliance date shall not exceed 3 years after the applicable compliance date. A compliance extension shall be granted in 1 year increments which may be renewed until the final compliance date upon a showing by the manufacturer that any increments of progress and other terms and conditions in the order have been met.~~

~~(6) The Department shall notify the applicant in writing of the determination under section (3) of this rule and the terms and conditions established under section (5) of this rule.~~

~~(7) Notwithstanding Section (4) of this rule, if, prior to the applicable compliance date, a manufacturer, as defined in OAR 340-242-0710, submits to the Department a variance order granted by the California Air Resources Board (CARB) which is valid as of February 20, 1995, the manufacturer shall be granted a 1 year extension from the applicable compliance date. Such compliance extensions may be revoked by the Department if the Department believes that the manufacturer is not in compliance with the terms and conditions of the CARB variance order.~~

~~(8) For any product for which a compliance extension has been approved pursuant to this rule, the manufacturer shall notify the Department in writing within 30 days if the manufacturer learns that information submitted to the Department under this rule has changed in a manner which could modify the basis of the Department's approval.~~

~~(9) If the Department believe that a product for which a compliance extension has been granted no longer meets the criteria for a compliance extension specified in this rule, the Department may modify or revoke the extension as necessary to ensure that the product will meet these criteria. The Department shall notify the applicant in writing if a compliance extension is modified or revoked under this section.~~

~~[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 468.020 & ORS 468A.035~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 13-1995, f. & cert. ef. 5-25-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-1110~~

## **340-242-0780**

### **Exemption from Disclosure to the Public**

~~(1) If a person claims that any writing, as that term is defined in ORS 192.410(5), is confidential or otherwise exempt from disclosure, in whole or in part, the person shall comply with the following procedures:~~

~~(a) The writing shall be clearly marked with a request for exemption from disclosure. For a multi-page writing, each page shall be so marked.~~

~~(b) The person shall state the specific statutory provision under which it claims exemption from disclosure and explain why the writing meets the requirements of that provision.~~



~~(c) For writings that contain both exempt and non-exempt material, the proposed exempt material shall be clearly distinguishable from the non-exempt material. If possible, the exempt material shall be arranged so that it is placed on separate pages from the non-exempt material.~~

~~(2) For a writing to be considered exempt from disclosure as a "trade secret," it shall meet all of the following criteria:~~

~~(a) The information shall not be patented;~~

~~(b) It shall be known only to a limited number of individuals within a commercial concern who have made efforts to maintain the secrecy of the information;~~

~~(c) It shall be information which derives actual or potential economic value from not being disclosed to other persons; and~~

~~(d) It shall give its users the chance to obtain a business advantage over competitors not having the information.~~

~~[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 468.020 & ORS 468A.035~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 13-1995, f. & cert. ef. 5-25-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-1120~~

## **~~340-242-0790~~**

### **~~Future Review~~**

~~Within a reasonable period of time following adoption by the United States Environmental Protection Agency of regulations to reduce VOC emissions from one or more products subject to OAR 340-242-0700 through OAR 340-242-0750, the Department shall provide the following information to the Environmental Quality Commission:~~

~~(1) A comparison of the federal regulation with OAR 340-242-0700 through 340-242-0750;~~

~~(2) An estimate of the change in emissions which would occur from repeal of provisions in OAR 340-242-0700 through 340-242-0750 applicable to such product or products;~~

~~(3) An assessment of the effect of eliminating or modifying the provisions of OAR 340-242-0700 through 340-242-0750 on the State Implementation Plan adopted under 340-200-0040, including any need for substitute measures; and~~

~~(4) A recommendation regarding amendment to eliminate such provisions and, if applicable, a schedule for amendment.~~

~~[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 468.020 & ORS 468A.035~~

~~Stats. Implemented: ORS 468A.035~~

~~Hist.: DEQ 13-1995, f. & cert. ef. 5-25-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-1130~~

## DIVISION 244

### OREGON FEDERAL HAZARDOUS AIR POLLUTANT PROGRAM

#### General Provisions for Stationary Sources

340-244-0040

#### List of Hazardous Air Pollutants

For purposes of this Division the Commission EQC adopts by reference the pollutants, including groups of substances and mixtures, listed in section 112(b), as Hazardous Air Pollutants (Table 1).

[ED. NOTE: Tables referenced are ~~available from the agency~~ not included in rule text. [Click here for PDF copy of tables.](#)]

Stat. Auth.: ORS 468.020 & 468A.025

Stats. Implemented: ORS 468A.025~~40~~

| TABLE 1<br>(OAR 340-244-0040)<br>LIST OF HAZARDOUS AIR POLLUTANTS |                       |
|-------------------------------------------------------------------|-----------------------|
| CAS Number                                                        | Chemical Name         |
| 75-07-0                                                           | Acetaldehyde          |
| 60-35-5                                                           | Acetamide             |
| 75-05-8                                                           | Acetonitrile          |
| 98-86-2                                                           | Acetophenone          |
| 53-96-3                                                           | 2-Acetylaminofluorene |
| 107-02-8                                                          | Acrolein              |
| 79-06-1                                                           | Acrylamide            |
| 79-10-7                                                           | Acrylic acid          |
| 107-13-1                                                          | Acrylonitrile         |
| 107-05-1                                                          | Allyl chloride        |
| 92-67-1                                                           | 4-Aminobiphenyl       |
| 62-53-3                                                           | Aniline               |

**TABLE 1**  
**(OAR 340-244-0040)**  
**LIST OF HAZARDOUS AIR POLLUTANTS**

| CAS Number | Chemical Name                             |
|------------|-------------------------------------------|
| 90-04-0    | o-Anisidine                               |
| 1332-21-4  | Asbestos                                  |
| 71-43-2    | Benzene (including benzene from gasoline) |
| 92-87-5    | Benzidine                                 |
| 98-07-7    | Benzotrichloride                          |
| 100-44-7   | Benzyl chloride                           |
| 92-52-4    | Biphenyl                                  |
| 117-81-7   | Bis(2-ethylhexyl) phthalate (DEHP)        |
| 542-88-1   | Bis(chloromethyl)ether                    |
| 75-25-2    | Bromoform                                 |
| 106-99-0   | 1,3-Butadiene                             |
| 156-62-7   | Calcium cyanamide                         |
| 133-06-2   | Captan                                    |
| 63-25-2    | Carbaryl                                  |
| 75-15-0    | Carbon disulfide                          |
| 56-23-5    | Carbon tetrachloride                      |
| 463-58-1   | Carbonyl sulfide                          |
| 120-80-9   | Catechol                                  |
| 133-90-4   | Chloramben                                |
| 57-74-9    | Chlordane                                 |

**TABLE 1**  
**(OAR 340-244-0040)**  
**LIST OF HAZARDOUS AIR POLLUTANTS**

| CAS Number | Chemical Name                               |
|------------|---------------------------------------------|
| 7782-50-5  | Chlorine                                    |
| 79-11-8    | Chloroacetic acid                           |
| 532-27-4   | 2-Chloroacetophenone                        |
| 108-90-7   | Chlorobenzene                               |
| 510-15-6   | Chlorobenzilate                             |
| 67-66-3    | Chloroform                                  |
| 107-30-2   | Chloromethyl methyl ether                   |
| 126-99-8   | Chloroprene                                 |
| 1319-77-3  | Cresols/Cresylic acid (isomers and mixture) |
| 95-48-7    | o-Cresol                                    |
| 108-39-4   | m-Cresol                                    |
| 106-44-5   | p-Cresol                                    |
| 98-82-8    | Cumene                                      |
| 94-75-7    | 2,4-D, salts and esters                     |
| 3547-04-4  | DDE                                         |
| 334-88-3   | Diazomethane                                |
| 132-64-9   | Dibenzofurans                               |
| 96-12-8    | 1,2-Dibromo-3-chloropropane                 |
| 84-74-2    | Dibutylphthalate                            |
| 106-46-7   | 1,4-Dichlorobenzene(p)                      |

**TABLE 1**  
**(OAR 340-244-0040)**  
**LIST OF HAZARDOUS AIR POLLUTANTS**

| CAS Number | Chemical Name                                 |
|------------|-----------------------------------------------|
| 91-94-1    | 3,3-Dichlorobenzidene                         |
| 111-44-4   | Dichloroethyl ether (Bis(2-chloroethyl)ether) |
| 542-75-6   | 1,3-Dichloropropene                           |
| 62-73-7    | Dichlorvos                                    |
| 111-42-2   | Diethanolamine                                |
| 121-69-7   | N,N-Diethyl aniline (N,N-Dimethylaniline)     |
| 64-67-5    | Diethyl sulfate                               |
| 119-90-4   | 3,3-Dimethoxybenzidine                        |
| 60-11-7    | Dimethyl aminoazobenzene                      |
| 119-93-7   | 3,3'-Dimethyl benzidine                       |
| 79-44-7    | Dimethyl carbamoyl chloride                   |
| 68-12-2    | Dimethyl formamide                            |
| 57-14-7    | 1,1-Dimethyl hydrazine                        |
| 131-11-3   | Dimethyl phthalate                            |
| 77-78-1    | Dimethyl sulfate                              |
| 534-52-1   | 4,6-Dinitro-o-cresol, and salts               |
| 51-28-5    | 2,4-Dinitrophenol                             |
| 121-14-2   | 2,4-Dinitrotoluene                            |
| 123-91-1   | 1,4-Dioxane (1,4-Diethyleneoxide)             |
| 122-66-7   | 1,2-Diphenylhydrazine                         |

**TABLE 1**  
**(OAR 340-244-0040)**  
**LIST OF HAZARDOUS AIR POLLUTANTS**

| CAS Number | Chemical Name                               |
|------------|---------------------------------------------|
| 106-89-8   | Epichlorohydrin (1-Chloro-2,3-epoxypropane) |
| 106-88-7   | 1,2-Epoxybutane                             |
| 140-88-5   | Ethyl acrylate                              |
| 100-41-4   | Ethyl benzene                               |
| 51-79-6    | Ethyl carbamate (Urethane)                  |
| 75-00-3    | Ethyl chloride (Chloroethane)               |
| 106-93-4   | Ethylene dibromide<br>(Dibromoethane)       |
| 107-06-2   | Ethylene dichloride (1,2-Dichloroethane)    |
| 107-21-1   | Ethylene glycol                             |
| 151-56-4   | Ethylene imine (Aziridine)                  |
| 75-21-8    | Ethylene oxide                              |
| 96-45-7    | Ethylene thiourea                           |
| 75-34-3    | Ethylidene dichloride (1,1-Dichloroethane)  |
| 50-00-0    | Formaldehyde                                |
| 76-44-8    | Heptachlor                                  |
| 118-74-1   | Hexachlorobenzene                           |
| 87-68-3    | Hexachlorobutadiene                         |
| 77-47-4    | Hexachlorocyclopentadiene                   |
| 67-72-1    | Hexachloroethane                            |

**TABLE 1**  
**(OAR 340-244-0040)**  
**LIST OF HAZARDOUS AIR POLLUTANTS**

| CAS Number | Chemical Name                             |
|------------|-------------------------------------------|
| 822-06-0   | Hexamethylene-1,6-diisocyanate            |
| 680-31-9   | Hexamethylphosphoramide                   |
| 110-54-3   | Hexane                                    |
| 302-01-2   | Hydrazine                                 |
| 7647-01-0  | Hydrochloric acid                         |
| 7664-39-3  | Hydrogen fluoride (Hydrofluoric acid)     |
| 123-31-9   | Hydroquinone                              |
| 78-59-1    | Isophorone                                |
| 58-89-9    | Lindane (all isomers)                     |
| 108-31-6   | Maleic anhydride                          |
| 67-56-1    | Methanol                                  |
| 72-43-5    | Methoxychlor                              |
| 74-83-9    | Methyl bromide (Bromomethane)             |
| 74-87-3    | Methyl chloride (Chloromethane)           |
| 71-55-6    | Methyl chloroform (1,1,1-Trichloroethane) |
| 60-34-4    | Methyl hydrazine                          |
| 74-88-4    | Methyl iodide (Iodomethane)               |
| 108-10-1   | Methyl isobutyl ketone (Hexone)           |
| 624-83-9   | Methyl isocyanate                         |
| 80-62-6    | Methyl methacrylate                       |



**TABLE 1**  
**(OAR 340-244-0040)**  
**LIST OF HAZARDOUS AIR POLLUTANTS**

| CAS Number | Chemical Name                              |
|------------|--------------------------------------------|
| 1634-04-4  | Methyl tert butyl ether                    |
| 101-14-4   | 4,4-Methylene bis(2-chloroaniline)         |
| 75-09-2    | Methylene chloride<br>(Dichloromethane)    |
| 101-68-8   | Methylene diphenyl diisocyanate<br>(MDI)   |
| 101-77-9   | 4,4-Methylenedianiline                     |
| 91-20-3    | Naphthalene                                |
| 98-95-3    | Nitrobenzene                               |
| 92-93-3    | 4-Nitrobiphenyl                            |
| 100-02-7   | 4-Nitrophenol                              |
| 79-46-9    | 2-Nitropropane                             |
| 684-93-5   | N-Nitroso-N-methylurea                     |
| 62-75-9    | N-Nitrosodimethylamine                     |
| 59-89-2    | N-Nitrosomorpholine                        |
| 56-38-2    | Parathion                                  |
| 82-68-8    | Pentachloronitrobenzene<br>(Quintobenzene) |
| 87-86-5    | Pentachlorophenol                          |
| 108-95-2   | Phenol                                     |
| 106-50-3   | p-Phenylenediamine                         |
| 75-44-5    | Phosgene                                   |

**TABLE 1**  
**(OAR 340-244-0040)**  
**LIST OF HAZARDOUS AIR POLLUTANTS**

| CAS Number | Chemical Name                              |
|------------|--------------------------------------------|
| 7803-51-2  | Phosphine                                  |
| 7723-14-0  | Phosphorus                                 |
| 85-44-9    | Phthalic anhydride                         |
| 1336-36-3  | Polychlorinated biphenyls<br>(Aroclors)    |
| 1120-71-4  | 1,3-Propane sultone                        |
| 57-57-8    | beta-Propiolactone                         |
| 123-38-6   | Propionaldehyde                            |
| 114-26-1   | Propoxur (Baygon)                          |
| 78-87-5    | Propylene dichloride (1,2-Dichloropropane) |
| 75-56-9    | Propylene oxide                            |
| 75-55-8    | 1,2-Propylenimine (2-Methyl aziridine)     |
| 91-22-5    | Quinoline                                  |
| 106-51-4   | Quinone                                    |
| 100-42-5   | Styrene                                    |
| 96-09-3    | Styrene oxide                              |
| 1746-01-6  | 2,3,7,8-Tetrachlorodibenzo-p-dioxin        |
| 79-34-5    | 1,1,2,2-Tetrachloroethane                  |
| 127-18-4   | Tetrachloroethylene<br>(Perchloroethylene) |

**TABLE 1**  
**(OAR 340-244-0040)**  
**LIST OF HAZARDOUS AIR POLLUTANTS**

| CAS Number | Chemical Name                              |
|------------|--------------------------------------------|
| 7550-45-0  | Titanium tetrachloride                     |
| 108-88-3   | Toluene                                    |
| 95-80-7    | 2,4-Toluene diamine                        |
| 584-84-9   | 2,4-Toluene diisocyanate                   |
| 95-53-4    | o-Toluidine                                |
| 8001-35-2  | Toxaphene (chlorinated camphene)           |
| 120-82-1   | 1,2,4-Trichlorobenzene                     |
| 79-00-5    | 1,1,2-Trichloroethane                      |
| 79-01-6    | Trichloroethylene                          |
| 95-95-4    | 2,4,5-Trichlorophenol                      |
| 88-06-2    | 2,4,6-Trichlorophenol                      |
| 121-44-8   | Triethylamine                              |
| 1582-09-8  | Trifluralin                                |
| 540-84-1   | 2,2,4-Trimethylpentane                     |
| 108-05-4   | Vinyl acetate                              |
| 593-60-2   | Vinyl bromide                              |
| 75-01-4    | Vinyl chloride                             |
| 75-35-4    | Vinylidene chloride (1,1-Dichloroethylene) |
| 1330-20-7  | Xylenes (isomers and mixture)              |
| 95-47-6    | o-Xylenes                                  |
| 108-38-3   | m-Xylenes                                  |
| 106-42-3   | p-Xylenes                                  |

| <p>TABLE 1<br/>(OAR 340-244-0040)<br/>LIST OF HAZARDOUS AIR POLLUTANTS</p> |                                                |
|----------------------------------------------------------------------------|------------------------------------------------|
| CAS Number                                                                 | Chemical Name                                  |
| 0                                                                          | Antimony Compounds                             |
| 0                                                                          | Arsenic Compounds (inorganic including arsine) |
| 0                                                                          | Beryllium Compounds                            |
| 0                                                                          | Cadmium Compounds                              |
| 0                                                                          | Chromium Compounds                             |
| 0                                                                          | Cobalt Compounds                               |
| 0                                                                          | Coke Oven Emissions                            |
| 0                                                                          | Cyanide Compounds <sup>1</sup>                 |
| 0                                                                          | Glycol ethers <sup>2</sup>                     |
| 0                                                                          | Lead Compounds                                 |
| 0                                                                          | Manganese Compounds                            |
| 0                                                                          | Mercury Compounds                              |
| 0                                                                          | Fine mineral fibers <sup>3</sup>               |
| 0                                                                          | Nickel Compounds                               |
| 0                                                                          | Polycyclic Organic Matter <sup>4</sup>         |
| 0                                                                          | Radionuclides (including radon) <sup>5</sup>   |
| 0                                                                          | Selenium Compounds                             |

NOTE: For all listings above that contain the word "compounds" and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc.) as part of that chemical's infrastructure.

\*1 X'CN where X = H' or any other group where a formal dissociation may occur. For example KCN or Ca(CN)<sub>2</sub>

\*2 Glycol ethers include mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>-OR'.

Where:

n = 1, 2, or 3;

R = alkyl C7 or less; or

R = phenyl or alkyl substituted phenyl;

R' = H, or alkyl C7 or less; or

OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate. Does not include ethylene glycol monobutyl ether (EGBE, 2-Butoxyethanol)(CAS No. 111-76-2).

\*3 Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.

\*4 Includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100°C.

\*5 A type of atom which spontaneously undergoes radioactive decay.

Stat. Auth.: ORS 468 & 468A

Stats Implemented: ORS 468.020 and 468A.025.

## Emission Standards for Gasoline Dispensing Facilities

### 340-244-0232

#### Purpose

This rule establishes emission limitations and management practices for hazardous air pollutants (HAP) and volatile organic compounds (VOC) emitted from the loading of gasoline storage tanks and dispensing of fuel at gasoline dispensing facilities (GDF). This rule also establishes requirements to demonstrate compliance with the emission limitations and management practices.

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

Stat. Auth.: ORS 468.020 & 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 15-2008, f. & cert. ef 12-31-08

### 340-244-0234

#### Affected Sources

(1) The affected source to which the emission standards apply is each GDF. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank.

(2) The emissions standards in OAR 340-244-0236 through 340-244-0252 do not apply to agricultural operations as defined in ORS 468A.020. Agricultural operations are however required to comply with the Gasoline Dispensing NESHAP, if applicable (40 CFR part 63 subpart CCCCCC).

(3) All GDFs must comply with the requirements of OAR 340-244-0240.

(4) The owner or operator of a GDF must comply with the requirements of OAR 340-244-0242 for the following gasoline storage tanks:

(a) All tanks with a capacity of 250 gallons or more located at GDFs:

(A) Whose annual throughput ~~is exceeds~~ 480,000 gallons of gasoline or more;

(B) Whose ~~average~~ monthly throughput ~~is exceeds~~ 100,000 gallons of gasoline or more; or

(C) In Clackamas, Multnomah, or Washington County whose annual throughput ~~is exceeds~~ 120,000 gallons of gasoline or more.

(b) All tanks with a capacity of 1,500 gallons or more located at GDFs in the Portland AQMA, Medford AQMA, or Salem -Keizer in the SKATS.

(5) The owner or operator of a GDF must comply with the requirements of OAR 340-244-0242(4) for any gasoline storage tank equipped with a vapor balance system.

(6) An affected source must, upon request by DEQ or the EPA Administrator, demonstrate ~~their~~ its annual or monthly throughput. For new or reconstructed affected sources, as specified in OAR 340-244-0236(2) and (3),

recordkeeping to document monthly throughput must begin upon startup of the affected source. For existing sources, as specified in OAR 340-244-0236(4), recordkeeping to document monthly throughput must begin on January 10, 2008. For existing sources that are subject only because they load gasoline into fuel tanks other than those in motor vehicles, as defined in OAR 340-244-0030, recordkeeping to document monthly throughput must begin on January 24, 2011. Records required under this section must be kept for a period of 5 years.

(7) The owner or operator of an affected source, as defined in section (1) ~~of this rule~~, is not required to obtain an [Oregon](#) Title V Operating Permit as a result of being subject to OAR 340-244-0236 through 340-244-0252. However, the owner or operator of an affected source must still apply for and obtain an [Oregon](#) Title V Operating Permit if meeting one or more of the applicability criteria found in OAR 340-218-0020.

(8) The loading of aviation gasoline storage tanks at airports, and the subsequent transfer of aviation gasoline within the airport, is not subject to OAR 340-244-0236 through [340-244-0252](#), except in the Portland AQMA, Medford AQMA, Salem-[Keizer in the](#) SKATS, and Clackamas, Multnomah, and Washington Counties. In these geographic areas, aviation gasoline is subject to OAR 340-244-0236 through [340-244-0252](#).

(9) Monthly throughput is the total volume of gasoline loaded into, or dispensed from, all the gasoline storage tanks located at a single affected GDF. If an area source has two or more GDFs at separate locations within the area source, each GDF is treated as a separate affected source.

(10) If the affected source's throughput ever exceeds an applicable throughput threshold, the affected source will remain subject to the requirements for sources above the threshold, even if the affected source throughput later falls below the applicable throughput threshold.

(11) The dispensing of gasoline from a fixed gasoline storage tank at a GDF into a portable gasoline tank for the on-site delivery and subsequent dispensing of the gasoline into the fuel tank of a motor vehicle or other gasoline-fueled engine or equipment used within the area source is only subject to OAR 340-244-0240(1).

(12) For any affected source subject to the provisions of OAR 340-244-0232 through [340-244-0252](#) and another federal rule, the owner or operator may elect to comply only with the more stringent provisions of the applicable rules. The owner or operator of an affected source must consider all provisions of the rules, including monitoring, recordkeeping, and reporting. The owner or operator of an affected source must identify the affected source and provisions with which the owner or operator of an affected source will comply in the Notification of Compliance Status required under OAR 340-244-0246. The owner or operator of an affected source also must demonstrate in the Notification of Compliance Status that each provision with which the owner or operator of an affected source will comply is at least as stringent as the otherwise applicable requirements in OAR 340-244-0232 through [340-244-0252](#). The owner or operator of an affected source is responsible for making accurate determinations concerning the more stringent provisions, and noncompliance with this rule is not excused if it is later determined that your determination was in error, and, as a result, the owner or operator of an affected source is violating OAR 340-244-0232 through [340-244-0252](#). Compliance with this rule is the owner's or operator's responsibility and the Notification of Compliance Status does not alter or affect that responsibility.

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

Stat. Auth.: ORS 468.020 & 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 15-2008, f. & cert. ef. 12-31-08; DEQ 1-2011, f. & cert. ef. 2-24-11; DEQ 4-2013, f. & cert. ef. 3-27-13

### 340-244-0236

#### Affected Equipment or Processes

(1) The emission sources to which this rule applies are gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or existing GDF that meet the criteria specified in OAR 340-244-0234. Pressure/~~V~~yacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at GDF are covered emission sources.

(2) An affected source is a new affected source if construction commenced on the affected source after November 9, 2006, and the applicability criteria in OAR 340-244-0234 are met at the time operation commenced.

(3) An affected source is reconstructed if meeting the criteria for reconstruction as defined in 40 CFR 63.2.

(4) An affected source is an existing affected source if it is not new or reconstructed.

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

Stat. Auth.: ORS 468.020 & 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 15-2008, f. & cert. ef. 12-31-08; DEQ 1-2011, f. & cert. ef. 2-24-11

### 340-244-0238

#### Compliance Dates

(1) For a new or reconstructed affected source, the owner or operator must comply with the standards in OAR 340-244-0240 and 340-244-0242, as applicable, no later than Jan.~~uary~~ 10, 2008 or upon startup, whichever is later, except as follows:

(a) The owner or operator of a new or reconstructed GDF must comply with OAR 340-244-0240(1)(b) and (c) no later than July 1, 2009 or upon startup, whichever is later.

(b) For tanks located at a GDF with average monthly throughput less than 100,000 gallons of gasoline and not listed in OAR 340-244-0234(4)(a)(C) or (4)(b), must comply with OAR 340-244-0242, as applicable, no later than Dec.~~ember~~ 13, 2009 or upon startup, whichever is later.

(c) The owner or operator of a GDF subject to Table 2 of OAR 340-244-0242 must comply no later than Sep.~~tember~~ 23, 2008 or upon startup, whichever is later.

(2) For an existing affected source, the owner or operator must comply with the standards in OAR 340-244-0240 and 340-244-0242, as applicable, by no later than Jan.~~uary~~ 10, 2011, except as follows:



- (a) For tanks with a capacity between 1,500 and 40,000 gallons and located in the Portland AQMA, Medford AQMA, or Salem SATS, the owner or operator must comply with the standards in OAR 340-244-0240(3) and [340-244-0242](#) no later than Dec. ~~ember~~ 13, 2008.
- (b) For tanks located at an affected source located in Clackamas, Multnomah, or Washington County, whose annual throughput exceeds 120,000 gallons, the owner or operator must comply with the standards in OAR 340-244-0240(3) and [340-244-0242](#) no later than Dec. ~~ember~~ 13, 2008.
- (c) The owner or operator of an existing GDF must comply with OAR 340-244-0240(1)(b) and (c) no later than July 1, 2009 or upon startup, whichever is later.
- (3) For an existing affected source that becomes subject to the control requirements in OAR 340-244-0242 because of an increase in the monthly throughput, as specified in OAR 340-244-0234(4), the owner or operator must comply with the standards OAR 340-244-0242 no later than 3 years after the affected source becomes subject to the control requirements in OAR 340-244-0242.
- (4) The initial compliance demonstration test required under OAR 340-244-0244(1)(a) and (b) must be conducted as specified in subsections (4)(a) and (b) ~~of this rule~~.
- (a) For a new or reconstructed affected source, the owner or operator must conduct the initial compliance test upon installation of the complete vapor balance system.
- (b) For an existing affected source, the owner or operator must conduct the initial compliance test as specified in paragraph (4)(b)(A) or (B) of this rule.
- (A) For vapor balance systems installed on or before Dec. ~~ember~~ 15, 2009 at a GDF whose average monthly throughput is 100,000 gallons of gasoline or more, the owner or operator must test no later than 180 days after the applicable compliance date specified in section (2) or (3) ~~of this rule~~.
- (B) For vapor balance systems installed after Dec. ~~ember~~ 15, 2009, the owner or operator must test upon installation of a complete vapor balance system or a new gasoline storage tank.
- (C) For a GDF whose average monthly throughput is less than or equal to 100,000 gallons of gasoline, the owner or operator is only required to test upon installation of a complete vapor balance system or a new gasoline storage tank.
- (5) If the GDF is subject to the control requirements in OAR 340-244-0232 through [340-244-0252](#) only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in OAR 340-244-0030, the owner or operator of the GDF must comply with the standards in OAR 340-244-0232 through [340-244-0252](#) as specified in subsections (5)(a) and (b) ~~of this rule~~.
- (a) If the GDF is an existing facility, the owner or operator of the GDF must comply by Jan. ~~uary~~ 24, 2014.
- (b) If the GDF is a new or reconstructed facility, the owner or operator of the GDF must comply by the dates specified in paragraphs (5)(b)(A) and (B) ~~of this rule~~.
- (A) If startup of the GDF is after Dec. ~~ember~~ 15, 2009, but before January 24, 2011, the owner or operator of the GDF must comply no later than Jan. ~~uary~~ 24, 2011.

(B) If startup of the GDF is after January 24, 2011, the owner or operator of the GDF must comply upon startup of the GDF.

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

[\[ED. NOTE: Table referenced are available from the agency. Click here for PDF copy of tables.\]](#)

Stat. Auth.: ORS 468.020 & 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 15-2008, f. & cert. ef. 12-31-08; DEQ 8-2009, f. & cert. ef. 12-16-09; DEQ 1-2011, f. & cert. ef. 2-24-11; DEQ 4-2013, f. & cert. ef. 3-27-13

## **Emissions Limitations and Management Practices**

### **340-244-0239**

#### **General Duties to Minimize Emissions**

Each owner or operator of an affected source must comply with the requirements of sections (1) and (2) ~~of this rule~~.

(1) The owner or operator of an affected source must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to DEQ [and the EPA Administrator](#) which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(2) The owner or operator of an affected source must keep applicable records and submit reports as specified in OAR 340-244-0248(~~43~~) and 340-244-0250(2).

Stat. Auth.: ORS 468.020, ~~&~~ 468A.025 [& 468A.050](#)

Stats. Implemented: ORS 468A.025 [& 468A.050](#)

Hist.: DEQ 4-2013, f. & cert. ef. 3-27-13

### **340-244-0240**

#### **Work Practice and Submerged Fill Requirements**

(1) The owner or operator of a GDF must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

(a) Minimize gasoline spills;

(b) Do not top off or overfill vehicle tanks. If a person can confirm that a vehicle tank is not full after the nozzle clicks off (such as by checking the vehicle's fuel tank gauge), the person may continue to dispense fuel using best judgment and caution to prevent a spill;

(c) Post a sign at the GDF instructing a person filling up a motor vehicle to not top off the vehicle tank;

(d) Clean up spills as expeditiously as practicable;

(e) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;

(f) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

(g) Ensure that cargo tanks unloading at the GDF comply with subsections (1)(a) through (e) ~~of this rule~~.

(2) Any cargo tank unloading at a GDF equipped with a functional vapor balance system must connect to the vapor balance system whenever gasoline is being loaded.

(3) Except as specified in section (4) ~~of this rule~~, the owner or operator of a GDF must only load gasoline into storage tanks at the facility by utilizing submerged filling, as defined in OAR 340-244-0030, and as specified in subsection (3)(a), (3)(b), or (3)(c) ~~of this rule~~. The applicable distances in subsections (3)(a) and (3)(b) must be measured from the point in the opening of the submerged fill pipe that is the greatest distance from the bottom of the storage tank.

(a) Submerged fill pipes installed on or before Nov. ~~ember~~ 9, 2006, must be no more than 12 inches from the bottom of the storage tank.

(b) Submerged fill pipes installed after Nov. ~~ember~~ 9, 2006, must be no more than 6 inches from the bottom of the storage tank.

(c) Submerged fill pipes not meeting the specifications of subsection (3)(a) or (3)(b) ~~of this rule~~ are allowed if the owner or operator of a GDF can demonstrate that the liquid level in the tank is always above the entire opening of the fill pipe. Documentation providing such demonstration must be made available for inspection by DEQ [and the EPA Administrator](#) during the course of a site visit.

(4) Gasoline storage tanks with a capacity of less than 250 gallons are not subject to the submerged fill requirements in section (3) ~~of this rule~~.

(5) The owner or operator of a GDF must submit the applicable notifications as required under OAR 340-244-0246.

(6) The owner or operator of a GDF must have records available within 24 hours of a request by DEQ [or the EPA Administrator](#) to document gasoline throughput.

(7) The owner or operator of a GDF must comply with the requirements of this rule by the applicable dates specified in OAR 340-244-0238.

(8) Portable gasoline containers that meet the requirements of 40 CFR part 59 subpart F are considered acceptable for compliance with subsection (1)(e) ~~of this rule~~.

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

Stat. Auth.: ORS 468.020 & 468A.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 15-2008, f. & cert. ef. 12-31-08; DEQ 8-2009, f. & cert. ef. 12-16-09; DEQ 4-2013, f. & cert. ef. 3-27-13

## **340-244-0242**

### **Vapor Balance Requirements**

(1) Except as provided in section (2) ~~of this rule~~, the owner or operator of a gasoline storage tank listed in OAR 340-244-0234(4), must meet the requirements in either subsection (1)(a) or (1)(b) ~~of this rule~~.

(a) Each management practice in Table 2 [of OAR 340-244-0242](#) that applies to the GDF.

(b) If, prior to January 10, 2008, the owner or operator of a GDF operates a vapor balance system at the GDF that meets the requirements of either paragraph (1)(b)(A) or (1)(b)(B) ~~of this rule~~, the owner or operator of a GDF will be deemed in compliance with this section.

(A) Achieves emissions reduction of at least 90 percent.

(B) Operates using management practices at least as stringent as those in Table 2 [of OAR 340-244-0242](#) ~~of this rule~~.

(2) Gasoline storage tanks equipped with floating roofs or the equivalent are not subject to the control requirements in section (1) ~~of this rule~~.

(3) The owner or operator of a cargo tank unloading at a GDF must comply with the requirements of OAR 340-244-0240(1) and management practices in Table 3 [of OAR 340-244-0242](#).

(4) The owner or operator of a GDF subject to section (1) ~~of this rule~~ or having a gasoline storage tank equipped with a vapor balance system, must comply with the following requirements on and after the applicable compliance date in OAR 340-244-0238:

(a) When loading a gasoline storage tank equipped with a vapor balance system, connect and ensure the proper operation of the vapor balance system whenever gasoline is being loaded.

(b) Maintain all equipment associated with the vapor balance system to be vapor tight and in good working order.

(c) In order to ensure that the vapor balance equipment is maintained to be vapor tight and in good working order, have the vapor balance equipment inspected on an annual basis to discover potential or actual equipment failures.

(d) Replace, repair or modify any worn or ineffective component or design element within 24 hours to ensure the vapor-tight integrity and efficiency of the vapor balance system. If repair parts must be ordered, either a written or verbal order for those parts must be initiated within 2 working days of detecting such a leak. Such repair parts must be installed within 5 working days after receipt.

(5) The owner or operator of a GDF subject to section (1) ~~of this rule~~ must also comply with the following requirements:

(a) The applicable testing requirements ~~contained~~ in OAR 340-244-0244.

(b) The applicable notification requirements ~~under~~ in OAR 340-244-0246.

(c) The applicable recordkeeping and reporting requirements ~~as specified~~ in OAR 340-244-0248 and 340-244-0250.

(d) The owner or operator of a GDF must have records available within 24 hours of a request by DEQ or the EPA Administrator to document gasoline throughput.

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

[ED. NOTE: Tables referenced are not included in rule text. [Click here for PDF copy of table\(s\)](#).]

Stat. Auth.: ORS 468.020, ~~&~~ 468A.025 & 468A.050

Stats. Implemented: ORS 468A.025 & 468A.050

Hist.: DEQ 15-2008, f. & cert. ef. 12-31-08; DEQ 8-2009, f. & cert. ef. 12-16-09; DEQ 1-2011, f. & cert. ef. 2-24-11; DEQ 4-2013, f. & cert. ef. 3-27-13

## Testing and Monitoring Requirements

### 340-244-0244

#### Testing and Monitoring Requirements

(1) Each owner or operator of a GDF, at time of installation, as specified in OAR 340-244-0238(4), of a vapor balance system required under OAR 340-244-0242(1)(a), and every 3 years thereafter at a GDF with monthly throughput of 100,000 gallons of gasoline or more, must comply with the requirements in subsections (1)(a) and (b) ~~of this rule~~.

(a) The owner or operator of a GDF must demonstrate compliance with the leak rate and cracking pressure requirements, specified in item 1(g) of Table 2 of OAR 340-244-0242, for pressure-vacuum vent valves installed on gasoline storage tanks using the test methods identified in paragraph (1)(a)(A) or (B) ~~of this rule~~.

(A) California Air Resources Board Vapor Recovery Test Procedure TP-201.1E,—Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, adopted Oct. ~~ober~~ 8, 2003 (incorporated by reference, see 40 CFR 63.14).

(B) Use alternative test methods and procedures in accordance with the alternative test method requirements in 40 CFR 63.7(f).

(b) The owner or operator of a GDF must demonstrate compliance with the static pressure performance requirement, specified in item 1(h) of Table 2 of OAR 340-244-0242, for the vapor balance system by conducting a static pressure test on the gasoline storage tanks using the test methods identified in paragraph (1)(b)(A), (1)(b)(B), or (1)(b)(C) ~~of this rule~~.

(A) California Air Resources Board Vapor Recovery Test Procedure TP-201.3,—Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, adopted April 12, 1996, and amended March 17, 1999 (incorporated by reference, see 40 CFR 63.14).

(B) Use alternative test methods and procedures in accordance with the alternative test method requirements in 40 CFR 63.7(f).

(C) Bay Area Air Quality Management District Source Test Procedure ST-30—Static Pressure Integrity Test—Underground Storage Tanks, adopted Nov. ~~ember~~ 30, 1983, and amended Dec. ~~ember~~ 21, 1994 (incorporated by reference, see 40 CFR 63.14).

(2) Each owner or operator of a GDF, choosing, under the provisions of 40 CFR 63.6(g), to use a vapor balance system other than that described in Table 2 of OAR 340-244-0242, must demonstrate to DEQ [or upon request by the EPA Administrator](#), the equivalency of their vapor balance system to that described in Table 2 of OAR 340-244-0242 using the procedures specified in subsections (2)(a) through (c) ~~of this rule~~.

(a) The owner or operator of a GDF must demonstrate initial compliance by conducting an initial performance test on the vapor balance system to demonstrate that the vapor balance system achieves 95 percent reduction using the California Air Resources Board Vapor Recovery Test Procedure TP-201.1, -- Volumetric Efficiency for Phase I Vapor Recovery Systems, adopted April 12, 1996, and amended Feb. ~~ruary~~ 1, 2001, and Oct. ~~ober~~ 8, 2003, (incorporated by reference, see 40 CFR 63.14).

(b) The owner or operator of a GDF must, during the initial performance test required under subsection (2)(a) ~~of this rule~~, determine and document alternative acceptable values for the leak rate and cracking pressure requirements specified in item 1(g) of Table 2 of OAR 340-244-0242 and for the static pressure performance requirement in item 1(h) of Table 2 of OAR 340-244-0242.

(c) The owner or operator of a GDF must comply with the testing requirements specified in section (1) ~~of this rule~~.

(3) Conduct of performance tests. Performance tests must be conducted under such conditions as DEQ [or the EPA Administrator](#) specifies to the owner or operator of a GDF based on representative performance (i.e., performance based on normal operating conditions) of the affected source. Upon request [by DEQ or the EPA Administrator](#), the owner or operator of a GDF must make available ~~to DEQ~~ such records as may be necessary to determine the conditions of performance tests.

(4) Owners and operators of gasoline cargo tanks subject to the provisions of Table 3 of OAR 340-244-0242 must conduct annual certification testing according to the vapor tightness testing requirements found in 40 CFR 63.11092(f).

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

[\[ED. NOTE: Table referenced are available from the agency. Click here for PDF copy of tables.\]](#)

Stat. Auth.: ORS 468.020, ~~&~~ 468A.025 [& 468A.070](#)

Stats. Implemented: ORS 468A.025 [& 468A.070](#)

## Notifications, Records, and Reports

### 340-244-0246

#### Notifications

(1) Each owner or operator of a GDF subject to the control requirements in OAR 340-244-0240(3) must comply with subsections (1)(a) through (c) ~~of this rule~~.

(a) The owner or operator of a GDF must submit an Initial Notification that the owner or operator is subject to the Gasoline Dispensing Facilities NESHAP by May 9, 2008, or at the time the owner or operator becomes subject to the control requirements in OAR 340-244-0240(3), unless the owner or operator meets the requirements in subsection (1)(c) ~~of this rule~~. If the owner or operator of a GDF is subject to the control requirements in OAR 340-244-0240(3) only because the owner or operator loads gasoline into fuel tanks other than those in motor vehicles, as defined on OAR 340-244-0030, the owner or operator must submit the initial notification by May 24, 2011 ~~April 24, 2013~~. The Initial Notification must contain the information specified in paragraphs (1)(a)(A) through (D) ~~of this rule~~. The notification must be submitted to EPA's Region 10 Office and DEQ as specified in 40 CFR 63.13.

(A) The name and address of the owner and the operator.

(B) The address (i.e., physical location) of the GDF.

(C) The volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks during the previous twelve months.

(D) A statement that the notification is being submitted in response to the Gasoline Dispensing Facilities NESHAP and identifying the requirements in OAR 340-244-0240(1) through (3) that apply to the owner or operator of a GDF.

(b) The owner or operator of a GDF must submit a Notification of Compliance Status to EPA's Region 10 Office and DEQ, as specified in 40 CFR 63.13, within 60 days of the applicable compliance date specified in OAR 340-244-0238, unless the owner or operator meets the requirements in subsection (1)(c) ~~of this rule~~. The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of OAR 340-244-0232 through 340-244-0252, and must indicate whether the facility's monthly throughput is calculated based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If the facility is in compliance with the requirements of OAR 340-244-0232 through 340-244-0252 at the time the Initial Notification required under subsection (1)(a) of this rule is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under subsection (1)(a) ~~of this rule~~.

(c) If, prior to January 10, 2008, the owner or operator of a GDF is operating in compliance with an enforceable State rule or permit that requires submerged fill as specified in OAR 340-244-0240(3), the owner or operator is



not required to submit an Initial Notification or a Notification of Compliance Status under subsection (1)(a) or (b) ~~of this rule~~.

(2) Each owner or operator of a GDF subject to the control requirements in OAR 340-244-0242 must comply with subsections (2)(a) through (e) ~~of this rule~~.

(a) The owner or operator of a GDF must submit an Initial Notification that the owner or operator is subject to the Gasoline Dispensing Facilities NESHAP by May 9, 2008, or at the time the owner or operator becomes subject to the control requirements in OAR 340-244-0242. If the owner or operator of a GDF is subject to the control requirements in OAR 340-244-0242 only because the owner or operator loads gasoline into fuel tanks other than those in motor vehicles, as defined on OAR 340-244-0030, the owner or operator must submit the initial notification by [May 24, 2011](#) ~~April 24, 2013~~. The Initial Notification must contain the information specified in paragraphs (2)(a)(A) through (C) of this rule. The notification must be submitted to EPA's Region 10 Office and DEQ as specified in 40 CFR 63.13.

(A) The name and address of the owner and the operator.

(B) The address (i.e., physical location) of the GDF.

(C) The volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks during the previous twelve months.

(D) A statement that the notification is being submitted in response to the Gasoline Dispensing Facilities NESHAP and identifying the requirements in OAR 340-244-0242 that apply to the owner or operator of a GDF.

(b) The owner or operator of a GDF must submit a Notification of Compliance Status to EPA's Regional 10 Office and DEQ, as specified in 40 CFR 63.13, in accordance with the schedule specified in 40 CFR 63.9(h). The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of OAR 340-244-0232 through [340-244-0252](#), and must indicate whether the facility's monthly throughput is calculated based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If the facility is in compliance with the requirements OAR 340-244-0232 through 0252 at the time the Initial Notification required under subsection (2)(a) ~~of this rule~~ is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under subsection (2)(a) ~~of this rule~~.

(c) If, prior to January 10, 2008, the owner or operator of a GDF satisfies the requirements in both paragraphs (2)(c)(A) and (B) ~~of this rule~~, the owner or operator is not required to submit an Initial Notification or a Notification of Compliance Status under subsections (2)(a) or (b) ~~of this rule~~.

(A) The owner or operator of a GDF operates a vapor balance system at the gasoline dispensing facility that meets the requirements of either subparagraphs (2)(c)(A)(i) or (ii) ~~of this rule~~.

(i) Achieves emissions reduction of at least 90 percent.

(ii) Operates using management practices at least as stringent as those in Table 2 of OAR 340-244-0242.

(B) The GDF is in compliance with an enforceable State rule or permit that contains requirements of subparagraphs (2)(c)(A)(i) and (ii) ~~of this rule~~.



(d) The owner or operator of a GDF must submit a Notification of Performance Test, as specified in 40 CFR 63.9(e), prior to initiating testing required by OAR 340-244-0244(1) and (2).

(e) The owner or operator of a GDF must submit additional notifications specified in 40 CFR 63.9, as applicable.

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

[\[ED. NOTE: Table referenced are available from the agency. Click here for PDF copy of tables.\]](#)

Stat. Auth.: ORS 468.020, ~~&~~ 468A.025 [& 468A.050](#)

Stats. Implemented: ORS 468A.025 [& 468A.050](#)

Hist.: DEQ 15-2008, f. & cert. ef. 12-31-08; DEQ 8-2009, f. & cert. ef. 12-16-09; DEQ 4-2013, f. & cert. ef. 3-27-13

### **340-244-0248**

#### **Recordkeeping Requirements**

(1) Each owner or operator of a GDF must keep the following records:

(a) Records of all tests performed under OAR 340-244-0244(1) and (2);

(b) Records related to the operation and maintenance of vapor balance equipment required under OAR 340-244-0242. Any vapor balance component defect must be logged and tracked by station personnel using forms provided by DEQ or a reasonable facsimile.

(c) Records of total throughput volume of gasoline, in gallons, for each calendar month.

(d) Records of permanent changes made at the GDF and vapor balance equipment which may affect emissions.

(2) Records required under section (1) ~~of this rule~~ must be kept for a period of 5 years and must be made available for inspection by DEQ [and the EPA Administrator](#) during the course of a site visit.

(3) Each owner or operator of a gasoline cargo tank subject to the management practices in Table 3 of OAR 340-244-0242 must keep records documenting vapor tightness testing for a period of 5 years. Documentation must include each of the items specified in 40 CFR 63.11094(b)(2)(i) through (viii). Records of vapor tightness testing must be retained as specified in either subsection (3)(a) or (b) ~~of this rule~~.

(a) The owner or operator of a gasoline cargo tank must keep all vapor tightness testing records with the cargo tank.

(b) As an alternative to keeping all records with the cargo tank, the owner or operator of a gasoline cargo tank may comply with the requirements of paragraphs (3)(a)(A) and (B) ~~of this rule~~.

(A) The owner or operator of a gasoline cargo tank may keep records of only the most recent vapor tightness test with the cargo tank and keep records for the previous 4 years at their office or another central location.

(B) Vapor tightness testing records that are kept at a location other than with the cargo tank must be instantly available (e.g., via e-mail or facsimile) to DEQ [and the EPA Administrator](#) during the course of a site visit or within a mutually agreeable time frame. Such records must be an exact duplicate image of the original paper copy record with certifying signatures.

(4) Each owner or operator of a GDF must keep records as specified in subsections (4)(a) and (b) ~~of this rule~~.

(a) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

(b) Records of actions taken during periods of malfunction to minimize emissions in accordance with OAR 340-244-0239(1), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

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

[\[ED. NOTE: Table referenced are available from the agency. Click here for PDF copy of tables.\]](#)

Stat. Auth.: ORS 468.020, ~~& ORS~~ 468A.025 [& 468A.050](#)

Stats. Implemented: ORS 468A.025 [& 468A.050](#)

Hist.: DEQ 15-2008, f. & cert. ef. 12-31-08; DEQ 1-2011, f. & cert. ef. 2-24-11; DEQ 4-2013, f. & cert. ef. 3-27-13

## **340-244-0250**

### **Reporting Requirements**

(1) Each owner or operator of a GDF subject to the management practices in OAR 340-244-0242 must report to DEQ [and the EPA Administrator](#) the results of all volumetric efficiency tests required under OAR 340-244-0244(1) and (2). Reports submitted under this rule must be submitted within 180 days of the completion of the performance testing.

(2) Annual report. Each owner or operator of a GDF [that has monthly throughput of 10,000 gallons of gasoline or more](#) must report, by February 15 of each year, the following information, as applicable.

(a) The total throughput volume of gasoline, in gallons, for each calendar month.

(b) A summary of changes made at the facility on vapor recovery equipment which may affect emissions.

(c) List of all major maintenance performed on pollution control ~~equipment~~ [devices](#).

(d) The number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year and which caused or may have caused any applicable emission limitation to be exceeded.

(e) A description of actions taken by the owner or operator of a GDF during a malfunction to minimize emissions in accordance with OAR 340-244-0239(1), including actions taken to correct a malfunction.

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

Stat. Auth.: ORS 468.020, ~~& ORS~~ 468A.025 [& 468A.050](#)

Stats. Implemented: ORS 468A.025 [& 468A.050](#)

Hist.: DEQ 15-2008, f. & cert. ef 12-31-08; DEQ 4-2013, f. & cert. ef. 3-27-13

## DIVISION 246

### OREGON STATE AIR TOXICS PROGRAM

340-246-0230

#### Safety Net Source Air Toxics Emissions Reduction Measures in Permit

(1) Public Participation. The Department will hold public informational meetings to discuss proposed air toxics emissions reduction measures. After the informational meetings, the Department will provide at least 40-days notice before holding a public hearing to collect official comments on the proposed air toxics emissions reduction measures.

(2) Permit or Permit Modification. After considering public comments, the Department will propose air toxics emissions reduction measures to be placed in the source's permit, according to the reopening process for Oregon Title V permits in OAR 340-218-0200 or Oregon Title V Permit issuance in 340-218-0120 or Department Initiated Permit Modifications in 340-216-0084 or Air Contaminant Discharge Permit issuance in 340-216-00620, ~~Table 1, Part B, line 74.~~

Stat. Auth.: ORS 468.020~~35~~, 468A.025, 468A.040~~010(1)~~ & 468A.310~~15~~

Stats. Implemented: ORS 468A.025, 468A.040 & 468A.310

Hist.: DEQ 15-2003, f. & cert. ef. 11-3-03; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

## DIVISION 262

### HEAT SMART PROGRAM FOR RESIDENTIAL WOODSTOVES AND OTHER SOLID FUEL HEATING DEVICES

**340-262-0450**

#### **Definitions**

The definitions in OAR 340-200-0020 and this rule apply to this ~~D~~division. If OAR 340-0200-0020 and this rule define the same term, the definition in this rule applies to this ~~D~~division.

- (1) "Antique woodstove" means a woodstove built before 1940 that has an ornate construction and a current market value substantially higher than a common woodstove manufactured during the same period.
- (2) "Central wood-fired furnace" means an indoor, wood-fired furnace that is thermostatically controlled, has a dedicated cold air inlet and dedicated hot air outlet, and is connected to heating ductwork for the entire residential structure.
- (3) "CFR" means Code of Federal Regulations.
- (4) "Consumer" means a person who buys a solid fuel burning device for personal use.
- (5) "Cookstove" means an indoor wood-burning appliance designed for the primary purpose of cooking food.
- (6) "Dealer" means a person that sells solid fuel burning devices to retailers or other dealers for resale. For the purpose of this Division, a dealer that is also an Oregon retailer ~~shall~~will be considered to be only a retailer.
- (7) "DEQ" means Oregon Department of Environmental Quality.
- (8) "Destroy" means to demolish or decommission to the extent that restoration or reuse as a heating device is impossible.
- (9) "EPA" means United States Environmental Protection Agency.
- (10) "EQC" means Environmental Quality Commission
- (11) "Federal Regulations" means 40 CFR, Part 60, Subpart AAA as in effect on July 1, 2010.
- (12) "Fireplace" means a site-built or factory-built masonry fireplace that is designed to be used with an open combustion chamber and that is without features to control air-to-fuel ratios.
- (13) "Hydronic heater" means a fuel-burning device which may be equipped with a heat storage unit, and which is designed to:
  - (a) Burn wood or other automatically fed fuels such as wood pellets, shelled corn, and wood chips;
  - (b) Be installed according to the manufacturer's specifications either indoors or outdoors; and

(c) Heat building space and/or water via the distribution, typically through pipes, of a fluid heated in the device, typically water or a water/antifreeze mixture.

(14) "Manufacturer" means a person who designs a solid fuel burning device, constructs a solid fuel burning device or constructs parts for solid fuel burning devices.

(15) "Masonry heater" means a site-built or site-assembled, solid fueled heating device constructed of structural masonry mass used to store heat from intermittent fires burned rapidly in the structure's firebox and slow release the heat to the site. Such solid-fueled heating device must meet the design and construction specifications set forth in ASTM E 1602-03, "Guide for Construction of Solid Fuel Burning Masonry Heaters."

(16) "New solid fuel burning device" or "new device" means a solid fuel burning device defined under ORS 468A.485(4)(a) that has not been sold, bargained, exchanged, given away, acquired secondhand, or otherwise had its ownership transferred from the person who first acquired it from a retailer.

(17) "PM10" means particulate matter less than 10 microns.

(18) "PM2.5" means particulate matter less than 2.5 microns.

(19) "Pellet stove" means a heating device that uses wood pellets, or other biomass fuels designed for use in pellet stoves, as its primary source of fuel.

(20) "Phase 1 emission level qualified model" is a model of a hydronic heater that achieves an average emission level of 0.60 lbs/million Btu heat input or less for all fuel types listed in the owner's manual and/or mentioned in marketing/sales materials, as acknowledged by EPA in writing to the manufacturer as part of EPA's acceptance of the model as a qualified model.

(21) "Phase 2 emission level qualified model" is a model of a hydronic heater that achieves an average emissions level of 0.32 lbs/million Btu heat output or less for all fuel types listed in the owner's manual and/or mentioned in marketing/sales materials, and that did not exceed 18.0 grams/hr of fine particles in any individual test run that was used in the calculation of the average, as acknowledged by EPA in writing to the manufacturer as part of EPA's acceptance of the model as a qualified model pursuant to the EPA Hydronic Heater Program Phase 2 Partnership Agreement.

(22) "Residential structure" has the meaning given that term in ORS 701.005.

(23) "Retailer" means a person engaged in the sale of solid fuel burning devices directly to consumers.

(24) "Solid fuel burning device" or "device" means a woodstove or any other device that burns wood, coal or other nongaseous or non-liquid fuels for aesthetic, space-heating or water-heating purposes in or for a private residential structure or a commercial establishment and that has a heat output of less than one million British thermal units per hour. Solid fuel burning device does not include:

(a) Fireplaces;

(b) Antique stoves;

(c) Pellet stoves;

(d) Masonry heaters;

(e) Central, wood-fired furnaces;

(f) Saunas; and

(g) Boilers providing process heat to a commercial, industrial, or institutional establishment ~~subject to 40 CFR part 63, subpart DDDDD or subpart JJJJJ, as in effect on February 16, 2012~~ that obtain construction approval under OAR 340-210-0205 through 340-210-0250.

(25) “Trash burner” means any equipment that is used to dispose of waste by burning and has not been issued an air quality permit under ORS 468A.040.

(26) “Treated ~~W~~wood” means wood of any species that has been chemically impregnated, painted or similarly modified to prevent weathering and deterioration.

(27) "Used solid fuel burning device" or “used device” means a solid fuel burning device that has been sold, bargained, exchanged, given away, or otherwise has had its ownership transferred.

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

Stat. Auth.: ORS 468.020 & 468A.025

Stats. Implemented: ORS 468A.025, 468A.035 & 468A.460 ~~-through~~ 468A.515

Hist.: DEQ 2-2011, f. 3-10-11, cert. ef. 3-15-11; DEQ 7-2011(Temp), f. & cert. ef. 6-24-11 thru 12-19-11; Administrative correction, 2-6-12; DEQ 1-2012, f. & cert. ef. 5-17-12

## DIVISION 264

### RULES FOR OPEN BURNING

#### 340-264-0010

##### How to Use These Open Burning Rules

(1) This ~~D~~division classifies all open burning into one of seven classes: Agricultural; Commercial; Construction; Demolition (which includes land clearing); Domestic (which includes burning commonly called "backyard burning" and burning of yard debris); Industrial; or Slash. Except for field burning within the Willamette Valley regulated through OAR ~~chapter 340~~, division 266 and slash burning administered by the forest practices smoke management plan of the Oregon Department of Forestry, this ~~D~~division prescribes requirements for and prohibitions of open burning for every location in the state. Generally, if a class of open burning is not specifically prohibited in a given location, then it is authorized subject to [OAR 340-264-0050](#) and [340-264-0060](#) and the requirements and prohibitions of local jurisdictions and the State Fire Marshal. In addition, some practices specifically mentioned in [OAR 340-264-0040](#) are exempted from this division.

(2) Organization of rules:

(a) OAR 340-264-0020 is the Policy statement of the ~~Environmental Quality Commission~~[EQC](#) setting forth the goals of this ~~D~~division;

(b) OAR 340-264-0030 contains definitions of terms that have specialized meanings within the context of this ~~D~~division;

(c) OAR 340-264-0040 lists specific types of open burning and practices that are not governed by this ~~D~~division;

(d) OAR 340-264-0050 lists general requirements that usually apply to any open burning governed by this ~~D~~division;

(e) OAR 340-264-0060 lists general prohibitions that apply to most open burning;

(f) OAR 340-264-0070 establishes the open burning schedule based on air quality and meteorological conditions as required by ORS 468A.570;

(g) OAR 340-264-0075 allows the delegation of some or all of the open burning authority to be administered by a local jurisdiction;

(h) OAR 340-264-0078 contains the legal description of Open Burning Control Areas and maps that generally depict these areas;

(i) OAR 340-264-0080 indexes each county of the state to a specific rule giving specific restrictions for each class of open burning applicable in the county;

(j) OAR 340-264-0100 through 340-264-0170 are rules that give specific restrictions to open burning for each class of open burning in the counties named in each rule;



(k) OAR 340-264-0180 provides for a letter permit authorization for open burning under certain circumstances in which open burning otherwise would be prohibited;.

~~(l) OAR 340-264-0190 establishes criteria for use of forced-air pit incineration.~~

(3) Use of this ~~D~~division will be made easier by the following procedure:

(a) Read OAR 340-264-0050 and 340-264-0060 to understand general requirements and prohibitions that apply to all burning governed by this ~~D~~division;

(b) In OAR 340-264-0030 read the definitions of Agricultural, Commercial, Construction, Demolition, Domestic and Industrial open burning plus the definitions of land clearing and yard debris to determine the type of burning of concern. Also read OAR 340-264-0040 to determine if the type of burning is exempted from this ~~D~~division;

(c) Locate the rule (OAR 340-264-0100 through 340-264-0170) that governs the county in which burning is to take place. OAR 340-264-0090 is an index to the county rules;

(d) Read the sections of the county rules that apply to the type of burning to be accomplished;

(e) If not prohibited by this ~~D~~division, obtain a fire permit from the fire district, county court or county commissioners before conducting any burning;

(f) If the type of burning proposed is prohibited by this ~~D~~division, refer to OAR 340-264-0180 (Letter Permits) ~~or 340-363-0190 (Forced-Air Pit Incinerators)~~ for a possible alternative.

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

Stat. Auth.: ORS 468.020, ~~ORS~~ 468A.025, 468A.575 & 468A.595~~ORS 477~~

Stats. Implemented: ORS 468A.025, 468A.555 through 468A.620, 477.515 & 477.520

Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-023-0022; DEQ 21-2000, f. & cert. ef. 12-15-00

## **340-264-0020**

### **Policy**

In order to restore and maintain the quality of the air resources of the state in a condition as free from air pollution as is practicable, consistent with the overall public welfare of the state, it is the policy of the ~~Environmental Quality Commission~~EQC:

(1) To eliminate open burning disposal practices where alternative disposal methods are feasible and practicable;

(2) To encourage the development of alternative disposal methods;

(3) To emphasize resource recovery;

(4) To regulate specified types of open burning;

(5) To encourage utilization of the highest and best practicable burning methods to minimize emissions where other disposal practices are not feasible; and

(6) To require specific programs and timetables for compliance with this ~~D~~Edivision.

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

Stat. Auth.: ORS 468.~~020~~, ~~& ORS~~ 468A.025, 468A.575 & 468A.595

Stats. Implemented: ORS 468A.025, 468A.555 through 468A.620, 477.515 & 477.520

Hist.: DEQ 123, f. & ef. 10-20-76; DEQ 27-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-023-0025

### 340-264-0030

#### 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) "Agricultural ~~B~~Burning for ~~D~~Disease or ~~P~~Pest ~~C~~Control" means open burning of waste infected or infested with a disease or pest for which the County Extension Service or Oregon Department of Agriculture identify as having no other practicable control .

(2) "Agricultural ~~O~~Operation" means an activity on land currently used or intended to be used primarily for the purpose of obtaining a profit in money by raising, harvesting and selling crops or by raising and selling livestock or poultry, or the produce thereof, which activity is necessary to serve that purpose. Agricultural operation also means activities conducted by not-for-profit agricultural research organizations, which activities are necessary to serve that purpose. It does not include the construction and use of dwellings customarily provided in conjunction with the agricultural operation.

(3) "Agricultural ~~O~~Open ~~B~~Burning" means the open burning of any agricultural waste, except as provided in OAR 340-264-0040(5).

(4) "Agricultural ~~W~~Waste" means any waste material generated or used by an agricultural operation, excluding those materials described in OAR 340-264-0060(3).

(5) "Animal ~~D~~Disease ~~E~~Emergency" means the occurrence of a disease that the Oregon Department of Agriculture determines has potentially serious economic implications for the livestock industries of this state.

(6) "Auxiliary ~~C~~Combustion ~~E~~Equipment" includes, but is not limited to, ~~fans or air curtain incinerators.~~

(7) "Combustion ~~P~~Promoting ~~M~~Materials" include, but are not limited to, propane, diesel oil, or jellied diesel.

(8) "Commercial ~~O~~Open ~~B~~Burning" means the open burning of any commercial waste.

(9) "Commercial ~~W~~waste" means:

(a) Any material except:

(A) Agricultural waste;

(B) Construction waste;

(C) Demolition waste;

(D) Domestic waste;

(E) Industrial waste; and

(F) Slash.

(b) Examples of commercial waste are waste material from offices, wholesale or retail yards and outlets, warehouses, restaurants, mobile home parks, domestic waste removed from the property of origin, and dwellings containing more than four family living units, such as apartments, condominiums, hotels, motels or dormitories.

~~(10) "Commission" means the Environmental Quality Commission.~~

(10~~4~~) "Construction ~~O~~open ~~B~~burning" means the open burning of any construction waste.

(11~~2~~) "Construction ~~W~~waste" means any waste material generally used for, resulting from or produced by a building or construction project. Examples of construction waste are wood, lumber, paper, crating and packing materials processed for or used during construction, materials left after completion of construction, and materials collected during cleanup of a construction site.

(12~~3~~) "Daylight hours" means the time between 7:30 a.m. and two hours before sunset.

(13~~4~~) "Demolition ~~O~~open ~~B~~burning" means the open burning of demolition waste.

(14~~5~~) "Demolition ~~W~~waste" means any material resulting from or produced by the complete or partial destruction or tearing down of any man-made structure, or the clearing of any site for land improvement or cleanup, excluding yard debris (domestic waste) and agricultural waste.

~~(16) "Department" means the Department of Environmental Quality.~~

~~(17) "Director" means the Director of the Department or delegated employee representative pursuant to ORS 468.045(3).~~

(15~~8~~) "Domestic ~~O~~open ~~B~~burning" means the open burning of any domestic waste.

(16~~9~~) "Domestic ~~W~~waste" means household waste material, which includes paper, cardboard, clothing, yard debris, or other material generated in or around a dwelling of four-or-fewer-family-living units, or on the real property appurtenant to the dwelling. Such waste materials generated in or around a dwelling of more than four-family-living units are commercial wastes. Once domestic waste is removed from the property of origin, it becomes commercial waste.

(1720) "Fire ~~H~~azard" means the presence or accumulation of combustible material of such nature and in sufficient quantity that its continued existence constitutes an imminent and substantial danger to life, property, public welfare, or adjacent lands.

~~(21) "Forced Air Pit Incineration" means any method or device by which burning is accomplished in a subsurface pit or above ground enclosure using:~~

~~(a) Combustion air supplied under positive draft by an air curtain; and~~

~~(b) Combustion air controlled in order to optimize combustion efficiency and minimize the emission of air contaminants.~~

(1822) "Hazard to public safety" means fires that burn prohibited materials or result in smoke that substantially impairs visibility on a roadway.

(1923) "Industrial ~~O~~pen ~~B~~urning" means the open burning of any industrial waste.

(204) "Industrial ~~W~~aste" means any waste material, including process waste, produced as the direct result of any manufacturing or industrial process.

(2125) "Land ~~C~~learing" means the removal of trees, brush, logs, stumps, debris or man-made structures for the purpose of site clean-up or site preparation. All waste material generated by land clearing is demolition waste except those materials included in the definitions of agricultural wastes, yard debris (domestic waste), and slash.

(226) "Letter ~~P~~ermit" means an authorization issued pursuant to OAR 340-264-0180 to burn select materials at a defined site and under certain conditions.

(237) "Local ~~J~~urisdiction" means:

(a) The local fire permit issuing authority; or

(b) The local governmental entity having authority to regulate by law or ordinance.

(248) "Nuisance" means a substantial and unreasonable interference with another's use and enjoyment of real property, or the substantial and unreasonable invasion of a right common to members of the general public.

(259) "Open ~~B~~urning" means:

(a) Burning in open, outdoor fires;

(b) Burning in burn barrels; and

~~(c) Burning in incinerators that do not meet the emission limitations specified for solid and infectious waste incinerators in OAR 340-230-0100 through 340-230-0150; and~~

~~(d)~~ Any other outdoor burning when combustion air is not effectively controlled and combustion products are not effectively vented through a stack or chimney.

(2630) "Open ~~B~~urning ~~C~~ontrol ~~A~~rea" means an area established to control specific open burning practices or to maintain specific open burning standards that may be more stringent than those established for other areas of the state. Open burning control areas in the state are described in OAR 340-264-0078.

~~(31) "Person" means any individual, corporation, association, firm, partnership, joint stock company, public or municipal corporation, political subdivision, the state or any agency thereof, or the federal government or any agency thereof.~~

(27~~32~~) "Population" means the annual population estimate of incorporated cities within the State of Oregon issued by the Center for Population Research and Census, Portland State University, Portland, Oregon.

(28~~33~~) "Slash" means forest debris or woody vegetation to be burned that is related to the management of forest land used for growing and harvesting timber.

(29~~34~~) "Special ~~O~~open ~~B~~burning ~~C~~control ~~A~~area" means an area in the Willamette Valley where ~~the~~ ~~Department~~DEQ restricts the practice of open burning. These areas are described in OAR 340-264-0078(6).

(30~~5~~) "Ventilation ~~I~~index" means a number calculated by ~~the Department~~DEQ relating to the ability of the atmosphere to disperse regulated pollutants. The ventilation index is the product of the measured or estimated meteorological mixing depth in hundreds of feet and the measured or estimated average wind speed in knots through the mixed layer.

(31~~6~~) "Waste" includes any useless or discarded materials. Each waste is categorized in this ~~D~~division as one of the following types:

- (a) Agricultural;
- (b) Commercial;
- (c) Construction;
- (d) Demolition;
- (e) Domestic;
- (f) Industrial; or
- (g) Slash.

(32~~7~~) "Yard ~~D~~debris" means wood, needle or leaf materials from trees, shrubs or plants from the real property appurtenant to a dwelling of not more than four family living units so long as such debris remains on the property of origin. Once yard debris is removed from the property of origin, it becomes commercial waste. Yard debris is included in the definition of domestic waste.

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

~~[ED. NOTE: Figures referenced are available from the agency.]~~

Stat. Auth.: ORS 468.020, ~~ORS 468A.025, 468A.575 & 468A.595 & ORS 477~~

Stats. Implemented: ORS 468A.025, 468A.555 through 468A.620, 477.515 & 477.520

Hist.: DEQ 123, f. & ef. 10-20-76; DEQ 23-1979, f. & ef. 7-5-79; DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84; DEQ 21-1991, 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 340-023-0030; DEQ 21-2000, f. & cert. ef. 12-15-00

## 340-264-0040

### Exemptions, Statewide

Except for the provisions contained in OAR 340-264-0050 and 340-264-0060, this ~~D~~division does not apply to:

- (1) Recreational fires and ceremonial fires, for which a fire is appropriate.
- (2) Barbecue equipment used in connection with any residence.
- (3) Fires set or permitted by any public agency when such fire is set or permitted in the performance of its official duty for the purpose of weed abatement, prevention or elimination of a fire hazard, or a hazard to public health or safety, or for instruction of employees in the methods of fire fighting, which in the opinion of the public agency is necessary. Every effort will be made by the public agency to conduct this burning during good smoke dispersal conditions and specifically avoiding periods during Air Pollution Advisories. The agency will adjust its schedule for setting such fires for better smoke dispersal if necessary. Open burning fires otherwise exempt from the requirements of this division are still subject to the requirements and prohibitions of local jurisdictions and the State Fire Marshall.
- (4) Agricultural open burning pursuant to ORS 468A.020. Agricultural open burning is still subject to the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (5) Open field burning, propane flaming, and stack and pile burning in the Willamette Valley between the crests of the Cascade and Coast Ranges pursuant to OAR ~~chapter 340,~~ division 266, Rules for Field Burning.
- (6) Slash burning on forest land or within one-eighth mile of forest land permitted under the Oregon Smoke Management Program regulated by the Department of Forestry pursuant to ORS 477.515.
- (7) Fires set pursuant to permit for the purpose of instruction of employees of private industrial concerns in methods of fire fighting, or for civil defense instruction.
- (8) Fires set for the purpose of disposal of dry tumbleweed plants (typically Russian Thistle and Tumbleweed Mustard plants) that have been broken off, and rolled about, by the wind.
- (9) Agricultural burning for disease or pest control when the fire is set or authorized in writing by the Department of Agriculture.
- (10) When caused by an authorized representative of the Department of Agriculture, open burning of carcasses of animals that have died or been destroyed because of an animal disease emergency.

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

Stat. Auth.: ORS 468.020, 468A.025, 468A.575 & 468A.595-~~& 477~~

Stats. Implemented: ORS 468A.020, 468A.025, 468A.555 through 468A.620, 477.515 & 477.520

Hist.: DEQ 123, f. & ef. 10-20-76; DEQ 23-1979, f. & ef. 7-5-79; DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84; DEQ 6-1992, f. & cert. ef. 3-11-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999,

f. & cert. ef. 10-14-99, Renumbered from 340-023-0035; DEQ 21-2000, f. & cert. ef. 12-15-00; DEQ 12-2008, f. & cert. ef. 9-17-08; DEQ 10-2012, f. & cert. ef. 12-11-12

## 340-264-0050

### General Requirements Statewide

This rule applies to all open burning, unless expressly limited by any other rule, regulation, permit, ordinance, order or decree of the ~~Commission~~[EQC](#) or other agency having jurisdiction:

(1) The following persons are considered a responsible person for open burning in violation of this rule:

(a) Each person who is in ownership, control or custody of the real property on which open burning occurs, including any tenant thereof;

(b) Each person who is in ownership, control or custody of the material that is burned; and

(c) Any person who causes or allows open burning to be initiated or maintained.

(d) For purposes of this rule, a public agency in its official capacity that has issued the permit for burning is not considered a responsible person.

(2) A responsible person, or an expressly authorized agent, must constantly attend all open burning. This person must be capable of and have the necessary equipment for extinguishing the fire. This person also must completely extinguish the fire before leaving it.

(3) A responsible person must promptly extinguish any burning that is in violation of any rule of the Commission or of any permit issued by ~~the Department~~[DEQ](#), unless ~~the Department~~[DEQ](#) has given written approval to such responsible person to use auxiliary combustion equipment or combustion promoting materials to minimize smoke production, and the responsible person complies with the requirements in the written approval. However, nothing in this section authorizes any violation of OAR 340-264-0060(2) or (3).

(4) To promote efficient burning and prevent excessive emissions of smoke, a responsible person must:

(a) Assure that all combustible material is dried to the extent practicable. This includes covering the combustible material when practicable to protect the material from moisture in any form, including precipitation or dew. However, nothing in this section authorizes any violation of OAR 340-264-0060(2) or (3);

(b) Loosely stack or windrow the combustible material to eliminate dirt, rocks and other noncombustible material and promote an adequate air supply to the burning pile, and provide the necessary tools and equipment to accomplish this;

(c) Periodically re-stack or feed the burning pile, insure that combustion is essentially completed and smoldering fires are prevented, and provide the necessary tools and equipment to accomplish this.

(5) Notwithstanding OAR 340-264-0040(4), each person sanitizing perennial or annual grass seed crops by open burning in counties outside the Willamette Valley must pay ~~the Department~~[DEQ](#) \$4 for each acre burned:

(a) ~~The Department~~[DEQ](#) may contract with counties, rural fire protection districts, or other responsible individuals for the collection of the fees;

(b) All fees collected under this section must be deposited in the State Treasury to the credit of the Department of Agriculture Service Fund.

(6) Open burning in compliance with this ~~D~~[d](#)ivision does not exempt any person from any civil or criminal liability for consequences or damages resulting from such burning, nor does it exempt any person from complying with any other applicable law, ordinance, regulation, rule, permit, order, or decree of this or any other governmental entity having jurisdiction.

(7) If any commercial, construction, or demolition debris burning allowed in OAR 340-264-0100 through 340-264-0170 violates OAR 340-264-0060(2), the open burning must be immediately extinguished. Any future burning of this material or similar material by the responsible person is prohibited unless ~~the Department~~[DEQ](#) issues a letter permit pursuant to OAR 340-264-0180.

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

Stat. Auth.: ORS 468.~~020~~, ~~& ORS~~ 468A.[025](#), 468A.575 & 468A.595

Stats. Implemented: ORS [468A.025](#), 468A.555 [through 468A.620, 477.515 & 477.520](#)

Hist.: DEQ 123, f. & ef. 10-20-76; DEQ 23-1979, f. & ef. 7-5-79; DEQ 27-1981, f. & ef. 9-8-81; DEQ 6-1992, f. & cert. ef. 3-11-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-023-0040; DEQ 21-2000, f. & cert. ef. 12-15-00

## **340-264-0060**

### **General Prohibitions Statewide**

This rule applies to all open burning, unless expressly limited by any other rule, regulation, permit, ordinance, or order or decree of the ~~Commission~~[EQC](#) or other agency having jurisdiction:

(1) The following persons are strictly liable for open burning in violation of this rule:

(a) Each person who is in ownership, control or custody of the real property on which open burning occurs, including any tenant thereof;

(b) Each person who is in ownership, control or custody of the material that is burned; and

(c) Any person who causes or allows open burning to be initiated or maintained.

(2) No person may cause or allow to be initiated or maintained any open burning that creates a nuisance or a hazard to public safety.

(3) No person may cause or allow to be initiated or maintained any open burning of any wet garbage, plastic, asbestos, wire insulation, automobile part, asphalt, petroleum product, petroleum treated material, rubber product, animal remains, or animal or vegetable matter resulting from the handling, preparation, cooking, or service of food or of any other material which normally emits dense smoke or noxious odors.



(4) No person may cause or allow to be initiated or maintained any open burning of any material in any part of the state on any day or at any time if ~~the Department~~[DEQ](#) has notified the State Fire Marshal that such open burning is prohibited because of meteorological or air quality conditions pursuant to OAR 340-264-0070.

(5) No agency may issue any fire permit authorizing any open burning of any material at any location on any day or at any time if ~~the Department~~[DEQ](#) has notified the State Fire Marshal that such open burning is prohibited because of meteorological or air quality conditions. If an agency issues a permit in violation of this rule, the permit does not excuse any person from complying with this section.

(6) No person may cause or allow to be initiated or maintained any open burning authorized by this Division during hours other than specified by ~~the Department~~[DEQ](#).

(7) No person may cause or allow to be initiated or maintained any open burning at any solid waste disposal site unless authorized by a Solid Waste Permit issued pursuant to OAR 340-093-0050.

(8) No person may cause or allow to be initiated or maintained any open burning of debris removed from the property of origin unless the person receives a letter permit pursuant to OAR 340-264-0180. A letter permit is not required to burn agricultural waste removed from the property of origin provided the waste remains under control of the same responsible person.

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

Stat. Auth.: ORS ~~468A & ORS~~ 468.020, [468A.025, 468A.575 & 468A.595](#)

Stats. Implemented: ORS 459.205, [468A.025, 468A.555 through 468A.620, 477.515 & 477.520](#)

Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 9-1996, f. & cert. ef. 7-10-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-023-0042; DEQ 21-2000, f. & cert. ef. 12-15-00

## **340-264-0070**

### **Open Burning Conditions**

Pursuant to ORS 468A.570, 476.380, 477.520 and 478.960, the following open burning conditions apply:

(1) Mandatory Prohibition Based on Adverse Air Quality Conditions:

(a) ~~The Department~~[DEQ](#) will notify the State Fire Marshal that all open burning is prohibited in all or a specified part of the state when ~~the Department~~[DEQ](#) declares:

(A) A particulate or sulfur dioxide alert pursuant to OAR 340-206-0030(2);

(B) A particulate or sulfur dioxide warning pursuant to OAR 340-206-0030(3); or

(C) An emergency for any air contaminant pursuant to OAR 340-206-0030(4).

(b) All open burning is prohibited until ~~the Department~~[DEQ](#) notifies the State Fire Marshal that the episode and prohibition are terminated.

(2) Discretionary Prohibition or Limitation Based on Meteorological Conditions:

- (a) ~~The Department~~ DEQ may notify the State Fire Marshal that all or specified types of open burning are prohibited or limited in all or any specified parts of the state based on any one or more of the following criteria affecting that part of the state:
  - (A) An air stagnation event as determined by ~~the Department~~ DEQ;
  - (B) The daily maximum ventilation index calculated by ~~the Department~~ DEQ for Willamette Valley Open Burning Control Areas or Umpqua Basin Open Burning Control Area is less than 200;
  - (C) The daily maximum ventilation index calculated by ~~the Department~~ DEQ for the Rogue Basin Open Burning Control Area is less than 400 for all regulated open burning.
  - (D) ~~The Department~~ DEQ determines there is poor ventilation;
  - (E) For regulation of burning of yard debris in urban areas, the amount of precipitation expected during the day;  
or
  - (F) Any other relevant factor.
- (b) Such prohibitions or limits remain in effect until ~~the Department~~ DEQ notifies the State Fire Marshal that the prohibition or limitation has been terminated;
- (c) In deciding whether to prohibit or limit open burning pursuant to this section, ~~the Department~~ DEQ will consider:
  - (A) The policy of the state set forth in ORS 468A.010;
  - (B) The relevant criteria set forth in ORS 468A.025(2);
  - (C) The extent and types of materials available to be burned;
  - (D) In the case of Agricultural open burning, the recommendations received from any local agricultural smoke management organization; and
  - (E) Any other relevant factor.
- (d) In deciding whether to prohibit or limit any open burning pursuant to this section ~~the Department~~ DEQ must give first priority to the burning of perennial grass seed crop used for grass seed production, second priority for annual grass seed crop used for grass seed production, third priority to grain crop burning, and fourth priority to all other burning.
- (3) Unless prohibited or limited pursuant to section (1) or (2) ~~of this rule~~, open burning will be allowed only during daylight hours, and must be conducted consistent with the other rules in this ~~D~~ division and the requirements and prohibitions of local jurisdiction and the State Fire Marshal.

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

Stat. Auth.: ORS 468.~~020~~, ~~ORS~~ 468A.~~025~~, 468A.575 & 468A.595~~ORS-477~~

Stats. Implemented: ORS 468A.025, 468A.555 through 468A.620, 477.515 & 477.520

Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84; DEQ 21-1991, 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 340-023-0043; DEQ 21-2000, f. & cert. ef. 12-15-00

### 340-264-0075

#### Delegation of Authority

Whenever ~~the department~~ DEQ finds that any city, county, fire protection district, forest protection district or state agency is capable of effectively administering the issuance and/or enforcement of permits under any or all of the open burning authority outlined within this division and is desirous of doing so, ~~the department~~ DEQ may delegate powers necessary for the issuance and/or enforcement of open burning permits to that entity. ~~The department~~ DEQ, upon finding that the entity is not effectively administering the program, may withdraw such delegation.

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

Stat. Auth.: ORS 468.~~020~~, ~~ORS~~ & 468A.~~575~~ & ~~ORS-477~~

Stats. Implemented: ORS 468A.5~~75~~

Hist.: DEQ 21-2000, f. & cert. ef. 12-15-00

### 340-264-0078

#### Open Burning Control Areas

Generally, areas around the more densely populated locations in the state and valleys or basins that restrict atmospheric ventilation are designated "Open Burning Control Areas". The practice of open burning may be more restrictive in open burning control areas than in other areas of the state. The specific open burning restrictions associated with these open burning control areas are listed in OAR 340-264-0100 through 340-264-0170 by county. The general locations of open burning control areas are depicted in Figures 2 through 5. The open burning control areas of the state are defined as follows:

(1) All areas in or within three miles of the incorporated city limit of all cities with a population of 4,000 or more.

(2) The Coos Bay Open Burning Control Area is located in Coos County with boundaries as generally depicted in Figure 3 Coos Bay Open Burning Control Area ~~of this rule~~. The area is enclosed by a line beginning at a point approximately 4-1/2 miles WNW of the City of North Bend, at the intersection of the north boundary of T25S, R13W, and the coastline of the Pacific Ocean; thence east to the NE corner of T25S, R12W; thence south to the SE corner of T26S, R12W; thence west to the intersection of the south boundary of T26S, R14W and the coastline of the Pacific Ocean, thence northerly and easterly along the coastline of the Pacific Ocean to its intersection with the north boundary of T25S, R13W, the point of beginning.

(3) The Rogue Basin Open Burning Control Area is located in Jackson and Josephine Counties with boundaries as generally depicted in Figure 4 [Rogue Basin Open Burning Control Area](#). The area is enclosed by a line beginning at a point approximately 4-1/2 miles NE of the City of Shady Cove at the NE corner of T34S, R1W, Willamette Meridian, thence south along the Willamette Meridian to the SW corner of T37S, R1W; thence east to the NE corner of T38S, R1E; thence south to the SE corner of T38S, R1E; thence east to the NE corner of T39S, R2E; thence south to the SE corner of T39S, R2E; thence west to the SW corner of T39S, R1E; thence NW along a line to the NW corner of T39S, R1W; thence west to the SW corner of T38S, R2W; thence north to the SW corner of T36S, R2W; thence west to the SW corner of T36S, R4W; thence south to the SE corner of T37S, R5W; thence west to the SW corner of T37S, R6W; thence north to the NW corner of T36S, R6W; thence east to the SW corner of T35S, R1W; thence north to the NW corner of T34S, R1W; thence east to the point of beginning.

(4) The Umpqua Basin Open Burning Control Area is located in Douglas County with boundaries as generally depicted in Figure 5 [Umpqua Basis Open Burning Control Area](#). The area is enclosed by a line beginning at a point approximately four miles ENE of the City of Oakland, Douglas County, at the NE corner of T25S, R5W, Willamette Meridian, thence south to the SE corner of T25S, R5W; thence east to the NE Corner of T26S, R4W; thence south to the SE corner of T27S, R4W; thence west to the SE corner of T27S, R5W; thence south to the SE corner of T30S, R5W; thence west to the SW corner of T30S, R6W; thence north to the NW corner of T29S, R6W; thence west to the SW corner of T28S, R7W thence north to the NW corner of T27S, R7W; thence east to the NE corner of T27S, R7W; thence north to the NW corner of T26, R6W; thence east to the NE corner of T26S, R6W; thence north to the NW corner of T25S, R5W; thence east to the point of beginning.

(5) The boundaries of the Willamette Valley Open Burning Control Area are generally depicted in Figures [1 Willamette Valley Open Burning Control Area](#) and [Figure 2 Open Burning Control Areas](#). The area includes all of Benton, Clackamas, Linn, Marion, Multnomah, Polk, Washington and Yamhill Counties and that portion of Lane County east of Range 7 West.

(6) The Klamath Basin Open Burning Control Area is located in Klamath County with boundaries generally depicted in Figure 6 [Klamath Basin Open Burning Control Area](#). The area is enclosed by a line beginning at the corner common to northwest corner of Section 31, Township 37 South, Range 9 East of the Willamette Meridian and southwest corner of Section 30 T37S, R9E W.M.; thence east approximately two miles to the northeast corner of Section 32; thence south approximately four miles to the southeast corner of Section 17, T38S, R9E W.M.; thence east approximately one mile to the southwest corner of Section 15; thence north approximately one mile to the northwest corner of Section 15; thence east approximately 2 miles to the northeast corner of Section 14; thence south approximately one mile to the northwest corner of section 24; thence east approximately one mile to the northeast corner of Section 24; thence south approximately three miles to the southeast corner of Section 36; thence east approximately four miles to the northeast corner of Section 3, T39S, R10E W.M.; thence south approximately three miles to the southeast corner of Section 15; thence west approximately two miles to the southwest corner of Section 16; thence south approximately two miles to the southeast corner of Section 29; thence west approximately five miles to the southwest corner of Section 27, T39S, R9E; thence north approximately one mile to the northeast corner of Section 27; thence west approximately four miles to the southwest corner of Section 24, T39S R8E; thence north approximately two miles to the northeast corner of Section 13; thence west approximately one mile to the southwest corner of Section 11; thence north approximately four miles to the northwest corner of Section 26 T38S, R8E; thence west one mile to the southwest corner of Section 22; thence north approximately one mile to the northwest

corner of Section 22; thence west approximately one mile to the southwest corner of Section 16; thence north approximately one mile to the northeast corner of Section 16; thence west approximately one mile to the southwest corner of Section 8; thence north approximately two miles to the northwest corner of Section 5; thence east to the northeast corner of Section 1; thence north approximately one mile to the point of beginning.

(7) "Special Open Burning Control Areas" are established around cities within the Willamette Valley Open Burning Control Area. The boundaries of these special open burning control areas are determined as follows:

- (a) Any area in or within three miles of the boundary of any city of more than 1,000 but less than 45,000 population;
- (b) Any area in or within six miles of the boundary of any city of 45,000 or more population;
- (c) Any area between areas established by this rule where the boundaries are separated by three miles or less;
- (d) Whenever two or more cities have a common boundary, the total population of these cities will determine the applicability of subsection (a) or (b) ~~of this section~~ and the municipal boundaries of each of the cities must be used to determine the limit of the special open burning control area.

(8) A domestic burning ban area around the Portland metropolitan area is generally depicted in Figure 1A [Metropolitan Area Backyard Burning Boundaries](#). This area encompasses parts of the special control area in Clackamas, Multnomah and Washington Counties. Specific boundaries are listed in OAR 340-264-0120(5), 340-264-0130(5) and 340-264-0140(5). Domestic burning is prohibited in this area except as allowed pursuant to 340-264-0180.

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

[ED. NOTE: Figures referenced are not included in rule text. [Click here for PDF copy of figure\(s\).](#)]

Stat. Auth.: ORS 468.[020](#), [ORS 468A.025](#), [468A.575](#) & 468A.[595](#)

Stats. Implemented: ORS 468A.025, [468A.555 through 468A.620](#), [477.515 & 477.520](#)

Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-023-0115; DEQ 21-2000, f. & cert. ef. 12-15-00, Renumbered from 340-264-0200; DEQ 10-2012, f. & cert. ef. 12-11-12

## 340-264-0080

### County Listing of Specific Open Burning Rules

Except as otherwise provided, in addition to the general requirements and prohibitions listed in OAR 340-264-0050 and 340-264-0060, specific prohibitions of ~~A~~[a](#)gricultural, ~~E~~[c](#)ommercial, ~~E~~[c](#)onstruction, ~~D~~[d](#)emolition, ~~D~~[d](#)omestic, and ~~I~~[i](#)ndustrial open burning are listed in separate rules for each county. The following list identifies the rule containing prohibitions of specific types of open burning applicable to a given county:

(1) Baker County — OAR 340-264-0100.

(2) Benton County — OAR 340-264-0110.

- (3) Clackamas County — OAR 340-264-0120.
- (4) Clatsop County — OAR 340-264-0100.
- (5) Columbia County — OAR 340-264-0150.
- (6) Coos County — OAR 340-264-0170.
- (7) Crook County — OAR 340-264-0100.
- (8) Curry County — OAR 340-264-0100.
- (9) Deschutes County — OAR 340-264-0100.
- (10) Douglas County — OAR 340-264-0170.
- (11) Gilliam County — OAR 340-264-0100.
- (12) Grant County — OAR 340-264-0100.
- (13) Harney County — OAR 340-264-0100.
- (14) Hood River County — OAR 340-264-0100.
- (15) Jackson County — OAR 340-264-0170.
- (16) Jefferson County — OAR 340-264-0100.
- (17) Josephine County — OAR 340-264-0170.
- (18) Klamath County — OAR 340-264-0175.
- (19) Lake County — OAR 340-264-0100.
- (20) Lane County — OAR 340-264-0160.
- (21) Lincoln County — OAR 340-264-0100.
- (22) Linn County — OAR 340-264-0110.
- (23) Malheur County — OAR 340-264-0100.
- (24) Marion County — OAR 340-264-0110.
- (25) Morrow County — OAR 340-264-0100.
- (26) Multnomah County — OAR 340-264-0130.
- (27) Polk County — OAR 340-264-0110.
- (28) Sherman County — OAR 340-264-0100.
- (29) Tillamook County — OAR 340-264-0100.

(30) Umatilla County — OAR 340-264-0100.

(31) Union County — OAR 340-264-0100.

(32) Wallowa County — OAR 340-264-0100.

(33) Wasco County — OAR 340-264-0100.

(34) Washington County — OAR 340-264-0140.

(35) Wheeler County — OAR 340-264-0100.

(36) Yamhill County — OAR 340-264-0110.

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

Stat. Auth.: ORS 468.~~020~~, & 468A.~~025~~, 468A.575 & 468A.595

Stats. Implemented ORS 468A.025, [468A.555 through 468A.620, 477.515 & 477.520](#)

Hist.: DEQ 123, f. & ef. 10-20-76; DEQ 23-1979, f. & ef. 7-5-79; DEQ 1-1981(Temp), f. & ef. 1-9-81; DEQ 7-1981(Temp), f. & ef. 2-17-81; DEQ 8-1981(Temp), f. & ef. 3-13-81; DEQ 27-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-023-0045; DEQ 21-2000, f. & cert. ef. 12-15-00; DEQ 10-2012, f. & cert. ef. 12-11-12

## Open Burning Requirements

### 340-264-0100

**Baker, Clatsop, Crook, Curry, Deschutes, Gilliam, Grant, Harney, Hood River, Jefferson, Klamath, Lake, Lincoln, Malheur, Morrow, Sherman, Tillamook, Umatilla, Union, Wallowa, Wasco and Wheeler Counties**

Open burning requirements for the counties of Baker, Clatsop, Crook, Curry, Deschutes, Gilliam, Grant, Harney, Hood River, Jefferson, Klamath, Lake, Lincoln, Malheur, Morrow, Sherman, Tillamook, Umatilla, Union, Wallowa, Wasco and Wheeler:

(1) Industrial open burning is prohibited, except as provided in OAR 340-264-0180.

(2) Agricultural open burning is allowed subject to OAR 340-264-0050(5) and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(3) Commercial open burning:

(a) Commercial open burning is prohibited within Lincoln County except as provided in OAR 340-264-0180.

(b) Commercial open burning is allowed outside of open burning control areas subject to OAR 340-264-0050, 340-264-0060 and 340-264-0070, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal. Commercial open burning, unless authorized pursuant to [OAR](#) 340-264-0180, is prohibited within

three miles of the corporate city limits of the following open burning control areas. In addition, commercial open burning is prohibited in any area meeting the test in [OAR 340-264-0078\(1\)](#):

- (c) In Baker County, the City of Baker City;
- (d) In Clatsop County, the Cities of Astoria, Seaside and Warrenton;
- (e) In Crook County, the City of Prineville;
- (f) In Curry County, the City of Brookings;
- (g) In Deschutes County, the Cities of Bend and Redmond;
- (h) In Hood River County, the City of Hood River;
- (i) In Jefferson County, the City of Madras;
- (j) In Malheur County, the City of Ontario;
- (k) In Tillamook County, the City of Tillamook;
- (l) In Umatilla County, the Cities of Hermiston, Milton-Freewater and Pendleton;
- (m) In Union County, the City of La Grande;
- (n) In Wasco County, the City of The Dalles.

(4) Construction and ~~D~~[demolition](#) open burning outside of an open burning control area is allowed subject to the requirements and prohibitions of local jurisdictions, the State Fire Marshal, OAR 340-264-0050, 340-264-0060, and 340-264-0070. Construction and ~~D~~[demolition](#) open burning, unless authorized pursuant to [OAR 340-264-0180](#), is prohibited within three miles of the corporate city limits of the following open burning control areas. In addition, construction and demolition burning is prohibited in any area meeting the standard in [OAR 340-264-0078\(1\)](#):

- (a) In Baker County, the City of Baker City;
- (b) In Clatsop County, the Cities of Astoria, Seaside and Warrenton;
- (c) In Crook County, the City of Prineville;
- (d) In Curry County, the City of Brookings;
- (e) In Deschutes County, the Cities of Bend and Redmond;
- (f) In Hood River County, the City of Hood River;
- (g) In Jefferson County, the City of Madras;
- (h) In Lincoln County, the Cities of Lincoln City and Newport;
- (i) In Malheur County, the City of Ontario;
- (j) In Tillamook County, the City of Tillamook;



(k) In Umatilla County, the Cities of Hermiston, Milton-Freewater and Pendleton;

(l) In Union County, the City of La Grande;

(m) In Wasco County, the City of The Dalles.

(5) Domestic open burning is allowed subject to the requirements and prohibitions of local jurisdictions, the State Fire Marshal, and OAR 340-264-0050, 340-264-0060 and 340-264-0070.

(6) Slash burning on forest land within open burning control areas not regulated by the Department of Forestry under the Smoke Management Plan is prohibited, except as provided in OAR 340-264-0180.

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

Stat. Auth.: ORS 468.~~020~~, & 468A.~~025~~, 468A.575 & 468A.595

Stats. Implemented: ORS 468A.025, 468A.555 through 468A.620, 477.515 & 477.520

Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 6-1992, f. & cert. ef. 3-11-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-023-0055; DEQ 21-2000, f. & cert. ef. 12-15-00; DEQ 10-2012, f. & cert. ef. 12-11-12

### **340-264-0110**

#### **Benton, Linn, Marion, Polk, and Yamhill Counties**

Open burning requirements for Benton, Linn, Marion, Polk, and Yamhill Counties that form a part of the Willamette Valley Open Burning Control Area described in OAR 340-264-0078:

(1) Industrial open burning is prohibited, except as provided in OAR 340-264-0180.

(2) Agricultural open burning is allowed, subject to the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(3) Commercial open burning is prohibited, except as provided in OAR 340-264-0180.

(4) Construction and Demolition open burning is allowed outside of special open burning control areas, subject to the requirements and prohibitions of local jurisdictions, the State Fire Marshal, OAR 340-264-0050, 340-264-0060 and 340-264-0070. Unless authorized pursuant to 340-264-0180, ~~C~~construction and ~~D~~demolition open burning is prohibited within special open burning control areas, including the following:

(a) Areas in or within six miles of the corporate city limit of:

(A) In Benton County, the City of Corvallis;

(B) In Marion County, the Cities of Salem and Keizer;

(C) In Polk County, the City of Salem.

(b) Areas in or within three miles of the corporate city limit of:

(A) In Benton County, the Cities of Albany, and Philomath;

(B) In Linn County, the Cities of Albany, Brownsville, Harrisburg, Lebanon, Lyons, Mill City, Tangent and Sweet Home;

(C) In Marion County the Cities of Aumsville, Gervais, Hubbard, Jefferson, Mill City, Mt. Angel, Silverton, Stayton, Sublimity, Turner and Woodburn;

(D) In Polk County, the Cities of Dallas, Falls City, Independence, Monmouth and Willamina;

(E) In Yamhill County, the Cities of Amity, Carlton, Dayton, Dundee, Lafayette, McMinnville, Newberg, Sheridan and Willamina.

(c) Any areas that meet the test in OAR 340-264-0078(6).

(5) Domestic open burning:

(a) As generally depicted in Figure 1 [Willamette Valley Open Burning Control Area](#) of OAR 340-264-0078, domestic open burning is prohibited in the special open burning control areas named in section (4) ~~of this rule~~, except open burning of yard debris is allowed beginning March first and ending June 15th, inclusive, and beginning October 1st and ending December 15th, inclusive, subject to 340-264-0050 and 340-264-0060 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal;

(b) Domestic open burning is allowed outside of special open burning control areas named in section (4) ~~of this rule~~, subject to OAR 340-264-0050, 340-264-0060 and 340-264-0070, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal;

(c) No person may cause or allow to be initiated or maintained any domestic open burning other than during daylight hours, unless otherwise specified by ~~the Department~~ [DEQ](#) pursuant to OAR 340-264-0070.

(6) Slash burning on forest land within special open burning control areas not regulated by the Department of Forestry under the Smoke Management Program is prohibited, except as provided in OAR 340-264-0180.

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

[ED. NOTE: Figures referenced are ~~available from the agency~~ [not included in the rule text. Click here for PDF copy of figures.](#)]

Stat. Auth.: ORS 468.[020](#), ~~&~~ ORS 468A.[025](#), [468A.575](#) & [468A.595](#)

Stats. Implemented: ORS 468A.[025](#), [468A.555 through 468A.620](#), [477.515 & 477.520](#) ~~555~~

Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84; DEQ 6-1992, f. & cert. ef. 3-11-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-023-0060; DEQ 21-2000, f. & cert. ef. 12-15-00

## 340-264-0120

### Clackamas County

## Open burning requirements for Clackamas County:

- (1) Industrial open burning is prohibited, except as provided in OAR 340-264-0180.
- (2) Agricultural open burning is allowed, subject to the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (3) Commercial open burning is prohibited, except as may be provided by OAR 340-264-0180.
- (4) Construction and ~~D~~demolition open burning is allowed outside of special open burning control areas, subject to OAR 340-264-0050, 340-264-0060 and 340-264-0070, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal. Unless authorized pursuant to 340-264-0180, Construction and ~~D~~demolition open burning is prohibited within the following:
  - (a) Areas in or within six miles of the corporate city limits of Gladstone, Gresham, Happy Valley, Lake Oswego, Milwaukie, Oregon City, Portland, Rivergrove, Tualatin, West Linn and Wilsonville;
  - (b) Areas in or within three miles of the corporate city limits of Canby, Estacada, Molalla and Sandy.
  - (c) Any areas that meet the test in OAR 340-264-0078(76).
- (5) Domestic open burning:
  - (a) Those areas where domestic burning is always prohibited (unless authorized under 340-264-0180): Beginning at the trisection of the Clackamas-Multnomah-Washington County Line; thence east and then northerly and then east following the Clackamas-Multnomah County Line to the intersection with the northwest corner of Section 27, T1S, R2E; thence south to the midpoint of the western boundary of Section 3, T2S, R2E; thence on a line east approximately 1/4 of a mile; thence south to the southern boundary of Section 3, T2S, R2E and the corner of Camp Withycombe (Oregon National Guard); thence west approximately 1/4 mile to the midpoint of the southern boundary of Section 3, T2S, R2E; thence on a line south to the Clackamas River and the Metro Boundary as defined in Oregon Revised Statutes (ORS) Chapter 268.125; thence following the Metro Boundary first southerly and then westerly to the intersection with the Willamette River, excepting that portion listed in subsection (b)(2); thence northeasterly along the Willamette River to the confluence with the Tualatin River; thence northwesterly along the Tualatin River to the intersection with U.S. Interstate Highway 205 (I-205); thence westerly along I-205 to the intersection with the Clackamas-Washington County Line; thence north along the Clackamas-Washington County Line to the trisection of the Clackamas-Multnomah-Washington County Line, the point of beginning.
  - (b) Those areas where domestic open burning is prohibited except for the burning of yard debris between March 1 and June 15, and between October 1 and December 15, subject to OAR 340-264-0050 through 340-264-0070, and the requirements and prohibitions of local jurisdictions and the State Fire Marshall, are the areas that lie within both Clackamas County and the Metro Boundary and are not included in paragraph (a) ~~of this section~~. Specifically, those areas are listed as follows:
    - (A) The area beginning at the point on the Clackamas-Washington County Line where it is intersected by I-205; thence easterly along I-205 to the intersection with the Tualatin River; thence southeasterly along the Tualatin River to the confluence with the Willamette River; thence southerly along the Willamette River to the intersection with the northern boundary of Section 15, T3S, R1E; thence west to the northwest corner of Section

15, T3S, R1E; thence north to the northwest corner of section 10, T3S, R1E; thence west to the northwest corner of Section 9, T3S, R1E; thence north to the northwest corner of Section 4, T3S, R1E; thence west to the intersection with the Clackamas-Washington County Line; thence north to the intersection with I-205, the point of beginning.

(B) The area bounded by Henrici Road on the south; Highway 213 on the west; Beaver Creek Road on the east; and the southern boundary of Clackamas Community College on the north.

(C) The area beginning at the point where the Clackamas-Multnomah County Line intersects the northwest corner of Section 27, T1S, R2E; thence south to the midpoint of the western boundary of Section 3, T2S, R2E; thence on a line east approximately 1/4 of a mile; thence south to the southern boundary of Section 3, T2S, R2E and the corner of Camp Withycombe; thence west 1/4 mile to the midpoint of the southern boundary of Section 3, T2S, R2E; thence on a line south to the Clackamas River; thence easterly along the Clackamas River to the intersection with the western boundary of Section 18, T2S, R3E; thence north to the northwest corner of Section 18, T2S, R3E; thence east to the northwest corner of Section 14, T2S, R3E; thence north to the northwest corner of Section 11, T2S, R3E; thence east to the intersection with Epperson Road; thence north-northwesterly along Epperson Road to the intersection with the Clackamas-Multnomah County Line at the northern boundary of Section 29, T1S, R2E; thence west along the county line to the northwest corner of Section 27, T1S, R2E, the point of beginning.

(c) Domestic open burning is allowed in all other areas of Clackamas County, subject to OAR 340-264-0050 and 340-264-0060 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal;

(d) No person may cause or allow to be initiated or maintained any domestic open burning other than during daylight hours unless specified by ~~the Department~~ [DEQ](#) pursuant to OAR 340-264-0070.

(6) Slash burning on forest land within special open burning control areas not regulated by the Department of Forestry under the Smoke Management Program is prohibited, except as provided in OAR 340-264-0180.

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

Stat. Auth.: ORS 468.~~020~~, & ORS 468A.~~025~~, 468A.575 & 468A.595

Stats. Implemented: ORS 468A. ~~025~~, 468A.555 through 468A.620, 477.515 & 477.520~~555~~

Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84; DEQ 6-1992, f. & cert. ef. 3-11-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-023-0065; DEQ 21-2000, f. & cert. ef. 12-15-00

## **340-264-0130**

### **Multnomah County**

Open burning requirements for Multnomah County:

(1) Industrial open burning is prohibited, except as provided in OAR 340-264-0180.

(2) Agricultural open burning is allowed, subject to the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(3) Commercial open burning is prohibited, except as provided in OAR 340-264-0180.

(4) Construction and ~~D~~emolition open burning, unless authorized pursuant to OAR 340-264-0180, is prohibited west of the Sandy River but is allowed east of the Sandy River, subject to 340-264-0050, 340-264-0060 and 340-264-0070, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(5) Domestic open burning:

(a) Those areas where open burning is always prohibited (unless authorized by 340-264-0180):

(A) The area encompassed by the line beginning at the point where the Multnomah, Clackamas, and Washington County lines meet at a trisection; thence east and then north and then east along the Multnomah-Clackamas County Line to the intersection with SE 172nd Avenue; thence north along SE 172nd Avenue to the intersection with SE Foster Road; thence southeasterly along SE Foster Road to the intersection with Jenne Road; thence northeasterly along Jenne Road to the intersection with SE 174th Avenue; thence north along SE 174th Avenue to the intersection with SE Marie Street; thence east along SE Marie Street to the intersection with SE 182nd Avenue; thence north along SE 182nd Avenue and continuing north as SE 182nd Avenue merges into SE 181st Avenue and then turns into NE 181st Avenue to the intersection with NE Sandy Boulevard; thence easterly along NE Sandy Boulevard to the intersection with NE 185th Drive; thence north along NE 185th Drive to the intersection with Marine Drive; thence continuing on a line due north to the Columbia River and the state line; thence following the Columbia River and the state line; thence following the Columbia River and the state line to the confluence of the Columbia and the Willamette Rivers; thence along the Willamette River to the Confluence with the Multnomah Channel and the Portland City Limits; thence following the Portland City Limits generally southerly to the intersection with Section 27, T1N, R1W and the Multnomah-Washington County Line; thence following the Multnomah-Washington County Line southwesterly and then south to the trisection of the Multnomah-Clackamas-Washington County Line, the point of beginning.

(B) All areas in northwest Multnomah County that are not contained within a Fire Protection District.

(C) The Burlington Water District.

(b) Those areas where domestic open burning is prohibited, except for the burning of yard debris between March 1 and June 15, and between October 1 and December 15 and subject to OAR 340-264-0050 through 340-264-0070 and the requirements and prohibitions of local jurisdictions and the State Fire Marshall, are the areas within Multnomah County that lie west of the Sandy River and are not included in OAR 340-264-0130(5)(a).

(c) Domestic open burning is allowed east of the Sandy River, subject to OAR 340-264-0050, 340-264-0060 and 340-264-0070, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal;

(d) No person may cause or allow to be initiated or maintained any domestic open burning other than during daylight hours unless otherwise specified by ~~Department~~ DEQ pursuant to OAR 340-264-0070.

(6) Slash burning on forest land within special open burning control areas not regulated by the Department of Forestry under the Smoke Management Program is prohibited, except as provided in OAR 340-264-0180.

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

Stat. Auth.: ORS 468.~~020~~ & ORS 468A.025, 468A.575 & 468A.595

Stats. Implemented: ORS 468A.025, 468A.555 through 468A.620, 477.515 & 477.520~~555~~

Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84; DEQ 6-1992, f. & cert. ef. 3-11-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-023-0070; DEQ 21-2000, f. & cert. ef. 12-15-00

## **340-264-0140**

### **Washington County**

Open burning requirements for Washington County:

- (1) Industrial open burning is prohibited, except as provided in OAR 340-264-0180.
- (2) Agricultural open burning is allowed, subject to the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (3) Commercial open burning is prohibited, except as may be provided by OAR 340-264-0180.
- (4) Construction and Demolition open burning, unless authorized pursuant to OAR 340-264-0180, is prohibited in all incorporated areas and areas within rural fire protection districts. Construction and demolition open burning is allowed in all other areas subject to 340-264-0050, 340-264-0060 and 340-264-0070, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (5) Domestic open burning:
  - (a) The area where open burning is always prohibited (unless authorized by 340-264-0180): Beginning at the point where U.S. Interstate Highway 205 (I-205) intersects the Washington-Clackamas County Line; thence west along I-205 to the Tualatin City Limits; thence following along the Tualatin City Limits westerly, southerly, westerly and northerly to the intersection with U.S. Highway 99; thence northerly along U.S. Highway 99 to the intersection with the Metro Boundary as defined in Oregon Revised Statutes (ORS) Chapter 268.125; thence following the Metro Boundary generally northerly and westerly to the intersection with the Tualatin Valley Highway; thence westerly along the Tualatin Valley Highway to the intersection with the western boundary of Section 11, T1S, R2W; thence north to the northwest corner of Section 2, T1S, R2W; thence east to the northwest corner of Section 2, T1S, R2W; thence north to the intersection with U.S. Highway 26; thence northwesterly along U.S. Highway 26 to the intersection with Cornelius Pass Road; thence northeasterly along Cornelius Pass Road to the intersection with the northern boundary of Section 23, T1N, R2W; thence east approximately 1/5 mile along the northern boundary of section 23, T1N, R2W to the southernmost point of the Orchard; thence north following the eastern boundary of the Orchard to the intersection with West Union Road; thence southeasterly and then easterly along West Union Road approximately 1.1 miles to a point approximately 1/4 mile west of the eastern boundary of Section 24, T1N, R2W; thence north on a line approximately 1000 feet; thence northeasterly on a line approximately 1/4 mile to the intersection of NW 185th Avenue and NW Springville Road; thence northeasterly along NW Springville



Road approximately 1/4 mile to the one-quarter point of the northern boundary of Section 19, T1N, R1W; thence north approximately 400 feet; thence east to the intersection with NW 185th Avenue; thence north along 185th Avenue approximately 800 feet to the one-quarter point of the western boundary of Section 18, T1N, R1W; thence gradually northeasterly such that the Rock Creek Campus of Portland Community College is within the boundary approximately 1/2 mile to the midpoint of Section 18, T1N, R1W; thence south following the eastern boundary of the Rock Creek Campus of Portland Community College and continuing on a line due south to the intersection with NW Springville Road and the southern boundary of Section 18, T1N, R1W; thence northeasterly along NW Springville Road to the intersection with the Washington-Multnomah County Line; thence following the Washington County line southeasterly and then southerly to the point where the Washington-Clackamas County Line intersects I-205, the point of beginning.

(b) Those areas where domestic open burning is prohibited, except for the burning of yard debris between March 1 and June 15, and between October 1 and December 15, subject to OAR 340-264-0050 through 340-262-0070, and the requirements and prohibitions of local jurisdictions and the State Fire Marshall:

(A) All incorporated areas in Washington County not listed in OAR 340-264-0140(5)(a) or 340-264-0140(5)(c).

(B) All unincorporated areas within municipal or rural fire districts.

(c) Those areas where domestic burning is allowed, subject to OAR 340-264-0050, and 340-264-0060 and the requirements and prohibitions of local jurisdictions and the State Fire Marshall:

(A) The area enclosed by a line beginning at the point where Highway 26 intersects the western boundary of Section 24, T2N, R4W; thence north to the northwest corner of Section 13, T2N, R4W; thence east to the midpoint of the northern boundary of Section 16, T2N, R3W; thence on a line south to the middle of Section 21, T2N, R3W; thence east to the intersection with the midpoint of the western boundary of Section 22, T2N, R3W; thence south to the southwest corner of Section 22, T2N, R3W; thence continuing south to the northern boundary of Washington County Donation Land Claim (DLC) #44; thence southeast and east following the northern boundary of Washington County DLC #44 to the eastern boundary of Washington County DLC #44; thence southwesterly along the eastern boundary of DLC #44 to the intersection with DLC Plot #76; thence continuing southwesterly along the eastern boundary of DLC #76 to the intersection with the Burlington Northern Railroad Line; thence northwesterly along the Burlington Northern Railroad Line to the intersection with the southern boundary of Section 32, T2N, R4W; thence west to the southwest corner of Section 36, T2N, R4W; thence north to the point where Highway 26 intersects the western boundary of Section 24, T2N, R4W, the point of beginning.

(B) All unincorporated areas of Washington County outside of municipal or rural fire districts.

(d) No person may cause or allow to be initiated or maintained any domestic open burning other than during daylight hours between 7:30 a.m. and two hours before sunset unless otherwise specified by ~~Department~~ [DEQ](#) pursuant to OAR 340-264-0070.

(6) Slash burning on forest land within special open burning control areas not regulated by the Department of Forestry under the Smoke Management Program is prohibited, except as provided in OAR 340-264-0180.

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

Stat. Auth.: ORS 468.~~020~~, & ORS 468A.~~025~~, 468A.575 & 468A.595

Stats. Implemented: ORS 468A.~~025~~, 468A.555 through 468A.620, 477.515 & 477.520~~555~~

Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84; DEQ 6-1992, f. & cert. ef. 3-11-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1995, f. & cert. ef. 5-25-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-023-0075; DEQ 21-2000, f. & cert. ef. 12-15-00

### 340-264-0150

#### Columbia County

Open burning requirements for Columbia County:

(1) Industrial open burning is prohibited unless authorized pursuant to OAR 340-264-0180.

(2) Agricultural open burning is allowed subject to OAR 340-264-0050(5) and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(3) Commercial open burning is prohibited unless authorized pursuant to OAR 340-264-0180.

(4) Construction and demolition open burning:

(a) Unless authorized pursuant to OAR 340-264-0180, ~~C~~construction and ~~D~~demolition open burning is prohibited within three miles of the open burning control areas of Clatskanie, Rainier, St. Helens, Scappoose, and Vernonia and any other area that meets the standard in OAR 340-264-0078(1);

(b) Construction and ~~D~~demolition open burning is allowed in all other parts of Columbia County subject to OAR 340-264-0050, 340-264-0060 and 340-264-0070, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(5) Domestic open burning is allowed subject to OAR 340-264-0050, 340-264-0060 and 340-264-0070, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(6) Slash burning on forest land within open burning control areas not regulated by the Department of Forestry under the Smoke Management Program is prohibited, except as provided in OAR 340-264-0180.

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

Stat. Auth.: ORS 468.~~020~~, & ~~ORS~~ 468A.~~025~~, 468A.575 & 468A.595

Stats. Implemented: ORS 468A.~~025~~, 468A.555 through 468A.620, 477.515 & 477.520~~555~~

Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-023-0080; DEQ 21-2000, f. & cert. ef. 12-15-00

### 340-264-0160

#### Lane County



Open burning requirements for Lane County. That portion of Lane County east of Range 7 West, Willamette Meridian, forms a part of the Willamette Valley Open Burning Control Area as generally described in OAR 340-264-0078(5) and depicted in Figure 2 [Open Burning Control Areas](#):

(1) The rules and regulations of ~~the Lane Regional Air Pollution authority~~ [LRAPA](#) apply to all open burning in Lane County, provided such rules are no less stringent than the provisions of this Division. ~~The Lane Regional Air Pollution Authority~~ [LRAPA](#) may not regulate agricultural open burning.

(2) Industrial open burning is prohibited unless authorized pursuant to OAR 340-264-0180.

(3) Agricultural open burning is allowed subject to the requirements and prohibitions of local jurisdictions and the State Fire Marshal:

(4) Commercial open burning, unless authorized pursuant to OAR 340-264-0180, is prohibited in Lane County east of Range 7 West Willamette Meridian and in or within three miles of the city limit of Florence on the coast. Commercial open burning is allowed in the remaining areas of Lane County, subject to 340-264-0050 and 340-264-0060 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(5) Construction and ~~D~~[demolition](#) open burning, unless authorized pursuant to OAR 340-264-0180, is prohibited within all fire districts and other areas specified in this section but is allowed elsewhere in Lane County, subject to 340-264-0050, 340-264-0060 and 340-264-0070, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal. Areas where open burning of construction and demolition waste is prohibited include:

(a) Bailey-Spencer RFPD;

(b) Coburg RFPD;

(c) Cottage Grove/South Lane Fire District;

(d) Creswell RFPD;

(e) Dexter RFPD except that portion east of the Willamette Meridian;

(f) Eugene RFPD No. 1;

(g) Goshen RFPD;

(h) Junction City Fire District;

(i) Junction City RFPD;

(j) Lane County Fire District #1;

(k) Lane RFPD No. 1 outside the Eugene-Springfield Urban Growth Boundary;

(l) Lowell RFPD;

(m) Marcola RFPD;

(n) McKenzie RFPD outside the Eugene-Springfield Urban Growth Boundary;

- (o) Monroe RFPD that portion within Lane County;
- (p) Oakridge RFPD;
- (q) Pleasant Hill RFPD;
- (r) Santa Clara RFPD outside the Eugene-Springfield Urban Growth Boundary;
- (s) Westfir RFPD;
- (t) Willakenzie RFPD;
- (u) Zumwalt RFPD.

(6) Domestic open burning:

- (a) Domestic open burning outside the fire districts listed in section (5) ~~of this rule~~ is allowed subject to OAR 340-264-0050, 340-264-0060 and 340-264-0070, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal;
- (b) Domestic open burning is prohibited within all fire districts listed in section (5) ~~of this rule~~ except that open burning of yard debris is allowed subject to OAR 340-264-0050, 340-264-0060 and 340-264-0070, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal;
- (c) Refer to ~~Lane Regional Air Pollution Authority~~ [LRAPA](#) open burning rules for specific seasons and hours for domestic open burning.

(7) Slash burning on forest land within special open burning control areas not regulated by the Department of Forestry under the Smoke Management Program is prohibited, except as provided in OAR 340-264-0180.

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

[ED. NOTE: Figures referenced are ~~available from the agency~~ [not included in rule text. Click here for PDF copy of figures.](#)]

Stat. Auth.: ORS 468.[020](#), ~~& ORS~~ 468A.[025](#), 468A.[135](#), 468A.[140](#), 468A.[155](#), 468A.[575](#) & 468A.[595](#)

Stats. Implemented: ORS 468A.[025](#), 468A.[100](#) through 468A.[180](#), 468A.[555](#) through 468A.[620](#), 477.[515](#) & [477.520](#)~~555~~

Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84; DEQ 6-1992, f. & cert. ef. 3-11-92; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-023-0085; DEQ 21-2000, f. & cert. ef. 12-15-00

### **340-264-0170**

#### **Coos, Douglas, Jackson and Josephine Counties**

Open burning requirements for Coos, Douglas, Jackson and Josephine Counties:

(1) Open burning control areas:

- (a) The Coos Bay open burning control area, as ~~generally~~ described in OAR 340-264-0078(2) and generally depicted in Figure 3 Coos Bay Open Burning Control Area of OAR 340-264-0078, is located in Coos County;
- (b) The Umpqua Basin open burning control area, as ~~generally~~ described in OAR 340-264-0078(4), and generally depicted in Figure 5 Umpqua Basin Open Burning Control Area of OAR 340-264-0078, is located in Douglas County;
- (c) The Rogue Basin open burning control area, as ~~generally~~ described in OAR 340-264-0078(3) and generally depicted in Figure 4 Rogue Basin Open Burning Control Area of OAR 340-264-0078, is located in Jackson and Josephine Counties.

(2) Industrial open burning is prohibited unless authorized pursuant to OAR 340-264-0180.

(3) Agricultural open burning is allowed subject to OAR 340-264-0050(5) and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(4) Commercial open burning is prohibited within the Coos Bay, Umpqua Basin and Rogue Basin open burning control areas and within three miles of the corporate city limits of Coquille, Reedsport and other areas that meet the standard in OAR 340-264-0078(1), unless authorized pursuant to OAR 340-264-0180. Commercial open burning is allowed in all other areas of these counties subject to OAR 340-264-0050, 340-264-0060 and 340-264-0070 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(5) Construction and ~~D~~demolition open burning is prohibited within the Coos Bay, Umpqua Basin and Rogue Basin open burning control areas and within three miles of the corporate city limits of Coquille, Reedsport and other areas that meet the standard within OAR 340-264-0078(1), unless authorized pursuant to OAR 340-264-0180. Construction and ~~D~~demolition open burning is allowed in other areas of these counties subject to OAR 340-264-0050, 340-264-0060 and 340-264-0070, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(6) Domestic open burning is allowed subject to OAR 340-264-0050, 340-264-0060, 340-264-0070 and section (7) ~~of this rule~~, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(7) Slash burning on forest land within open burning control areas not regulated by the Department of Forestry under the Smoke Management Program is prohibited, except as provided in OAR 340-264-0180.

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

[ED. NOTE: Figures referenced are ~~available from the agency~~ not included in rule text. Click here for PDF copy of figures.]

Stat. Auth.: ORS 468.~~020~~, ~~& ORS~~ 468A.~~025~~, 468A.575 & 468A.595

Stats. Implemented: ORS 468A.~~025~~, 468A.555 through 468A.620, 477.515 & 477.520~~555~~

Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 21-1991, 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 340-023-0090; DEQ 21-2000, f. & cert. ef. 12-15-00

## 340-264-0175

### Klamath County

Open burning requirements for Klamath County:

- (1) Open burning control areas: The Klamath Basin open burning control area as generally described in OAR 340-264-0078(6) and depicted in Figure 6 is located in Klamath County;
- (2) Industrial open burning is prohibited unless authorized pursuant to OAR 340-264-0180.
- (3) Agricultural open burning is allowed subject to OAR 340-264-0050(5) and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (4) Commercial open burning is prohibited within the Klamath Basin open burning control areas and within three miles of the corporate city limits of other areas that meet the standard in OAR 340-264-0078(1), unless authorized pursuant to 340-264-0180. Commercial open burning is allowed in all other areas of this county subject to 340-264-0050, 340-264-0060 and 340-264-0070 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (5) Construction and Demolition open burning is prohibited within the Klamath Basin open burning control areas and within three miles of the corporate city limits of other areas that meet the standard within OAR 340-264-0078(1), unless authorized pursuant to 340-264-0180. Construction and Demolition open burning is allowed in other areas of these counties subject to 340-264-0050, 340-264-0060 and 340-264-0070, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (6) Domestic open burning is allowed subject to OAR 340-264-0050, 340-264-0060, 340-264-0070 and section (7) of this rule, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (7) Slash burning on forest land within open burning control areas not regulated by the Department of Forestry under the Smoke Management Program is prohibited, except as provided in OAR 340-264-0180.

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

[ED. NOTE: Figures referenced are ~~available from the agency~~ not included in rule text. [Click here for PDF copy of figures.](#)]

Stat. Auth.: ORS 468.020 ~~&~~ 468A.025, 468A.575 & 468A.595

Stats. Implemented: ORS 468A.025, 468A.555 through 468A.620, 477.515 & 477.520

Hist.: DEQ 10-2012, f. & cert. ef. 12-11-12

## 340-264-0180

### Letter Permits

- (1) Open Burning of commercial, industrial, slash, construction or demolition waste on a singly occurring or infrequent basis or the open burning of yard debris that is otherwise prohibited, may be permitted by a letter

permit issued by ~~the Department~~ [DEQ](#) in accordance with this rule and subject to OAR 340-264-0050, 340-264-0060 and 340-264-0070, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal. OAR 340-014-0025 and division 216 do not apply.

(2) A letter permit may only be issued on the basis of a written application for disposal of material by burning that has been approved by ~~the Department~~ [DEQ](#). Each application for a letter permit must contain the following items:

- (a) The quantity and type of material proposed to be burned;
- (b) A listing of all alternative disposal methods and potential costs that have been identified or investigated;
- (c) The expected amount of time that will be required to complete the burning (not required for yard debris);
- (d) The methods proposed to be used to insure complete and efficient combustion of the material;
- (e) The location of the proposed burning site;
- (f) A diagram showing the proposed burning site and the structures and facilities inhabited or used in the vicinity including distances thereto;
- (g) The expected frequency of the need to dispose of similar materials by burning in the future;
- (h) If the application is for prescribed burning of standing vegetation for the purpose of creating or restoring wetlands or for promoting or enhancing habitat for indigenous species of plants or animals, the application must also include a citation to the federal or state law or program requiring or authorizing such conversion or enhancement. The application must also include a statement from the appropriate agency responsible for implementing the law or program that open burning is the most practicable alternative for the conversion or enhancement.
- (i) Any other information that the applicant considers relevant or ~~the Department~~ [DEQ](#) may require;
- (j) For open burning of yard debris:
  - (A) A "Hardship Permit Application" completed on a form supplied by ~~the Department~~ [DEQ](#); and
  - (B) Either payment of the appropriate fee pursuant to section (10) ~~of this rule~~ or a "waiver request" completed on a form supplied by ~~the Department~~ [DEQ](#).
- (3) Upon receipt of a written application, ~~the Department~~ [DEQ](#) may approve the application if it is satisfied that:
  - (a) The applicant has demonstrated that all reasonable alternatives have been explored and no practicable alternative method for disposal of the materials exists; and
  - (b) The proposed burning will not cause or contribute to significant degradation of air quality.
  - (c) For locations within Clackamas, Columbia, Multnomah and Washington counties, where open burning is otherwise prohibited, the following conditions must also be met. Letter permits may be issued only for disposing of:
    - (A) Material resulting from emergency occurrences, including but not limited to, floods, storms or oil spills;

(B) Material originating as yard debris that has been collected and stored by governmental jurisdictions, provided that no other reasonable means of disposal are available;

(C) Yard debris excluding grass clippings and leaf piles, on the property of a private residence where the inability to burn creates a significant hardship due to:

(i) An economic burden because the estimated cost of alternative means of yard debris disposal presents a financial hardship in relation to household income and expenses of the applicant;

(ii) A physical handicap, personal disability, chronic illness, substantial infirmity or other physical limitation substantially inhibiting the ability of the applicant to process or transport yard debris; or

(iii) Inaccessibility of yard debris, where steepness of terrain or remoteness of the debris site makes access by processing or transportation equipment unreasonable.

(4) ~~The Department~~ [DEQ](#) may deny an application for a letter permit or revoke or suspend an issued letter permit on any of the following grounds:

(a) Any material misstatement or omission in the application or a history of such misstatements or omissions by the applicant;

(b) Any actual or projected violation of any statute, rule, regulation, order, permit, ordinance, judgment or decree.

(5) In making its determination under section (3) ~~of this rule~~, ~~the Department~~ [DEQ](#) may consider:

(a) The conditions of the airshed of the proposed burning;

(b) The other air pollution sources in the vicinity of the proposed burning;

(c) The availability of other methods of disposal, and special circumstances or conditions that may impose a hardship on an applicant;

(d) The frequency of the need to dispose of similar materials in the past and expected in the future;

(e) The applicant's prior violations, if any;

(f) The projected effect upon persons and property in the vicinity; and

(g) Any other relevant factor.

(6) Each letter permit issued by ~~the Department~~ [DEQ](#) pursuant to section (2) ~~of this rule~~ must contain at least the following elements:

(a) The location where burning is permitted to take place.

(b) The number of actual calendar days on which burning is permitted to take place, not to exceed seven. Burning pursuant to a permit for yard debris must be limited to three days per season unless satisfactory justification for more burning is provided by the applicant.

(c) The period during which the permit is valid, not to exceed a period of 30 consecutive days, except a permit for yard debris. The actual period in the permit must be specific to the needs of the applicant. ~~The Department~~[DEQ](#) may issue specific letter permits for shorter periods.

(d) A letter permit for yard debris is valid for a single burning season or for both the spring and fall burning seasons during a calendar year, as appropriate to the application and the fee paid pursuant to the schedule in section (10)~~-of this rule~~. The spring burning is from March 1 to June 15, inclusive, and the fall burning season is from October 1 to December 15, inclusive.

(e) Equipment and methods required to be used by the applicant to insure that the burning is accomplished in the most efficient manner over the shortest period of time to minimize smoke production.

(f) The limitations, if any, based on meteorological conditions required before burning may occur. Open burning under permits for yard debris must be limited to the hours and times that limit seasonal domestic yard debris burning permitted in the county where the burning under the letter permit is to occur.

(g) Reporting requirements for both starting the fire each day and completion of the requested burning, (optional for permits for yard debris).

(h) A statement that OAR 340-264-0050 and 340-264-0060 are fully applicable to all burning under the permit.

(i) Such other conditions as ~~the Department~~[DEQ](#) considers to be desirable.

(7) Regardless of the conditions contained in any letter permit, each letter permit, except permits for yard debris, will not be valid for more than 30 consecutive calendar days of which a maximum of seven can be used for burning. ~~The Department~~[DEQ](#) may issue specific letter permits for shorter periods.

(8) Letter permits are not renewable. Any request to conduct additional burning requires a new application and a new permit.

(9) No person may violate any condition, limitation, or term of a letter permit.

(10) All applications for a letter permit for yard debris must be accompanied by a permit fee payable to ~~the Department~~[DEQ](#), or approved delegated authority, and become non-refundable upon issuance of the permit. The fee to be submitted is:

(a) For a single burning season, spring or fall — \$20;

(b) For a calendar year — \$30.

(11) ~~The Department~~[DEQ](#) may waive the single season permit fee if the applicant shows that the cost of the yard debris permit presents an extreme financial hardship in relation to the household income and expenses of the applicant.

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

Stat. Auth.: ORS 468.[020](#), ~~& ORS~~ 468A.[025](#), 468A.[575](#) & 468A.[595](#)

Stats. Implemented: ORS 468A.[025](#), 468A.[555](#) through 468A.[620](#), 477.[515](#) & 477.[520](#)~~555~~

Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-023-0100; DEQ 21-2000, f. & cert. ef. 12-15-00

### **340-264-0190**

#### **Forced Air Pit Incinerators**

~~Forced air pit incineration may be approved as an alternative to open burning prohibited by this Division, provided that the following conditions are met:~~

- ~~(1) The person requesting approval of forced air pit incineration must demonstrate to the satisfaction of the Department that no feasible or practicable alternative to forced air pit incineration exists.~~
- ~~(2) The forced air pit incineration facility must be designed, installed, and operated in such a manner that visible emissions do not exceed 40 percent opacity, as measured by EPA Method 9, for more than three minutes out of any one hour of operation following the initial 30 minute startup period.~~
- ~~(3) The person requesting approval of a forced air pit incineration facility must submit a Notice of Construction and Application for Approval pursuant to OAR 340-210-0200 through 340-210-0220 before the department will approve any facility.~~
- ~~(4) A forced air pit permit for operation of a forced air pit incineration facility is required, based on the same conditions and requirements for letter permits in OAR 340-264-0180, except that both the term of the permit and the operation limit of the facility will be specified in the permit and must be appropriate to the purpose of the facility.~~

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

~~Stat. Auth.: ORS 468 & ORS 468A~~

~~Stats. Implemented: ORS 468A.575~~

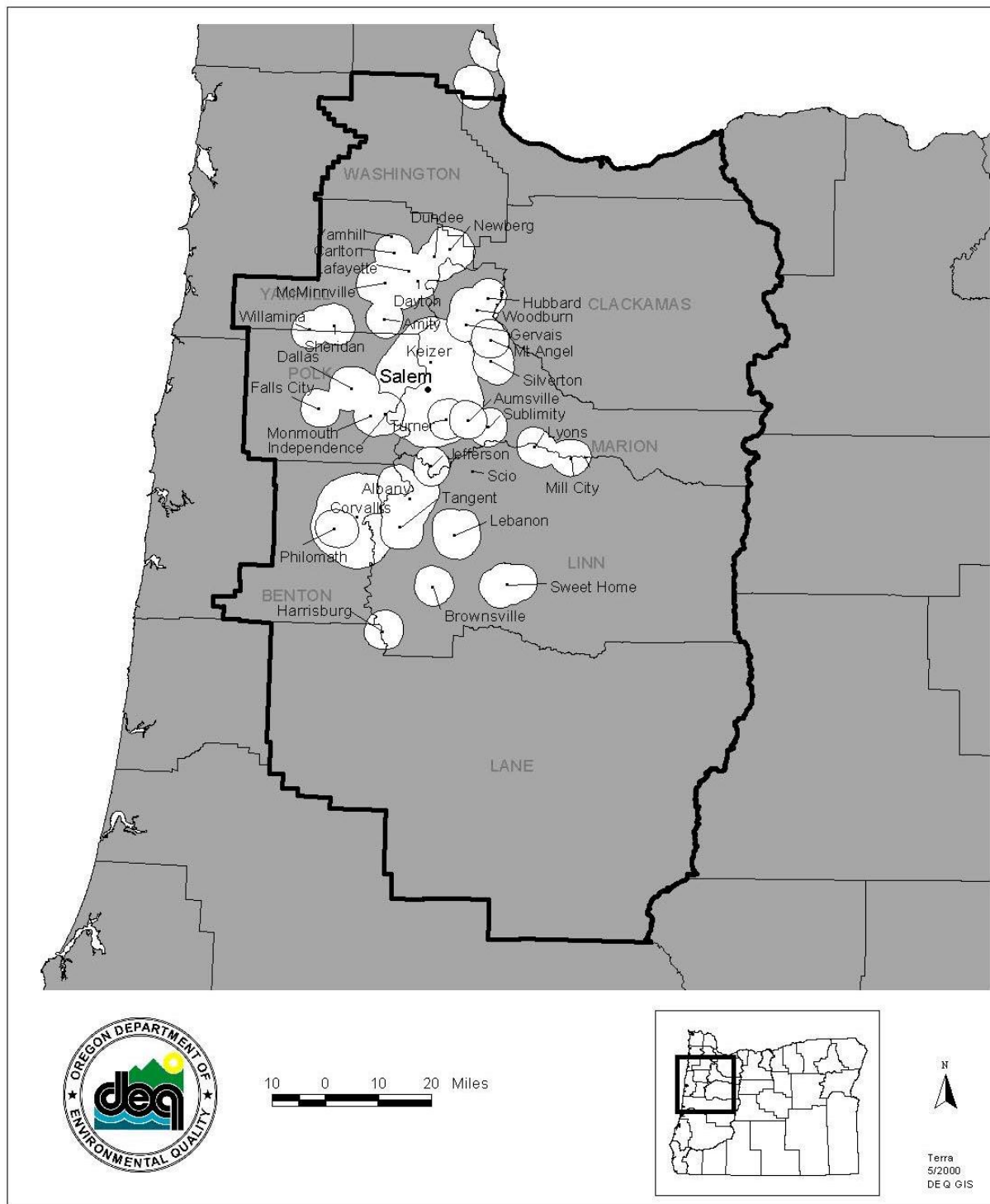
~~Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-023-0105; DEQ 21-2000, f. & cert. ef. 12-15-00~~



340-264-0078

Figure 1

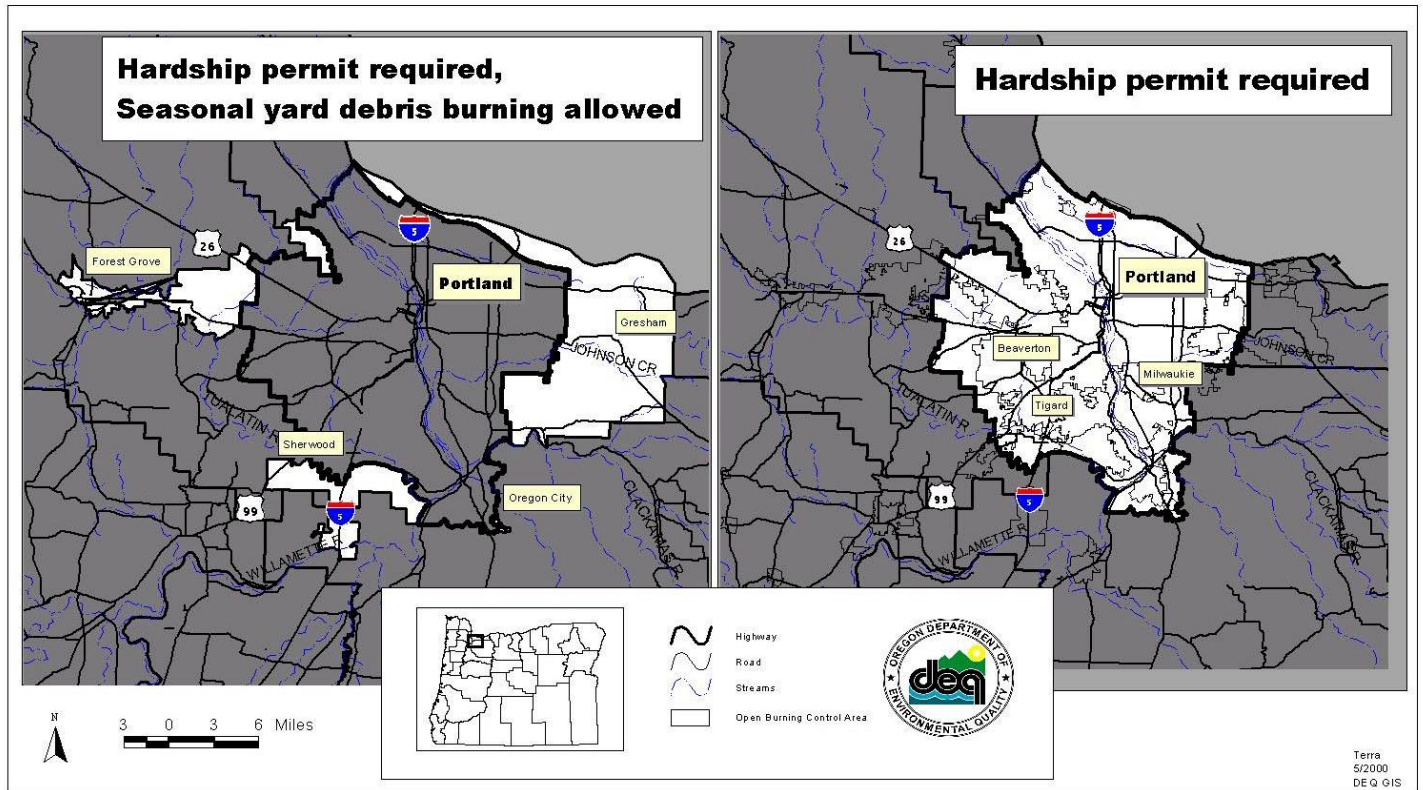
WILLAMETTE VALLEY OPEN BURNING CONTROL AREA



340-264-0078

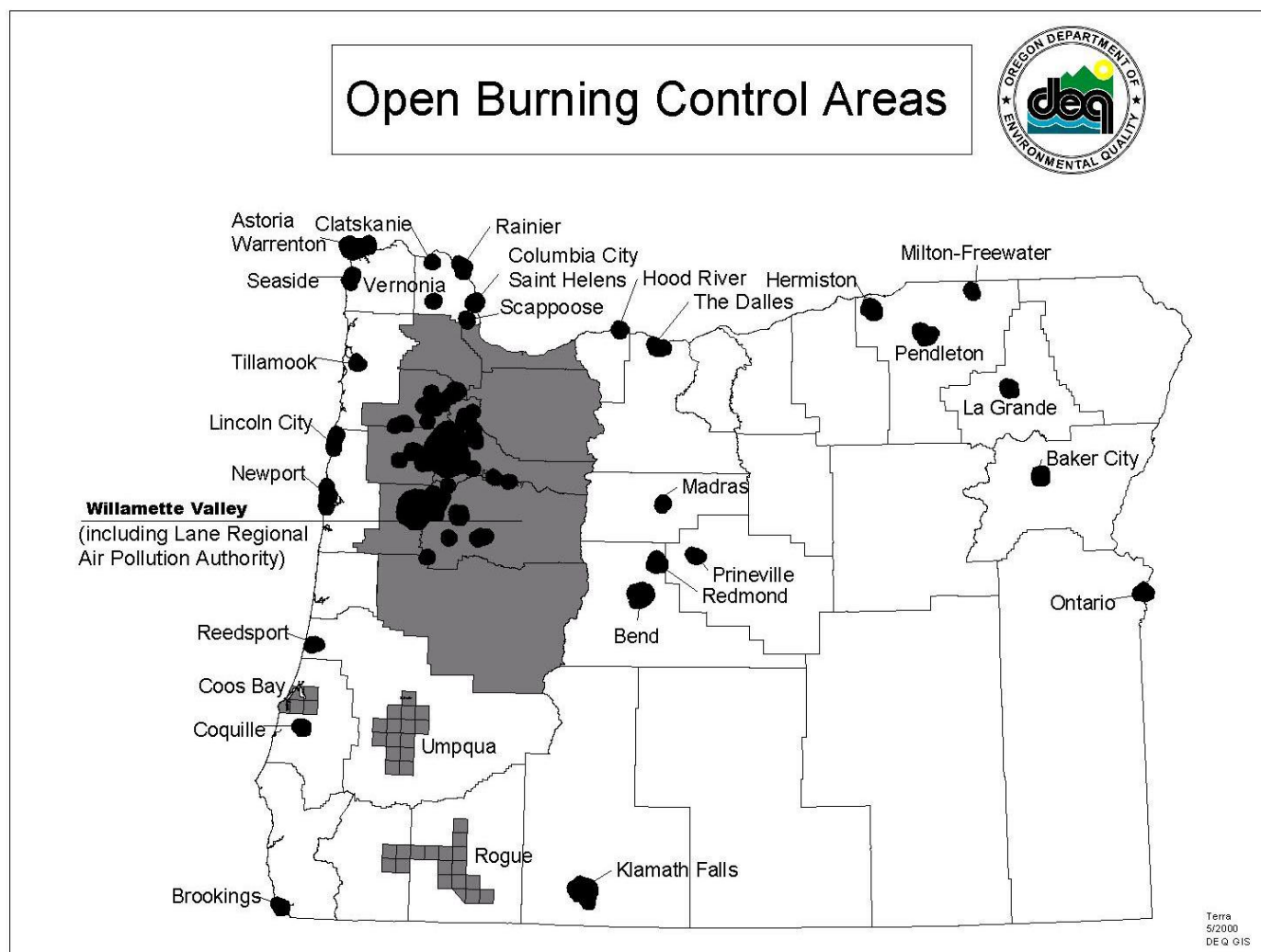
Figure 1A

# METROPOLITAN AREA BACKYARD BURNING BOUNDARIES



340-264-0078

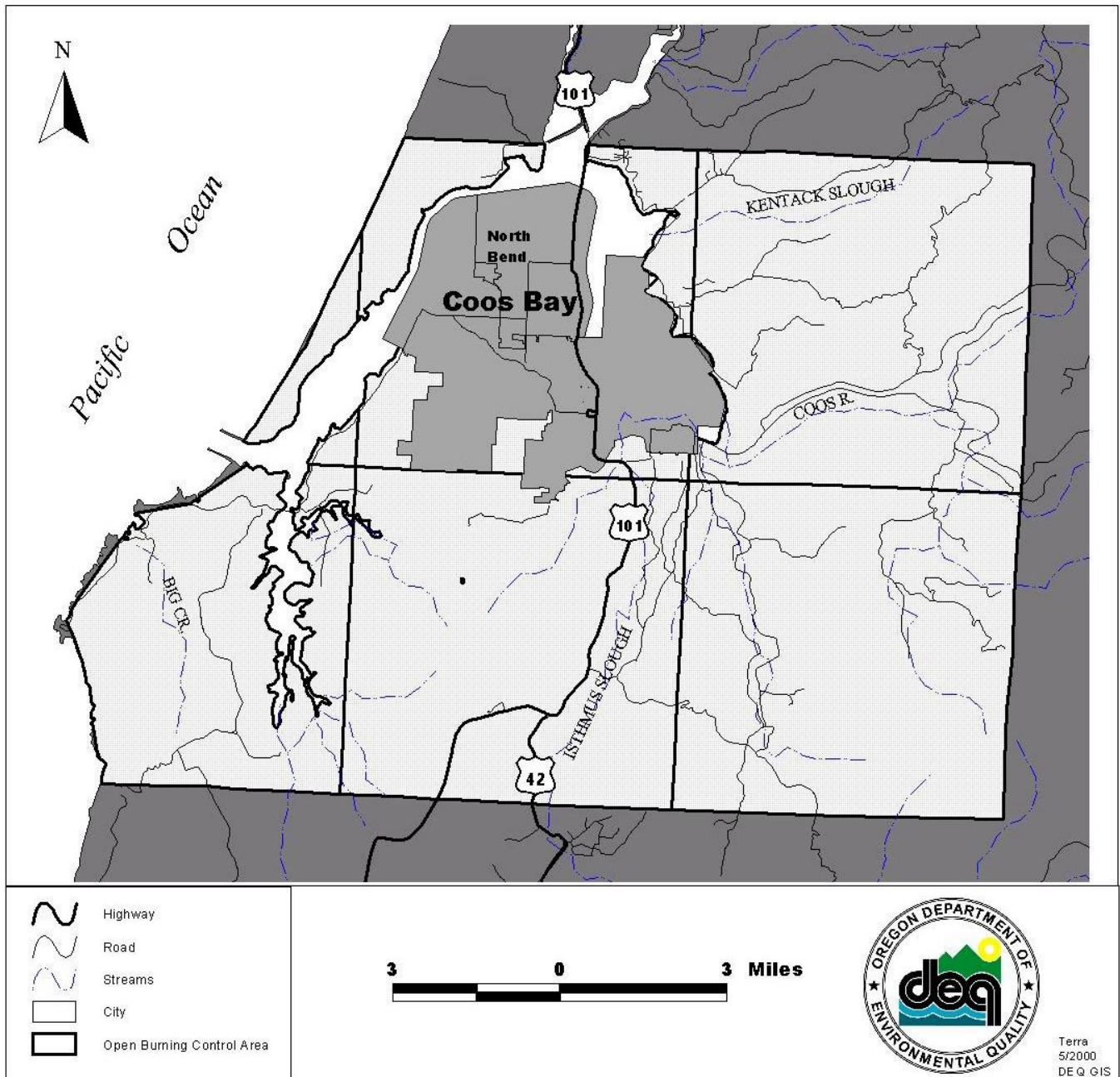
Figure 2



340-264-0078

Figure 3

COOS BAY OPEN BURNING CONTROL AREA





340-264-0078

Figure 4

ROGUE BASIN OPEN BURNING CONTROL AREA

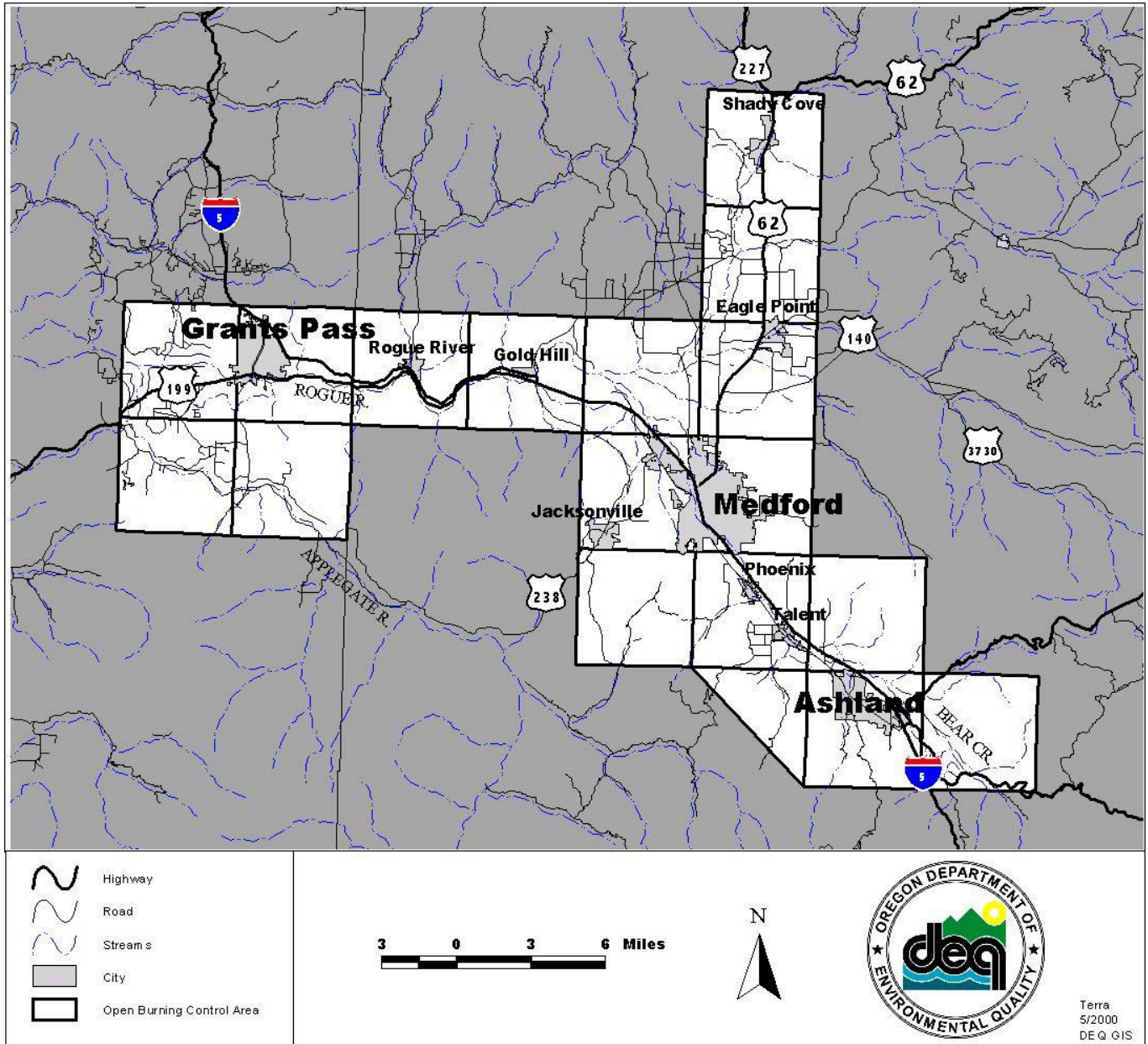
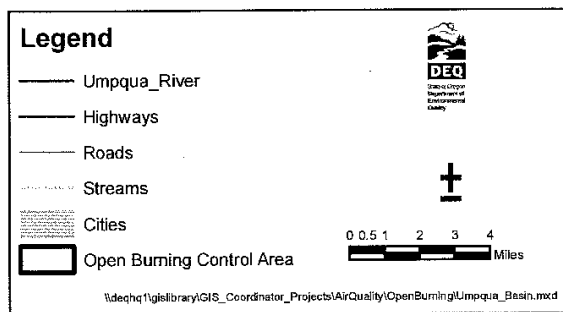
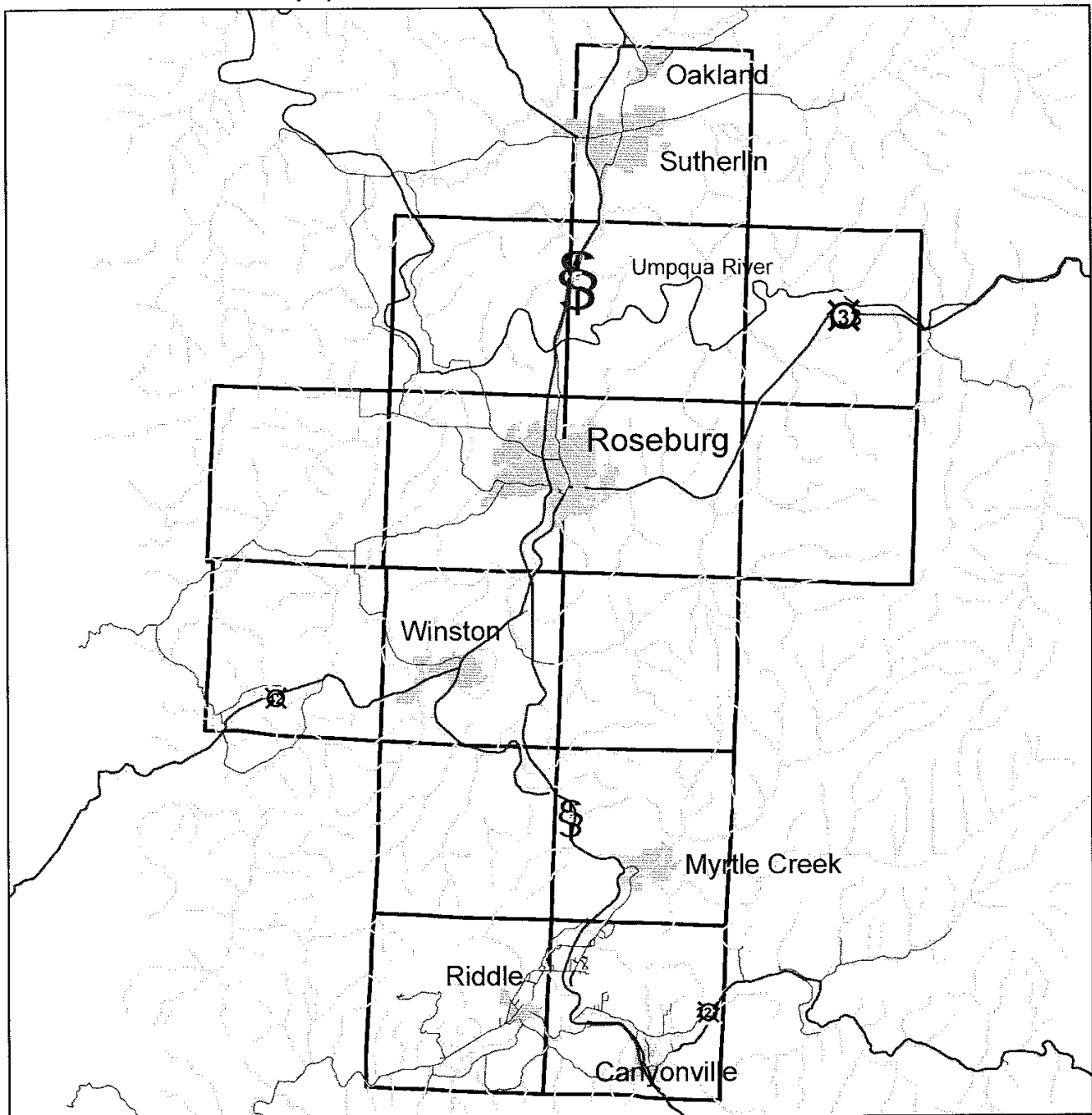


Figure 5

## Umpqua Basin Open Burning Control Area



## EMISSION REDUCTION CREDITS

### 340-268-0010

#### Applicability and Jurisdiction

(1) This division applies to any person who wishes to create or bank an emission reduction credit in the state.

(2) Subject to the requirements in this division, LRAPA is designated by the EQC to implement this division within its area of jurisdiction. The requirements and procedures contained in this division must be used by LRAPA unless LRAPA has adopted or adopts rules which are at least as strict as this division.

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

Stat. Auth.: ORS 468A

Stats. Implemented: ORS 468 & ~~ORS~~ 468A

Hist.: DEQ 14-1999, f. & cert. ef. 10-14-99; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

### 340-268-0020

#### Definitions

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

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

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 14-1999, f. & cert. ef. 10-14-99

### 340-268-0030

#### Emission Reduction Credits

Any person who reduces emissions by implementing more stringent controls than required by a permit or an applicable regulation may create an emission reduction credit. Emission reduction credits must be created and banked within two years from the time of actual emission reduction.

(1) Creating Emission Reduction Credits. Emission reductions can be considered credits if all of the following requirements are met:

(a) The reduction is permanent due to continuous overcontrol, curtailment or shutdown of an existing activity or device.

(b) The reduction is in terms of actual emissions reduced at the source. The amount of the creditable reduction is the difference between the contemporaneous (any consecutive 12 calendar month period during the prior 24 calendar months) pre-reduction actual (or allowable, whichever is less) emissions and the post-reduction allowable emissions from the subject activity or device.

(c) The reduction is either:

(A) Enforceable by ~~the Department~~ [DEQ](#) through permit conditions or rules adopted specifically to implement the reduction that make increases from the activity or device creating the reduction a violation of a permit condition; or

(B) The result of a physical design that makes such increases physically impossible.

(d) The reduction is surplus. Emission reductions must be in addition to any emissions used to attain or maintain ~~NA~~AAQS in the SIP.

(e) Sources in violation of air quality emission limitations may not create emission reduction credits from those emissions that are or were in violation of air quality emission limitations.

(f) If establishing emission reduction credits due to the replacement of residential wood fuel-fired devices in Klamath Falls, the source must use the procedures in OAR 340-240-0560 to calculate the emission reductions.

(g) Hazardous emissions reductions required to meet the MACT standards at 40 CFR part 61 and part 63, including emissions reductions to meet the early reduction requirements of section 112(i)(5), are not creditable as emission reduction credits for purposes of Major NSR in nonattainment or reattainment areas. However, any emissions reductions that are in excess of or incidental to the MACT standards are not precluded from being credited as emission reduction credits as long as all conditions of a creditable emission reduction credit are met.

(2) Banking of Emission Reduction Credits.

(a) The life of emission reduction credits may be extended through the banking process as follows:

(A) Emission reduction credits may be banked for ten years from the time of actual emission reduction.

(B) Requests for emission reduction credit banking must be submitted within the 2 year (24 calendar month) contemporaneous time period immediately following the actual emission reduction. (The actual emission reduction occurs when the airshed experiences the reduction in emissions, not when a permit is issued or otherwise changed).

(b) Banked emission reduction credits are protected during the banked period from rule required reduction, if ~~the Department~~ [DEQ](#) receives the emission reduction credit banking request before ~~the Department~~ [DEQ](#) submits a notice of a proposed rule or plan development action for publication in the Secretary of State's bulletin. The ~~Commission~~ [EQC](#) may reduce the amount of any banked emission reduction credit that is protected under this section, if the ~~Commission~~ [EQC](#) determines the reduction is necessary to attain or maintain an ambient air quality standard.



(c) Emission reductions must be in the amount of ten tons per year or more to be creditable for banking, except as follows:

(A) In the Medford-Ashland AQMA, PM10 emission reductions must be at least 3 tons per year.

(B) In Lane County, LRAPA may adopt lower levels.

(d) Emission reduction credits will not expire pending ~~the Department~~ [DEQ](#) taking action on a timely banking request unless the 10 year period available for banking expires.

(3) Using Emission ~~R~~[R](#)eduction Credits: Emission reduction credits may be used for:

(a) Netting actions within the source that generated the credit, through a permit modification; or

(b) Offsets pursuant to the ~~New Source Review~~ [NSR program](#), (~~OAR 340 division 224~~) ~~and the Net Air Quality Benefit requirements of OAR 340-225-0090.~~

(4) Emission reduction credits are considered used when a complete NSR permit application is received by DEQ to apply the emission reduction credits to netting actions within the source that generated the credit, or to meet the offset and net air quality benefit requirements of the NSR program under OAR 340-224-0500 though 340-224-0540.

(5) Unused Emission Reduction Credits.

(a) Emission reduction credits that are not used, and for which ~~the Department~~ [DEQ](#) does not receive a request for banking within the contemporaneous time period, will become unassigned emissions for purposes of the Plant Site Emission Limit (PSEL) and are no longer available for use as external offsets.

(b) Emission ~~R~~[R](#)eduction credits that are not used prior to the expiration date of the credit will revert to the source that generated the credit and will be treated as unassigned emissions for purposes of the PSEL pursuant to OAR 340-222-00455 and are no longer available for use as external offsets.

(6) Emission Reduction Credit (ERC) Permit:

(a) ~~The Department~~ [DEQ](#) tracks ERC creation and banking through the permitting process. The holder of ERCs must maintain either an ACDP, Title V permit, or an ERC Permit.

(b) ~~The Department~~ [DEQ](#) issues ERC Permits for anyone who is not subject to the ACDP or Title V programs that requests an ERC or an ERC to be banked.

(c) An ERC permit will only contain conditions necessary to make the emission reduction enforceable and track the credit.

(d) Requests for emission reduction credit banking must be submitted in writing to ~~the Department~~ [DEQ](#) and contain the following documentation:

(A) A detailed description of the activity or device controlled or shut down;

(B) Emission calculations showing the types and amounts of actual emissions reduced, including pre-reduction actual emission and post-reduction allowable emission calculations;

**CONTINUOUS MONITORING MANUAL**

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
811 SW SIXTH AVENUE  
Portland, Oregon 97204**

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**Continuous Monitoring Manual  
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## **1.0 INTRODUCTION**

Continuous Monitoring Systems (CMS) are required to be installed in facilities specified by Oregon Department of Environmental Quality (DEQ) Air Contaminant Discharge Permits (ACDP), Oregon Administrative rules (OAR), and Federal Environmental Protection Agency (EPA) New Source Performance Standards (NSPS-40 CFR Part 60). The CMS are used to continuously monitor the effectiveness of air pollution control techniques and to determine if source control requirements are being met.

This manual has been prepared to specify the requirements for CMS operation, reporting, and quality assurance/quality control (QA/QC). For the purposes of this manual, continuous monitoring system is defined as the total equipment (sample interface, analyzer, and data recording) required for determining emissions and/or operating parameters. There are three basic categories of CMS. These are continuous opacity monitoring systems (COMS), continuous emission monitoring systems (CEMS), and continuous parameter monitoring systems (CPMS). The CMS may be required for continuously monitoring compliance with a specific pollutant emission limit or may be required to monitor compliance with source and pollution control device operating limits.

Effective January 23, 1992, this manual supercedes any previously existing continuous monitoring manual, draft or otherwise, provided by the DEQ.

## **2.0 DEFINITIONS**

- A. "Calibration gas" means any gas containing a known concentration of pollutant and traceable to the National Institute of Standards and Technology (NIST) - standard reference materials (SRM), Environmental Protection Agency (EPA) - certified reference material (CRM), or certified according to EPA Protocol - 1.
- B. "Continuous Emissions Monitoring System (CEMS)" means a CMS used for measuring and recording gaseous pollutant emissions (i.e. SO<sub>2</sub>, NO<sub>x</sub>, CO, etc.).
- C. "Continuous Monitoring System (CMS)" means the total equipment required for measuring and recording an emission and/or operating parameter at a source.
- D. "Continuous Opacity Monitoring System (COMS)" means a CMS used for measuring and recording visible emissions.
- E. "Continuous Parameter Monitoring System (CPMS)" means a CMS

used for measuring and recording the operating conditions of a source or pollution control device (i.e. steam pressure, scrubber pressure drop, temperatures, etc.).

- F. "Monitor" means the analyzer component of the CMS (i.e. CO analyzer, transducer, etc.)
- G. "Out-of-control" means the CMS is not operating within performance specifications and the data is invalid.
- H. "Site" means the entire plant regulated by an Air Contaminate Discharge Permit.
- I. "Source" means the regulated process at a site (i.e. hogged fuel boiler #1).
- J. "Span gas" means any gas containing a known concentration of pollutant as certified by the manufacturer of the gas.
- K. "Zero Gas" means any calibration gas containing less than 0.25% of the span of the monitor for the pollutant being measured.

### **3.0 CONTINUOUS MONITORING SYSTEMS REQUIREMENTS**

The source operator shall prepare and maintain written standard operating procedures (SOP) and a quality assurance plan (QAP) for each CMS used at a source. The SOP and QAP shall be written by the permittee, and approved by the DEQ, prior to operation of a CMS and revised as necessary based on operator experience with the CMS. The SOP and QAP shall contain detailed, complete, step-by-step written procedures. Appendix B contains further explanations and requirements for the SOP and QAP. Both documents shall be made available to DEQ personnel for inspection upon request.

#### **3.1 Standard operating procedures**

Standard operating procedures shall be written for each CMS. The contents of the SOP shall include, as a minimum, the following information:

- A. Source owner or operator name and address.
- B. Identification, description, and location of monitors in the CMS.
- C. Description and location of the sample interface (i.e. sample probe).

- D. Manufacturer and model number of each monitor in the CMS.
- E. Equipment involved in sample transport, sample conditioning, analysis, and recording.
- F. Procedures for routine operation checks, including daily zero and span calibration drift (CD) check.
- G. Procedures for routine preventive maintenance. Initially, these procedures can be taken from the manufacturer's installation and operation manuals. However, as the CMS operators gain more experience with the CMS, it may be necessary or desirable to modify these procedures to increase or decrease frequency of maintenance and add or delete some procedures.
- H. Routine maintenance spare parts inventory.
- I. Procedures for calculating and converting CMS data into units of the standard.
- J. Documentation of the activities described in 3.1 A - I.

### **3.2 Quality Assurance Plan**

A quality assurance plan (QAP) shall be written for each CMS or for the entire site when more than one CMS exists. The contents of the QAP shall include as a minimum the following information:

- A. Data quality objectives.
- B. Chain of responsibility for CMS operation, corrective action, and training program.
- C. Procedure for measuring the CMS accuracy and precision including the following:
  - 1. CMS calibrations
  - 2. Zero and span drift checks
  - 3. Performance audits
  - 4. System audits
- D. Procedures for quality control activities

- E. Procedures for quality control documentation
- F. Procedures for data recording, calculations, and reporting
- G. Criteria for corrective action
- H. Procedures for corrective action

#### **4.0 SPECIFIC CMS OPERATING REQUIREMENTS**

This section addresses specific requirements for the operation of CMS, including performance criteria, location, installation, calibrations, routine maintenance, and data recording. These are minimum requirements. The source operator is encouraged to add additional requirements for their specific CMS that will improve data quality and completeness.

##### **4.1 Continuous Opacity Monitoring Systems (COMS)**

- A. Existing COMS installed prior to 6/1/91 shall be maintained and operated in accordance with ACDP requirements; and, unless otherwise specified, are not subject to the requirements of this manual.
- B. COMS installed after 6/1/91 and/or installed on NSPS sources shall continuously monitor and record the opacity of emissions discharged into the atmosphere from the regulated emission point. Single pass or double pass transmissometers may be used in the COMS as long as the calibration drift can be measured and recorded daily. The Span of COMS for non-NSPS sources shall be set at 100% Opacity, or a span agreed upon by the source and DEQ. Sources which must follow NSPS requirements must set COMS span at the value specified in the applicable subpart of 40 CFR Part 60.
- C. COMS put into service after 6/1/91 on non-NSPS sources shall be installed at a location in the stack or duct work where opacity measurements are representative of emissions, as far as practicable from bends and obstructions; in an area of the stack or duct work where condensed water vapor is absent; shielded from interference by ambient light (if the transmissometer is responsive to ambient light); and be accessible for routine maintenance including lens cleaning, alignment checks, calibration checks, blower maintenance, and audits.

COMS put into service to replace existing COMS may be installed at the same location as the previous COMS with the

approval of the DEQ.

COMS for all NSPS sources and COMS installed after 6/1/91 must comply with the provisions of Performance Specification 1 (PS-1), 40 CFR 60 Appendix B (Appendix D).

- D. COMS installed after 6/1/91 shall be calibrated prior to installation to cover the appropriate opacity range using a minimum of three (3) optical filters with neutral spectral characteristics (calibrated according to procedures in 40 CFR 60, Appendix B, Performance Specification 1, section 7.1.2 - 7.1.3); and of sufficient size to attenuate the entire light beam received by the transmissometer detector.
1. Transmissometers shall be calibrated to measure percent opacity at the stack exit (i.e. the point where emissions are released into the environment). Although this correction is frequently made electronically, when the instrument is installed it must be documented and verifiable. Measurements shall be corrected for Stack Taper Ratio (STR) - the ratio of the optical pathlength at the stack exit ( $L_2$ ) to the optical pathlength at the transmissometer ( $L_1$ ) - using Eq-A1:

$$\text{Opacity} = 1 - 10^{-(\text{STR}) (D)} \quad \text{Eq-A1}$$

where:  $\text{STR} = L_2/L_1 = \text{"Stack Taper Ratio"}$   
 $D = \text{optical density of attenuator @ } L_1$   
 $L_1 = \text{transmissometer pathlength (feet)}$   
 $L_2 = \text{stack exit pathlength (feet)}$

Note: For circular stacks, the stack exit pathlength is the diameter at the outlet.  
For noncircular stacks, the stack exit pathlength equals  $(2LW)/(L+W)$ , where L is the length of the outlet and W is the width of the outlet.

2. Correction of calibration filters is necessary to compensate for the Stack Taper Ratio (STR). Since the measurements are being made upstream of the emission point, the measured opacity must be adjusted to reflect the opacity at the emission point by calibrating the COMS with optical density filters corrected for the stack taper ratio. Correction is accomplished using Eq-A2, knowing the Certified Optical Density of the calibration filters (O.D.), the stack exit pathlength at the emission point ( $L_2$ ), and the transmissometer



pathlength at the measurement point ( $L_1$ ). Each calibration filter must be corrected. Appendix A contains a table (A-1) listing correction values.

$$\text{Corrected \%Op} = \{1 - [1 - (\text{Op}_c/100)]^{(\text{STR})}\} \times 100 \quad \text{Eq-A2}$$

where:

|               |   |                                           |
|---------------|---|-------------------------------------------|
| Corrected %Op | = | corrected calibration filter opacity      |
| $\text{Op}_c$ | = | certified %Op value of calibration filter |
| STR           | = | $L_2/L_1$                                 |
| $L_1$         | = | transmissometer pathlength (feet)         |
| $L_2$         | = | stack exit pathlength (feet)              |

3. Calibration attenuators (filters) shall be selected based on the appropriate span value using Table 1-2, 40 CFR 60 Appendix B, PS-1. Calculate the specific filter attenuator optical density needed, using Eq-A3, and purchase certified neutral density filters closest to the calculated values.

$$D_1 = D_2 (L_1/L_2) \quad \text{Eq-A3}$$

where:

|       |   |                                                                                        |
|-------|---|----------------------------------------------------------------------------------------|
| $D_1$ | = | Optical density of required calibration filter.                                        |
| $D_2$ | = | Nominal attenuator optical density from Table (Table 1-2, 40 CFR 60 Appendix B, PS-1). |
| $L_1$ | = | Transmissometer pathlength (feet).                                                     |
| $L_2$ | = | Stack exit pathlength (feet).                                                          |

- D. The zero and span calibration drift shall be measured and recorded daily when the COMS is in operation. (See appendix B for details of this procedure.)

#### 4.1.1 Correlating opacity with mass emission rates

It may be possible to correlate opacity measurements with mass emission rates by assuming that the density, particle size distribution, and optical properties of the particulate material remain reasonably constant. In order to determine the relationship between opacity and mass emission rates for non-NSPS sources, these guidelines must be followed:

- A. The relationship between opacity and mass emission rate must

be documented.

1. Each data pair must consist of a one-hour particulate sample collected using pre-approved EPA or DEQ Methods and a one-hour average %Opacity monitored during that same time period. Each one-hour average %Opacity must have at least 90% data recovery.
2. Sufficient data pairs must be collected to show a reasonable correlation between particulate emissions and opacity. This may vary from source to source and may require tests at several different operating rates. A plan for determining the relationship shall be prepared and approved by the DEQ prior to testing. The final correlation constants must be approved by the DEQ.
3. For this relationship to be acceptable to the Department the source must demonstrate the COMS to be operating within EPA's Performance Specification 1 (40 CFR 60, Appendix B).

#### **4.2 Sodium ion electrode continuous emission monitoring system**

When sodium is a major constituent of the particulate effluent, present at a known and nearly constant percentage, the sodium concentration in a measured volume of stack gas may be relatable to effluent particulate concentration. Such is the case for some Kraft Process recovery furnaces.

- A. The sampling probe must be installed in the stack to obtain a sample which is representative of the average particulate concentration (normally the point of average velocity).
- B. A material balance shall be performed and documented monthly, according to a written operating procedure.
- C. The CEMS shall be inspected for fouling of electrode(s) and cleaned weekly.
- D. Accuracy must be demonstrated monthly by documentation of instrument response to challenges from two solutions of known sodium concentration; at between 10 - 20% and 90% of full-scale range.
- E. Due to the effect of pH on sodium ion electrode measurements it is necessary to buffer the scrubbing solution at pH 10. The pH of the scrubbing solution shall be checked daily with a calibrated pH meter.

1. The temperature of the pH electrode must be known and constant because pH varies with electrode temperature.
  2. The pH electrode shall be calibrated before each use, using pH 7 and pH 10 buffers, according to a written procedure.
- F. Gas flow rates, in and out of the system, must be checked and documented three times each week. Liquid flow rates must be checked once per month. There must be a written procedure for checking flows, and a procedure for correcting those flows found to be out of limits.
- G. Flow measurement devices for liquids and gases must be calibrated at least annually, and the calibration documented. Flow measurement accuracy must be within  $\pm 3\%$ .
- H. Water vapor content (i.e. absolute humidity) of the gas exiting the CEMS and the particulate scrubbing efficiency of the CEMS shall be verified and documented annually. The particulate scrubbing efficiency shall be determined by measuring the amount of particulate matter collected on a one-hour glass-fiber filter sample of the CEMS exiting gas stream.
- I. The percent sodium in the stack particulate shall be measured annually using an isokinetic impinger sample train and flame atomic absorption analysis. The sampling and analytical method shall be described in a written procedure and results documented.

#### **4.3 Continuous Emissions Monitoring Systems (CEMS)**

##### **4.3.1 NSPS sources and CEMS installed after 6/1/91**

- A. The CEMS shall continuously monitor and record the concentration of gaseous pollutant emissions on a wet or dry basis discharged into the atmosphere consisting of subsystems for sample extraction, conditioning, detection, analysis, and data recording/processing.
- B. All CEMS must meet the performance specifications of 40 CFR 60, Appendix B. (Included for reference in Appendix D of this manual). The specific performance specifications are listed below:
1. SO<sub>2</sub> and NO<sub>x</sub> CEMS - Performance Specification 2

2. CO<sub>2</sub> and O<sub>2</sub> CEMS - Performance Specification 3
  3. CO CEMS - Performance Specification 4 and 4a
  4. TRS CEMS - Performance Specification 5
- C. The span of the CEMS shall be set at 200% of the emission standard or a level specified by a specific subpart of 40 CFR Part 60 and approved by the DEQ.
1. The CEMS must be capable of recording down-scale drift below zero (see Appendix B).
- D. Sample probes for all CEMS shall be installed downstream of the control device(s); in a location representative of emissions from the source; accessible for routine maintenance, cleaning, calibration, and audits.
- E. Extractive CEMS operating procedures shall include automatic back-flushing of the sample line and probe to purge condensed moisture and particulate material.
- F. The CEMS analyzer must be installed and maintained in an environment conducive to analyzer stability.
- G. The calibration drift must be measured and recorded daily when the CEMS is in operation. Span gases used for this procedure need not be NIST traceable. However, the concentration of the gases should be verified by an analyzer calibrated with SRM or CRM calibration gases. It may be necessary to periodically respecify the concentration of the zero and span drift check gases.
- H. The CEMS must be audited at least once each quarter. Successive audits shall occur no closer than 2 months apart. (See Appendix B for auditing procedures.)
- I. Data shall be recorded in units of the ACDP limits.
1. CEMS installed for demonstrating compliance with concentration standards shall report concentrations on a dry basis.
  2. Equations for correcting emissions measured on a wet basis to a dry basis are found in Appendix A.

#### 4.3.2 CEMS installed prior to 6/1/91

- A. The CEMS shall continuously monitor and record the

concentration of gaseous pollutant emissions discharged to the atmosphere from any stationary source using CEMS approved by the Department of Environmental Quality.

- B. The span of the CEMS shall be set:
  - 1. At 200% of the permit requirement concentration or the emission standard, whichever is lower. The span may be set at alternative values with DEQ approval.
  - 2. The CEMS must be capable of recording down-scale drift below zero (See Appendix B).
- C. The CEMS shall be pollutant specific and free from interferences. (e.g.: For TRS CEMS, a method must be used to monitor TRS which excludes SO<sub>2</sub>)
- D. The CEMS analyzer must be maintained in an environment conducive to analyzer stability.
- E. Extractive CEMS operating procedures shall include automatic back-flushing of sample line and probe to purge condensed moisture and particulate material.
- F. If the emissions must be corrected for diluent oxygen, periodically test and record the concentration of oxygen in the exhaust gases using an oxygen CEMS, Orsat Analyzer, or equivalent.
  - 1. An Oxygen CEMS, if used, must be calibrated according to written procedures, approved by the Department, at least twice each year using two calibration gases having oxygen concentrations of approximately 5 and 15 volume percent, and accurate to within 0.5% oxygen.
  - 2. Oxygen must be measured at least semi-annually, after any major maintenance/repair on duct work, and frequently enough to be representative of average oxygen concentration.
- G. The zero and span drift of CEMS must be measured and recorded daily when the CEMS is in operation. Span gases used for this procedure need not be NIST traceable. However, the concentration of the gases should be verified by an analyzer calibrated with SRM or CRM calibration gases. It may be necessary to periodically respecify the concentration of the zero and span drift check gases.
- H. A cylinder gas audit (CGA) of the CEMS shall be performed

weekly with successive CGAs performed no closer than six days apart. The CGA shall include a "zero" gas and a minimum of one upscale gas concentration at approximately 60 percent of analyzer full-scale.

1. If 4 consecutive CGAs result in the CEMS being within specifications (see appendix B), the frequency of the CGAs may be reduced to once each month with successive CGAs performed no closer than 21 days apart.
  2. If three consecutive monthly CGAs result in the CEMS being within specifications, the frequency of the CGAs may be reduced to once each quarter with successive CGAs performed no closer than two months apart.
  3. If two consecutive quarterly CGAs result in the CEMS being within specifications, the CGA frequency may be reduced to once every six months with successive CGAs no closer than five months apart.
  4. The minimum CGA frequency shall be once every six months with successive CGAs no closer than five months apart.
  5. The CGA frequency shall revert back to a weekly frequency if a CGA results in the CEMS failing to meet the performance specifications (Appendix B).
    - a. The concentration of the cylinder audit gases must be traceable to National Institute of Standards and Technology (NIST) standard reference materials (SRM) or EPA certified reference materials (CRM) and reanalyzed every 6-months using EPA Reference Methods (40 CFR 60, Appendix A). Gases may be analyzed at less frequent intervals if the manufacturer guarantees their certified concentration for longer time periods.
    - b. Cylinder gases must be introduced to include as much of the monitoring system as feasible, in no case shall gas conditioning subsystems (i.e. SO<sub>2</sub> scrubbers for TRS CEMS) be excluded or by-passed.
- I. A Relative Accuracy Audit (RAA) shall be performed at least once each year. The RAA may satisfy one of the CGA requirements. (See Appendix B for auditing procedures)
- J. Data shall be recorded in units of the standard.

#### **4.4 Continuous Parameter Monitoring Systems (CPMS)**

A CPMS shall continuously monitor source or pollution control device operating parameters. These may include, but are not limited to: fuel consumption rates; production rates; exhaust gas flow rates; process temperatures; pollution control device pressure drop, voltages, water flow and pressure, etc. There are three basic types of CPMS: 1) CPMS used for the purpose of determining pollutant emissions rates (i.e. stack gas flow monitoring devices); 2) CPMS used for the purpose of monitoring pollution control device operations; and, 3) CPMS used for the purpose of monitoring source operations. It is not the intention of this manual to cover each and every possible CPMS. General requirements for CPMS are provided below.

##### **4.4.1 CPMS general requirements:**

- A. CPMS shall be installed in a location that is representative of the monitored process and free from interferences.
- B. CPMS shall be installed and maintained in an environment conducive to CPMS stability and data reliability.
- C. CPMS shall be calibrated and certified by the manufacturer prior to installation. (Applies to CPMS installed after 6/1/91)

##### **4.4.2 Pollutant emissions related CPMS**

- A. CPMS for the purpose of determining emission rates (i.e. stack gas flow monitoring devices) require the highest level of QA/QC.
  - 1. CPMS installed after 6/1/91 must meet 40 CFR Part 60 Appendix B performance specification 6. The reference methods for determining relative accuracy (RA) shall be EPA or DEQ methods 1 through 4.
  - 2. Performance audits shall be conducted quarterly in conjunction with the CEMS audits (see Appendix B). It may not be possible to conduct audits on some CPMS. Exemption from this requirement must be approved by the DEQ.
- B. Stack Gas Flow Monitoring

CPMS data are necessary for converting emission concentrations to units of the standard. This is

accomplished by continuously monitoring stack gas flow rates to calculate the emissions as a rate (pounds per hour) in addition to the CEMS output (percent or parts per million).

There are several acceptable procedures and equipment for measuring flow rates (pitot tubes, hot wire anemometers, process rates - steam, air flows, etc.). The CPMS shall include the capability to measure and/or assume the six variables for determining the stack gas flow rate. These variables are: 1) stack gas temperature, 2) stack absolute pressure, 3) stack gas moisture content, 4) stack gas molecular weight, 5) stack gas velocity, and 6) the cross-sectional area of the stack at the point of velocity measurements.

Provided below is a discussion of each of these variables and one or more methods for measuring their values. As mentioned before, there are other acceptable methods for determining stack gas flow rates. Each method must be approved by the DEQ.

1. The stack gas temperature should be continuously monitored with a temperature monitoring device.
2. The absolute stack pressure is the static pressure, usually measured in inches of water converted to inches of mercury, added to the barometric pressure, measured in inches of mercury.
3. The stack gas moisture content can be determined by one of three alternative methods:
  - a. EPA method 4: A sample of the stack gas is extracted from the stack and passed through a condensing chamber to collect the moisture in the stack gas. The moisture collected is measured in milliliters or grams and converted to cubic feet. The moisture content is determined by dividing the moisture collected (cubic feet) by the quantity: dry gas sampled (cubic feet) plus the volume of moisture collected (cubic feet). (40 CFR Part 60 Appendix A Method 4).

It is recommended that this test be performed in triplicate at least once per week at normal operating rates.

- b. Wet bulb/dry bulb alternative method: The temperature of the stack gas is measured with a



standard temperature measuring device (dry bulb) and with a temperature measuring device altered to include a wetted sock over the tip (wet bulb). The relationship of the wet bulb, dry bulb, and stack absolute pressure will determine the moisture content of the stack gas using vapor pressure tables. (Oregon Source Sampling Manual Method 4).

It is recommended that this procedure be performed in triplicate at least once per week at normal operating rates.

- c. The third alternative is to use an assumed value for stack gas moisture content based on operating parameters. This method must be demonstrated to be accurate within  $\pm 2$  percent moisture by conducting a series of tests as described in either option 1 or 2 above. A plan for determining the assumed moisture shall be submitted to the DEQ for approval prior to collecting data.
4. Stack gas dry molecular weight can be determined or assumed by two methods.
- a. Extract a dry gas sample from the stack and measure the oxygen and carbon dioxide content of the gas with an Orsat analyzer. The balance of the gas is considered to be nitrogen. (EPA method 3).

This procedure should be performed in triplicate at least once per week.

- b. If the source has an oxygen and/or carbon dioxide CEMS, the percent composition of gases can be determined from this system. It is important, however, that the gases are measured in the stack and not in the combustion zone. All gas concentrations must be measured as dry volume percents, or converted to dry volume percents. If only one analyzer is available, the percent oxygen or carbon dioxide can be determined by subtracting the known gas concentration from 20 to obtain the unknown gas concentration. This will be an approximation of the stack gas composition. Calculate the molecular weight in accordance with Method 3.

Since the gas analyzers are CEMS it would be possible to determine the dry gas molecular weight on a continuous basis.

- c. A constant molecular weight may be assumed for some sources. Contact the DEQ for approval.
- 5. Stack gas velocity may be measured with a pitot tube and pressure gauge. Other types of instruments and technologies are available.

The pitot tube method involves inserting a pitot tube (type S) into the stack at some predetermined point of average velocity and measuring continuously the velocity pressure. The pitot tube is connected to a pressure gauge (transducer) with tubing. Initially, the stack shall be traversed to determine the point of average velocity. In addition, due to the harsh environment, the pitot tube shall be back purged at least daily and the tubing shall be inspected for plugging by particulate matter and/or moisture. In erratic velocity stacks, it may be necessary to include a pressure damping device in the connecting tubing. This consists simply of an air-tight plastic or glass jar in line with the tubing. Prior to installation of the pitot tube, it must be calibrated against a standard pitot tube or, if constructed properly, assigned a pitot tube coefficient. The manufacturer can assist or provide documentation of this coefficient. (Refer to EPA Method 2 for more detailed explanation.)

Since the transducer can continuously measure the velocity pressure, the stack gas velocity can be recorded continuously.

- 6. Cross-sectional area of the stack:

Measure the diameter (circular stacks) or dimensions (rectangular stacks) of the stack at the point where the stack gas temperature, moisture content, dry molecular weight, and velocity pressure are measured. Calculate the area of the stack from the measurements.

Note: All flow rate variables shall be measured at approximately the same location in the stack.

#### 4.4.3 Pollution control device related CPMS.

- A. Pollution control device related CPMS include but are not limited to scrubber pressure drop, water flow, temperature, and pressure, gas temperature, electrostatic precipitator current and voltage, etc.
- B. Calibration checks shall be performed in accordance with the manufacturer's procedures at least once per month. Depending on the CPMS, an exemption from this requirement may be obtained from the DEQ upon written request. For example, water flow devices are typically calibrated prior to installation and not calibrated again.

#### 4.4.4 Source related CPMS.

- A. Source related CPMS include but are not limited to steam flow meters, fuel meters, temperatures, etc. As a minimum, source related CPMS shall meet the general CPMS requirements listed above. Depending on the CPMS, an exemption from this requirement may be obtained from the DEQ upon written request. Temperature CPMS shall be calibrated during each planned maintenance outage or annually, whichever is more frequent.

## 5.0 RECORD KEEPING AND REPORTING

### 5.1 Record keeping

The source owner or operator shall maintain records of all CMS activities in a file and/or log book. This record shall be used by the CMS operator to ensure that the CMS is operating correctly. The record must also be made available to DEQ personnel upon request. The record shall include as a minimum the following information:

- A. Records of routine observation checks.
- B. Records of routine maintenance and adjustments.
- C. Records of parts that are replaced.
- D. Spare parts inventory for the CMS.
- E. Records of CMS calibrations.
- F. Records of CMS daily calibration drift.
- G. Records of CMS audits.

- H. Records of corrective action taken to bring an out-of-control CMS into control.
- I. Records of date and time when CMS is inoperative or out-of-control.

## 5.2 Reporting Requirements

As a condition of installing a CEMS, the source owner or operator will be required to submit reports to the DEQ. These reports shall include as a minimum the following information:

- A. Reporting period (determined by permit condition or 40 CFR Part 60).
- B. CMS type, manufacturer, serial number, and location.
- C. Specific CMS reporting requirements:
  - 1. All continuous opacity monitoring systems (COMS) shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period (15 seconds for non-NSPS sources if approved by the DEQ). Unless otherwise specified by an ACDP, the data shall be reduced and reported as follows:
    - a. 6-minute (clock) averages (NSPS sources only)
    - b. Hourly (clock) averages
    - c. averages of 10 or 15-second data that exceed the emission limit when the aggregate period is greater than 3-minutes in a 1-hour (clock) period, and the aggregate period (OAR 340-21-015).
    - d. Monthly average of the hourly averages.
  - 2. All continuous emissions monitoring systems (CEMS) and continuous parameter monitoring systems (CPMS) shall complete a minimum of one cycle of sampling and analyzing for each successive 15-minute period unless the DEQ has specified a different frequency (i.e. Medford AQMA requires one minute cycle). The data shall be reduced and reported as:
    - 1. Hourly (clock) averages.
    - 2. Monthly average of the hourly averages.

- D. For a CMS data average to be accepted, a minimum of 75% of the data for a 6-minute or 1-hour period and 90% of a 24-hour or monthly period must be included in the average. Insufficient data completeness, excluding CMS downtime due to daily zero and span checks and performance audits, will void that data period. All data collected shall be reported. Non-valid data shall be highlighted.
- E. Data recorded during periods of CMS breakdowns, repairs, audits, calibration checks, and zero and span adjustments shall not be included in the data averages.
- F. The magnitude of excess emissions computed in accordance with any conversion factor(s), and the date and time of commencement and completion of each period of excess emissions.
- G. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
- H. The date and time identifying each period during which the CMS was inoperative (out-of-control) except for zero and span checks and the nature of the CMS repairs or adjustments.
- I. Results of all CMS audits conducted during the reporting period.
- J. DEQ approved reporting forms are provided in Appendix C. Additional reporting requirements may be stipulated in an Air Contaminate Discharge Permit or DEQ communication.

## **6.0 REFERENCES**

- A. Useful Quality Control/Quality Assurance information and criteria to maintain CMS data quality at an acceptable level can be found in EPA's Quality Assurance Handbook for Air Pollution Measurement Systems: Volume 3. Stationary Sources Specific Methods, sections 3.0.4, 3.0.7, 3.0.9, and 3.0.10 (Nov. 26, 1987), EPA/600/4-77/027b.
- B. Other references:
  - 1. Code of Federal Regulations: 40 CFR Part 60 Appendices A, B, and F.

2. Continuous Emission Monitoring: Present and Future, Air and Waste Management Association International Specialty Conference SP-71, Nov. 1989.
3. Field Inspectors Audit Techniques: Gas CEMS's Which Accept Calibration Gases; EPA/340/1-89-003, June 1989.

## 7.0 GLOSSARY OF ACRONYMS

|                  |                                                  |
|------------------|--------------------------------------------------|
| ACDP             | = Air Contaminate Discharge Permit               |
| CD=              | Calibration Drift                                |
| CEMS             | = Continuous Emissions Monitoring System         |
| CGA              | = Cylinder Gas Audit                             |
| CMS              | = Continuous Monitoring System                   |
| CO=              | Carbon Monoxide                                  |
| CO <sub>2</sub>  | = Carbon Dioxide                                 |
| COMS             | = Continuous Opacity Monitoring System           |
| CPMS             | = Continuous Parameter Monitoring System         |
| CRM              | = Certified Reference Material                   |
| DEQ              | = Department of Environmental Quality (Oregon)   |
| EPA              | = Environmental Protection Agency (U.S.)         |
| NIST             | = National Institute of Standards and Technology |
| NO <sub>x</sub>  | = Oxides of Nitrogen                             |
| NSPS             | = New Source Performance Standard                |
| OAR              | = Oregon Administrative Rules                    |
| O <sub>2</sub> = | Oxygen                                           |
| QA/QC            | = Quality Assurance and Quality Control          |
| QAP              | = Quality Assurance Plan                         |
| SOP              | = Standard Operating Procedures                  |
| SO <sub>2</sub>  | = Sulfur Dioxide                                 |
| SRM              | = Standard Reference Material                    |
| STR              | = Stack Taper Ratio                              |
| TRS              | = Total Reduced Sulfur                           |

**APPENDIX A**  
**CMS Data Corrections**

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## CMS Data Corrections

### A.1.0 MOISTURE CORRECTION

- A. Stack gas concentrations measured by CEMS are to be reported on a dry basis (dry gas concentration by volume). The CEMS may be designed to measure concentrations on either a wet basis or dry basis. If concentrations are measured on a dry basis, no correction is necessary. However, if the stack gas sample is measured wet, the CMS response must be corrected for the moisture content of the gases.

Correcting CEMS response from wet basis to dry basis:

$$C_{\text{dry}} = \frac{C_{\text{wet}}}{(1 - B_{\text{ws}})}$$

where:

$C_{\text{dry}}$  = concentration in stack gas corrected to dry conditions

$C_{\text{wet}}$  = concentration in stack gas as measured on wet basis

$B_{\text{ws}}$  = stack gas moisture content as a volume fraction (% volume moisture/100)

- B. All concentrations (pollutants and/or diluent gases) shall be corrected for moisture before any other corrections are performed (i.e. diluent gas corrections).

### A.2.0 DILUENT GAS CORRECTIONS

A regulation may require that an emission concentration be corrected to a standard diluent gas (oxygen or carbon dioxide) concentration. The formulas for these corrections are presented below.

#### A.2.1 Correction of measurements for percent oxygen

$$C_{\text{corr}} = C_{\text{meas}} (20.9 - X) / (20.9 - Y)$$

where:  $C_{\text{corr}}$  = concentration corrected for oxygen.

$C_{\text{meas}}$  = concentration measured by CMS.

X = Percent volumetric oxygen concentration to be corrected to.

Y = Measured average percent volumetric oxygen concentration.

#### A.2.1 Correction of measurements for percent carbon dioxide

$$C_{\text{corr}} = C_{\text{meas}} (12/Y)$$

where:  $C_{\text{corr}}$  = concentration corrected for CO<sub>2</sub>.

$C_{\text{meas}}$  = concentration measured by CEMS.

Y = Measured average percent volumetric CO<sub>2</sub> concentration.

#### A.3.0 MEASUREMENT CORRECTION EXAMPLE

Situation: A CEMS measures 200 ppm carbon monoxide (CO), 5% oxygen, and 12% carbon dioxide. The CEMS measures concentrations on a wet basis. The stack gas moisture is 20%. Correct the CO concentration to a dry concentration, 3% oxygen, and 12% carbon dioxide.

$$\begin{aligned} \text{Solution: } C_{\text{CO, dry}} &= C_{\text{CO, wet}} / (1 - B_{\text{ws}}) \\ &= 200 / (1 - 20/100) \\ &= 200 / (1 - .2) \\ &= 200 / .8 \\ &= 250 \text{ ppm, dry} \end{aligned}$$

$$\begin{aligned} C_{\text{oxygen, dry}} &= C_{\text{oxygen, wet}} / (1 - B_{\text{ws}}) \\ &= 5 / .8 \\ &= 6.25\%, \text{ dry} \end{aligned}$$

$$\begin{aligned} C_{\text{carbon dioxide, dry}} &= C_{\text{carbon dioxide, wet}} / (1 - B_{\text{ws}}) \\ &= 12 / .8 \\ &= 15\%, \text{ dry} \end{aligned}$$

$$\begin{aligned} C_{\text{CO, 3\%O}_2} &= C_{\text{CO, dry}} [(20.9 - 3) / (20.9 - 6.25)] \\ &= 250 (17.9 / 14.65) \\ &= 250 * 1.2222 \\ &= 305.5 \text{ ppm, dry at 3\% oxygen} \end{aligned}$$

$$\begin{aligned} C_{\text{CO, 12\%CO}_2} &= C_{\text{CO, dry}} (12/15) \\ &= 250 * 0.80 \\ &= 200 \text{ ppm, dry at 12\% carbon dioxide} \end{aligned}$$

#### A.4.0 TRANSMISSOMETER CALIBRATION WITH ADJUSTMENT FOR STACK EXIT

Table A-1, page A-3, shows corrected % Opacity for calibration filters from 10 - 80%, for different stack exit diameters and transmissometer pathlengths, which are corrected for the actual Stack Taper Ratio.

TABLE A-1. Calibration filters corrected to "L<sub>2</sub>" STACK DIAMETER

| %OP OF CALIBRATION FILTERS CORRECTED TO "L <sub>2</sub> " STACK EXIT DIAMETER |                |                                |          |        |        |        |        |        |        |        |        |
|-------------------------------------------------------------------------------|----------------|--------------------------------|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| L <sub>2</sub>                                                                | L <sub>1</sub> | STR=                           | NOM.%OP: | 10     | 20     | 30     | 40     | 50     | 60     | 70     | 80     |
| FT                                                                            | FT             | L <sub>2</sub> /L <sub>1</sub> | O.D.=    | 0.0458 | 0.0969 | 0.1549 | 0.2218 | 0.3010 | 0.3979 | 0.5229 | 0.6990 |
| 10                                                                            | 10             | 1.000                          |          | 10.0%  | 20.0%  | 30.0%  | 40.0%  | 50.0%  | 60.0%  | 70.0%  | 80.0%  |
| 10                                                                            | 12             | 0.833                          |          | 8.4%   | 17.0%  | 25.7%  | 34.7%  | 43.9%  | 53.4%  | 63.3%  | 73.8%  |
| 10                                                                            | 14             | 0.714                          |          | 7.2%   | 14.7%  | 22.5%  | 30.6%  | 39.0%  | 48.0%  | 57.7%  | 68.3%  |
| 10                                                                            | 16             | 0.625                          |          | 6.4%   | 13.0%  | 20.0%  | 27.3%  | 35.2%  | 43.6%  | 52.9%  | 63.4%  |
| 10                                                                            | 18             | 0.556                          |          | 5.7%   | 11.7%  | 18.0%  | 24.7%  | 32.0%  | 39.9%  | 48.8%  | 59.1%  |
| 10                                                                            | 20             | 0.500                          |          | 5.1%   | 10.6%  | 16.3%  | 22.5%  | 29.3%  | 36.8%  | 45.2%  | 55.3%  |
| 10                                                                            | 22             | 0.455                          |          | 4.7%   | 9.6%   | 15.0%  | 20.7%  | 27.0%  | 34.1%  | 42.1%  | 51.9%  |
| 10                                                                            | 24             | 0.417                          |          | 4.3%   | 8.9%   | 13.8%  | 19.2%  | 25.1%  | 31.7%  | 39.4%  | 48.9%  |
| 12                                                                            | 12             | 1.000                          |          | 10.0%  | 20.0%  | 30.0%  | 40.0%  | 50.0%  | 60.0%  | 70.0%  | 80.0%  |
| 12                                                                            | 14             | 0.857                          |          | 8.6%   | 17.4%  | 26.3%  | 35.5%  | 44.8%  | 54.4%  | 64.4%  | 74.8%  |
| 12                                                                            | 16             | 0.750                          |          | 7.6%   | 15.4%  | 23.5%  | 31.8%  | 40.5%  | 49.7%  | 59.5%  | 70.1%  |
| 12                                                                            | 18             | 0.667                          |          | 6.8%   | 13.8%  | 21.2%  | 28.9%  | 37.0%  | 45.7%  | 55.2%  | 65.8%  |
| 12                                                                            | 20             | 0.600                          |          | 6.1%   | 12.5%  | 19.3%  | 26.4%  | 34.0%  | 42.3%  | 51.4%  | 61.9%  |
| 12                                                                            | 22             | 0.545                          |          | 5.6%   | 11.5%  | 17.7%  | 24.3%  | 31.5%  | 39.3%  | 48.1%  | 58.4%  |
| 12                                                                            | 24             | 0.500                          |          | 5.1%   | 10.6%  | 16.3%  | 22.5%  | 29.3%  | 36.8%  | 45.2%  | 55.3%  |
| 14                                                                            | 14             | 1.000                          |          | 10.0%  | 20.0%  | 30.0%  | 40.0%  | 50.0%  | 60.0%  | 70.0%  | 80.0%  |
| 14                                                                            | 16             | 0.875                          |          | 8.8%   | 17.7%  | 26.8%  | 36.0%  | 45.5%  | 55.1%  | 65.1%  | 75.5%  |
| 14                                                                            | 18             | 0.778                          |          | 7.9%   | 15.9%  | 24.2%  | 32.8%  | 41.7%  | 51.0%  | 60.8%  | 71.4%  |
| 14                                                                            | 20             | 0.700                          |          | 7.1%   | 14.5%  | 22.1%  | 30.1%  | 38.4%  | 47.3%  | 56.9%  | 67.6%  |
| 14                                                                            | 22             | 0.636                          |          | 6.5%   | 13.2%  | 20.3%  | 27.8%  | 35.7%  | 44.2%  | 53.5%  | 64.1%  |
| 14                                                                            | 24             | 0.583                          |          | 6.0%   | 12.2%  | 18.8%  | 25.8%  | 33.3%  | 41.4%  | 50.5%  | 60.9%  |
| 16                                                                            | 16             | 1.000                          |          | 10.0%  | 20.0%  | 30.0%  | 40.0%  | 50.0%  | 60.0%  | 70.0%  | 80.0%  |
| 16                                                                            | 18             | 0.889                          |          | 8.9%   | 18.0%  | 27.2%  | 36.5%  | 46.0%  | 55.7%  | 65.7%  | 76.1%  |
| 16                                                                            | 20             | 0.800                          |          | 8.1%   | 16.3%  | 24.8%  | 33.5%  | 42.6%  | 52.0%  | 61.8%  | 72.4%  |
| 16                                                                            | 22             | 0.727                          |          | 7.4%   | 15.0%  | 22.8%  | 31.0%  | 39.6%  | 48.6%  | 58.3%  | 69.0%  |
| 16                                                                            | 24             | 0.667                          |          | 6.8%   | 13.8%  | 21.2%  | 28.9%  | 37.0%  | 45.7%  | 55.2%  | 65.8%  |
| 18                                                                            | 18             | 1.000                          |          | 10.0%  | 20.0%  | 30.0%  | 40.0%  | 50.0%  | 60.0%  | 70.0%  | 80.0%  |
| 18                                                                            | 20             | 0.900                          |          | 9.0%   | 18.2%  | 27.5%  | 36.9%  | 46.4%  | 56.2%  | 66.2%  | 76.5%  |
| 18                                                                            | 22             | 0.818                          |          | 8.3%   | 16.7%  | 25.3%  | 34.2%  | 43.3%  | 52.7%  | 62.7%  | 73.2%  |
| 18                                                                            | 24             | 0.750                          |          | 7.6%   | 15.4%  | 23.5%  | 31.8%  | 40.5%  | 49.7%  | 59.5%  | 70.1%  |
| 20                                                                            | 20             | 1.000                          |          | 10.0%  | 20.0%  | 30.0%  | 40.0%  | 50.0%  | 60.0%  | 70.0%  | 80.0%  |
| 20                                                                            | 22             | 0.909                          |          | 9.1%   | 18.4%  | 27.7%  | 37.1%  | 46.7%  | 56.5%  | 66.5%  | 76.8%  |
| 20                                                                            | 24             | 0.833                          |          | 8.4%   | 17.0%  | 25.7%  | 34.7%  | 43.9%  | 53.4%  | 63.3%  | 73.8%  |

L<sub>2</sub>=STACK EXIT DIAMETER    L<sub>1</sub>=STACK DIAMETER AT TRANSMISSOMETER

STR=STACK TAPER RATIO FOR CORRECTING ACTUAL STACK DIAMETER = L<sub>2</sub>/L<sub>1</sub>

CORRECTED % OPACITY = [1-(1-OP)<sup>STR</sup>]\*100

**APPENDIX B**  
**Quality Assurance**

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**GENERAL**  
**CMS Quality Assurance Plan**

**B.1.0 QUALITY ASSURANCE AND QUALITY CONTROL**

The terms "Quality Assurance" (QA) and "Quality Control" (QC) are frequently applied very loosely (sometimes interchangeably) without clear understanding of the differences between them. In these guidelines, the terms are defined as follows:

- A. "Quality Control" refers to an activity carried out during routine internal operations to ensure that the data produced are within known limits of accuracy and precision. Examples of QC activities include periodic calibrations, routine zero and span checks, routine leak checks, routine check of optical alignment, etc. QC represents the core activity in a Quality Assurance program.
- B. "Quality Assurance" refers to all of the planned and systematic activities carried out externally and independent of routine operation to document data quality. QA activities include written documentation of operation, calibration, and QC procedures; independent system and performance audits; data validation; evaluation of QC data; etc. QA requires documentation of every aspect of the CMS effort, from responsibilities of each person involved to how the data is reported.

**B.2.0 QUALITY ASSURANCE PROJECT PLANNING**

Implementation of a Quality Assurance program calls for detailed planning to identify and control critical characteristics of the total measurement system.

- A. The planning process may include any or all of the following activities:
  - 1. Sampler location and environment
  - 2. Sample handling, pretreatment, conditioning
  - 3. Sample analysis method & equipment
  - 4. Method parameters, criteria for performance, limits
  - 5. Data retrieval, data validation, etc
  - 6. Equipment specifications and acquisition
  - 7. Reference standards for calibration, span check, zero check, etc.
- B. Questions typically asked during the planning process may

include the following:

1. Which activities are most critical to data quality?
  2. What acceptance limits are necessary to ensure
  3. How frequently should the activity be checked?
  4. What methods should be used to check?
  5. What should be done if the acceptance limits are not met?
- C. Once the plan is developed it must be communicated to those whose job it is to implement and follow it. This takes the form of a written Quality Assurance Plan (QAP) which, for CMS, shall address the following elements:
1. Data Quality Objectives; completeness, precision, accuracy, etc.
  2. Chain of responsibility for CEMS operation, maintenance, data reduction and reporting.
  3. Procedures for assessing precision and accuracy: control charts, calibration checks, secondary standards, audits, CRM or SRM calibration gas traceability documentation, etc.
  4. Routine Quality control checks, and frequency, to assess zero or span drift, flow rates, calibration, data retrieval, etc.
  5. Criteria for corrective actions.
  6. Procedures for corrective action if criteria exceeded.
  7. Procedures for documenting activities in 1 - 6.

After the QAP is written it shall not be considered a static document but rather a dynamic one which can be changed to reflect what is learned as it is used. If the CEMS system is modified, operating procedures changed, or the organization of the group responsible for the system changed the QAP shall be revised to reflect these changes; as a minimum, the entire CEMS system and QAP shall be reviewed in detail on an annual basis (see System audit).

### **B.3.0 QUALITY ASSURANCE PLAN**

#### **B.3.1 Data Quality Objectives**

Each quality assurance plan (QAP) shall include specific data quality objectives. These are data completeness, representativeness, accuracy, and precision. A brief description and general requirements are provided below.

- A. Completeness is the measure of the number of valid data points collected over the possible number of data points in a period of time. For continuous measurements, the data is considered complete when at least 75% of the possible observations in an hour and 90 percent of the daily or monthly hourly averages are present and valid. This means that at least 45 minutes of continuously monitoring data must be present and valid to report an hourly average; likewise, at least 22 hourly averages must be valid to report a daily average, and 648 hourly averages for a 30 day month.
- B. Representativeness refers to measurements which accurately depict the condition of interest. One aspect of representativeness involves the method chosen to perform the monitoring; it must be accurate in a qualitative, as well as quantitative, sense. If the permit calls for monitoring SO<sub>2</sub> the CMS must be specific for SO<sub>2</sub>...a CMS that measures "total sulfur" would not be adequate. CEMS for "Total Reduced Sulfur (TRS) shall report data which represents TRS only, not TRS and sulfur dioxide.

Representativeness can be expressed by describing the CMS components by type, manufacturer, identification number, and location.

- C. Accuracy describes how close the measurement is to the "true concentration" of the quantity being measured. The difference between the CEMS response to the standard (Y) and the true value of the certified standard (X) is expressed as a percentage of the certified standard value and describes the CEMS "bias."

$$\text{Accuracy} = \% \text{ Bias} = (Y - X) / X \times 100$$

1. Bias may arise from changes in procedure, instrument malfunction, leak in the sample line, dirty optics, contaminated reference standard, etc..
2. Minimum accuracy limits are listed in the "criteria for corrective action" section of this document.
3. Accuracy is measured by conducting routine performance



audits.

- D. Precision is a measure of variability, or scatter, of the CEMS response to repeated challenges by the same standard. It is not necessary for the concentration of a precision test sample to be known, as long as it remains stable. However, the concentration of the precision test sample should periodically be verified by an analyzer calibrated with either CRM or SRM calibration gases. Normal variability may be attributable to small random changes in flow rate, temperature, pressure, intermittent electrical loading, etc.. Precision is commonly measured as standard deviation (s), variance ( $s^2$ ), or relative standard deviation (RSD) [sometimes called the coefficient of variation].

Precision measures:

$$\text{standard deviation} = s = [\Sigma(x_i - x_{\text{avg}})^2 / (n-1)]^{1/2}$$

$$\text{variance} = s^2$$

$$\text{relative standard deviation (RSD)} = (s/x_{\text{avg}})100$$

where:  $x_{\text{avg}}$  = mean of measurements  
 $n$  = number of measurements  
 $x_i$  = individual measurement

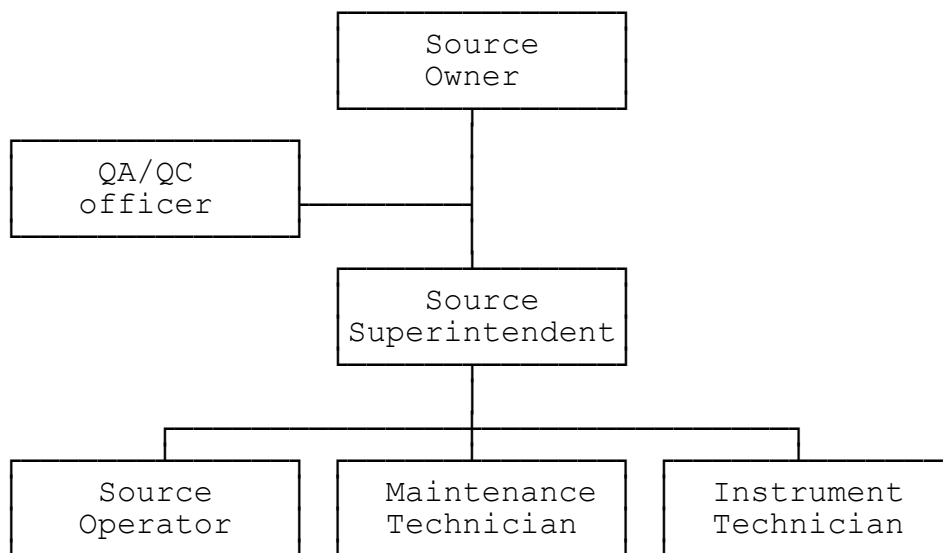
1. The goal for any monitoring activity is to obtain data with minimum bias and scatter. Regardless of what is being monitored it is important to document the quality of data being produced to ensure that it is adequate for the intended purpose: in this instance, compliance with the conditions of the ACDP.
2. Minimum precision limits are listed in the "criteria for corrective action" section of this document.
3. Precision is measured by conducting routine zero and span drift checks.

### **B.3.2 Chain of Responsibility and Training**

The individuals and their responsibilities involved with the CMS shall be clearly defined in the QAP. This can be accomplished by means of flow charts and position descriptions. An example of a typical flow chart is provided below with descriptions of the personnel involved in the operation, maintenance, and reporting

of CMS. The number of people involved and titles will depend on the complexity and number of CMS and the existing plant organization.

A. Flow Chart



B. Responsibilities

1. The source operator uses the CMS data for correct operation of the process being controlled, including the pollution control device. This person is the first one to detect problems with the CMS. Should problems develop, and the CMS data be considered invalid, the source superintendent would be notified so that a maintenance or instrument technician would be sent to correct the problem. In some cases, it may be advantageous to have the source operator communicate directly with the technicians.
2. The maintenance technician is responsible for conducting routine maintenance on the CMS. This would require daily inspections of the CMS. Any problems not corrected immediately would be communicated to the source superintendent. Generally, the maintenance technician is concerned with the mechanics of the system, such as pumps, sample lines, filters, etc. The maintenance technician would be responsible for maintaining records of all quality control and maintenance activities that he or she performs, including maintaining an inventory of spare parts

necessary for the CMS.

3. The instrument technician would be responsible for conducting the daily zero and span checks, cylinder gas audits, electronic tests, etc. Should a problem be detected that cannot be immediately corrected, the source superintendent would be notified. Like the maintenance technician, the instrument technician is also responsible for maintaining a record of all quality control activities such as the results of zero and span checks, performance audits, and corrective action that he or she performs.
  4. The source superintendent is responsible for the correct operation of the CMS and coordinates all activities associated with maintenance, quality control, and data recording. This person shall be familiar enough with the CMS to correct just about any problem that occurs and develop procedures for ensuring that problems do not occur. The source superintendent would most likely also be responsible for preparing reports to source management and DEQ. The source superintendent must have the authority to authorize appropriate corrective action if necessary.
  5. The QA/QC officer is responsible for reviewing the data and reports prepared by the source superintendent; assessing the data completeness, precision, and accuracy; and performing annual system audits. The QA/QC officer would develop the quality assurance plan and ensure that the quality control activities are being performed and documented. The QA/QC officer shall not be directly involved in the day-to-day operation of the CMS.
  6. The source owner is ultimately responsible for the source operation and validity of CMS data. The source owner shall be periodically apprised of the CMS working condition and quality of data through summary reports prepared by the source superintendent and reviewed by the QA/QC officer.
- C. Each individual involved with the CMS shall be made aware of the CMS goals and criteria for corrective action (see section B.3.6) so that they can effectively make decisions about corrective action. The QAP shall include a training program consisting of the type (e.g. in-house, certificate, etc.) and frequency of the training. Records of training

shall be maintained at the site and made available to DEQ personnel upon request.

### **B.3.3 Measures of Accuracy and Precision**

There are four distinct activities for measuring and ensuring the accuracy and precision of the CMS. Provided below is a description of each of these activities and the frequency at which they shall occur.

#### **A. CMS Calibration**

1. Calibration procedures shall be in written form in the SOP. These procedures must be available to both source personnel, who operate the system, and Agency personnel for review. Simple reference to the instrument manual is inadequate unless procedures are identical to those of the manufacturer.
2. Calibration of a CEMS shall include running "zero" and two upscale points using reference standards. The upscale standards shall be between 10 - 20 and 80 - 90 percent of the full-scale response. Single upscale point calibrations are not acceptable: they assume a linear response, which must be demonstrated.
3. Calibrations shall be fully documented and take place on a schedule. At a minimum, the CMS must be calibrated prior to installation or just after installation, whichever is most appropriate for the CMS. Whenever the CMS requires major maintenance or repair a full calibration shall be performed before data is declared valid. The actual schedule for calibrations will be determined by the source operator. The frequency will depend upon CMS performance and audit results.
4. Calibration standards
  - a. For COMS, the reference standards are neutral density optical filters which have optical densities certified to be traceable to National Institute of Standards and Technology (NIST) reference material (40 CFR Part 60, Appendix B, sec 3.4 & 7.1.3).
  - b. For CEMS (SO<sub>2</sub>, NO<sub>2</sub>, CO<sub>2</sub> and O<sub>2</sub>, TRS, CO), the reference standards can be either Certified

compressed gases; a permeation device (for SO<sub>2</sub>, NO<sub>x</sub>, TRS) whose permeation rate is Certified at some fixed temperature; or a sealed gas cell containing a gas whose concentration is Certified. Certified standards must be traceable to NIST standards.

i. Calibration accuracy is dependent on the quality of the reference standard used. Ideally, compressed gas standards shall be either NIST-Standard Reference Materials (SRMs), EPA- Certified Reference Material (CRMs), or Primary Standard quality. Calibration gases analyzed by the user employing the appropriate EPA Reference Method and at least one NIST traceable standard would be acceptable providing the necessary documentation is available. Permeation device permeation rates must be certified by the manufacturer or the user, either gravimetrically or by Reference Method analysis. Permeation devices must be used in an oven capable of maintaining the set temperature within  $\pm 0.1^{\circ}\text{C}$ .

c. For CPMS, typical reference standards would be liquid (water or mercury) manometers, NIST traceable thermometers, NIST traceable pitot tubes, etc.

B. Zero (low level) & span checks (Calibration Drift)

1. Zero (low level) and span checks, sometimes referred to as Calibration Drift (CD) checks, must be performed daily. The CMS response to zero or low level and span (high level) standards must be recorded to evaluate the performance of the CMS over a period of time. The CD checks are the first criteria for determining the degree of control of the CMS.

The drift must be checked at two levels: zero and high. If the instrument technology is such that it is not possible to check the zero level, a low level point shall be checked instead. The calibration drift levels are defined as follows:

- a. Zero =  $<0.25\%$  of instrument span
- b. Low level = 0 to 20% of instrument span

- c. High level = 50 to 100% of instrument span
- 2. Daily span standards need not be certified reference materials, but they should be reanalyzed immediately after each full-scale calibration or audit and their nominal concentration "renamed" to match the instrument response.
- 3. On some CMS the CD can be performed automatically at preset times. The zero and span trace on the strip chart shall be verified for timing as well as magnitude of response; the observed/reference values shall be written directly on the strip chart as documentation.
- 4. For CMS that automatically correct for drift, the CMS must be designed to record the observed zero and span values prior to any adjustments.

C. Performance audits for data accuracy

- 1. The performance audit shall be conducted independently of normal calibrations and calibration drift checks using specially assigned reference standards.
- 2. For CMS installed on NSPS sources and all CMS installed after 6/1/91, the performance audit shall be conducted at least quarterly. Successive audits shall be conducted no closer than 2 months apart. There are three types of audits: Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), and the Cylinder Gas Audit (CGA). At least one of the four required audits in one year shall be a RATA. The other three audits may be RAAs or CGAs. If the RATA is performed once per year, the RATA shall not be conducted in successive quarters.
- 3. For CMS installed on non-NSPS sources and prior to 6/1/91, the performance audit shall be conducted at least two times per year. The source operator may want to conduct audits more frequently to ensure that a minimum amount of data is not put in jeopardy.
- 4. If it is demonstrated by a compliance source test that the emissions monitored by a CMS are less than 50% of the ACDP limit, the permittee may petition the DEQ to change the annual RATA requirements to once every 3 years. This option does not apply to CMS installed specifically for demonstrating compliance with an ACDP

limit.

5. A description of each type of audit is provided below. These are explained in detail in 40 CFR Part 60 Appendix F.

- a. Relative Accuracy Test Audit (RATA)

- i. The RATA is conducted upon initial startup of the CMS and at least annually thereafter.
- ii. The RATA consists of conducting a minimum of nine reference method test runs and comparing the results to the CMS output using a 95% confidence coefficient. The reference methods are from 40 CFR Part 60 Appendix A. The CMS specific reference methods are listed below:
  - (1) SO<sub>2</sub> CEMS - Reference Method 6 or 6c
  - (2) NO<sub>x</sub> CEMS - Reference Method 7 or 7e
  - (3) CO CEMS - Reference Method 10
  - (4) TRS CEMS - Reference Method 16 or 16a
  - (5) O<sub>2</sub> CEMS - Reference Method 3 or 3a
  - (6) CO<sub>2</sub> CEMS - Reference Method 3 or 3a
- iii. For SO<sub>2</sub>, TRS, and NO<sub>x</sub> testing, EPA audit samples shall be analyzed by the same individual that performs the reference method sample analysis. The audit samples may be obtained from the DEQ. Contact the Source Testing Coordinator (503) 229-5069.
- iv. When the emissions are reported as emission rates (lb/hr), the RATA shall include methods 1 through 4 for determining stack gas flow rates.

- b. Relative Accuracy Audit (RAA)

- i. Three of the required 4 audits performed each year may be the RAA.
- ii. The RAA procedure is identical to the RATA procedure except that a minimum of three reference method test runs instead of nine are required. The reference methods are the same as for the RATA.

iii. The sample analysis shall include analysis of audit samples as described for the RATA.

c. Cylinder Gas Audit (CGA)

i. Three of the required 4 audits performed each year may be a CGA.

ii. A CGA consists of challenging the CMS three times with each audit standard: an independent "zero" and two independent upscale Certified Standards (at approximately 1 and 0.5 times the permitted emission standard). **Audit standards used must not be the same ones used for daily checks or calibration.** Standards which are acceptable include those from the National Institute of Standards and Technology-Standard Reference Materials (NIST-SRMs), gas vendor Certified Reference Materials (CRM), or a Primary Standard gas which is traceable to NIST-SRMs or CRMs using EPA's Revised Traceability Protocol No.1 (DEQ Lab can provide copy).

iii. CGA audit samples shall be introduced into the CEMS operating in the normal sampling mode to include as much of the system as possible (e.g. at or as close as possible to the sampling probe for extractive systems). Most in-situ CEMS incorporate a gas fitting at the point the sampling probe penetrates the stack wall for introduction of audit gases.

iv. Results of each audit shall be available to DEQ for review.

4. NSPS sources with SO<sub>2</sub>, NO<sub>x</sub>, or TRS CEMS must audit the pollutant channel and the diluent (O<sub>2</sub> or CO<sub>2</sub>) CEMS because the emission standard is based on both the pollutant and diluent CEMS.

D. System Audits

1. System audits shall be done at least annually.



2. A System audit is performed by a person other than the person who does routine daily checks, repair and maintenance, or data reporting; preferably a supervisor who is familiar with the CEMS but does not have daily contact with it. Generally, system audits are "paper audits," concerned with verifying the existence of documentation, adherence to procedures as written, verifying complete documentation and the physical condition of the CEMS operation. All documentation and procedures called for in the QAP shall be examined for completeness and timeliness. Data resulting from routine daily checks shall be reviewed for completeness.
3. The system audit shall result in a written report to management indicating whether the QAP is being followed, the quality of CEMS data, and recommending changes.

#### **B.3.4 Quality Control**

##### **A. Internal Quality Control Checks**

Internal quality control check procedures and the frequency with which they are conducted will vary depending on the type of CMS, its history, and its operating environment. The following checks shall be made at the indicated frequency on all CMS:

##### **1. Daily**

Daily checks shall be limited to relatively simple aspects of the CMS and may vary depending on the parameter being monitored and the type of monitor being used. Manuals provided by the manufacturer will normally indicate what needs to be inspected and how to test it.

- a. Zero & span checks. Sometimes referred to as Zero or Calibration Drift (CD) checks. The monitor response to zero and span standards shall be recorded. Daily span standards need not be certified reference materials but they should be reanalyzed immediately after each full-scale calibration or performance audit and their nominal concentration "renamed" to match the instrument response.

On some CMS the zero and span can be performed

automatically at preset times. The zero and span trace on the strip chart shall be verified for timing as well as magnitude of response; the observed/reference values shall be written directly on the strip chart as documentation.

- b. Flow rate shall be checked in the probe, for extractive monitors, and at the analyzer sampling point to ensure that the sample is getting to the monitor. In-line filter plugging or a leak could cause reduced flow. Condensed water traps shall be emptied or checked for proper drainage.
- c. Sample conditioning equipment shall be checked for effectiveness, leaks or condensation; particulate filters shall be checked for integrity and plugging; thermal converter temperatures shall be verified; etc.
- d. Fault indicators shall be checked to make certain that they are functioning properly; if any are activated, the cause shall be determined and corrected immediately. In computerized CMS, "error messages" on the printout shall be followed up.
- e. Auxiliary monitor performance parameters shall be checked and values noted. Many CMS have electronic reference or zero compensation values which can be monitored. They can be used to evaluate stability of the electronics and reliability of the fault indicators. After some history is obtained, frequency of checking may be reduced.

## 2. Weekly

QC checks that are performed on a weekly, monthly, or quarterly frequency shall be designed to identify developing or existing problems which cannot be detected in the daily checks and will usually incorporate some preventative maintenance activities. The integrity of sampling lines are verified; in-line filters are checked or changed; pump and motor bearings are lubricated; optical path alignment is verified; optical surfaces are cleaned; purge system checked; replacement of expendable supplies (chart paper, recorder ink, printer ribbon, etc); etc. Preventative

maintenance activities on the schedule recommended by the CMS component manufacturer shall be performed and the date of completion documented.

- a. Data recording/display devices shall be checked for accuracy and stability. Most CMS have a panel meter (digital or analog) and a strip chart recorder; some use a computer to log data and perform calculations. The recording/display device used to obtain the data which is reported to DEQ shall be of primary concern. A check shall be done to verify that the panel meter and the strip chart are displaying the same value; the "zero" of the display device has not drifted appreciably; the proper strip chart paper is being used; the recorder is responsive to changes in CMS output; and the recorder is set for the proper full-scale range.

The recorder "zero" may be offset upscale by 5% of full-scale to permit observation of down-scale drift in CMS response (e.g. for a COMS monitoring 0 - 100% Opacity on a strip chart having 100 scale divisions, set the recorder zero at 5 scale divisions). Although the upper 5% of the monitoring range is lost, it is an acceptable trade-off for the ability to observe negative zero drift on the low end. Values are not routinely expected in the upper 5% of the range anyway.

### 3. Monthly

- a. Plumbing associated with sample handling and conditioning shall be inspected for leaks, corrosion, etc. Fittings, valves, and gas regulators also need to be checked. Solenoid valves, commonly used to automate flow systems, shall be tested to ensure they function properly.
- b. Electrical cables and heat traced lines shall be inspected regularly. In an industrial environment physical damage can occur easily, and exposure to chemicals or weather can cause insulation to deteriorate rapidly.

#### **B.3.5 Quality Control Documentation**

- A. Calibrations, QA and QC activities, routine maintenance, or repair activities shall be documented in a bound laboratory notebook with pre-numbered pages dedicated to each CMS monitor. A brief description of the activity and data is written any time anything is done to the CMS; each entry is initialed and dated by the person performing the activity. The complete chronological history of the CMS is then available in one document for review. The notebook is kept with the CMS at all times.
- B. All data resulting from daily QC checks (e.g. zero, span, flow rates, fault lamp condition, probe vacuum, etc.) must be recorded because they document the operating condition of the CMS. If several persons are involved in performing the daily checks, a change in these parameters is easier to monitor if the data is plotted on a control chart.

#### **B.3.6 Data Recording, Calculations, and Reporting**

The QAP must include detailed procedures for recording and reporting CMS data, including all calculations used to obtain emissions in units of the standard.

##### **A. Recording**

There are several techniques for recording CMS data ranging from manually recorded data to computer recorded data. Many CMS will utilize more than one technique to ensure that data is not lost.

This might include a strip chart recorder combined with an electronic data logger. The QAP will include the following information:

1. Type, manufacturer, identification number, and location of all equipment used for recording the CMS data.
2. Equipment maintenance procedures such as changing chart paper and pens, computer printer paper, cleaning, etc.
3. Electronic check procedures
4. Calibration procedures if necessary.

##### **B. Calculations**

All calculations used to convert CMS data to reporting values shall be clearly defined in the QAP. Each formula shall be written out with explanations of the variables and constants. Constants that have been estimated or assumed shall be

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highlighted and the rational or justification for using the value provided. Example calculations shall be provided. The accuracy of the calculations shall be periodically reviewed.

## C. Reporting

The QAP shall include examples of the specific reporting formats for all CMS data, performance audits, CMS out-of-control periods, and excess emissions. Reporting summaries are provided in Appendix C.

### B.3.7 Criteria for Corrective Action

For QC/QA activities to serve the purpose of maintaining and documenting data quality it is necessary to set up performance criteria which trigger or initiate some corrective action when the limits are exceeded. In the case of daily drift checks it is necessary to set an "allowable" standard; as long as the CMS drift is within the limits nothing is done; as soon as the limit is exceeded some action must be taken to get the system back into control, and a decision must be made regarding the quality of the data that has been produced since the last acceptable check.

## A. Performance Specifications

1. The Environmental Protection Agency (EPA) has established Performance Specifications (PS) for CMS installed after March 30, 1983 as a requirement of a subpart in 40 CFR Part 60, to generate data of acceptable quality: PS-1, -2, -3, -4, and -5 deal with Opacity, SO<sub>2</sub> & NO<sub>x</sub>, diluent gases (O<sub>2</sub> & CO<sub>2</sub>), CO, and Total Reduced Sulfur (TRS) CMS, respectively. A summary of these PS's (from 40 CFR Part 60, Appendix B) are shown in Table B-1 on page B-17. The State of Oregon DEQ has adopted these performance specifications for CMS installed for the purpose of demonstrating continuous compliance with emission limits.
2. CPMS performance specifications (40 CFR Part 60 Appendix B specification 6) are as follows:
  - a. Flow rate and pressure analyzers shall not drift or deviate from either of their reference values by more than 3% of 1.25 times the average potential absolute value for that measurement.
  - b. A temperature analyzer shall not drift or deviate from its reference value by more than 1.5% of 1.25 times the average potential absolute value for that measurement.

- c. The relative accuracy (RA) for CPMS shall be not greater than 20% of the mean value of the reference method's test data in terms of the units of the emission standard, or 10% of the applicable standard, whichever is greater.
  - d. For existing CPMS, the DEQ may approve less stringent performance specifications on a case by case basis.
3. These Performance Specifications are goals for operation of the CMS; whenever they are exceeded, data quality deteriorates and something must be done to restore the system to control. When the CMS is "out-of-control" the data shall be invalidated until "control" can be restored.

#### **B.3.8 Corrective Action**

- A. There are three degrees of "control" for setting action and data quality criteria: "acceptable," "marginal," and "out-of-control." "Acceptable" data is self-explanatory; the data is valid and the CMS is operating within specifications. "Marginal" data is still valid but some action needs to take place to prevent further deterioration to the point where the data is invalid and the CMS is out of specification. When the third level of control is reached a serious problem exists in the system and data shall be invalidated until the problem can be identified and fixed.

| <u>Criteria</u>                                                                                                                                                                                                                                                                                                                                                                                                                   | <u>Degree of Control</u>                                                 | <u>Action</u>                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| CD $\leq$ (2xspec) or<br>Accuracy audit OK                                                                                                                                                                                                                                                                                                                                                                                        | "acceptable"                                                             | valid data,<br>proceed as normal<br>until next CD                                                                            |
| CD $\leq$ (4xspec) but<br>CD $\geq$ (2xspec) for<br>four consec.days                                                                                                                                                                                                                                                                                                                                                              | "marginal"                                                               | valid data,<br>identify problem,<br>correct, may adj.<br><u>zero &amp; span with</u><br><u>due care</u> , repeat<br>CD check |
| CD $\geq$ (4xspec)<br>or<br>CD $\geq$ (2xspec) for<br>five consec. days                                                                                                                                                                                                                                                                                                                                                           | "out-of-control"                                                         | invalid data,<br>identify problem,<br>correct,<br>recalibrate,<br>repeat CD check                                            |
| RA specification<br>exceeded                                                                                                                                                                                                                                                                                                                                                                                                      | "out-of-control"<br>invalidate data,<br>repair, repeat<br>accuracy audit |                                                                                                                              |
| B. When CD $\geq$ (2xspec), adjustment of both the zero and span of the CMS are permitted to regain control. This must be done carefully as it is possible to make the situation worse without realizing it by "chasing" an instrument response to an <u>erroneous standard</u> . Recheck the zero and/or span gas supply system for leaks, excess/reduced flow, permeation tube temperature, etc. before making any adjustments. |                                                                          |                                                                                                                              |
| C. If, for whatever reason, a CMS is declared out-of-control, data shall be invalidated back to the last check which was not out-of-control and shall remain invalid until a check is performed which is within criteria.                                                                                                                                                                                                         |                                                                          |                                                                                                                              |
| D. The QAP shall include contingency procedures for anticipated problems with the CMS. Initially, this may be very brief until source personnel become more familiar with CMS and problems that could be encountered.                                                                                                                                                                                                             |                                                                          |                                                                                                                              |



Table B-1. Summary of 40 CFR 60, Appendix B, Performance Specifications

| <u>Parameter</u>       | <u>PS-1</u>    | <u>PS-2</u>                       | <u>PS-3</u>                                | <u>PS-4</u>                     | <u>PS-5</u>                            |
|------------------------|----------------|-----------------------------------|--------------------------------------------|---------------------------------|----------------------------------------|
| Calibration error      | $\leq 3\%OP^a$ | $\leq 5\%Span$                    | $\leq 5\%Span$                             | $\leq 5\%Span$                  | $\leq 5\%Span$                         |
| Calibration drift (CD) | $\leq 2\%OP^a$ | $\leq 2.5\%Span$                  | $\leq 0.5\%O_2$<br>or $CO_2$               | $\leq 5\%Span$                  | $\leq 5\%Span$<br>(1.5ppm/<br>30ppmFS) |
| Relative Accuracy (RA) | -----          | $\leq 20\%RM^b$<br>$\leq 10\%Std$ | $\leq 20\%RM^b$<br>or<br>$\leq 1\%O_2CO_2$ | $\leq 10\%RM^b$<br>or 5%<br>Std | $\leq 20\%RM^b$<br>or 10%<br>Std       |

Where: %OP = % opacity  
Std = emission standard  
Span = FS = full scale range of CMS  
RM = concentration of pollutant by reference method.

and

a = sum of absolute value of mean and absolute value of confidence coefficient (95%)  
=  $|x_{avg}| + |t_{.975} * s/\sqrt{n}|$

b = % mean difference between RM concentration and CMS response plus 2.5% confidence coefficient divided by the RM concentration.  
=  $[|d_{avg}| + |t_{.975}s/\sqrt{n}|] * 100/RM$

$|d| = |CEMS \text{ resp} - RM|$

## **APPENDIX C**

### **Reporting Forms**

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### C.1.0 CONTINUOUS MONITORING REPORT

#### I. Source Information

Reporting Period: From \_\_\_\_\_ To \_\_\_\_\_  
Company name: \_\_\_\_\_  
Plant name: \_\_\_\_\_  
Source: \_\_\_\_\_  
ACDP#: \_\_\_\_\_  
Operation time (hrs) \_\_\_\_\_

#### II. Continuous Monitor Information

| Continuous Monitor | Manufacturer | ID#   | Type  | Span  | Location |
|--------------------|--------------|-------|-------|-------|----------|
| _____              | _____        | _____ | _____ | _____ | _____    |
| _____              | _____        | _____ | _____ | _____ | _____    |
| _____              | _____        | _____ | _____ | _____ | _____    |
| _____              | _____        | _____ | _____ | _____ | _____    |

#### III. Continuous Monitor Operation Summary<sup>+</sup>

| Continuous Monitor | Downtime* |       | Reason | Corrective Action |
|--------------------|-----------|-------|--------|-------------------|
|                    | From      | To    |        |                   |
| _____              | _____     | _____ | _____  | _____             |
| _____              | _____     | _____ | _____  | _____             |
| _____              | _____     | _____ | _____  | _____             |
| _____              | _____     | _____ | _____  | _____             |
| _____              | _____     | _____ | _____  | _____             |

\* Excluding zero and span checks (calibration drifts)  
Total monitor downtime as a percent of source operating time \_\_\_\_\_

#### IV. Excess Emissions Summary<sup>+</sup>

| Pollutant/<br>Parameter | Excess Period |       | Average<br>Excesses | Reason |
|-------------------------|---------------|-------|---------------------|--------|
|                         | From          | To    |                     |        |
| _____                   | _____         | _____ | _____               | _____  |
| _____                   | _____         | _____ | _____               | _____  |
| _____                   | _____         | _____ | _____               | _____  |
| _____                   | _____         | _____ | _____               | _____  |
| _____                   | _____         | _____ | _____               | _____  |

Total excess emissions as a percent of source operating time \_\_\_\_\_

+ Attach extra sheets if necessary

#### **V. Data Averages**

Attach summaries of 1-hour data averages of pollutant emissions for the reporting period. Note the overall emissions average for the reporting period below.

| <u>Pollutant</u> | <u>Average Emissions</u> | <u>Units</u> |
|------------------|--------------------------|--------------|
| _____            | _____                    | _____        |
| _____            | _____                    | _____        |
| _____            | _____                    | _____        |
| _____            | _____                    | _____        |

#### **VI. Accuracy Assessment Results**

Complete forms A, B, or C for each CMS or for each pollutant and diluent analyzer, as applicable. If the quarterly audit results show the CMS to be out-of-control, report the results of both the quarterly audit and the audit following corrective action showing the CMS to be operating properly. Attach the forms to this report.

#### **VII. Calibration Drift Assessment**

| <u>Continuous<br/>Monitor</u> | <u>Out-of-<br/>Control<br/>Periods</u> |           | <u>Corrective Action Taken</u> |
|-------------------------------|----------------------------------------|-----------|--------------------------------|
|                               | <u>From</u>                            | <u>To</u> |                                |
| _____                         | _____                                  | _____     | _____                          |
| _____                         | _____                                  | _____     | _____                          |
| _____                         | _____                                  | _____     | _____                          |
| _____                         | _____                                  | _____     | _____                          |

Report Prepared by \_\_\_\_\_ Date \_\_\_\_\_

### **C.1.1 Continuous Monitoring Report Instructions**

#### **I. Source Information**

Enter the reporting period (i.e. 1/1/91 to 1/21/91), the company name, the plant name or location, the facility (i.e. hogged fuel boiler #1), and the Oregon Air Contaminate Discharge Permit (ACDP) number.

#### **II. Continuous Monitor Information**

Enter the manufacturer of the major component(s) of the CMS (i.e. Horiba for a CO analyzer), the serial number and model number, the type (i.e. in-situ or extractive non-dispersive infrared), the span (i.e. 1000 ppm), and the location (i.e. downstream of the wet scrubber in the stack). This information will remain the same for each report unless a component is changed.

#### **III. Continuous Monitor Operation Summary**

If the monitor was inoperative for any reason other than routine calibration drift checks and maintenance, note the time period the CMS was down, the reason, and the corrective action taken to get the CMS back on line. The reason and corrective action explanations shall be provided in detail.

#### **IV. Excess Emissions Summary**

List the duration and magnitude of all excess emissions for regulated pollutants (i.e. CO) and operating parameters (i.e. scrubber pressure differential). Provide a detailed explanation for the excess emissions if there is a discernible reason (i.e. feed water pump failure, grate cleaning, etc.).

#### **V. Data Averages**

Attach a summary of the data collected during the reporting period. The format for the data summary shall be developed by the source operator and approved by the DEQ. It shall include some means of "high-lighting" excess emission periods. List the reporting period average emissions for all regulated pollutants (i.e. opacity, carbon monoxide, etc.) and the units of the emissions (i.e. lbs/hr).

#### **VI. Accuracy Assessment Results**

If performance audits were required during the reporting period, complete and attach the appropriate section (A, B, or C and D if

applicable) of the accuracy assessment form showing the results of the audit and the accuracy of the CMS.

#### **VII. Calibration drift assessment**

List any periods of CMS out-of-control during the reporting period due to excessive calibration drift and a detailed explanation of the corrective action taken to bring the CMS into control.

### **C.2.0 ACCURACY ASSESSMENT RESULTS REPORT**

#### **A. Relative Accuracy Test Audit (RATA) for \_\_\_\_\_**

1. Date of audit \_\_\_\_\_
2. Reference methods (RM's) used \_\_\_\_\_
3. Average RM value \_\_\_\_\_
4. Average CMS value \_\_\_\_\_
5. Absolute value of mean difference (d) \_\_\_\_\_
6. Confidence coefficient (CC) \_\_\_\_\_
7. Percent relative accuracy (RA) \_\_\_\_\_
8. EPA performance audit results:
  - a. Audit lot number (1) \_\_\_\_\_, (2) \_\_\_\_\_
  - b. Audit sample number (1) \_\_\_\_\_, (2) \_\_\_\_\_
  - c. Results (mg/dscm) (1) \_\_\_\_\_, (2) \_\_\_\_\_
  - d. Actual value (mg/dscm) (1) \_\_\_\_\_, (2) \_\_\_\_\_
  - e. Relative error (1) \_\_\_\_\_, (2) \_\_\_\_\_

#### **B. Relative accuracy audit (RAA) for \_\_\_\_\_**

1. Date of audit \_\_\_\_\_
2. Reference methods (RM's) used \_\_\_\_\_
3. Average RM value \_\_\_\_\_
4. Average CMS value \_\_\_\_\_
5. Percent accuracy \_\_\_\_\_
6. EPA performance audit results:
  - a. Audit lot number (1) \_\_\_\_\_, (2) \_\_\_\_\_
  - b. Audit sample number (1) \_\_\_\_\_, (2) \_\_\_\_\_



- c. Results (mg/dscm) (1) \_\_\_\_\_, (2) \_\_\_\_\_
- d. Actual value (mg/dscm) (1) \_\_\_\_\_, (2) \_\_\_\_\_
- e. Relative error (1) \_\_\_\_\_, (2) \_\_\_\_\_

C. Cylinder gas audit (CGA) for \_\_\_\_\_

|                          | Audit Point 1 | Audit Point 2 |
|--------------------------|---------------|---------------|
| 1. Date of audit         |               |               |
| 2. Cylinder ID number    |               |               |
| 3. Date of certification |               |               |
| 4. Type of certification |               |               |
| 5. Certified audit value |               |               |
| 6. CMS response value    |               |               |
| 7. Accuracy (percent)    |               |               |

**D. Corrective Action for excessive inaccuracy:**

1. Out of control periods: Dates
2. Number of days
3. Corrective action taken \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. Results of audit following corrective action. (Use A, B, or C above, as applicable, to report results.)

### C.2.1 Accuracy Assessment Report Instructions

Complete section A, B, or C, and D if applicable, each time a performance audit is conducted. Attach the report to the monthly continuous monitoring report.

Line-by-line instructions:

**A. Enter the continuous monitoring system (i.e. carbon monoxide) that is being checked by a RATA**

1. Enter the date of the audit (i.e. 1/1/91)
2. Enter the reference methods used (i.e. EPA methods 1 through 4 for stack gas volumetric flow and method 10 for carbon monoxide, write them as follows: EPA M 1-4, 10).
3. Average the reference method values (at least 9 results and reported in units of the permit limit: i.e. lbs/hr).
4. Average the CMS values (in units of the permit limit) during the testing.
5. Calculate the arithmetic mean of the difference (d) between the RM and CMS.
6. Enter the confidence coefficient (CC) as calculated from the following formula and the t-value table.

$$CC = t_{0.975} * S_d / \sqrt{n}$$

where;

$t_{0.975}$  = t-value from table

n = number of test RM results

$S_d$  = standard deviation

$$= \{ [\sum d_i^2 - (\sum d_i)^2 / n] / (n-1) \}^{1/2}$$

where;

n = number of RM test results

d = difference between individual  
RM and CMS results

7. Calculate the relative accuracy (RA) by the following formula:

$$RA = 100 * ( |\bar{d}| + |CC| / \overline{RM} )$$

where;

$|\bar{d}|$  = absolute value of the arithmetic mean of the RM and CMS difference.

$|CC|$  = absolute value of the confidence coefficient calculate above.

$\overline{RM}$  = Average reference method value or applicable standard.

t-values:

| $n^a$ | $t_{0.975}$ | $n^a$ | $t_{0.975}$ | $n^a$ | $t_{0.975}$ |
|-------|-------------|-------|-------------|-------|-------------|
| 2     | 12.706      | 7     | 2.447       | 12    | 2.201       |
| 3     | 4.303       | 8     | 2.365       | 13    | 2.179       |
| 4     | 3.182       | 9     | 2.306       | 14    | 2.160       |
| 5     | 2.776       | 10    | 2.262       | 15    | 2.145       |
| 6     | 2.571       | 11    | 2.228       | 16    | 2.131       |

<sup>a</sup> The values in this table are already corrected for n-1 degrees of freedom. Use n equal to the number of individual values.

8. If it is required that EPA audit samples be analyzed during the reference method testing (i.e. Method 6 and 7, SO<sub>2</sub> and NO<sub>x</sub>), enter the results in the space provided. The actual value will be entered by the DEQ and the relative error will be calculated by the DEQ. The DEQ will notify the source operator and testing company if the percent error is greater than 5%. Results of the audit analysis are available upon request.

#### **B. Relative accuracy audit (RAA)**

The instruction for lines 1 through 4 and 6 are the same as for lines 1 through 4, and 8 above.

5. Calculate the percent accuracy (A) using the following formula:

$$A = (C_m - C_a) / C_a * 100$$

where;

$C_m$  = Average of CMS response during the audit in units of the standard.

$C_a$  = Average audit value (reference method results) in units of the standard.

### **C. Cylinder gas audit (CGA)**

Complete the table as follows:

1. Enter the date of the audit.
2. Enter the calibration gas identification number.
3. Enter the date that the cylinder gas was certified.
4. Enter the type of certification (i.e. NIST-SRM, EPA-CRM, Protocol-1, reference method).
5. Enter the certified audit value (concentration: percent or parts per million).
6. Enter the CMS response value.
7. Calculate the accuracy (A) using the following formula:

$$A = (C_m - C_a) / C_a * 100$$

where;

$C_m$  = Average of CMS response during the audit in units of the appropriate concentration.

$C_a$  = Average audit value (CGA certified value) in units of the appropriate concentration.

**Note:** audit point 1 shall be 20-30% of the span value, audit point 2 shall be 50-60% of the span value.

**D. Corrective action for excessive inaccuracy**

1. Enter the dates that the CMS is out-of-control due to excessive inaccuracy.
2. Enter the number of days that the CMS is out-of-control due to excessive inaccuracy.
3. Describe in detail the corrective action taken to bring the CMS back into control (i.e. replaced leaking sample line, replaced detector, etc.)
4. Complete the appropriate form (A, B, or C) to show that the CMS successively completed an audit and is back in control.

Appendix D  
Code of Federal Regulations  
Appendices B and F

Appendices B and F of 40 CFR Part 60 will be included in the final version of the Continuous Monitoring Systems Manual. This material is directly from 40 CFR Part 60.

# **Draft Continuous Monitoring Manual**

## **(Stationary Source, Air Quality Permit Program)**



**January, 1992**

**Revisions:**  
**January, 2015**

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DEQ is a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water.



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# Executive Summary

DEQ's Continuous Monitoring Manual provides specifications and procedures for conducting continuous monitoring at facilities regulated by DEQ's stationary source air quality permit program. The manual includes requirements for preparing monitoring plans that include standard operating and quality assurance procedures to ensure that continuous monitor systems will provide accurate and reliable data. The manual is applicable to continuous emission monitoring systems (CEMS), continuous parameter monitoring systems (CPMS), and continuous opacity monitoring systems (COMS). In addition to DEQ specific requirements, the manual incorporates by reference federal monitoring requirements contained in 40 CFR Parts 60, 63, and 75. The Continuous Monitoring Manual was first written in 1992 and revised in 2014. The Continuous Monitoring Manual is included in Oregon's State Implementation Plan.

# 1.0 Introduction

This manual provides guidance and direction to owners and operators that are responsible for continuously monitoring air emissions, operating parameters, or opacity from their facilities. For purposes of this manual, continuous monitoring systems (CMS) are divided into three (3) main subgroups:

- Continuous Emission Monitoring Systems (CEMS),
- Continuous Parameter Monitoring Systems (CPMS), and
- Continuous Opacity Monitoring Systems (COMS).

CMS that are required by permit condition, but not subject to federal regulations are subject to the requirements of this manual. This manual also applies to CMS that are required by the following federal standards. The monitoring requirements specified in the federal standards are incorporated by reference as published in the July 2012 Code of Federal Regulations (CFR). If there is an inconsistency between the requirements of this manual and the federal requirements, the federal requirement will take precedence:

- New Source Performance Standards (NSPS), 40 CFR Part 60;
- National Emissions Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63; and
- Acid Rain Program, 40 CFR Part 75.

When required to perform continuous monitoring by DEQ, CMS operators are required to perform the monitoring in accordance with this manual, at a minimum, to ensure reported data are complete and of high quality. Operators may choose more rigorous specifications or more sophisticated procedures appropriate for their purposes.

## 2.0 Monitoring Objectives

### 2.1 Program Objectives

The objectives of a monitoring program will vary depending on the regulation or permit, but may include one or more of the following. The CMS must be designed to meet the appropriate objectives.

- Measure air contaminant concentrations and operating parameters as required by permit or regulation;
- Ensure high quality data is collected to determine continuous compliance with permit or regulation;
- Prevent possible adverse environmental effects;
- Determine emissions improvements and trends in conjunction with process changes; or
- Provide accurate and reliable data as part of an integrated emissions inventory program.

### 2.2 Data Quality Objectives

Each monitoring program must meet specific data quality objectives. These are data completeness, representativeness, accuracy, precision, and comparability. A brief description of each objective is provided below.

- Completeness is the measure of the number of valid data points collected over the possible number of data points in a period of time.
- Representativeness refers to measurements which accurately depict the condition of interest. One aspect of representativeness involves the method chosen to perform the monitoring; it must be accurate in both a qualitative and quantitative sense.
- Accuracy describes how close the measurement is to the "true value" of the quantity being measured.
- Precision is a measure of variability, or scatter, of the system's response to repeated challenges by the same standard. Precision is a measure of repeatability, how closely multiple measurements agree.
- Comparability is a measure of how data sets are similar or different. It determines how data sets can be used collectively.

## 3.0 Continuous Monitoring Plans

The source operator must prepare and maintain written standard operating procedures (SOP) and a quality assurance plan (QAP) for each continuous monitoring system used at a source. The SOP and QAP must be submitted to DEQ prior to operation of a CMS. These documents must be reviewed periodically by the CMS operator and revised as necessary based on experience with the CMS. The SOP and QAP must contain detailed, complete, step-by-step written procedures. Both documents must be made available to DEQ personnel for inspection upon request.

### 3.1 Standard operating procedures

Standard operating procedures (SOP) must be written for each CMS. The contents of the SOP must include, as a minimum, the following information:

- a. Source owner or operator name and address.
- b. Identification, description, and location of monitors in the CMS.
- c. Description and location of the sample interface (i.e. sample probe).
- d. Manufacturer and model number of each monitor in the CMS.
- e. Equipment involved in sample transport, sample conditioning, analysis, and data recording.
- f. Procedures for routine operation checks, including daily zero and span calibration drift (CD) check.
- g. Procedures for routine preventive maintenance. Initially, these procedures can be taken from the manufacturer's installation and operation manuals. However, as the CMS operators gain more experience with the CMS, it may

- be necessary or desirable to modify these procedures to increase or decrease frequency of maintenance and add or delete some procedures.
- h. Routine maintenance spare parts inventory.
  - i. Procedures for calculating and converting CMS data into the reporting units of the standard.
  - j. Documentation of the activities described in 3.1 a – i.

## 3.2 Quality Assurance Plan

Prior to initiating a continuous monitoring program, a written quality assurance plan (QAP) must be prepared. The QAP must include quality control and quality assurance procedures for ensuring that the CMS will provide accurate and reliable data. For these purposes, the terms "Quality Control" (QC) and "Quality Assurance" (QA) are defined as follows:

- "Quality Control" refers to an activity carried out during routine internal operations to ensure that the data produced are within known limits of accuracy and precision. Examples of QC activities include periodic calibrations, routine zero and span checks, routine leak checks, routine check of optical alignment, etc. QC represents the core activity in a Quality Assurance program.
- "Quality Assurance" refers to all of the planned and systematic activities carried out externally and independent of routine operation to document data quality. QA activities include written documentation of operation, calibration, and QC procedures; independent system and performance audits; data validation; evaluation of QC data; etc. QA requires documentation of all aspects of the CMS effort, from the responsibilities of each person involved to how the data are reported.

The contents of the QAP are dependent on the applicable regulation or permit condition. Some systems may be subject to multiple regulations, and therefore multiple plan requirements. The plan should be reviewed annually and updated when there are changes to equipment and procedures. Plan updates should be submitted to DEQ for review. In general, a satisfactory QAP plan includes the following:

- a. Data quality objectives.
- b. Chain of responsibility for CMS operation, corrective action, and training program.
- c. Procedure for measuring the CMS accuracy and precision including the following:
  - CMS calibrations
  - Zero and span drift checks
  - Performance audits
  - System audits
- d. Quality control activities
- e. Quality control documentation
- f. Procedures for data recording, calculations, and reporting
- g. Criteria for taking corrective actions

## h. Procedures for corrective action

Monitoring plan requirements for various regulations are summarized in the following table.

| REGULATIONS       | AQ/QC PROGRAM PLAN REQUIREMENTS                         |
|-------------------|---------------------------------------------------------|
| NSPS              | 40 CFR Part 60, section 60.13 and appendix F, section 3 |
| NESHAP            | 40 CFR Part 63, Subpart A, Section 63.8                 |
| Acid Rain Program | 40 CFR Part 75, Appendix B, Section 1.                  |

\* This table may not include all references to applicable monitoring plan requirements.

## 4.0 Continuous Emission Monitoring Systems

### 4.1 CEMS Equipment and Installation Specifications

Equipment specifications, installation, and measurement location are defined according to the applicable performance specification. Refer to the following reference table for equipment specifications, installation, and measurement location requirements.

| REGULATIONS             | EQUIPMENT SPECIFICATIONS, INSTALLATION & MEASUREMENT LOCATION REQUIREMENTS |
|-------------------------|----------------------------------------------------------------------------|
| NSPS                    | 40 CFR Part 60, section 60.13 and appendix B                               |
| NESHAP                  | 40 CFR Part 63, section 63.8                                               |
| Acid Rain Program       | 40 CFR Part 75, Subpart A – H and appendices A-J                           |
| Oregon DEQ Requirements | Appendix A of this manual                                                  |

\*This table may not include all references to applicable equipment and installation requirements.

### 4.2 Performance Assessments for CEMS

Performance assessments are utilized to determine quality of monitored data. In general, most regulations divide the assessments into four (4) separate activities:

- Initial performance specifications
- Daily performance assessments
- Quarterly performance assessments, and
- Annual performance assessments.

The requirement of each assessment depends on the applicable performance specifications and the QA/QC requirements. Performance assessments requirements are detailed below.

| REGULATIONS             | PERFORMANCE ASSESSMENTS                               |
|-------------------------|-------------------------------------------------------|
| NSPS                    | 40 CFR Part 60, Appendices B & F                      |
| NESHAP                  | 40 CFR Part 63, section 63.8                          |
| Acid Rain Program       | 40 CFR Part 75, Subparts A – H and appendices A and B |
| Oregon DEQ Requirements | Appendix A of this manual                             |

\*This table may not include all references to applicable performance assessment requirements.

## 5.0 Continuous Parameter Monitoring Systems

A continuous parameter monitoring system (CPMS) continuously monitors source or pollution control device operating parameters. These may include, but are not limited to:

- Fuel consumption rates;
- Production rates;
- Oxygen concentration;
- Moisture content;
- Process temperatures;
- Pollution control device parameters (e.g., pressure drop, voltages, water flow and pressure, etc.)

There are three basic types of CPMS:

- CPMS used for the purpose of determining pollutant emissions rates (PEMS);
- CPMS used for the purpose of monitoring pollution control device operations; and,
- CPMS used for the purpose of monitoring source operations.

It is not the intention of this manual to cover each and every possible CPMS. Requirements for CPMS that are used for determining pollutant emissions rates are generally found within applicable federal regulation. CPMS requirements are detailed below.

| REGULATIONS             | CPMS REQUIREMENTS                                          |
|-------------------------|------------------------------------------------------------|
| NSPS                    | 40 CFR Part 60, applicable subparts and appendices B and F |
| NESHAP                  | 40 CFR Part 63, Applicable subparts                        |
| Acid Rain Program       | 40 CFR Part 75, Subpart E and appendices D and E           |
| Oregon DEQ Requirements | Appendix B of this manual                                  |

\*This table may not include all references to applicable CPMS performance requirements.



## 6.0 Continuous Opacity Monitoring Systems (COMS)

This section addresses specific requirements for the operation of continuous opacity monitoring systems (COMS). These requirements do *not* supersede any requirements specified by rule, regulation, or by permit condition.

Existing COMS installed prior to 6/1/91 must be maintained and operated in accordance with permit requirements; and, unless otherwise specified, are not subject to the requirements of this manual. If the COMS system is not subject to federal regulation and is installed, replaced, relocated or substantially refurbished after 6/1/91, then the COMS must satisfy 40 CFR Part 60, Spec. 1 requirements in effect at the time of the change.

All continuous opacity monitoring systems (COMS) must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period (15 seconds for non-NSPS sources if approved by the DEQ).

Federal requirements for COMS can be found within the applicable federal regulations cited below.

| REGULATIONS                                     | COMS REQUIREMENTS                                             |
|-------------------------------------------------|---------------------------------------------------------------|
| NSPS                                            | 40 CFR Part 60, section 60.13 and appendix B, specification 1 |
| NESHAP                                          | 40 CFR Part 63, section 63.8                                  |
| Acid Rain Program -Optional Emissions Protocols | 40 CFR Part 75, Subpart B                                     |

\*This table may not include all references to applicable COMS performance requirements.

## 7.0 Recordkeeping and Reporting

This section addresses specific requirements for recordkeeping and reporting requirements for CMS. If inconsistencies exist, these requirements do not supersede any requirements specified by regulation or permit condition.

The source owner or operator must maintain records of all CMS activities in a file and/or log book. This record must be used by the CMS operator to ensure that the CMS is operating correctly. The record must also be made available to DEQ personnel upon request

Recordkeeping and reporting requirements for various regulations are cited below.

| REGULATIONS             | RECORDKEEPING & REPORTING REQUIREMENTS                         |
|-------------------------|----------------------------------------------------------------|
| NSPS                    | 40 CFR Part 60, applicable subparts and appendix F             |
| NESHAP                  | 40 CFR Part 63, applicable subparts                            |
| Acid Rain Program       | 40 CFR Part 75, subparts E, F and G and appendices B, D, and E |
| Oregon DEQ Requirements | Appendix C of this manual                                      |

\*This table may not include all references to applicable recordkeeping and reporting requirements.

# **Appendix A**

## **DEQ Continuous Emission Monitoring Requirements**

General continuous emissions monitoring requirements are outlined below. These requirements do not supersede any requirements specified by regulation or permit condition. Refer to Section 4.0 of this monitoring manual.

## **A.1 CEMS Not Required by Federal Program and Installed after 6/1/91**

1. The CEMS must continuously monitor and record the concentration of gaseous pollutant emissions on a wet or dry basis discharged into the atmosphere. The CEMS must consist of subsystems for sample extraction, conditioning, detection, analysis, and data recording/processing.
2. All CEMS must meet the requirements of 40 CFR 60 Appendix B (performance specifications) and Appendix F (QA/QC procedures).
3. All continuous emissions monitoring systems (CEMS) must complete a minimum of one cycle of sampling and analyzing for each successive 15-minute period unless the DEQ has specified a different frequency (i.e. Medford AQMA requires one minute cycle).

## **A.2 CEMS Not Required by Federal Program and Installed Prior to 6/1/91:**

1. The CEMS must continuously monitor and record the concentration of gaseous pollutant emissions discharged to the atmosphere from any stationary source using CEMS approved by DEQ.
2. The span of the CEMS must be set:
  - a. At 200% of the permit requirement concentration or the emission standard, whichever is lower. The span may be set at alternative values with DEQ approval.
  - b. The CEMS must be capable of recording down-scale drift below zero.
3. The CEMS must be pollutant specific and free from interferences. (e.g.: For TRS CEMS, the measured TRS must exclude SO<sub>2</sub>)
4. The CEMS analyzer must be maintained in an environment conducive to analyzer stability.
5. Extractive CEMS operating procedures must include automatic back-flushing of sample line and probe to purge condensed moisture and particulate material.
6. If the emissions must be corrected for diluent oxygen, periodically test and record the concentration of oxygen in the exhaust gases using an oxygen CEMS, Orsat Analyzer, or equivalent.
  - a. An Oxygen CEMS, if used, must be calibrated according to written procedures, approved by the Department, at least twice each year using two calibration gases having oxygen concentrations of approximately 5 and 15 percent by volume, accurate to within 0.5% oxygen.

- b. Oxygen must be measured at least semi-annually, after any major maintenance/-repair on duct work, and frequently enough to be representative of average oxygen concentration.
- 7. The zero and span drift of CEMS must be measured and recorded daily when the CEMS is in operation. Span gases used for this procedure need not be NIST traceable. However, the concentration of the gases should be verified by an analyzer calibrated with certifiable calibration gases. It may be necessary to periodically certify the concentration of the zero and span drift check gases.
- 8. A cylinder gas audit (CGA) of the CEMS must be performed weekly with successive CGAs performed no closer than six days apart. The CGA must include a "zero" gas and a minimum of one upscale gas concentration at approximately 60 percent of analyzer full-scale. The CGA results must satisfy the audit specifications outlined within 40 CFR 60, Appendix F.
  - a. If 4 consecutive weekly CGAs result in the CEMS being within the allowable specifications, the frequency of the CGAs may be reduced to once each month with successive CGAs performed no closer than 21 days apart.
  - b. If three consecutive monthly CGAs result in the CEMS being within specifications, the frequency of the CGAs may be reduced to once each quarter with successive CGAs performed no closer than two months apart.
  - c. If two consecutive quarterly CGAs result in the CEMS being within specifications, the CGA frequency may be reduced to once every six months with successive CGAs no closer than five months apart.
  - d. The minimum CGA frequency must be once every six months with successive CGAs no closer than five months apart.
  - e. The CGA frequency must revert back to a weekly frequency if a CGA results in the CEMS failing to meet the performance specifications of 40 CFR Part 60, Appendix F.
    - i. The concentration of the cylinder audit gases must be traceable to National Institute of Standards and Technology (NIST) standard reference materials (SRM) or EPA certified reference materials (CRM) and reanalyzed every 6-months using EPA Reference Methods (40 CFR 60, Appendix A). Gases may be analyzed at less frequent intervals if the manufacturer guarantees their certified concentration for longer time periods.
    - ii. Cylinder gases must be introduced to include as much of the monitoring system as feasible, in no case may gas conditioning subsystems (i.e. SO<sub>2</sub> scrubbers for TRS CEMS) be excluded or by-passed.
- 9. A Relative Accuracy Audit (RAA) must be performed at least once each year. The RAA may satisfy one of the CGA requirements. RAA must satisfy the audit specifications outlined within 40 CFR 60, Appendix F.
- 10. If the CEMS system is not subject to federal regulation and is installed, replaced, relocated or substantially refurbished after 6/1/91, then the CEMS is not applicable to the requirements of this section and must comply with section A.1 of this appendix.
- 11. As an alternative to complying with conditions 1 through 9 of this section, the owner/operator may choose to comply with the requirements of section A.1 of this appendix.
- 12. Data must be recorded in units of the standard.

# **APPENDIX B**

## **DEQ CONTINUOUS PARAMETER MONITORING REQUIREMENTS**

General continuous parameter monitoring requirements are outlined below. These requirements do not supersede any requirements specified by rule, regulation, or by permit condition. Refer to Section 5.0 of this manual.

## B.1 CPMS General Requirements:

1. CPMS must be installed in a location that is representative of the monitored process and free from interferences.
2. CPMS must be installed and maintained in an environment conducive to CPMS stability and data reliability.
3. CPMS must be calibrated and certified by the manufacturer prior to installation. (Applies to CPMS installed after 6/1/91).
4. All CPMS must complete a minimum of one cycle of sampling and analyzing for each successive 15-minute period unless the DEQ has specified a different frequency (i.e. Medford AQMA requires one minute cycle).

## B.2 Pollutant Emissions Related CPMS

1. CPMS for the purpose of determining emission rates (i.e. stack gas flow monitoring devices) require the highest level of QA/QC. If CPMS system is installed to satisfy 40CFR Parts 60 and 75, then requirements specified by those regulations must be followed.
  - a. CPMS installed after 6/1/91 must meet 40 CFR Part 60 Appendix B performance specification 6. The reference methods for determining relative accuracy (RA) are EPA or DEQ methods 1 through 4.
  - b. Performance audits must be conducted quarterly in conjunction with the CEMS audits. It may not be possible to conduct audits on some CPMS. Exemption from this requirement must be approved by DEQ.

### 2. Stack Gas Flow Monitoring

CPMS data are necessary for converting emission concentrations to units of the standard. This is accomplished by continuously monitoring stack gas flow rates to calculate the emissions as a rate (pounds per hour) in addition to the CEMS output (percent or parts per million).

There are several acceptable alternatives for measuring flow rates (ultrasonic sensors, pitot tubes, process rates - steam, air flows, etc.). The CPMS must include the capability to measure and/or assume the following variables for determining the stack gas flow rate.

- Stack gas temperature,
- Stack gas pressure (absolute),
- Stack gas moisture content,
- Stack gas molecular weight,
- Stack gas velocity, and
- Cross-sectional area of the stack at the point of velocity measurements.

Flow rate metering systems generally measure and record the velocity, or velocity pressure (fifth bullet item 5 above). Other parameters are either directly or indirectly measured. In some circumstances parameters can be accurately assumed based on historical data collected from the source.

### **B.3 Pollution Control Device Related CPMS**

1. Pollution control device related CPMS include but are not limited to:
  - Operating pressure and/or temperature,
  - Water flow rate, temperature, and/or pressure
  - Electrical current and voltage, and
  - Cycle time.
2. Calibration checks must be performed in accordance with the manufacturer's procedures at least once per month. Depending on the CPMS, an exemption from this requirement may be obtained from the DEQ upon written request. For example, water flow devices are typically calibrated only once, prior to installation.

### **B.4 Source Operation Related CPMS**

Source related CPMS include but are not limited to:

- Steam flow & pressure meters,
- Fuel flow meters,
- Operating temperatures & pressures,
- Excess air levels,
- Hour meters and cycle time.

At a minimum, source related CPMS must meet the general CPMS requirements listed above. Depending on the CPMS, an exemption from this requirement may be obtained from the DEQ upon written request. Temperature CPMS must be calibrated during each planned maintenance outage or annually, whichever is more frequent.



# **APPENDIX C**

## **DEQ RECORDKEEPING AND REPORTING REQUIREMENTS**

General DEQ CMS recordkeeping and reporting requirements are outlined below. These requirements do not supersede any requirements specified by regulation or permit condition. Refer to Section 7.0 of this monitoring manual.

### C.1 Recordkeeping

The source owner or operator must maintain records of all CMS activities in a file and/or log book. This record must be used by the CMS operator to ensure that the CMS is operating correctly. The record must also be made available to DEQ personnel upon request. The record must include as a minimum the following information:

1. Records of routine observation checks.
2. Records of routine maintenance and adjustments.
3. Records of parts that are replaced.
4. Spare parts inventory for the CMS.
5. Records of CMS calibrations.
6. Records of CMS daily calibration drift.
7. Records of CMS audits.
8. Records of corrective action taken to bring an “out-of- control” (40CFR60 App F) CMS into control.
9. Records of date and time when CMS is inoperative or “out-of-control” (40CFR60 App F).

### C.2 Reporting Requirements

The source owner or operator may be required, by permit condition, to submit monitoring reports to the DEQ. These reports must include as a minimum the following information:

1. Reporting period (determined by permit condition).
2. CMS type, manufacturer, serial number, and location.
3. Monitoring data must be reduced and reported as follows (unless otherwise specified by permit or rule):
  - a. For opacity monitoring systems (COMS):
    - i. 6-minute (clock) averages (NSPS sources only)
    - ii. Hourly (clock) averages
    - iii. Averages of 10 or 15-second data that exceed the emission limit when the aggregate period is greater than 3-minutes in any 1-hour period.
    - iv. Monthly average of the hourly averages.
  - b. For emissions monitoring systems (CEMS):
    - i. Hourly (clock) averages.
    - ii. Monthly average of the hourly averages.
4. Data completeness information. The following completeness requirements are essential for a CMS data average to be accepted (unless otherwise specified by permit or rule):

- For a 6-minute or 1-hour reporting period, a minimum of 75% of the data must be included in the average.
- For a 24-hour or monthly reporting period, a minimum of 90% of the data must be included in the average.

Insufficient data completeness, excluding CMS downtime due to daily zero and span checks and performance audits, will void that data period. All data collected must be reported. Non-valid data must be highlighted. Data recorded during periods of CMS breakdowns, repairs, audits, calibration checks, and zero and span adjustments must not be included in the data averages.

5. The magnitude of excess emissions computed in accordance with any conversion factor(s), and the date and time of commencement and completion of each period of excess emissions.
6. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
7. The date and time identifying each period during which the CMS was inoperative (out-of-control as per 40CFR60 App F) except for zero and span checks and the nature of the CMS repairs or adjustments.
8. Results of all CMS audits conducted during the reporting period.  
DEQ approved reporting forms are provided upon request. Additional reporting requirements may be stipulated in an Air Contaminant Discharge Permit or DEQ communication.

# **SOURCE SAMPLING MANUAL VOLUME I**

**January, 1976**

**Revised: April, 1979**

**August, 1981; January, 1992**

**State of Oregon  
Department of Environmental Quality  
Air Quality Division**

# Source Sampling Manual

## Volume I

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## **1.0 INTRODUCTION**

### **1.1 Purpose**

The purpose of this manual is to identify and describe the source sampling methods on file at the Department of Environmental Quality (DEQ) in accordance with OAR 340-20-040.

### **1.2 Applicability**

The methods identified in this manual are suitable for use in conducting stationary source emissions testing for the purpose of demonstrating compliance (or non-compliance) with Air Contaminant Discharge Permit (ACDP) emission limits. The October, 1991 revision of the Source sampling Manual supersedes all previous versions of this manual.

The methods in this manual are primarily for measuring emissions of the criteria pollutants and some hazardous air pollutants. Methods for other hazardous and toxic air pollutants could be approved on a case-by-case basis at the time of reviewing the source test plan (see section 2). A copy of any method used for DEQ approved source testing shall be retained on file at the Air Quality Division Headquarters

### **1.3 Manual organization**

Section 2 of this manual provides general source testing requirements. Unless otherwise specified in an Oregon Administrative Rule, Air Contaminant Discharge Permit, or DEQ letter, these general requirements shall be followed when conducting source testing in Oregon.

Section 3 lists the specific source sampling methods for criteria pollutants either by reference or described in detail in this manual.

Section 4 lists the specific source sampling methods for hazardous air pollutants.

Many of the U.S. Environmental Protection Agency (EPA) reference source sampling methods have been included by reference because they are identical to Oregon's methods and there is no need for redundancy which could lead to confusion and inconsistency. Copies of these methods can be obtained from government bookstores, the DEQ, or directly from EPA. All methods included in this manual by reference are on file at the DEQ. The EPA methods are incorporated by reference as found in 40 CFR Part 51 Appendix M, 40 CFR Part 60 Appendix A, and 40 CFR Part 61 Appendix B, published on July 1, 1991.

## **2.0 SOURCE TESTING GENERAL REQUIREMENTS**

### **2.1 Department Notification**

The DEQ Source Testing Coordinator shall be notified -of all compliance source tests at least 15 days in advance of the source test date. The notification should be in writing and accompanied by a source test plan.

### **2.2 Source Test Plan**

A source test plan must be approved by the Department in advance of all compliance source testing. As stated above, the DEQ should be provided at least 15 days to review and approve source test plans. In more complex source testing programs, it may be necessary to allow up to 30 days to receive DEQ approval. The source test plan may be generated by the source testing consultant, source operator, or the DEQ. The source test plan will be reviewed by the DEQ Source Testing Coordinator.

A source test plan shall include, as a minimum, the following information:

1. Source Name and address.
2. Source site personnel: contact name and phone number.
3. Source testing personnel: company, contact name, and phone number.
4. Scheduled date of the source test
5. Source Description including a description of the pollution control device and sample locations.
6. Pollutant to be measured.
7. Test Methods
8. Number of sampling replicates
9. Applicable process/production information to be collected during the source test.
10. Control device operating parameters to be monitored during the testing.
11. Fuel samples and type of analysis: who will collect them and who will perform the analysis.
12. Visible emissions measurements: who will take opacity readings during the source test and are they certified.
13. other sampling considerations.
14. Other process considerations.
15. The source test plan shall include the following statements unless otherwise specified by an ACDP condition or DEQ letter:
  - a. It is assumed today, but it will be confirmed on or before the test day, that the duct air flow measuring meets criteria in EPA Methods 1 and 2.

- b. In no case will sampling replicate(s) be accepted if separated by a time duration of twenty-four (24) or more hours, unless prior authorization is granted by the Department.
- c. The source to be tested must operate at a normal production rate during testing. Rates not in agreement with those stipulated in the Air Contaminant Discharge Permit can result in test rejection for application to determine compliance. Imposed process limitations could also result from atypical rates.
- d. The Department must be notified of any changes in source test plans prior to testing. Significant changes not acknowledged by the Department which could affect accuracy and reliability of results could result in test report rejection.
- e. Method-specific quality assurance/quality control (QA/QC) procedures must be performed to ensure that the data is valid for determining source compliance. Documentation of the procedures and results shall be presented in the source test report for review. Omission of this critical information may result in rejection of the data, requiring a retest.
- f. Source test reports must be submitted to the Department within thirty (30) days of the test dates, unless another deadline has been stipulated, either by permit condition, or by Department letter approval.
- g. Two (2) copies of the completed source test report must be sent to the Department; one (1) to the DEQ Regional Operations staff person responsible for the source and the second copy to the Source-Testing Coordinator, Department of Environmental Quality Headquarters in Portland, OR.

### **2.3 Sample Replicates**

Unless otherwise specified by the ACDP or Department letter, a compliance source test shall consist of a minimum of three (3) individual tests with the pollutant emissions determined from the arithmetic average of the three tests. Pollutant emissions may be determined from the arithmetic average of two tests in the event that one of the samples was lost or unusual operating conditions (upset conditions) occurred during the testing.



## **2.4 Sample time, volumes, and detection limits**

In general, compliance source tests shall be a minimum of one (1) hour long and the sample volume shall be sufficient to ensure a minimum detection limit of one half of the emission limit.

For particulate emissions testing, the gravimetric analytical procedure minimum detection limit is considered to be 20 mg (100 mg for high volume samplers) per sample. For Methods 5, 7, and 17, the minimum sample volume shall be the greater of 31.8 dry standard cubic feet (dscf) or 20 mg divided by one half of the emission standard converted to mg/dscf. Sample times shall be a minimum of 60 minutes and a maximum of 480 minutes (8 hours). For Oregon Method 8 (high volume sampler), the minimum sample volume shall be the greater of 150 dry standard cubic feet (dscf) or 100 mg divided by one half of the emission standard converted to mg/dscf. Sample times shall be a minimum of 15 minutes and a maximum of 60 minutes.

## **2.5 Reporting and Record Keeping**

### **2.5.1 Reporting**

Unless otherwise specified by the ACDP, OARs, or DEQ letter, source test reports shall be submitted to the Department within 30 days following the source tests. Each source test report shall include as a minimum the following information:

- a. Name and location of the source.
- b. Date and time of individual tests.
- c. Description of the process, including:
  1. manufacturer and maximum capacity of the process
  2. technology type
  3. pollution control devices.
- d. Production rates during the testing.
- e. Fuel characteristics (if applicable).
- f. Visible emissions (if applicable).
- g. Pollutants
- h. Test Methods
- i. Source sampling equipment
- j. Method-specific equipment calibration data and results.
- k. Field data sheets
- l. Laboratory data sheets

- m. Calculated results
- n. Example calculations;
- o. Discussion of testing and/or process problems encountered during the testing.

### **2.5.2 Record Keeping**

The following records shall be maintained for a minimum of one year:

- a. Equipment calibrations
- b. Analytical results

Unused portions of the source test samples shall be preserved and archived for a minimum of 6 months.

## **3.0 TEST METHODS**

### **3.1 Sample locations/Traverse Points**

EPA Method 1 (40 CFR Part 60 Appendix A, 7-1-91 edition) is incorporated by reference.

### **3.2 Gas Velocity and Flow rate**

EPA Methods 2, 2A, 2B, 2C, and 2D (40 CFR Part 60 Appendix A, 7-1-91 edition) are incorporated by reference.

### **3.3 Gas composition Analysis**

EPA Methods 3 and 3A (40 CFR Part 60 Appendix A, 7-1-91 edition) are incorporated by reference.

**3.4** EPA Methods 3 and 3A (40 CFR Part 60 Appendix A, 7-1-91 edition) are incorporated by reference.

### **Moisture Content of Gas**

EPA Method 4 (40 CFR Part 60 Appendix A, 7-1-91 edition) is incorporated by reference.

### 3.4.1 Oregon Method 4 (wet bulb/dry bulb)

**State of Oregon  
Department of Environmental Quality  
Source Sampling Method 4**

**Determination of Moisture Content of Stack Gases  
(Alternate Method)**

1. **Principle.** The water vapor in a non-saturated gas stream causes a depression of the wet bulb temperature which is proportional to the fraction of moisture present.
2. **Procedure.**
  - 2.1 Measure the dry bulb temperature in the conventional way using either a thermometer or thermocouple.
  - 2.2 Wrap the end of the temperature-measuring device in a cloth sock with water. Insert the sock and temperature-measuring device into the flowing gas stream and allow the temperature to reach a steady state. Caution: after the water on the sock has evaporated, the temperature will rise to the dry bulb temperature. (Figure 4-1). The wet bulb temperature must be taken while the sock is saturated with moisture.
  - 2.3 Apply the wet bulb and dry bulb readings to the appropriate graph (Figure 4-2, 4-3, or 4-4) and determine the approximate water vapor content if the barometric pressure is near 29.92 inches of mercury (in. Hg).
  - 2.4 Alternately, apply the wet bulb and dry bulb readings to equation 4-1 in figure 4-5.
3. **Interference**
  - 3.1 The following conditions may drastically change the wet bulb reading causing erroneous results:
    - 3.1.1 The presence of acid gases in the gas stream, i.e.  $\text{SO}_2$ ,  $\text{SO}_3$ ,  $\text{HCl}$ .
    - 3.1.2 The presence of hydrocarbons in the gas
    - 3.1.3 Marked differences from atmospheric pressure (29.9 in. Hg) of the gas stream (if the graphs are used) .

3.2 Should any of the above interferences be present, the tester should consider another approach to determining moisture content.

3.3 Additionally, the following conditions can lead to difficulties:

3.3.1 Very high dry bulb temperature (in excess of 500° F).

3.3.2 Very high or very low gas velocities.

3.3.3 High concentrations of particulate matter which may adhere to the wet sock.

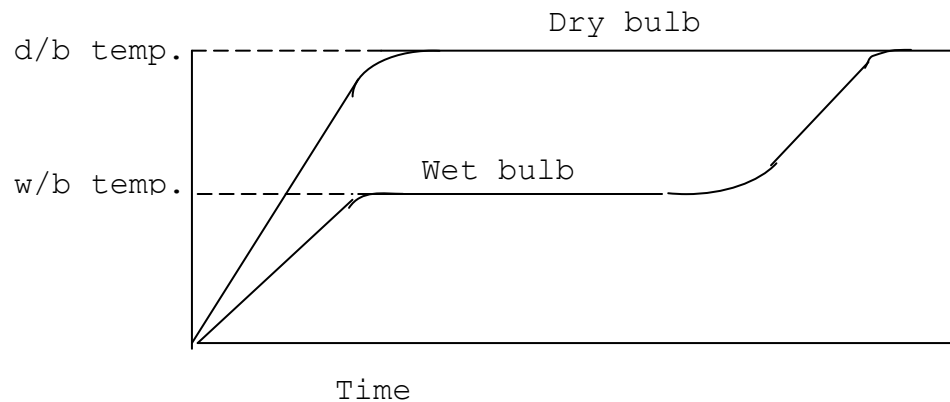


Figure 4-1

3.4 Moisture Equation:

$$\% \text{ H}_2\text{O} = \frac{e'' - \frac{(P_a - e'')(t_d - t_w)}{2800 - [1.3t_w]}}{P_a} \times 100 \quad (4-1)$$

where:

$e''$  = Vapor pressure of  $\text{H}_2\text{O}$  @  $t_w$ , in. Hg (See Figure 4-5)

$P_a$  = Absolute barometric pressure, in. Hg

$t_d$  = Dry bulb temperature, °F

$t_w$  = Wet bulb temperature, °F

VAPOR PRESSURE OF WATER AT SATURATION\*  
(Inches of Mercury)

| Temp.<br>Deg. F | 0     | 1     | 2     | 3      | 4     | 5     | 6     | 7      | 8     | 9     |
|-----------------|-------|-------|-------|--------|-------|-------|-------|--------|-------|-------|
| -20             | .0126 | .0119 | .0112 | .0106  | .0100 | .0095 | .0089 | .0084  | .0080 | .0075 |
| -10             | .0222 | .0209 | .0199 | .0187  | .0176 | .0168 | .0158 | .015   | .0142 | .0134 |
| -0              | .0376 | .0359 | .0339 | .0324  | .0306 | .0289 | .0275 | .0259  | .0247 | .0233 |
| 0               | .0376 | .0398 | .0417 | .0441  | .0463 | .0489 | .0517 | .0541  | .0571 | .0598 |
| 10              | .0631 | .0660 | .0696 | .0728  | .0768 | .0810 | .0846 | .0892  | .0932 | .0982 |
| 20              | .1025 | .108  | .1127 | .1186  | .1248 | .1302 | .1370 | .1429  | .1502 | .1567 |
| 30              | .1647 | .1716 | .1803 | .1878  | .1955 | .2035 | .2118 | .2203  | .2292 | .2383 |
| 40              | .2478 | .2576 | .2677 | .2782  | .2891 | .3004 | .3120 | .3240  | .3364 | .3493 |
| 50              | .3626 | .3764 | .3906 | .4052  | .4203 | .4359 | .4520 | .4586  | .4858 | .5035 |
| 60              | .5218 | .5407 | .5601 | .5802  | .6009 | .6222 | .6442 | .6669  | .6903 | .7144 |
| 70              | .7392 | .7648 | .7912 | .8183  | .8462 | .8750 | .9046 | ~.9352 | .9666 | .9989 |
| 80              | 1.032 | 1.066 | 1.102 | 1.138  | 1.175 | 1.213 | 1.253 | 1.293  | 1.335 | 1.378 |
| 90              | 1.422 | 1.467 | 1.513 | 1.561  | 1.610 | 1.660 | 1.712 | 1.765  | 1.819 | 1.875 |
| 100             | 1.932 | 1.992 | 2.052 | 2.114  | 2.178 | 2.243 | 2.310 | 2.379  | 2.449 | 2.521 |
| 110             | 2.596 | 2.672 | 2.749 | 2.829  | 2.911 | 2.995 | 3.081 | 3.169  | 3.259 | 3.351 |
| 120             | 3.446 | 3.543 | 3.642 | 3.744  | 3.848 | 3.954 | 4.063 | 4.174  | 4.289 | 4.406 |
| 130             | 4.525 | 4.647 | 4.772 | 4.900  | 5.031 | 5.165 | 5.302 | 5.442  | 5.585 | 5.732 |
| 140             | 5.881 | 6.034 | 6.190 | 6.350  | 6.513 | 6.680 | 6.850 | 7.024  | 7.202 | 7.384 |
| 150             | 7.569 | 7.759 | 7.952 | 8.150  | 8.351 | 8.557 | 8.767 | 8.981  | 9.200 | 9.424 |
| 160             | 9.652 | 9.885 | 10.12 | 10.36  | 10.61 | 10.86 | 11.12 | 11.38  | 11.65 | 11.92 |
| 170             | 12.20 | 1t.48 | 12.77 | 13.07  | 13.37 | 13.67 | 13.98 | 14.30  | 14.62 | 14.96 |
| 180             | 15.29 | 15.63 | 15.98 | 16.34  | 16.70 | 17.07 | 17.44 | 17.82  | 18.21 | 18.61 |
| 190             | 19.01 | 19.42 | 19-84 | 20.27  | 20.7  | 21.14 | 21.5  | 22.05  | 22.52 | 22.99 |
| 200             | 23.47 | 23.96 | 24.46 | 24.97  | 25.48 | 26.00 | 26.53 | 27.07  | 27.62 | 28.18 |
| 210             | 28.75 | 29.33 | 29.92 | 301.52 | 31.13 | 31.75 | 32.38 | 33.02  | 33.67 | 34.33 |
| 220             | 35.00 | 35.68 | 36.37 | 37.07  | 37.78 | 38.50 | 39.24 | 39.99  | 40.75 | 41.52 |
| 230             | 42.31 | 43.11 | 43-92 | 44.74  | 45.57 | 46.41 | 47.27 | 48.18  | 49.03 | 49.93 |
| 240             | 50.84 | 51.76 | 52.70 | 53.65  | 54.62 | 55.60 | 56.60 | 57.61  | 58.63 | 59.67 |

\* Methods for Determination of Velocity, Volume, Dust, and Mist Content of Gases, Bulletin WP-50, Western Precipitation Corp., Los Angeles, Calif., Figure 4-5

The following equation can be substituted for the above table for determining vapor pressures (e") from measured wet bulb (t<sub>w</sub>) temperatures:

$$e'' = 6.08764 \times 10^{-6} * t_w^3 - 1.00431 \times 10^{-3} * t_w^2 + 0.075602 \cdot 6 * t_w - 1.69343$$

### 3.5 Particulate Matter

EPA Methods 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H, and 17 (40 CFR Part 60 Appendix A, 7-1-91 edition) are incorporated by reference for measuring particulate emissions from specific sources as required in Oregon Administrative Rules, Air Contaminant Discharge Permits, and 40 CFR Part 60 regulations.

### 3.5.1 Oregon Method 5

State of Oregon  
Department of Environmental Quality  
Source Sampling Method 5

#### Sampling Particulate Emissions From Stationary Sources

#### 1. Principle and Applicability

1.1 **Principle.** Particulate matter including condensable gases are withdrawn isokinetically from a flowing gas stream. The particulate matter is determined gravimetrically after removal of combined water.

1.2 **Applicability.** This method is applicable to the determination of particulate emissions from stationary sources except those sources for which specified sampling methods have been devised and are on file with the Department.

2. **Acceptability.** Results of this method will be accepted as demonstration of compliance (or non-compliance) provided that the methods included or referenced in this procedure are strictly adhered to and a report containing at least the minimum amount of information regarding the source is included as described in Section 2.5.1. Deviations from the procedures described herein will be permitted only if permission from the Department is obtained in writing in advance of the tests. EPA Method 5 combined with EPA Method 202 may be substituted for this method.

#### 3. Apparatus

3.1 **Sampling Train:** Same as EPA Method 5 Sections 2.1.1 to 2.1.10 with the following exception:

3.1.1 The condenser shall consist of four impingers as described in EPA Method 5 Section 2.1.7.

3.2 **Sample Recovery:** Same as EPA Method 5 Sections 2.2.1 to 2.2.8.

3.3 **Analysis:** Same as EPA Method 5 Sections 2.3.1 to 2.3.7 with the following addition:

3.3.1 Glass separatory funnel (500-1000 ml) with Teflon stopcock and plug.

#### 4. **Reagents**

4.1 Sampling: Same as EPA Method 5 Sections 3.1.1 to 3.1.5 with the following condition:

4.1.1 Distilled water with a residue content of less than 0.001% (0.01mg/ml) shall be used in the impingers.

4.2 Sample Recovery: Same as EPA Method 5 Section 3.2.

4.3 **Analysis:** Same as EPA Method 5 Section 3.3 with following addition:

4.3.1 Methylene Chloride (dichloromethane) reagent grade, with a maximum total residue content of 0.001% (0.013 mg/ml).

#### 5. **Procedure**

5.1 Sampling: Same as EPA Method 5 Section 4.1

5.2 Sample Recovery: Same as EPA Method 5 Section 4.2 with the following additions:

5.2.1 The contents of the impingers, excluding the silica gel impinger, shall be transferred to container No. 4 along with a distilled water rinse of the impingers and interconnects from the back filter holder to the silica gel impinger.

5.2.2 Rinse all sample exposed glassware between the filter (excluding the glass frit filter support) and the fourth impinger with acetone and store in container No. 5.

5.3 Analysis: Same as EPA Method 5 Section 4.3 with following additions:

5.3.1 Transfer the contents of container No. 4 to a separator funnel (Teflon<sup>1</sup> stoppered). Rinse the container with distilled water and add to the separatory funnel.

---

<sup>1</sup> Mention of trade names or specific products does not constitute endorsement by the Department of Environmental Quality.



Add 50 ml of methylene chloride, stopper, and vigorously shake the separatory funnel 1 minute, let separate and transfer the methylene chloride (lower layer) into a tared beaker or evaporating dish. Repeat twice more.

**NOTE:** Always leave a small amount of methylene chloride in the separatory funnel to ensure that water does not get into the extracted sample. If water is present in the extracted sample, it will be difficult to completely evaporate the sample to dryness for gravimetric analysis.

- 5.3.2 Transfer the remaining water in the separator funnel to a tared beaker or evaporating dish and evaporate at 105°C. Desiccate for 24 hours and weigh to a constant weight.
- 5.3.3 Evaporate the combined impinger water extracts from section 5.3.1 at laboratory temperature ( $\leq 70^{\circ}\text{F}$ ) and pressure, desiccate for 24 hours and weigh to a constant weight.
- 5.3.4 Transfer the contents of container No. 5 to a tared beaker or evaporating dish, evaporate at laboratory temperature and pressure, desiccate for 24 hours, and weigh to a constant weight.
- 5.3.5 Evaporate a portion of the solvents in a manner similar to the sample evaporation to determine the solvent blanks.

5.4 Quality Control Procedures: Same as EPA Method 5 Section 4.4.

## 6. Calibration

6.1 Same as EPA Method 5 Section 5 with the following addition:

- 6.1.1 The calibration data and/or calibration curves shall be included in the source test report.

## 7. Calculations

Same as EPA Method 5 Section 6 with the following changes:

7.1 Additions to EPA Method 5 Section 6.1 nomenclature:

$C_m$  = Methylene chloride blank residue concentration,

mg/g.

$m_m$  = Mass of residue of methylene chloride after evaporation, mg.

$V_m$  = Volume of methylene chloride blank, ml.

$V_{mw}$  = Volume of methylene chloride used for Extracting the impinger water, ml.

$W_m$  = Weight of residue in methylene chloride, mg.

$P_m$  = Density of methylene chloride, mg/ml (see label on bottle).

7.2 Add Section 6.6a: Methylene Chloride Blank Concentration:

$$C_m = \frac{m_m}{V_m P_m}$$

7.3 Add Section 6.7a: Methylene Chloride Wash Blank.

$$W_m = C_m V_{mw} P_m$$

7.4 Change Section 6.8 to read:

**Total Particulate Weight.** Determine the total particulate matter catch from the sum of the weights obtained from Containers 1, 2, 4, 5, and the methylene chloride extract of the water from container 4 less the acetone or methylene chloride blanks (see attached figure 5.3a).

8. **Alternative Procedures, Bibliography, Sampling Train Schematic, Example Data Sheets, Etc.:**

Same as EPA Method 5 Sections 7, 8 and figures 5.1 through 5.12, excluding figure 5.3 (use 5.3a in place of 5.3).

**Figure 5.3a - page 1**  
**METHOD 5 DATA ANALYSIS FORM**

Plant \_\_\_\_\_ Run Number \_\_\_\_\_  
Sample Location \_\_\_\_\_ Test Date \_\_\_\_\_  
Sample Recovered by \_\_\_\_\_

| Front Half:                        | Date/Time | Weight(g) | Audit* | T-°F | RH-% | By |
|------------------------------------|-----------|-----------|--------|------|------|----|
| <u>Filter</u>                      |           |           |        |      |      |    |
| Filter ID _____                    |           |           |        |      |      |    |
| Tare Wt _____                      |           |           |        |      |      |    |
| Date/time into<br>Desiccator _____ |           |           |        |      |      |    |
| <u>Acetone</u>                     |           |           |        |      |      |    |
| Beaker ID _____                    |           |           |        |      |      |    |
| Tare Wt _____                      |           |           |        |      |      |    |
| Solv Vol _____                     |           |           |        |      |      |    |
| Solv ID _____                      |           |           |        |      |      |    |
| Date/time into<br>Desiccator _____ |           |           |        |      |      |    |
| <b>Back Half:</b>                  |           |           |        |      |      |    |
| <u>Acetone</u>                     |           |           |        |      |      |    |
| Beaker ID _____                    |           |           |        |      |      |    |
| Tare Wt _____                      |           |           |        |      |      |    |
| Solv Vol _____                     |           |           |        |      |      |    |
| Solv ID _____                      |           |           |        |      |      |    |
| Date/time into<br>Desiccator _____ |           |           |        |      |      |    |
| <u>Water</u>                       |           |           |        |      |      |    |
| Beaker ID _____                    |           |           |        |      |      |    |
| Tare Wt _____                      |           |           |        |      |      |    |
| Solv Vol _____                     |           |           |        |      |      |    |
| Solv ID _____                      |           |           |        |      |      |    |
| Date/time into<br>desiccator _____ |           |           |        |      |      |    |
| <u>DCM Extract</u>                 |           |           |        |      |      |    |
| Beaker ID _____                    |           |           |        |      |      |    |
| Tare Wt _____                      |           |           |        |      |      |    |
| Solv Vol _____                     |           |           |        |      |      |    |
| Solv ID _____                      |           |           |        |      |      |    |
| Date/time into<br>Desiccator _____ |           |           |        |      |      |    |

\* filter: 0.5000 g ± tolerance - NIST traceable Class S weight  
beaker: 100.0000 g ± tolerance - NIST traceable Class S weight

**Figure 5.3a - page 2**  
**METHOD 5 BLANK ANALYSIS DATA FORM**

Sample Prepared by \_\_\_\_\_ Date \_\_\_\_\_

| Front Half:                     | Date/Time | Weight(g) | Audit* | T-°F | RH-% | By |
|---------------------------------|-----------|-----------|--------|------|------|----|
| <u>Filter</u>                   |           |           |        |      |      |    |
| Filter ID _____                 |           |           |        |      |      |    |
| Tare Wt _____                   |           |           |        |      |      |    |
| Date/time into Desiccator _____ |           |           |        |      |      |    |
| <u>Acetone</u>                  |           |           |        |      |      |    |
| Beaker ID _____                 |           |           |        |      |      |    |
| Tare Wt _____                   |           |           |        |      |      |    |
| Solv Vol _____                  |           |           |        |      |      |    |
| Solv ID _____                   |           |           |        |      |      |    |
| Date/time into Desiccator _____ |           |           |        |      |      |    |
| <u>Water</u>                    |           |           |        |      |      |    |
| Beaker ID _____                 |           |           |        |      |      |    |
| Tare Wt _____                   |           |           |        |      |      |    |
| Solv Vol _____                  |           |           |        |      |      |    |
| Solv ID _____                   |           |           |        |      |      |    |
| Date/time into Desiccator _____ |           |           |        |      |      |    |
| <u>DCM Extract</u>              |           |           |        |      |      |    |
| Beaker ID _____                 |           |           |        |      |      |    |
| Tare Wt _____                   |           |           |        |      |      |    |
| Solv Vol _____                  |           |           |        |      |      |    |
| Solv ID _____                   |           |           |        |      |      |    |
| Date/time into Desiccator _____ |           |           |        |      |      |    |

\* filter: 0.5000 g ± tolerance - NIST traceable Class S weight  
 beaker: 100.0000 g ± tolerance - NIST traceable Class S weight

Figure 5.3a - Page 3  
METHOD 5 TARE WEIGHT RECORD

Indicate: filters or evaporation containers (beakers)

[illegible]

### **3.5.2 Oregon Method 7**

State of Oregon  
Department of Environmental Quality  
**Source Sampling Method 7**

#### Sampling Condensable Emissions From Stationary Sources

### **1. Principle and Applicability**

- 1.1 Principle: Particulate matter including condensable gases is withdrawn isokinetically from a flowing gas stream. The particulate matter is determined gravimetrically after extraction with an organic solvent and evaporation.
- 1.2 Applicability: This method is applicable to stationary sources whose primary emissions are condensable gases. It should be considered a modification of Source Sampling Method 5, and applied only when directed to do so by the Department.

### **2. Sampling Apparatus (Figure 7.1)**

- 2.1 Sampling train: Same as Oregon Source Sampling Method 5 Section 3.1 with the following exceptions:
  - 2.1.1 The heated filter and cyclone are optional, but should be used if a significant quantity of solid particulate matter is present.
  - 1.1.2 An unheated glass fiber filter is placed between the third and fourth impingers.
- 1.2 Sample Recovery and Analysis: Same as Oregon Source Sampling Method 5 Section 3.2 and 3.3.

### **2. Reagents**

Same as Oregon Source Sampling Method 5 Section 4.1 - 4.3.

### **3. Procedure**

- 3.1 Sampling: Same as Oregon Source Sampling Method 5 Section 5.1 with the following addition:
  - 4.1.1 Insert numbered and pre-weighted filters into each

of the front (if used) and rear filter holders.

- 4.2 Sample Recovery: Same as Oregon Source Sampling Method 5 Section 5.2 with the following addition:

4.2.1 Transfer the rear filter to container No. 6.

- 4.3 Sample Analysis: Same as Oregon Source Sampling Method 5 Section 5.3 with the following addition:

4.3.1 Desiccate the rear filter in container No. 6 for 24 hours at 70°F or less. Weigh the filter to a constant weight.

**Note:** In some cases, desiccation may give rise to a slow vaporization of the condensable material. Therefore, it is not recommended that an attempt to weigh to constant weight be made. If the weights continue to decrease over time and the sample is obviously dry, use the average of the first three weights to determine the particulate matter catch.

#### 4. **Calibrations**

- 4.1 Same as Oregon Source Sampling Method 5 Section 6.

#### 5. **Calculations**

- 5.1 Same as Oregon Source Sampling Method 5 Section 7 with the following exception:

6.1.1 Section 7.4 shall be changed as follows:

Total Particulate Weight. Determine the total particulate matter catch from the sum of the weights obtained from Containers 1 (optional), 2, 4, 5, 6, and the methylene chloride extract of the water from Container 4, less the acetone or methylene chloride blanks (see attached Figure 7.2).

#### 6. **Alternative Procedures and Example Data Sheets:**

Same as Oregon Source Sampling Method 5 Section 8 (Figure 7.2 replaces Figure 5.3a).





Figure 7.2 - page 1  
**METHOD 7 DATA ANALYSIS FORM**

Plant \_\_\_\_\_ Run Number \_\_\_\_\_  
 Sample Location \_\_\_\_\_ Test Date \_\_\_\_\_  
 Sample Recovered by \_\_\_\_\_

| Front Half:                     | Date/Time | Weight (g) | Audit* | T- °F | RH-% | By |
|---------------------------------|-----------|------------|--------|-------|------|----|
| <u>Filter</u>                   |           |            |        |       |      |    |
| Filter ID _____                 |           |            |        |       |      |    |
| Tare Wt _____                   |           |            |        |       |      |    |
| Date/time into desiccator _____ |           |            |        |       |      |    |
| <u>Acetone</u>                  |           |            |        |       |      |    |
| Beaker ID _____                 |           |            |        |       |      |    |
| Tare Wt _____                   |           |            |        |       |      |    |
| Solv Vol _____                  |           |            |        |       |      |    |
| Solv ID _____                   |           |            |        |       |      |    |
| Date/time into desiccator _____ |           |            |        |       |      |    |
| <b>Back Half:</b>               |           |            |        |       |      |    |
| <u>Filter</u>                   |           |            |        |       |      |    |
| Filter ID _____                 |           |            |        |       |      |    |
| Tare Wt _____                   |           |            |        |       |      |    |
| Date/time into desiccator _____ |           |            |        |       |      |    |
| <u>Acetone</u>                  |           |            |        |       |      |    |
| Beaker ID _____                 |           |            |        |       |      |    |
| Tare Wt _____                   |           |            |        |       |      |    |
| Solv Vol _____                  |           |            |        |       |      |    |
| Solv ID _____                   |           |            |        |       |      |    |
| Date/time into desiccator _____ |           |            |        |       |      |    |
| <u>Water</u>                    |           |            |        |       |      |    |
| Beaker ID _____                 |           |            |        |       |      |    |
| Tare Wt _____                   |           |            |        |       |      |    |
| Solv Vol _____                  |           |            |        |       |      |    |
| Solv ID _____                   |           |            |        |       |      |    |
| Date/time into desiccator _____ |           |            |        |       |      |    |
| <u>DCM Extract</u>              |           |            |        |       |      |    |
| Beaker ID _____                 |           |            |        |       |      |    |
| Tare Wt _____                   |           |            |        |       |      |    |
| Solv Vol _____                  |           |            |        |       |      |    |
| Solv ID _____                   |           |            |        |       |      |    |
| Date/time into desiccator _____ |           |            |        |       |      |    |

\* filter: 0.5000 g ☐ tolerance - NIST traceable Class S weight  
 beaker: 100.0000 g ☐ tolerance - NIST traceable Class S weight

### **3.5.3 Oregon Method 8**

State of Oregon  
Department of Environmental Quality  
**Source Sampling Method 8**

Sampling Particulate Emissions From Stationary Sources  
(High Volume Method)

#### **1. Principle and Applicability**

- 1.1 Principle: Particulate matter is withdrawn isokinetically from a flowing gas stream and deposited on a glass fiber filter. The particulate matter is determined gravimetrically after removal of uncombined water.
- 1.2 Applicability: This method is applicable to stationary sources whose primary emissions are solid particulate. Its primary application is intended to be wood product handling cyclone and baghouse exhaust systems. Prior approval of the Department is required before this method can be applied to other types of source emissions for the purpose of demonstrating compliance.

#### **2 Acceptability**

- 2.1 Results from this method will be accepted as a demonstration of compliance (or non-compliance) provided that the methods included or referenced in this procedure are strictly adhered to and a report containing at least the minimum amount of information regarding the source is included. Deviations from the procedures described herein will be permitted only if permission from the Department is obtained in writing in advance of the tests.

#### **3. Sampling Apparatus (Figure 8.1)**

- 3.1 Nozzle - smooth metal construction with sharp leading edge. The nozzle shall be connected to the probe by means of a joint designed to minimize particulate matter deposition.
- 3.2 Probe - smooth metal construction. The probe shall be attached to the nozzle and filter holder with air-tight joints designed to minimize particulate matter deposition. The probe should be as short as possible.

- 3.3 Filter holder - air-tight with support screen for the filter.
- 3.4 Metering system - a calibrated orifice followed by a thermometer or thermocouple and flow control device. The metering system shall be connected to the filter holder by means of an air-tight joint.
- 3.5 Pitot tube - P-type or S-type or equivalent, calibrated as described in EPA Method 2 (40 CFR part 60 Appendix A).
- 3.6 Blower - high capacity (typically 60 cfm free air). The blower may be connected to the metering system by a flexible hose if desired.
- 3.7 Probe Brush - flexible, nylon bristle brush at least as long as the probe and nozzle.
- 3.8 Differential Pressure Gauges - liquid manometer, Magnehelicle<sup>2</sup>, or equivalent. Differential pressure gauges other than liquid manometers shall be calibrated against a liquid manometer.
- 3.9 Barometer - mercury, aneroid, or other type capable of measuring atmospheric pressure to within 0.1 in Hg. If the barometric pressure is obtained from a nearby weather bureau station, the true station pressure (not corrected for elevation) must be obtained and an adjustment for elevation differences between the station and sampling site must be applied.
- 3.10 Temperature Gauges - as described in EPA Method 2.
- 3.11 Timer - integrating type, accurate and readable to the nearest 5 seconds per hour.
- 3.12 Filter Storage Container - clean manila envelopes and tagboards, or suitable equivalent.
- 3.13 Sample Storage Containers - glass with leak-tight cap that is resistant to attack by the solvent used, and allows complete recovery of particulate matter. Polyethylene bottles are also acceptable.

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<sup>2</sup>Mention of trade names or specific products does not constitute endorsement by the Department of Environmental Quality.

#### **4. Reagents**

- 4.1 Filters - glass fiber filters, free of pinhole leaks or other imperfections and exhibiting at least 99.95% efficiency on 0.3 micron DOP smoke particles. Desiccate individually numbered filters for 24-hours and weigh to the nearest 0.5 mg before use.
- 4.2 Probe Wash Solvent - acetone, reagent-grade, with 0.001% (0.008 mg/ml) residue. For aluminum probes and nozzles, methanol may be substituted for acetone. The same purity is required.

#### **5. Sample Train Preparation**

- 5.1 All parts of the sampling train shall be cleaned and properly calibrated as directed in Section 10.
- 5.2 Place a filter in the filter holder with the coarse side facing the flow, being careful not to damage it. Be certain that the filter is positioned so that no air can be drawn around the filter.
- 5.3 Assemble the sample train with the appropriate nozzle and length of probe. Perform a leak check by plugging the nozzle, turning on the blower, and observing the deflection of the flow orifice pressure gauge. The acceptable leakage rate shall not exceed 5% of the expected sample flow rate.

#### **6. Sample Collection**

- 6.1 Use a pitot tube to roughly map the velocity distribution across the face of the exhaust opening or duct. Areas of zero or negative flow should also be indicated if present. At each point at which the velocity is measured, measure the flow in the direction giving maximum deflection of the pitot pressure gauge. Record the data on Form 3.
- 6.2 Select six or more points of outgoing (positive) flow from the points measured in Section 6.1 to sample. The points shall be representative of the flow pattern, and shall include the point of maximum velocity. If six points of positive flow cannot be obtained, use the maximum number possible. Do not choose any points closer than 2 inches to the exhaust duct wall.

- 6.3 Measure the exhaust temperature.
- 6.4 Determine the nozzle size required for isokinetic sampling. An estimate of the orifice temperature is required. For low temperature exhausts, the orifice temperature is usually very close to the exhaust temperature. For higher temperature exhausts, a trial run may be necessary to determine the expected orifice temperature.
- 6.5 Calculate the required orifice pressure drop for each chosen sampling point to obtain an isokinetic sample rate. With the probe out of the exhaust stream, turn on the blower and adjust the flow rate to that calculated for the first sampling point in Section 6.2. Locate the probe nozzle at the first sampling point, and immediately start the timer. Move the probe around until the velocity pressure matches that for which the sampling flow rate was pre-set. The probe nozzle must be pointing directly into the flow.
- 6.6 Continually monitor the velocity during the sampling period and move the probe around as required to keep it in an area where the velocity matches the original velocity used to calculate the pre-set sampling rate. Record the sampling time, the orifice temperature, and orifice pressure drop on the data sheet. Record data every 5 minutes or once per sampling point, whichever is more frequent. Sample for a length of time so that the total sampling time for all points is at least 15 minutes and a minimum of 100 mg of particulate matter is collected.
- 6.7 Repeat steps 6.5 and 6.6 for each sampling point. The blower need not be turned off between points if readjustments to the new sampling rate can be made rapidly (less than 15 seconds).
- 6.8 Care should be taken so that the nozzle does not touch the walls of the exhaust stack because particulate matter may be dislodged and enter the sample train. If there is reason to believe this has happened, discontinue the sample, clean the train, and restart the test.
- 6.9 If excessive loading of the filter should occur, or the pressure drop should increase such that isokinetic conditions cannot be maintained, replace the filter and continue the test.

- 6.10 At the conclusion of the sampling period, remove the probe from the exhaust and turn off the blower (do not reverse this order because the filter may be broken and sample lost). Plug the nozzle to prevent sample loss, and transport to the sample recovery area.
- 6.11 Conduct a post-test leak check (Section 5.3).
- 6.12 Measure the moisture content, molecular weight, and the barometric pressure (absolute) of the exhaust gas. In most cases, the moisture may be measured by the wet bulb/dry bulb technique as described in Oregon Source Sampling Method 4. The molecular weight shall be measured by EPA Method 3 or 3a. If ambient air is the gas being sampled, the molecular weight can be assumed to equal 29 lbs./lb. mole (29 g/g mole).

## 7. **Sample Recovery**

- 7.1 Remove the nozzle plug, turn on the blower, insert the probe brush into the nozzle, and brush the particulate from the nozzle and probe onto the filter. Do not insert the brush so far in that it will come into contact with the filter. Turn off the blower.
- 7.2 Open the filter holder and carefully remove the filter. Inspect the filter for holes or tears, or places where the samples are deposited up to the edge of the filter indicating a leak around the filter. If any are found, clean the train and repeat the run. Fold the filter once lengthwise with the dirty side in, and place in a folded manila tagboard, folded edge down. Fasten the outside edge of the tagboard with a paper clip, and place in the manila envelope.
- 7.3 Rinse the inside front of the filter holder, probe, and nozzle with acetone or methanol while brushing. Repeat the rinsing/brushing until all particulate is removed as evidenced by a lack of visible residue on the inside surfaces after evaporation of the acetone or methanol. Retain the acetone or methanol rinse and a blank sample of the acetone or methanol in labeled containers for laboratory analysis.

## 8. **Analysis**

- 8.1 Desiccate the filter for 24-hours at room temperature (70°F or less), and weigh to a constant weight to the nearest 0.5mg.

**NOTE:** Make certain that any particulate that may have dislodged from the filter into the tagboard or envelope is returned to the filter before weighing.

**NOTE:** Since the relatively large filter and particulate catch may be hygroscopic, weigh immediately upon removal from the desiccator.

- 8.2 Blanks shall be run in the field before and after the complete source testing activity. A minimum of 2 blanks shall be collected for each source test. This is accomplished by inserting a pre-weighed filter into the filter holder, performing a leak check, removing the filter, and treating it as a sample filter in accordance with Section 7.2.
- 8.3 Quantitatively transfer the solvent rinse and blank solvent to tared beakers or evaporating dishes, evaporate at room temperature (70°F or less) and pressure, desiccate, and weigh to a constant weight to the nearest 0.5 mg.
- 8.4 Record the data on Form 4.

## 9. Exhaust Gas Flow Rate Measurement

- 9.1 Since the air flow pattern at the location of the sampling points may preclude an accurate flow rate measurement, a point upstream of the sampling point shall be selected for a velocity traverse. The flow rate at the velocity sampling point should accurately represent the flow rate to the atmosphere at the particulate sampling point (i.e., no air flows should be added to or removed from the system between the velocity and the particulate sampling points).
- 9.2 Select a suitable velocity sampling location in accordance with EPA Method 1.
- 9.3 Measure the gas velocity and flow rate in accordance with EPA Method 2.

## 10. Calibration

- 10.1 The orifice flow meter shall be calibrated at least once a year using a primary standard or a device which has been

calibrated against a primary standard. The calibration data and calibration curves for the orifice and intermediate standard shall be included in the source test report, along with documentation of the primary standard.

10.2 The pitot tube, differential pressure gauges, and thermometers or thermocouples, shall be calibrated at least every six months. The calibration data and/or calibration curves shall be included in the source test report.

10.3 The calibration records shall include the date, place, and method of calibration.

## 11. Calculations

11.1 Total particulate emissions from the system shall be calculated by multiplying the particulate concentration measured at the exhaust by the flow through the system.

11.2 Particulate Concentration: The following calculations shall be conducted for each test run:

11.2.1 Total Sample Weight: Calculate the total sample weight from laboratory results by adding the net weight gain of the filter sample(s), adjusted for a blank value, to the net weight of particulate matter collected in the acetone rinse, corrected for an acetone blank. If the acetone rinse represents more than one test run, the particulate mass should be pro-rated for each test run according to the relative net weights of the particulate matter collected on the filters. Record the results on a laboratory form such as Figure 8.2.

11.2.2 Total Sample Gas Volume: Calculate the sample gas volume for each sample point by multiplying the duration of the sample in minutes, times the average sample flow rate (actual cubic feet per minute - acfm). Add the volume of all sample points to get the total sample gas volume for the test run.

Sample flow rates for each point shall be determined from the orifice calibration curve. Typically, the orifice calibration curve is generated for flows at standard temperature and pressure, using 68°F and 29.92 in. Hg. As standard



conditions. In order to obtain actual flows through the orifice, it is necessary to correct the calibration curve flows for the orifice temperature and pressure.

$$q_a = q_s \times \frac{T_o}{598} \times \frac{29.92}{P_o}$$

where,

$q_o$  = actual flow rate through the orifice, acfm

$q_s$  = calibration flow rate through the orifice, scfm

$T_o$  = orifice temperature, °F

$P_o$  = orifice pressure, "Hg

- 11.2.3 Calculate the particulate concentration in gr/dscf by the following equation:

$$C_g = 0.0154 \times \frac{m_n}{V_{std}}$$

Where,

$C_s$  = particulate concentration, gr/dscf

$m_n$  = total particulate weight, mg.

$V_{std}$  = total sample volume, dscf.

$Bws$  = fraction moisture content in the sampled gas.

$t$  = sample time, minutes

### 11.3 Total Exhaust Gas Flow Rate

Use EPA Method 2 calculations to determine the total exhaust gas flow rate using the data obtained from section 9. For some cyclones, the total flow may be adjusted to account for air purposely vented out the bottom of the cyclone.

#### 11.4 Total Emissions

Calculate the total particulate emission rate (lb/hr) by the following equation, using Form 5:

$$E = 2.205E-6 \times \frac{m_n}{V_{std}} \times Q_{sd}$$

Where;

2.205E-6 = conversion factor, lb/mg

$Q_{sd}$  = Total Exhaust Gas Flow Rate, dscf/hr

#### 11.5 Percent Isokinetic

Use the tabular computing equations in Form 5 to compute the percent isokinetic (I), defined as the ratio of the average velocity of the sample gas entering the sample nozzle to the average local velocity at the sampling points. In order to achieve acceptable results, the value of this parameter must be between 82% and 120%. Test results falling outside this range shall be discarded, and the test repeated.

### 12. Test Reports

The test report shall include as a minimum the information requested in Section 2.5.1 of this manual.



Figure 8.2 - page 1  
**METHOD 8 DATA ANALYSIS FORM**

Plant \_\_\_\_\_ Run Number \_\_\_\_\_  
 Sample Location \_\_\_\_\_ Test Date \_\_\_\_\_  
 Sample Recovered by \_\_\_\_\_

|                                 | Date/Time | Weight (g) | Audit* | T- °F | RH-% | By |
|---------------------------------|-----------|------------|--------|-------|------|----|
| <u>Filter</u>                   |           |            |        |       |      |    |
| Filter ID _____                 |           |            |        |       |      |    |
| Tare Wt _____                   |           |            |        |       |      |    |
| Date/time into desiccator _____ |           |            |        |       |      |    |
| <u>Acetone</u>                  |           |            |        |       |      |    |
| Beaker ID _____                 |           |            |        |       |      |    |
| Tare Wt _____                   |           |            |        |       |      |    |
| Solv Vol _____                  |           |            |        |       |      |    |
| Solv ID _____                   |           |            |        |       |      |    |
| Date/time into desiccator _____ |           |            |        |       |      |    |

\* filter: 0.5000 g ☐ tolerance - NIST traceable Class S weight  
 beaker: 100.0000 g ☐ tolerance - NIST traceable Class S weight

**METHOD 8 BLANK ANALYSIS DATA FORM**

|                                 | Date/Time | Weight (g) | Audit* | T- °F | RH-% | By |
|---------------------------------|-----------|------------|--------|-------|------|----|
| <u>Filter</u>                   |           |            |        |       |      |    |
| Filter ID _____                 |           |            |        |       |      |    |
| Tare Wt _____                   |           |            |        |       |      |    |
| Date/time into desiccator _____ |           |            |        |       |      |    |
| <u>Acetone</u>                  |           |            |        |       |      |    |
| Beaker ID _____                 |           |            |        |       |      |    |
| Tare Wt _____                   |           |            |        |       |      |    |
| Solv Vol _____                  |           |            |        |       |      |    |
| Solv ID _____                   |           |            |        |       |      |    |
| Date/time into desiccator _____ |           |            |        |       |      |    |

\* filter: 0.5000 g ☐ tolerance - NIST traceable Class S weight  
 beaker: 100.0000 g ☐ tolerance - NIST traceable Class S weight

Figure 8.2 - Page 2  
METHOD 8 TARE WEIGHT RECORD

Indicate: filters or evaporation containers (beakers)

[illegible]

### EXHAUST GAS FLOW RATE DATA

Plant Name & Location \_\_\_\_\_  
Sampling Location or ID \_\_\_\_\_  
Volume Measurement: Date \_\_\_\_\_ Time \_\_\_\_\_ By (name) \_\_\_\_\_  
Duct ID \_\_\_\_\_ in.; Area (A) \_\_\_\_\_ ft<sup>2</sup>; No. traverse points \_\_\_\_\_; Pitot calib factor (C<sub>p</sub>) \_\_\_\_\_  
Temperature: Dry bulb \_\_\_\_\_ °F/°R; Wet bulb \_\_\_\_\_ °F; Ambient \_\_\_\_\_ °F; %CO<sub>2</sub> \_\_\_\_\_; %O<sub>2</sub> \_\_\_\_\_  
Static Pressure \_\_\_\_\_ in. H<sub>2</sub>O; Barometric Pressure (P<sub>b</sub>) \_\_\_\_\_; % Moisture \_\_\_\_\_

Sketch the sampling location showing the distance from disturbances and the numbered traverse points:

| Point No. | % Dia | Distance from inside wall, in. | Δ P <sub>1</sub> in. | √ΔP <sub>1</sub> in. | ΔP <sub>2</sub> in. | √ΔP <sub>2</sub> in. | Comments                                                                                                                                |
|-----------|-------|--------------------------------|----------------------|----------------------|---------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 1         |       |                                |                      |                      |                     |                      |                                                                                                                                         |
| 2         |       |                                |                      |                      |                     |                      |                                                                                                                                         |
| 3         |       |                                |                      |                      |                     |                      |                                                                                                                                         |
| 4         |       |                                |                      |                      |                     |                      |                                                                                                                                         |
| 5         |       |                                |                      |                      |                     |                      | T <sub>s</sub> avg. = °R                                                                                                                |
| 6         |       |                                |                      |                      |                     |                      | ΔP avg. = in. H <sub>2</sub> O                                                                                                          |
| 7         |       |                                |                      |                      |                     |                      | M <sub>d</sub> = (.44 x %CO <sub>2</sub> ) + (.32 x O <sub>2</sub> ) + (.28 x [100 - %O <sub>2</sub> - %CO <sub>2</sub> ]) lb./lb. mole |
| 8         |       |                                |                      |                      |                     |                      |                                                                                                                                         |
| 9         |       |                                |                      |                      |                     |                      |                                                                                                                                         |
| 10        |       |                                |                      |                      |                     |                      | Pitot tube leak check:                                                                                                                  |
| 11        |       |                                |                      |                      |                     |                      | Initial:                                                                                                                                |
| 12        |       |                                |                      |                      |                     |                      | Final:                                                                                                                                  |

**VELOCITY PRE-SURVEY**

Plant Name & Location \_\_\_\_\_  
Date \_\_\_\_\_ Time \_\_\_\_\_ By (Name) \_\_\_\_\_  
Source Location or ID \_\_\_\_\_

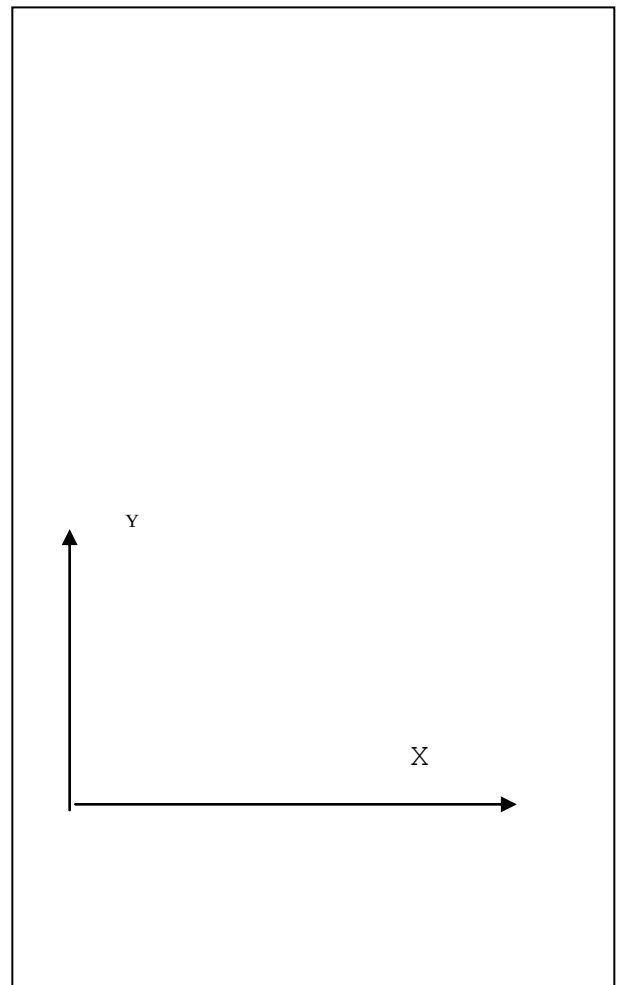
\_\_\_\_\_ Low Pressure System \_\_\_\_\_ High Pressure System

Type of Exhaust: \_\_\_\_\_ Straight Vertical \_\_\_\_\_ China Hat  
\_\_\_\_\_ Goose-Neck \_\_\_\_\_ Other (specify) \_\_\_\_\_

Temperature: Dry Bulb \_\_\_\_\_ °F Wet Bulb \_\_\_\_\_ °F

Velocity Survey: Record velocity head at enough points to roughly map the velocity distribution across the exhaust cross-section. Select six points for sample collection and show in diagram.

| Point | X<br>in. | Y<br>in. | $\Delta P$<br>in.<br>H <sub>2</sub> O | Check if<br>selected<br>( ) |
|-------|----------|----------|---------------------------------------|-----------------------------|
|       |          |          |                                       |                             |
|       |          |          |                                       |                             |
|       |          |          |                                       |                             |
|       |          |          |                                       |                             |
|       |          |          |                                       |                             |
|       |          |          |                                       |                             |
|       |          |          |                                       |                             |
|       |          |          |                                       |                             |
|       |          |          |                                       |                             |
|       |          |          |                                       |                             |
|       |          |          |                                       |                             |
|       |          |          |                                       |                             |
|       |          |          |                                       |                             |



### Sampling Data And Field Analysis

Plant Name/Location \_\_\_\_\_ Source Identification \_\_\_\_\_  
Date \_\_\_\_\_; Time \_\_\_\_\_; By (name) \_\_\_\_\_ Process Operation During Test \_\_\_\_\_  
Temperature: Dry bulb \_\_\_\_\_ F/ R; Wet bulb \_\_\_\_\_ F; %Moisture \_\_\_\_\_; Ambient \_\_\_\_\_ F  
Gas composition: %O<sub>2</sub> \_\_\_\_\_; %CO<sub>2</sub> \_\_\_\_\_; Pitot factor (C<sub>p</sub>) \_\_\_\_\_; Static Press (P<sub>g</sub>) \_\_\_\_\_ "H<sub>2</sub>O  
Nozzle Dia. \_\_\_\_\_ in.; Nozzle area (A<sub>n</sub>) \_\_\_\_\_ in<sup>2</sup>; Barometric Pressure (P<sub>b</sub>) \_\_\_\_\_ in. H<sub>g</sub>

| PT.                    | Location |   | Velocity Pressure |     | Orifice σH                   |                             | Orifice Temp.(°F) | Sample Time (min.) | Rate at Orifice Temp. (acfm) | Volume at Orifice Temp. ( cu.ft.) | Data Summaries and Calculations                                                                                                                                   |
|------------------------|----------|---|-------------------|-----|------------------------------|-----------------------------|-------------------|--------------------|------------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | X        | Y | σP                | 4σP | Pre-set In. H <sub>2</sub> O | Actual in. H <sub>2</sub> O |                   |                    |                              |                                   |                                                                                                                                                                   |
| 1                      |          |   |                   |     |                              |                             |                   |                    |                              |                                   | T <sub>o</sub> = avg. orifice temperature + 460<br>= °R                                                                                                           |
| 2                      |          |   |                   |     |                              |                             |                   |                    |                              |                                   | V <sub>o</sub> = total sample volume at orifice temperature<br>= ft <sup>3</sup>                                                                                  |
| 3                      |          |   |                   |     |                              |                             |                   |                    |                              |                                   | B <sub>ws</sub> = fraction moisture content<br>= %moisture/100<br>=                                                                                               |
| 4                      |          |   |                   |     |                              |                             |                   |                    |                              |                                   |                                                                                                                                                                   |
| 5                      |          |   |                   |     |                              |                             |                   |                    |                              |                                   | V <sub>std</sub> = total sample volume at standard conditions<br>= V <sub>o</sub> x 528/T <sub>o</sub> x P <sub>b</sub> /29.92 x (1 - B <sub>ws</sub> )<br>= dscf |
| 6                      |          |   |                   |     |                              |                             |                   |                    |                              |                                   |                                                                                                                                                                   |
| Avg. or Total          |          |   |                   |     |                              |                             |                   |                    |                              |                                   |                                                                                                                                                                   |
| Filter Number          |          |   |                   |     |                              |                             |                   |                    | Probe Washings               |                                   | C <sub>s</sub> = particulate concentration<br>= m <sub>n</sub> /V <sub>std</sub> x 0.0154<br>= gr/dscf                                                            |
| Filter & Sample Weight |          |   |                   |     |                              |                             |                   |                    |                              |                                   |                                                                                                                                                                   |
| Filter Tare Weight     |          |   |                   |     |                              |                             |                   |                    |                              |                                   |                                                                                                                                                                   |
| Sample Weight          |          |   |                   |     |                              |                             |                   |                    |                              |                                   | M <sub>n</sub> = total mass of particulate matter<br>= mg                                                                                                         |
| Blank Weight           |          |   |                   |     |                              |                             |                   |                    |                              |                                   |                                                                                                                                                                   |
| Sample Adjusted Weight |          |   |                   |     |                              |                             |                   |                    |                              |                                   |                                                                                                                                                                   |



### EMISSION CALCULATION AND SUMMARY

Plant Name and Location \_\_\_\_\_

Date \_\_\_\_\_ By (name) \_\_\_\_\_

| Exhaust Gas Flow Rate Calculations |                                                                                       |                                                                                                                    |  |  |  |  |
|------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| $\sigma P$                         | Avg. velocity pressure,<br>"H <sub>2</sub> O                                          | Form 1                                                                                                             |  |  |  |  |
| T <sub>s</sub>                     | Avg. stack gas temp., °R                                                              | Form 1                                                                                                             |  |  |  |  |
| P <sub>b</sub>                     | Barometric pressure,<br>"H <sub>g</sub>                                               | Form 1                                                                                                             |  |  |  |  |
| P <sub>g</sub>                     | Stack static pressure<br>"H <sub>2</sub> O                                            | Form 1                                                                                                             |  |  |  |  |
| P <sub>s</sub>                     | Stack absolute pressure,<br>"H <sub>g</sub>                                           | P <sub>g</sub> /13.6 + P <sub>b</sub>                                                                              |  |  |  |  |
| B <sub>ws</sub>                    | Water vapor in gas<br>stream, proportion by<br>volume                                 | %H <sub>2</sub> O/100, Form 1                                                                                      |  |  |  |  |
| M <sub>d</sub>                     | Molecular weight of<br>stack gas, dry basis,<br>lb/lb mole                            | (0.44 x % CO <sub>2</sub> ) + (0.32<br>x %O <sub>2</sub> ) + 0.28 x (100 -<br>%CO <sub>2</sub> - %O <sub>2</sub> ) |  |  |  |  |
| M <sub>s</sub>                     | Molecular weight of<br>stack gas, wet basis,<br>lb/lb mole                            | M <sub>d</sub> x (1-B <sub>ws</sub> )+18 x B <sub>ws</sub>                                                         |  |  |  |  |
| K <sub>p</sub>                     | Pitot tube constant                                                                   | 85.49                                                                                                              |  |  |  |  |
| V <sub>s</sub>                     | Avg stack gas velocity,<br>ft/sec                                                     | K <sub>p</sub> x C <sub>p</sub> x SQRT { (σP<br>x T <sub>s</sub> )/ (M <sub>s</sub> x P <sub>s</sub> ) }           |  |  |  |  |
| A                                  | Cross sectional area of<br>stack, ft <sup>2</sup>                                     | Form 1                                                                                                             |  |  |  |  |
| Q <sub>sd</sub>                    | Dry volumetric stack<br>gas flow rate corrected<br>to standard conditions,<br>dscf/hr | V <sub>s</sub> x (1 - B <sub>ws</sub> ) x /a x<br>528./ T <sub>s</sub> x P <sub>s</sub> / 29.92                    |  |  |  |  |

### EMISSION CALCULATION AND SUMMARY

Plant Name and Location \_\_\_\_\_

Date \_\_\_\_\_ By (name) \_\_\_\_\_

| $\sigma P$      | Avg. velocity pressure at sample point, "H <sub>2</sub> O            | Form 3                                                                                                       |  |  |  |  |
|-----------------|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|--|--|--|--|
| T <sub>s</sub>  | Avg. stack gas temp. at sample point, °R                             | Form 3                                                                                                       |  |  |  |  |
| P <sub>b</sub>  | Barometric pressure, "H <sub>g</sub>                                 | Form 3                                                                                                       |  |  |  |  |
| P <sub>g</sub>  | Stack static pressure at sample point "H <sub>2</sub> O              | Form 3                                                                                                       |  |  |  |  |
| P <sub>s</sub>  | Stack absolute pressure, "H <sub>g</sub>                             | P <sub>g</sub> /13.6 + P <sub>b</sub>                                                                        |  |  |  |  |
| B <sub>ws</sub> | Water vapor in gas stream at sample point, proportion by volume      | %H <sub>2</sub> O/100, Form 3                                                                                |  |  |  |  |
| M <sub>d</sub>  | Molecular weight of stack gas at sample point, dry basis, lb/lb mole | (0.44 x % CO <sub>2</sub> ) + (0.32 x %O <sub>2</sub> ) + 0.28 x (100 - %CO <sub>2</sub> - %O <sub>2</sub> ) |  |  |  |  |
| M <sub>s</sub>  | Molecular weight of stack gas at sample point, wet basis, lb/lb mole | M <sub>d</sub> x (1-B <sub>ws</sub> ) + 18 x B <sub>ws</sub>                                                 |  |  |  |  |
| K <sub>p</sub>  | Pitot tube constant                                                  | 85.49                                                                                                        |  |  |  |  |
| V <sub>s</sub>  | Avg stack gas velocity, ft/sec                                       | K <sub>p</sub> x C <sub>p</sub> x SQRT { (σP x T <sub>s</sub> )/ (M <sub>s</sub> x P <sub>s</sub> ) }        |  |  |  |  |

### EMISSION CALCULATION AND SUMMARY

Plant Name and Location \_\_\_\_\_

Date \_\_\_\_\_ By (name) \_\_\_\_\_

| Partiulate Emissions and Sampling Isokinetic Calculations: |                                                                     |                                                             |  |  |  |  |
|------------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------------------------------|--|--|--|--|
| $g_o$                                                      | Avg. sample rate, acfm                                              | Form 3                                                      |  |  |  |  |
| $t$                                                        | Total sample time, minutes                                          | Form 3                                                      |  |  |  |  |
| $V_o$                                                      | Sample volume @ orifice temperature, acf                            | $g_o \times t$                                              |  |  |  |  |
| $T_o$                                                      | Avg. orifice temperature, °R                                        | Form 3                                                      |  |  |  |  |
| $B_{ws}$                                                   | Water vapor in gas stream at the sample point, proportion by volume | %H <sub>2</sub> O/100, Form 3                               |  |  |  |  |
| $V_{std}$                                                  | Sample volume corrected to standard conditions, scf                 | $V_o \times (1 - B_{ws}) \times 528/T_o \times P_b / 29.92$ |  |  |  |  |
| $m_n$                                                      | Mass of particulate matter collected, mg                            | Form 3                                                      |  |  |  |  |
| $C_s$                                                      | Particulate concentration, gr/dscf                                  | $0.0154 \times m_n / V_{std}$                               |  |  |  |  |
| $E$                                                        | Particulate emission rate, lb/hr                                    | $m_n / V_{std} \times 2.205E^{-6} \times Q_{sd}$            |  |  |  |  |
| $A_n$                                                      | Cross sectional area of the sampling nozzle, in <sup>2</sup>        | Form 3                                                      |  |  |  |  |
| $T_s$                                                      | Avg. temperature of the exhaust gas at the sample point, °R         | Form 3                                                      |  |  |  |  |
| $V_n$                                                      | Velocity of sample gas through the nozzle, ft/min                   | $G_o/A_n \times T_s/T_o \times 144$                         |  |  |  |  |
| $V_s$                                                      | Avg exhaust gas velocity at sample point, ft/min                    | Form 4, page 2                                              |  |  |  |  |
| $I$                                                        | Percent isokinetic                                                  | $100 \times V_n/V^s$                                        |  |  |  |  |

### **3.6 PM<sub>10</sub> Particulate Matter**

EPA Methods 201, 201A, 202 (40 CFR Part 1 Appendix M, 7-1-901 edition) are incorporated by reference.

### **3.7 Sulfur Dioxide**

EPA Methods 6, 6A, 6B, 6C, 8, and 19 (40 CFR Part 60 Appendix A, 7-1-91 edition) are incorporated by reference.

### **3.8 Oxides of Nitrogen**

EPA Methods 7, 7A, 7B, 7C, 7D, 7E, 19 and 20 (40 CFR Part 60 Appendix A, 7-1-91 edition) are incorporated by reference.

### **3.9 Visible Emissions**

EPA Methods 9, Alternate Method 1 (LIDAR), and 22 (40 CFR Part 60 Appendix A, 7-1-91 edition) are incorporated by reference.

EPA Method 9 observation periods and data reduction shall be modified to demonstrate compliance with specific Oregon regulations and permit limits.

### **3.10 Carbon Monoxide**

EPA Methods 10, 10A, and 10B (40 CFR Part 60 Appendix A, 7-1-91 edition) are incorporated by reference.

### **3.11 Reduced Sulfur**

EPA Methods 11, 15, 15A, 16, 16A and 16B (40 CFR Part 60 Appendix A, 7-1-91 edition) are incorporated by reference.

### **3.12 Lead**

EPA Method 12 (40 CFR Part 60 Appendix A, 7-1-91 edition) is incorporated by reference.

### **3.13 Fluoride**

EPA Methods 13, 13A, 13B and 14 (40 CFR Part 60 Appendix A, 7-1-91 edition) are incorporated by reference.

### **3.14 Volatile Organic Compounds**

EPA Methods 18, 21, 24, 24A, 25, 25A, and 25B (40 CFR Part 60 Appendix A, 7-1-91 edition) are incorporated by reference. Volume II of the source sampling manual contains VOC methods specific to gasoline vapor control systems and chemical mass balances.

### **3.15 Polychlorinated Dibenzo-p-Dioxins Polychlorinated Dibenzofurans**

EPA Method 23 (40 CFR Part 60 Appendix A, 7-1-91 edition) is incorporated by reference.

### **3.16 Hydrogen Chloride**

EPA Methods 26 (40 CFR Part 60 Appendix A, 7-1-91 edition) is incorporated by reference.

### **3.17 Woodstoves**

EPA Methods 28 (40 CFR Part 60 Appendix A, 7-1-91 edition) is incorporated by reference.

## **4.0 Test Methods for National Emission Standards for Hazardous Air Pollutants (NESHAP)**

### **4.1 Mercury**

EPA Methods 101, 101A, 102, and 105 (40 CFR Part 61 Appendix B, 7-1-91 edition) are incorporated by reference.

### **4.2 Beryllium**

EPA Methods 103 and 104 (40 CFR Part 61 Appendix B, 7-1-91 edition) are incorporated by reference.

### **4.3 Vinyl Chloride**

EPA Methods 106, 107, and 107A (40 CFR Part 61 Appendix B, 7-1-91 edition) are incorporated by reference.

### **4.4 Arsenic**

EPA Methods 108, 108A, and 108C (40 CFR Part 61 Appendix B, 7-1-91 edition) are incorporated by reference.

# **Draft Source Sampling Manual**

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restoring, maintaining and  
enhancing the quality of  
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# Executive Summary

DEQ's Source Sampling Manual provides the procedures and test methods for conducting source sampling (i.e., stack testing) at facilities regulated by DEQ. The manual includes procedures for notifying DEQ of testing projects; preparing and obtaining approval of source test plans prior to conducting the testing; and preparing source test reports after the testing is completed. The manual identifies established sampling methods that are approved for source sampling projects, as well as procedures for obtaining approval for modifications or alternatives to the methods. Most of the sampling methods are federal methods that have been incorporated by reference. However, there are several test methods that are unique to DEQ. The Source Sampling Manual was first written in 1976 with revisions in 1979, 1981, 1992 and 2014. The Source Sampling Manual is included in Oregon's State Implementation Plan.

# 1.0 INTRODUCTION

## 1.1. PURPOSE AND SCOPE

This manual has been prepared by the Oregon Department of Environmental Quality (DEQ) for the purpose of delineating practices for the measurement and sampling of exhaust gas streams originating from point sources in accordance with Oregon Administrative Rules. Within this document, the references to *permit* signify either an Air Contaminant Discharge Permit (ACDP) or an Oregon Title V Operating Permit, both issued by the State of Oregon.

This manual applies to DEQ personnel, testing contractors, and permittees. Collectively, with permit requirements and promulgated sampling guidance documents, it outlines source sampling techniques approved by DEQ for use in conducting stationary source emissions testing. Unless otherwise specified in an Oregon Administrative Rule, permit, or DEQ letter, these general requirements must be followed when conducting source testing in Oregon. If there is a conflict with a permit or rule and this manual, the permit or rule will take precedence.

This 2014 revision of the Source Sampling Manual, Volume I, supersedes all previous versions of this manual.

## 1.2. APPLICABILITY

The procedures specified in this manual are standard requirements for measuring point source emissions under normal circumstances. Methods or techniques not cited in this manual may be approved on a case-by-case basis.

The measurement of point source emissions (i.e. stack testing) is conducted to determine the quantity, concentration, or destruction/removal of a specific pollutant or pollutants being emitted into the atmosphere by a regulated or non-regulated source.

This manual references test methods published by DEQ, EPA, and other agencies or organizations.

# 2.0 SOURCE SAMPLING GENERAL REQUIREMENTS

## 2.1. TESTING DEADLINES FOR CONDUCTING SOURCE SAMPLING

### 2.1.a. Identifying Regulation(s)

The deadlines for conducting source sampling projects may be established by any or all of the following:

- Air Contaminant Discharge Permit;
- Oregon Title V Operating Permit;
- Chapter 340 of Oregon Administrative Rules;
- Title 40 of Code of Federal Regulations; or
- Enforcement document (e.g., Mutual Agreement Order).

### **2.1.b. Time Extensions**

For sampling projects conducted to meet federal & state requirements, regulatory provisions to extend testing deadlines are limited and take into account the circumstances contributing to the delay. Failure to test a source by the required deadline may violate federal or state rule and may result in enforcement actions.

## **2.2. DEPARTMENT NOTIFICATION**

DEQ must be notified of all source sampling projects that are required by DEQ, including federal requirements that have been delegated to DEQ by the Environmental Protection Agency (EPA). Unless specified by rule or by permit condition, DEQ must receive notification at least 30 days in advance of the source test date. Notification may be submitted electronically or by hardcopy, and accompanied by a source test plan.

In addition, DEQ recommends that the person responsible for sampling projects that are not required by DEQ, but may be relied upon in permitting a source or demonstrating compliance with non-delegated federal requirements, notify DEQ of the sampling project schedule.

## **2.3. SOURCE TEST PLAN**

A source test plan must be approved by DEQ in advance of all source sampling projects that are required by DEQ, including federal requirements delegated to DEQ by EPA. If not otherwise specified by rule or permit condition, DEQ must be provided at least 30 days to review and approve source test plans. For routine testing programs, the permit or rule often specifies 15 days notice. Conversely, particularly complex source testing programs may require up to 45 days for protocol approval. The source test plan may be prepared by the source owner, operator, or consultant representing the owner or operator. The source test plan will be reviewed by the DEQ or by a consultant representing DEQ.

A source test plan must include, as a minimum, the information stipulated by Table A-1 in Appendix A. The source test plan should *not* include a copy of the published sampling method unless specifically requested by the regulating authority. In addition, sample system diagrams should *not* be included within the source test plan unless the proposed schematic deviates from published methodology.

## **2.4. MODIFICATIONS/ALTERNATIVES TO METHODS OR PROCEDURES**

### **2.4.a. Testing Projects Required by DEQ**

All modifications and/or alternatives to testing methods or procedures that are performed to satisfy DEQ testing requirements must receive approval from DEQ prior

to their use in the field. When possible, these requests are to be addressed within the Source Test Plan.

If the need for testing modifications or alterations to the approved Source Test Plan is discovered during field activities, approval must first be obtained from the observing Department representative. If a DEQ representative is not on site during field activities, approval from any DEQ Source Test Coordinator or other DEQ representative may be obtained. Significant changes not acknowledged by the DEQ could be basis for invalidating an entire test run and potentially the entire testing program. Documentation of any deviations must be incorporated in the source test report and include an evaluation of the impact of the deviation on the test data.

#### **2.4.b. Testing Projects Required by Federal Regulations**

For all testing projects performed to satisfy federal testing requirements (e.g. NSPS, NESHAP), approval for modifications and alterations of federal testing requirements must follow the procedures outlined in the Emission Measurement Center Guideline Document GD-022R3. As per this guideline, minor changes to test methods and procedures may be approved by DEQ personnel. All other changes must be approved by EPA.

Minor change to a test method is a modification to a federally enforceable test method that (a) does not decrease the stringency of the emission limitation or standard; (b) has no national significance (e.g., does not affect implementation of the applicable regulation for other affected sources, does not set a national precedent, and individually does not result in a revision to the test method); and (c) is site-specific, made to reflect or accommodate the operational characteristics, physical constraints, or safety concerns of an affected source. Examples of minor changes to a test procedure are:

- Modified sampling traverse or location to avoid interference from an obstruction in the stack,
- Increasing the sampling time or volume,
- Use of additional impingers for a high moisture situation,
- Accepting particulate emission results for a test run that was conducted with a lower than specified temperature,
- Substitution of a material in the sampling train that has been demonstrated to be more inert for the sample matrix, and
- Changes in recovery and analytical techniques such as a change in QA/QC requirements needed to adjust for analysis of a certain sample matrix.

( Per memo from John S. Seitz, Director OAQPS, *Delegation of 40 CFR Part 63 General Provisions Authorities to State and Local Air Pollution Control Agencies*, Attachment 1, July 10, 1998)

## **2.5. SAMPLE REPLICATES**

Unless otherwise specified by permit, State rule, federal regulation, or Department letter, each source test must consist of at least three (3) test runs and the emission results reported as the arithmetic average of all valid test runs. If for reasons beyond the control of the permittee (e.g., forced shutdown, extreme meteorological conditions, failure of an irreplaceable portion of the sample train) a test run is invalidated and cannot be replaced by a valid test run, DEQ may consider accepting two (2) test runs for demonstrating compliance with the emission limit or

standard. However, all test runs, including those deemed invalid, are to be included in the test report.

## **2.6. SAMPLE POSTPONEMENTS & STOPPAGES**

It is acceptable to postpone a scheduled test or suspend a test in progress if the discontinuation is due to equipment failure beyond the facility's control, construction delays beyond the facility's control, severe meteorological conditions, and situations that would jeopardize the safety of the testing contractors and/or operators. If the test is underway, the permittee should make every effort to complete the test run. All recoverable test information (process & sample data) must be available for DEQ review.

It is unacceptable to postpone or suspend a test run in progress if it is discontinued because the source is not able to comply with an emission limit or verify an emission factor. The permittee must provide DEQ written documentation explaining the reasons for the postponement or stoppage, and any data collected prior to the stoppage. DEQ will review the documentation and all available stack test data to determine if a violation occurred.

## **2.7. TEST DURATION & SAMPLE VOLUMES**

### **2.7.a. General Duration & Volume Requirements**

Unless otherwise specified by permit, state rule, federal regulation, or Department letter, each source test must be a minimum of one (1) hour long. For criteria pollutants (PM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>x</sub>, NO<sub>x</sub>, CO, & VOCs) measured utilizing wet-chemistry methods, the sample volume must be sufficient to ensure a minimum In-Stack Detection Limit (ISDL) of one-half (1/2) the emission standard. Refer to Section 2.8 of this manual for the definition and calculation of ISDL.

Unless otherwise specified in a rule or permit condition, all hazardous air pollutants (HAPs) sampling programs must ensure adequate sample volumes so that the mass recovered is at least five (5) times the limit of detection for the analytical method chosen. Alternatively, the ISDL must be less than or equal to one-fifth (1/5) the emission standard.

For purposes of this section, "emission standard" refers to emission limits (other than Plant Site Emission Limits), emission factor(s), and/or destruction and removal efficiencies.

### **2.7.b. DEQ Methods Specific Duration & Volume Requirements**

For DEQ Methods 5 & 7, the minimum sample volume must be the greater of 31.8 dry standard cubic feet (dscf) or sufficient to ensure a minimum In-Stack Detection Limit (ISDL) of one-half (1/2) the emission standard. In addition, the minimum sample duration must be 60 minutes.

For DEQ Method 8 (high volume sampler), the minimum sample volume must be the greater of 150 dry standard cubic feet (dscf) or sufficient to ensure a minimum In-Stack

Detection Limit of one-half (1/2) the emission standard. In addition, the minimum sample duration must be 15 minutes.

## 2.8. IN-STACK DETECTION LIMIT

### 2.8.a. General In-Stack Detection Limit (ISDL)

In general practice, the In-Stack Detection Limit (ISDL) is defined as follows:

$$ISDL = \frac{A \times B}{C}$$

Where:

|      |   |                                                                                                             |
|------|---|-------------------------------------------------------------------------------------------------------------|
| ISDL | = | In-Stack detection limit                                                                                    |
| A    | = | Analytical detection limit for analyte (e.g., pollutant) in a sample matrix (e.g., solution, filter, resin) |
| B    | = | Quantity of sample matrix (e.g. milliliters of solution)                                                    |
| C    | = | Volume of stack gas sampled                                                                                 |

Example:

For an HCl sample with the following characteristics:

|   |   |                                                              |
|---|---|--------------------------------------------------------------|
| A | = | 1 ug (HCl) per ml of solution;                               |
| B | = | 300 mls of sample solution; and                              |
| C | = | 1 dscm of exhaust gas (C) drawn through the sample solution. |

The ISDL in ug/dscm would be calculated as follows:

$$\begin{aligned} ISDL &= (A \times B)/C \\ ISDL &= (1 \text{ ug/ml} \times 300 \text{ ml})/1 \text{ dscm} \\ ISDL &= \underline{300 \text{ ug/dscm}} \end{aligned}$$

### 2.8.b. ISDL for Particulate Measurement Methods

When calculating the ISDL for particulate sampling methods, the analytical detection limits (A) are:

- 7 mg for ODEQ Methods 5 & 7 (total particulate),
- 3 mg for EPA Methods 5, 5A, 5B, 5D, 5E, 5F, & 17 (filterable particulate),
- 4 mg for EPA Method 202 (condensable particulate), and
- 100 mg for ODEQ Method 8 (high volume sampler-filterable particulate).

Additionally, when calculating the ISDL for the above particulate sampling methods, the quantity of sample matrix (B) equals “1 sample train”.

### **2.8.c. ISDL for Instrumental Monitoring Reference Methods**

The ISDL for continuous emission monitoring (CEM) reference methods (i.e., 3A, 6C, 6C/16A, 7E, 10, 20, & 25A), is equal to the sensitivity of the instrumentation, which is two percent (2%) of the span value (as per the CEMS Methods).

### **2.8.d. ISDL Expressed on a Mass Rate or Process Rate Basis**

If the emission standard is expressed on a mass rate basis, a representative flow and/or process rate is to be applied in conjunction with the ISDL (on a concentration basis) to obtain a value expressed in comparable units.

## **2.9. REPRESENTATIVE TESTING CONDITIONS**

For demonstrating compliance with an emission standard, the stack test must successfully demonstrate that a facility is capable of complying with the applicable standard under all normal operating conditions. Therefore, an owner or operator should conduct the source test while operating under typical worst-case conditions that generate the highest emissions. During the compliance demonstration, new or modified equipment should operate at levels that equal or exceed ninety-percent (90%) of the design capacity. For existing equipment, emission units should operate at levels that equal or exceed ninety-percent (90%) of normal maximum operating rates. Furthermore, the process material(s) and fuel(s) that generate the highest emissions for the pollutant(s) being tested should be used during the testing. Operating requirements for performance tests are often specified by State or federal rule, or by permit condition.

When verifying or determining an emission factor, the stack test must generate an emission factor that represents normal emissions for the operating condition tested. Multiple testing projects may be required for sources that experience large variations in process rates, have frequent start-ups and shut-downs, use multiple fuel combinations, utilize numerous process materials, or manufacture diverse products.

Whether sampling to demonstrate compliance or to formulate an emission factor, it is imperative to describe in detail the proposed process conditions within the Source Test Plan. Refer to section 2.3 of this manual for Source Test Plan requirements.

## **2.10. SIGNIFICANT FIGURES & ROUNDING PROCEDURES**

### **2.10.a. Significant Figures**

All federal emission standards have at least two (2) significant figures but no more than three (3) (Memorandum from William G. Lawton and John S. Seitz to New Source Performance Standards/National Emission Standards for Hazardous Pollutants Compliance Contacts, subject "Performance Test Calculation Guidelines", June 6, 1990). For example, 0.04 gr/dscf is considered to be 0.040 gr/dscf and 90 mg/dscm is considered to be 90. mg/dscm.

Generally, DEQ emission standards have at least two (2) significant figures. However, the number of significant figures for DEQ standards are defined by the

standards themselves. For example, 40 lbs/hr is considered to be 40. lbs/hr and 0.1 gr/dscf does not include additional significant figures.

It is imperative to maintain an appropriate number of significant figures within the intermediate calculations to minimize the discrepancy of results due to rounding inconsistencies. In general, at least five (5) significant figures should be retained throughout the intermediate calculations.

### **2.10.b. Rounding Procedures**

The procedure for rounding of a figure or a result may mean the difference between demonstrating compliance or demonstrating a violation. Based on the routine specified by the American Society for Testing and Materials (ASTM, Standard for Metric Practice E 380) the following procedure must be used:

*If the first digit to be discarded is less than five (5), the last digit retained should not be changed. When the first digit discarded is greater than five (5), or if it is a five (5) followed by at least one digit other than zero (0), the last figure retained should be increased by one unit. When the first digit discarded is exactly five, followed only by zeros (0s), the last digit retained should be rounded upward if it is an odd number, but no adjustment made if it is an even number.*

For example, if the emission standard is 0.040 gr/dscf, then 0.040341 would be rounded to 0.040, 0.040615 would be rounded to 0.041, 0.040500 would be rounded to 0.040, and 0.041500 would be rounded to 0.042 (note that five significant figures were retained prior to rounding).

## **2.11. REPORTING & RECORDKEEPING**

### **2.11.a. Report Content & Format**

At a minimum, the content of the source sampling report must be consistent with the requirements outlined in Table A-2 in Appendix A. DEQ recognizes that the presentation and format of the reports will vary between sampling projects and testing contractors. However, the report must comprehensively include all essential information and maintain sufficient detail to satisfactorily communicate the test objectives and results.

To conserve storage space and natural resources, all test reports should be published utilizing both-sides of each page. In addition, each page of the report body and of the appendices is to be numbered for ease of reference. Refer to Section 2.11.b. for information on the Source Test Audit Report.

### **2.11.b. Source Test Audit Report (STAR)**

A Source Testing Audit Report (STAR) is required for all testing required by DEQ. Like test reports, the submittal of the STAR is the responsibility of the owner or operator. DEQ may not accept test reports that do not include the STAR or if the submitted STAR is incomplete or inaccurate. Refer to the document, “*Guidelines for Completing Source Testing Audit Report*” for more details regarding the STAR.



Contact a DEQ Source Test Coordinator to receive instructions on how to obtain the most current STAR revision.

#### **2.11.c. Reporting Results that are below the In-Stack Detection Limits**

Emission tests occasionally yield results that are below the in-stack detection limit (ISDL) for a given pollutant. These data frequently provide important information, depending on the purpose of the test and if the tester extracted an adequate sample volume (see Section 2.7). Therefore, unless otherwise stated by method, rule, or permit, the following reporting procedures are to be followed when results from replicate tests are below the in-stack detection limit.

- Each test replicate that is below the ISDL should be reported as less than (<) the detection limit value (e.g., <0.14). If the test replicate is included in a multi-run test series, the ISDL value is used when calculating the numerical average.
- Label the average result as less than (<) if the numerical average of a test series includes at least one test replicate below the ISDL.

#### **2.11.d. Report Submittal**

Unless otherwise specified by rule or permit, one (1) source test report must be submitted to the regional Source Test Coordinator within 30 days following the field work. Requests for extensions will be evaluated by DEQ on a case- by-case basis.

#### **2.11.e. Recordkeeping**

All documentation of sampling equipment calibrations and analytical results should be maintained for a minimum of five years.

In general, the unanalyzed portions (aliquots) of the source test samples must be preserved up to the maximum holding times as specified by method. Sample filters gravimetrically analyzed for particulate matter are to be archived for a minimum of 6 months. However, sample archiving specifications pertaining to laboratory glassware is left to the discretion of the analyzing laboratory and the testing contractor.

## **3.0 SAMPLING METHODS**

### **3.1. ESTABLISHED SAMPLING METHODS**

Established sampling methods for various pollutants are listed within Appendix B of this manual. These methods have historically been accepted by DEQ and originate from various governmental agencies and organizations. This list is not all-inclusive and may not reflect current method updates. The use of a listed method is not automatically approved by DEQ. Instead, written DEQ approval is required prior to all testing projects that are executed to satisfy state or federal testing requirements. Refer to Section 2 of this manual for notification and source test plan requirements.

Generally, DEQ sampling methods (ODEQ Methods) or EPA methods (promulgated, alternative, & conditional) are preferable for conducting a testing program. In some cases, utilizing methods published by other public agencies and organizations are often valid and more

desirable, but must be evaluated cautiously to ensure that the test requirements established by rule or permit are satisfied.

## **3.2. DEQ SOURCE SAMPLING METHODS**

DEQ test methods are presented in Appendix C of this manual. These methods do not encompass all the provisions and procedures critical to their successful use. Persons performing these methods must have a comprehensive understanding of the physical sciences, have ample experience utilizing the testing equipment, and have a thorough knowledge of the sources to which they are applied.

DEQ test methods should only be applied to sampling situations that are consistent with their applicability. A careful and thorough evaluation of the applicability of each method to a specific testing condition is strongly recommended. Modifications or alterations to DEQ test methods must receive approval from DEQ prior to their utilization within the testing program. Refer to Section 2.4 of this manual for requirements pertaining to modifications to methods or procedures.

There are multiple references to EPA test methods within the Oregon Source Sampling Manual and test methods. The EPA methods are incorporated into this manual by reference as of the date they were published in the CFR, as shown below. Sampling provisions and procedures published within the most up-to-date revisions to the CFR may be incorporated into the testing program if approved by the administrator.

EPA Methods incorporated by reference:

Methods 1 through 30B: 40 CFR, Part 60, Appendix A, July 2012  
Methods 201 through 207: 40 CFR Part 52, Appendix M, July 2012  
Methods 301 through 323: 40 CFR Part 63, Appendix A, July 2012  
EPA Publication SW-846, Third Edition

## **3.3. Quality Assurance Requirements**

Quality assurance, including minimum calibration requirements are typically specified within each test method. DEQ test methods often refer to EPA test methods for quality assurance procedures. The calibration requirements for Oregon DEQ Methods 4, 5, 7, & 8 are summarized within Appendix D. Where inconsistencies exist, quality assurance requirements specified by method or by regulation supersede those presented within Appendix D.

# **APPENDIX A**

## **SOURCE TEST PLAN & TEST REPORT REQUIREMENTS**

### **MINIMUM SOURCE TEST PLAN REQUIREMENTS**

DEQ does not require that source test plans adhere to a specific format, but the information listed in Table A-1 must be included (as applicable). In addition, the following statements must be included in the test plan:

- Sampling replicate(s) will not be accepted if separated by a time duration of twenty-four (24) hours or more, unless prior authorization is granted by DEQ.
- All compliance source tests must be performed while the emission unit(s) are operating at normal maximum operating rates. Unless defined by permit condition or applicable rule, normal maximum operating rate is defined as the 90<sup>th</sup> percentile of the average hourly operating rates during a 12 month period immediately preceding the source test. Rates not in agreement with those stipulated in the Air Contaminant Discharge Permit can result in rejection of the test data. Imposed process limitations could also result from operating at atypical rates during the compliance demonstration.
- The DEQ must be notified of any changes in the source test plan and/or the specified methods prior to testing. Significant changes not acknowledged by the DEQ could be the basis for invalidating a test run and potentially the entire testing program. Documentation of any deviations must include an evaluation of the impact of the deviation on the test data.
- Method-specific quality assurance/quality control (QA/QC) procedures must be performed to ensure that the data is valid for determining source compliance. Documentation of the procedures and results shall be presented in the source test report for review. Omission of this critical information will result in rejection of the data, requiring a retest.
- Only regular operating staff may adjust the combustion system or production process and emission control parameters during the source performance tests and within two (2) hours prior to the tests. Any operating adjustments made during the source performance tests, which are a result of consultation during the tests with source testing personnel, equipment vendors or consultants, may render the source performance test invalid.
- Source test reports must be submitted to DEQ within thirty (30) days of the test dates, unless another deadline has been stipulated, either by permit condition, or by DEQ written approval.

**Table A-1****SOURCE TEST PLAN REQUIREMENTS**

| <b>Item #</b> | <b>Description</b>                 | <b>Explanatory Notes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1             | Facility Identification            | <ul style="list-style-type: none"> <li>- Facility Name;</li> <li>- Facility Address;</li> <li>- Permit Number (and source number if under General Permit);</li> <li>- Emission Unit(s) included within proposed testing project</li> </ul>                                                                                                                                                                                                                                                |
| 2             | Facility Personnel                 | <u>Name, address, phone number(s) and e-mail for:</u> <ul style="list-style-type: none"> <li>- Project Manager</li> <li>- On-site Contact (if different than Project Manager)</li> </ul>                                                                                                                                                                                                                                                                                                  |
| 3             | Testing Contractor Personnel       | <u>Name, physical address, phone number(s) and e-mail for:</u> <ul style="list-style-type: none"> <li>- Project Manager</li> <li>- Site Personnel (Team Leader, Technicians)</li> <li>- Laboratory Support</li> </ul>                                                                                                                                                                                                                                                                     |
| 4             | Project Purpose                    | <ul style="list-style-type: none"> <li>- Specify purpose of project (compliance, emission factor verification, applicability study, etc.)</li> <li>- Specify permit condition or rule initiating project</li> <li>- Specify applicable compliance limits and emission factors</li> </ul>                                                                                                                                                                                                  |
| 5             | Schedule                           | <ul style="list-style-type: none"> <li>- Specify testing dates for each unit tested</li> <li>- Specify starting times (approximate) for each test day</li> </ul>                                                                                                                                                                                                                                                                                                                          |
| 6             | Source Description                 | <u>Description of the emission unit(s), including the following:</u> <ul style="list-style-type: none"> <li>- Narrative of the emission source (system type, manufacturer, date installed, capacity, configuration, fuel type, etc.)</li> <li>- Narrative of the pollution control device (system type, manufacturer, date installed, configuration, etc.)</li> <li>- Narrative of the sample locations (where in system, distances to disturbances, duct configuration, etc.)</li> </ul> |
| 7             | Pollutant(s) Measured              | <u>Specify the following for each pollutant measured:</u> <ul style="list-style-type: none"> <li>- Pollutant (CO, PM, Formaldehyde, etc.)</li> <li>- Reporting unit for each pollutant (ppmdv, lbs/hr, lbs/ton, etc.)</li> </ul>                                                                                                                                                                                                                                                          |
| 8             | Test Methods                       | <u>Include the following for each test method proposed:</u> <ul style="list-style-type: none"> <li>- Method reference number ( e.g., EPA 1, ODEQ 7);</li> <li>- Copy of method (only if requested by DEQ);</li> <li>- Quantifiable or detectable limits for each pollutant</li> </ul>                                                                                                                                                                                                     |
| 9             | Sampling Replicates                | <ul style="list-style-type: none"> <li>- Specify the number of sample replicates for each method on each emission unit;</li> <li>- Specify the duration of each sample replicate for each method.</li> </ul>                                                                                                                                                                                                                                                                              |
| 10            | Production and Process Information | <ul style="list-style-type: none"> <li>- List the parameters to be recorded</li> <li>- Specify the frequency of measurements and recordings</li> <li>- Specify how each parameter is measured (manual, instrument, etc.)</li> </ul>                                                                                                                                                                                                                                                       |

| Item # | Description                          | Explanatory Notes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11     | Pollution Control Device Information | <ul style="list-style-type: none"> <li>- List the parameters to be recorded</li> <li>- Specify the frequency of measurements and recordings</li> <li>- Specify how each parameter is measured (manual, instrument, etc.)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 12     | Fuel Sampling and Analysis           | <ul style="list-style-type: none"> <li>- Specify how sample(s) will be collected (include references to established procedures such as ASTM, if applicable)</li> <li>- Specify frequency of collection</li> <li>- Specify the type of analysis, the analytical procedure, and the analytical laboratory</li> </ul>                                                                                                                                                                                                                                                                                                                                                      |
| 13     | Other Test Method Considerations     | <p><u>Include in the test plan a brief discussion of:</u></p> <ul style="list-style-type: none"> <li>- Applicability of proposed test methods</li> <li>- Any and all proposed method modifications/deviations, including modifications/deviations to QA/QC activities</li> <li>- Any foreseeable problems with sample recovery</li> <li>- Any known errors in the proposed method(s)</li> <li>- Simultaneous testing (multiple parameters or methods)</li> <li>- Multiple exhaust points of the source (if applicable)</li> <li>- Possible method interferences</li> <li>- Cyclonic flow measurements (if applicable)</li> <li>- Stratification measurements</li> </ul> |
| 14     | Other Process Considerations         | <p><u>Include in the test plan a brief discussion of:</u></p> <ul style="list-style-type: none"> <li>- Target process rate(s) and how it compares to day-to-day operations and the unit's rated capacity</li> <li>- Product (e.g., type, size, specie, etc.)</li> <li>- Potential process variability (i.e., continuous, cyclical, etc.)</li> <li>- Whether the proposed test conditions represent worst-case conditions with respect to emissions</li> </ul>                                                                                                                                                                                                           |

**MINIMUM SOURCE TEST REPORT REQUIREMENTS**

The DEQ does not require that test reports adhere to a specific format, but the information listed in Table A-2 (below) needs to be included (as applicable). Reports shall be organized in a clear and logical fashion to promote correctness and accuracy.

**Table A-2****SOURCE TEST REPORT REQUIREMENTS**

| <b>Item#</b> | <b>Description</b>                                     | <b>Explanatory Notes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1            | Facility Identification                                | <ul style="list-style-type: none"> <li>- Facility Name</li> <li>- Facility Address</li> <li>- Permit Number (and source number if under General Permit)</li> <li>- Emission Unit(s) included within the testing project</li> </ul>                                                                                                                                                                                                                                                                                                                                                                    |
| 2            | Facility Personnel                                     | <u>Name, address, phone number(s) and e-mail for:</u> <ul style="list-style-type: none"> <li>- Project Manager</li> <li>- On-site Contact (if different than Project Manager)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                              |
| 3            | Testing Contractor Personnel                           | <u>Name, physical address, phone number(s) and e-mail for:</u> <ul style="list-style-type: none"> <li>- Project Manager</li> <li>- Site Personnel (Team Leader, Technicians)</li> <li>- Laboratory Support</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                 |
| 4            | Project Purpose                                        | <ul style="list-style-type: none"> <li>- Specify purpose of project (compliance, emission factor verification, applicability study, etc.)</li> <li>- Specify permit condition or rule initiating project</li> <li>- Specify applicable compliance limits and emission factors</li> </ul>                                                                                                                                                                                                                                                                                                              |
| 5            | Schedule                                               | <ul style="list-style-type: none"> <li>- Specify testing dates for each unit tested</li> <li>- Specify starting and ending times for each test run</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 6            | Source Description                                     | <u>Description of the emission unit(s), including the following:</u> <ul style="list-style-type: none"> <li>- Narrative of the emission source (system type, manufacturer, date installed, capacity, configuration, fuel type, etc.)</li> <li>- Stack height above the ground</li> <li>- Orientation of the exhaust (vertical, horizontal, etc.)</li> <li>- Narrative of the pollution control device (system type, manufacturer, date installed, configuration, etc.)</li> <li>- Narrative of the sample locations (where in system, distances to disturbances, duct configuration, etc.)</li> </ul> |
| 7            | Process & Pollution Control Operating Rates & Settings | <u>Operating rates and parameters, including the following:</u> <ul style="list-style-type: none"> <li>- Process rates for each run on each emission unit</li> <li>- Process characteristics for each test run (temperature, process time, size, species, pressures, settings, fuel characteristics, etc.)</li> <li>- Pollution control device parameters for each test run (temperature, pressure drop, water injection rate, voltage, settings, etc.)</li> <li>- Description of process changes and interruptions that</li> </ul>                                                                   |

| Item# | Description                                        | Explanatory Notes                                                                                                                                                                                                                                                                                                                                                                      |
|-------|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       |                                                    | occurred during testing.                                                                                                                                                                                                                                                                                                                                                               |
| 8     | Pollutant(s) Measured                              | <u>Discuss the following for each pollutant measured:</u> <ul style="list-style-type: none"> <li>- Specie (CO, PM, Formaldehyde, Opacity, etc.)</li> <li>- Reporting unit for each specie (ppmdv, lbs/hr, lbs/ton, etc.)</li> </ul>                                                                                                                                                    |
| 9     | Test Methods                                       | <u>Include the following for each test method:</u> <ul style="list-style-type: none"> <li>- Method reference number ( e.g., EPA 1, ODEQ 7)</li> <li>- Discuss deviations from published methods and their impact on test results</li> </ul>                                                                                                                                            |
| 10    | Summary of Results                                 | <ul style="list-style-type: none"> <li>- One summary table for each emission unit (when possible)</li> <li>- List individual run results and average (when possible)</li> <li>- Include applicable emission standard, factor, or compliance limit</li> </ul>                                                                                                                           |
| 11    | Supporting Sampling Information                    | <ul style="list-style-type: none"> <li>- Spreadsheets &amp; electronic data records</li> <li>- Field data sheets, notes, and forms</li> <li>- Equipment calibration documentation (field &amp; laboratory equipment)</li> <li>- Example calculations</li> <li>- Sampling equipment description</li> <li>- Pre-test procedure documentation (stratification, cyclonic, etc.)</li> </ul> |
| 12    | Laboratory Analysis                                | <ul style="list-style-type: none"> <li>- Electronic data records</li> <li>- Data sheets, notes, and forms</li> <li>- Analytical detection limit for each constituent</li> <li>- Applicable analytical QA/QC information</li> <li>- Chain of custody</li> </ul>                                                                                                                         |
| 13    | Supporting Process & Pollution Control Information | <ul style="list-style-type: none"> <li>- Electronic generated output (if applicable)</li> <li>- Log sheets and forms</li> <li>- Operating capacity</li> <li>- 90% Percentile 12 Month Operating Analysis (existing sources)</li> </ul>                                                                                                                                                 |
| 14    | Source Test Audit Report                           | <ul style="list-style-type: none"> <li>- Complete for each test method and emission unit</li> <li>- Complete certification form</li> </ul>                                                                                                                                                                                                                                             |
| 15    | Test Correspondence                                | <ul style="list-style-type: none"> <li>- Test plan</li> <li>- Test plan approval correspondence</li> <li>- Approval for method deviations</li> <li>- Applicable permit excerpts that pertain to testing requirements, emission limits, and emission factors</li> </ul>                                                                                                                 |



# **APPENDIX B**

## **LISTING OF SOURCE SAMPLING METHODS**

## **ALPHABETICALLY BY POLLUTANT OR STACK PARAMETER**

## ESTABLISHED SAMPLING METHODS

| POLLUTANT OR STACK PARAMETER                    | TEST METHOD                                                                          | COMMENTS                                                                                                                                                                                                    |
|-------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ammonia                                         | EPA CTM-027, BAAQMD ST-1B, EPA 320,                                                  | Method depends on isokinetic requirements                                                                                                                                                                   |
| Carbon Dioxide (CO <sub>2</sub> )               | EPA 3, EPA 3A, EPA 3B                                                                |                                                                                                                                                                                                             |
| Carbon Monoxide                                 | EPA 10                                                                               |                                                                                                                                                                                                             |
| Chloride (Total)                                | EPA 26A, EPA 26 SW846-0050                                                           |                                                                                                                                                                                                             |
| Dioxins & Furans                                | EPA 23, SW846-23a                                                                    |                                                                                                                                                                                                             |
| Formaldehyde                                    | NCASI 98.01, NCASI 99.02, NCASI A105.1, EPA 316, EPA 320, EPA 323                    | Method depends on source type, isokinetic and ISDL requirements.                                                                                                                                            |
| Gaseous Organics                                | EPA 18                                                                               | Not applicable for high molecular weight compounds or for compounds with very low vapor pressure at stack or instrument conditions.                                                                         |
| Hydrogen Chloride, Hydrogen Halide and Halogens | EPA 26, EPA 26A, SW846-0050, EPA 321                                                 | Use EPA 26A when isokinetic sampling is required.<br>EPA 321 utilizes FTIR and is specific to Portland Cement Kilns                                                                                         |
| Methanol                                        | EPA 308, NCASI 98.01, NCASI 99.02 NCASI A105.1                                       | Methods may also be applicable to phenol with approval                                                                                                                                                      |
| Moisture Content                                | EPA 4, ODEQ 4                                                                        |                                                                                                                                                                                                             |
| Molecular Weight                                | EPA 3, EPA 3A, EPA 3B                                                                |                                                                                                                                                                                                             |
| Metals                                          | EPA 29, SW846-0060                                                                   | Includes: Antimony, Arsenic, Barium, Beryllium, Cadmium, Total Chromium, Cobalt, Copper, Lead, Manganese, Mercury, Nickel, Phosphorus, Selenium, Silver, Thallium, Zinc.                                    |
| Nitrogen Oxides                                 | EPA 7E, EPA 20                                                                       |                                                                                                                                                                                                             |
| Nonmethane Organic Compounds (NMOC)             | EPA 25, EPA 25C, BAAQMD ST-7, SCAQMD 25.3, EPA CTM-042                               | EPA 25 subject to interference by H <sub>2</sub> O and CO <sub>2</sub> . ST-7 applicable for compounds that respond well to FID. 25.3 for low concentration sources. EPA 25C for LFG. CTM-042 for bakeries. |
| Opacity                                         | EPA 9, EPA ALT Method 082                                                            | ALT 082 when pre-approved by DEQ                                                                                                                                                                            |
| Oxygen                                          | EPA 3, EPA 3A, EPA 3B                                                                |                                                                                                                                                                                                             |
| Particulate Matter-Filterable                   | EPA 5, EPA 5A, EPA 5B, EPA 5D, EPA 5E, EPA 5F, EPA 5i, EPA 17, Modified DEQ 5, DEQ 8 | ODEQ 8 acceptable under limited conditions<br>EPA 5i for low level particulate                                                                                                                              |
| Particulate Matter - Total                      | ODEQ 5, ODEQ 7, EPA 5/202                                                            |                                                                                                                                                                                                             |
| Particulate Matter - $\leq 10\mu\text{m}$       | EPA 201A/202                                                                         |                                                                                                                                                                                                             |

| POLLUTANT OR STACK<br>PARAMETER                   | TEST METHOD                                              | COMMENTS                                                                                                                                                                                                 |
|---------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Particulate Matter-<2.5um                         | EPA 201A/202                                             |                                                                                                                                                                                                          |
| Phenol                                            | NCASI 98.01, NCASI 99.02,<br>EPA 18, NCASI A105.1        |                                                                                                                                                                                                          |
| Sulfur Dioxide                                    | EPA 6, EPA 6C, EPA 8                                     | EPA 8 also measures sulfuric acid mist                                                                                                                                                                   |
| Total Enclosure                                   | EPA 204                                                  | Use for determining capture efficiency.                                                                                                                                                                  |
| Total Hydrocarbons                                | EPA 25A, EPA 18                                          | Applicable to alkanes, alkenes, and aromatic hydrocarbons. EPA 25A has a fractional response to many other organic compounds.                                                                            |
| Total Reduced Sulfur                              | EPA 16, EPA 16A, EPA 16C                                 |                                                                                                                                                                                                          |
| Velocity and Volumetric<br>Flow Rate              | EPA 2, EPA 2A, EPA 2C, EPA<br>2E, EPA 2F, EPA 2G, EPA 2H | EPA 2 if duct $\geq 12''$ in diameter<br>EPA 2A if duct $< 12''$ in diameter                                                                                                                             |
| Volatile Organic<br>Compounds by FTIR             | EPA 320                                                  | Analyzes for specific defined VOCs                                                                                                                                                                       |
| Volatile Organic<br>Compounds-<br>Uncharacterized | EPA 25, EPA 25A, EPA 25B                                 | Total VOC's reported on an equivalent basis (i.e. "as propane")                                                                                                                                          |
| Volatile Organic<br>Compounds by GC               | EPA 18, EPA CTM-028                                      | Analyzes for specific defined VOCs. EPA 18 not applicable for high molecular weight compounds or for compounds with very low vapor pressure at stack or instrument conditions. CTM-028 direct interface. |

# **APPENDIX C**

## **OREGON DEQ SOURCE SAMPLING METHODS**

- C-4: Oregon Method 4 (moisture)**
- C-5: Oregon Method 5 (PM)**
- C-7: Oregon Method 7 (PM)**
- C-8: Oregon Method 8 (PM, High Volume)**

# **SUB-APPENDIX C-4**

## **OREGON DEQ SOURCE SAMPLING METHOD 4**

## Oregon Method 4

### State of Oregon Department of Environmental Quality Source Sampling Method 4

#### Determination of Moisture Content of Stack Gases (Alternate Method)

1. **Principle.** Under certain conditions, the quantity of water vapor in the gas stream can be determined by measuring the wet-bulb and dry-bulb temperatures of the gaseous fluid.
2. **Applicability.** This method is applicable for the determination of the moisture content of the sample stream when EPA Method 4 is not suitable or when rigid moisture content measurements are not essential to the success of the testing program.
3. **Procedure.**
  - 3.1 Measure the dry bulb temperature in the conventional way using either a thermometer or thermocouple.
  - 3.2 Wrap the end of the temperature-measuring device in a cloth sock soaked with water. Insert the sock and temperature-measuring device into the flowing gas stream and allow the temperature to reach a steady state value. Caution: after the water on the sock has evaporated, the temperature will rise to the dry bulb temperature. (Refer to Figure 4-1). The wet bulb temperature must be taken while the sock is saturated with moisture.
  - 3.3 Apply the wet bulb readings to Table 4-1 to determine the water vapor pressure in the gas stream. Then use the dry bulb reading and equation 4.4-1 to determine the approximate water vapor content. In lieu of using Table 4-1, equation 4.4-2 may be utilized to determine the vapor pressure at saturation if the wet bulb temperature is less than 175°F.
  - 3.4 Alternately, if the barometric pressure is  $29.92 \pm 0.5$  inches of mercury (in. Hg) apply the wet bulb and dry bulb readings to a standard psychrometric chart and determine the approximate water vapor content.
4. **Interference**
  - 4.1 The following conditions may drastically change the wet bulb reading causing erroneous results:
    - 4.1.a. The presence of acid gases in the gas stream, i.e. SO<sub>2</sub>, SO<sub>3</sub>, HCl.
    - 4.1.b. The presence of hydrocarbons in the gas
    - 4.1.c. Marked differences from atmospheric pressure (29.9 “Hg) of the gas stream (if the graphs are used) .
  - 4.2 Should any of the above interferences be present, the tester should consider another approach to determining moisture content.

4.3 Additionally, the following conditions can lead to difficulties:

- 4.3.a. Very high dry bulb temperature (in excess of 500° F).
- 4.3.b. Very high or very low gas velocities.
- 4.3.c. High concentrations of particulate matter which may adhere to the wet sock.

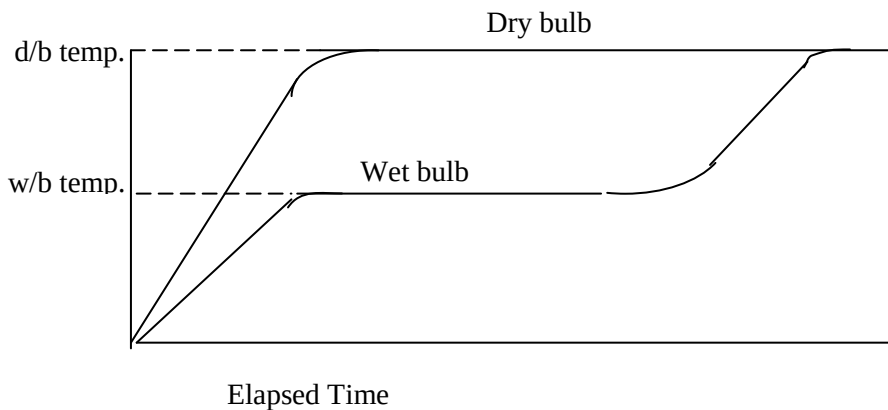


Figure 4-1

4.4 Moisture Equation:

$$H_2O = \frac{e'' - \frac{(P_s - e'')(t_d - t_w)}{2800 - (1.3t_w)}}{P_s} \times 100 \quad (\text{Eq. 4.4-1})$$

where:

$e''$  = Vapor pressure of  $H_2O$  at  $t_w$ , in. Hg (See Table 4-1)

$P_s$  = Exhaust gas pressure (absolute), in. Hg

$t_d$  = Dry bulb temperature, °F

$t_w$  = Wet bulb temperature, °F

**TABLE 4-1: VAPOR PRESSURE OF WATER AT SATURATION\* (Inches of Mercury)**

| Wet Bulb Temperature (°F) | 0      | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| -20                       | 0.0126 | 0.0119 | 0.0112 | 0.0106 | 0.0100 | 0.0095 | 0.0089 | 0.0084 | 0.0080 | 0.0075 |
| -10                       | 0.0222 | 0.0209 | 0.0190 | 0.0187 | 0.0176 | 0.0168 | 0.0158 | 0.0150 | 0.0142 | 0.0134 |
| -0                        | 0.0376 | 0.0359 | 0.0339 | 0.0324 | 0.0306 | 0.0289 | 0.0275 | 0.0259 | 0.0247 | 0.0233 |
| 0                         | 0.0376 | 0.0398 | 0.0417 | 0.0441 | 0.0463 | 0.0489 | 0.0517 | 0.0541 | 0.0571 | 0.0598 |
| 10                        | 0.0631 | 0.0660 | 0.0696 | 0.0728 | 0.0768 | 0.0810 | 0.0846 | 0.0892 | 0.0932 | 0.0982 |
| 20                        | 0.1025 | 0.1080 | 0.1127 | 0.1186 | 0.1248 | 0.1302 | 0.1370 | 0.1429 | 0.1502 | 0.1567 |
| 30                        | 0.1647 | 0.1716 | 0.1803 | 0.1878 | 0.1955 | 0.2035 | 0.2118 | 0.2203 | 0.2292 | 0.2383 |
| 40                        | 0.2478 | 0.2576 | 0.2677 | 0.2782 | 0.2891 | 0.300  | 0.3120 | 0.3240 | 0.3364 | 0.3493 |
| 50                        | 0.3626 | 0.3764 | 0.3906 | 0.4052 | 0.4203 | 0.4359 | 0.4520 | 0.4586 | 0.4858 | 0.5035 |
| 60                        | 0.5218 | 0.5407 | 0.5601 | 0.5802 | 0.6009 | 0.6222 | 0.6442 | 0.6669 | 0.6903 | 0.7144 |
| 70                        | 0.7392 | 0.7648 | 0.7912 | 0.8183 | 0.8462 | 0.8750 | 0.9046 | 0.9352 | 0.9666 | 0.9989 |
| 80                        | 1.032  | 1.066  | 1.102  | 1.138  | 1.175  | 1.213  | 1.253  | 1.293  | 1.335  | 1.378  |
| 90                        | 1.422  | 1.467  | 1.513  | 1.561  | 1.610  | 1.660  | 1.712  | 1.765  | 1.819  | 1.875  |
| 100                       | 1.932  | 1.992  | 2.052  | 2.114  | 2.178  | 2.243  | 2.310  | 2.379  | 2.449  | 2.521  |
| 110                       | 2.596  | 2.672  | 2.749  | 2.829  | 2.911  | 2.995  | 3.081  | 3.169  | 3.259  | 3.351  |
| 120                       | 3.446  | 3.543  | 3.642  | 3.744  | 3.848  | 3.954  | 4.063  | 4.174  | 4.89   | 4.406  |
| 130                       | 4.525  | 4.647  | 4.772  | 4.900  | 5.031  | 5.165  | 5.302  | 5.442  | 5.585  | 5.732  |
| 140                       | 5.881  | 6.034  | 6.190  | 6.350  | 6.513  | 6.680  | 6.850  | 7.024  | 7.202  | 7.384  |
| 150                       | 7.569  | 7.759  | 7.952  | 8.150  | 8.351  | 8.557  | 8.767  | 8.981  | 9.200  | 9.424  |
| 160                       | 9.652  | 9.885  | 10.12  | 10.36  | 10.61  | 10.86  | 11.12  | 11.38  | 11.65  | 11.92  |
| 170                       | 12.20  | 12.48  | 12.77  | 13.07  | 13.37  | 13.67  | 13.98  | 14.30  | 14.62  | 14.96  |
| 180                       | 15.29  | 15.63  | 15.98  | 16.34  | 16.70  | 17.07  | 17.44  | 17.82  | 18.21  | 18.61  |
| 190                       | 19.01  | 19.42  | 19.84  | 20.27  | 20.70  | 21.14  | 21.59  | 22.05  | 22.52  | 22.99  |
| 200                       | 23.47  | 23.96  | 24.46  | 24.97  | 25.48  | 26.00  | 26.53  | 27.07  | 27.62  | 28.18  |
| 210                       | 28.75  | 29.33  | 29.92  | 30.52  | 31.13  | 31.75  | 32.38  | 33.02  | 33.67  | 34.33  |
| 220                       | 35.00  | 35.68  | 36.37  | 37.07  | 37.78  | 38.50  | 39.24  | 39.99  | 40.75  | 41.52  |
| 230                       | 42.31  | 43.11  | 43.92  | 44.74  | 45.57  | 46.41  | 47.27  | 48.18  | 49.03  | 49.93  |
| 240                       | 50.84  | 51.76  | 52.70  | 53.65  | 54.62  | 55.60  | 56.60  | 57.61  | 58.63  | 59.67  |

\*Methods for Determination of Velocity, Volume, Dust, and Mist Content of Gases, Bulletin WP-50, Western Precipitation Corp., Los Angeles, CA

The following equation can be substituted for the above table for determining vapor pressures ( $e''$ ) from measured wet bulb ( $t_w$ ) temperatures:



$$e'' = 0.1805 \times e^{\left[ \frac{(17.27 \times (t_w - 32))}{(t_w + 395)} \right]} \quad (\text{Eq. 4.4-2})$$

# **SUB-APPENDIX C-5**

## **OREGON DEQ SOURCE SAMPLING METHOD 5**

## Oregon Method 5

### State of Oregon Department of Environmental Quality Source Sampling Method 5

#### Sampling Particulate Emissions from Stationary Sources

#### 1.0 Principle and Applicability

- 1.1 **Principle.** Particulate matter including condensable aerosols are withdrawn isokinetically from a flowing gas stream. Filterable particulate matter is determined gravimetrically after removal of combined water. Condensable particulate matter is determined gravimetrically after extraction with an organic solvent and evaporation.
- 1.2 **Applicability.** This method is applicable to the determination of particulate emissions from stationary sources except those sources for which specified sampling methods have been devised and are on file with DEQ.

- 2.0 **Acceptability.** Results of this method will be accepted as demonstration of compliance (or non-compliance) provided that the methods included or referenced in this procedure are strictly adhered to and a report is prepared according to Section 2.11 of DEQ's Source Sampling Manual, Volume I. Deviations from the procedures described herein will be permitted only if authorization from DEQ is obtained in writing in advance of the tests. EPA Method 5 combined with EPA Method 202 may be substituted for this method.

#### 3.0 Equipment and Supplies

- 3.1 **Sampling Train (figure 5-1):** Same as EPA Method 5 Section 6.1. with the following exception: Use of a glass frit filter support is prohibited. The support must be fabricated such that it can be quantitatively rinsed with acetone during sample recovery (refer to Section 5.7.1)
- 3.2 **Barometer:** Same as EPA Method 5 Section 6.1.2.
- 3.3 **Gas Density Determination Equipment:** Same as EPA Method 5 Section 6.1.3.
- 3.4 **Sample Recovery:** Same as EPA Method 5 Section 6.2.
- 3.5 **Sample Analysis:** Same as EPA Method 5 Section 6.3 with the following addition:
  - 3.5.1 Glass separatory funnel (500-1000 ml) with Teflon<sup>1</sup> stopcock and plug.

#### 4.0 Reagents and Standards

- 4.1 **Sample Collection:** Same as EPA Method 5 Section 7.1 with the following condition:
  - 4.1.1 Distilled water with a residue content of  $\leq 0.001\%$  (0.01 mg/ml) must be used in the impingers. The distilled water reagent blank weight correction will not exceed 0.001%, or 0.01 mg/ml.
  - 4.1.2 Stopcock grease (Section 7.1.5 of EPA Method 5) can bias test results and its use should be avoided whenever possible.
- 4.2 **Sample Recovery:** Same as EPA Method 5 Section 7.2.
- 4.3 **Analysis:** Same as EPA Method 5 Section 7.3 with following addition:
  - 4.3.1 Methylene Chloride reagent grade, with a residue content of  $\leq 0.001\%$  (0.013 mg/ml). The methylene chloride reagent blank weight correction will not exceed 0.001%, or 0.013 mg/ml. Hexane may be substituted for methylene chloride. The same purity is required.
  - 4.3.2 Distilled water with a residue content of  $\leq 0.001\%$  (0.01 mg/ml). The distilled water reagent blank weight correction will not exceed 0.001%, or 0.01 mg/ml.

#### 5.0 Sample Collection, Preservation, Storage, and Transport

- 5.1 **Pretest Preparation:** Same as EPA Method 5 Section 8.1.
- 5.2 **Preliminary Determinations:** Same as EPA Method 5 Section 8.2.
- 5.3 **Preparation of Sampling Train:** Same as EPA Method 5 Section 8.3.
- 5.4 **Leak-Check Procedures:** Same as EPA Method 5 Section 8.4.
- 5.5 **Sampling Train Operation:** Same as EPA Method 5 Section 8.5.
- 5.6 **Calculation of % Isokinetics:** Same as EPA Method 5 Section 8.6.
- 5.7 **Sample Recovery:** Same as EPA Method 5 Section 8.7 (with the following additions:
  - 5.7.1 In addition to the nozzle, probe, and filter-holder rinses, the filter frit support is to be rinsed with acetone and stored in Container No. 2.
  - 5.7.2 Container No. 4. The contents of impingers 1 through 3 along with a distilled water rinse of impingers and all interconnects between the heated filter holder to the silica gel impinger must be transferred to Container No. 4. To adequately recover the sample from the impingers and interconnects, each component is to be rinsed in triplicate and the total rinse volume should equal or exceed 75 mls of reagent (distilled water).
  - 5.7.3 Container 5. Rinse all sample exposed surfaces between the filter frit support and the inlet to the silica gel impinger with acetone and store in container No. 5. To adequately recover the sample from this portion of the sampling train, each component is to be rinsed in triplicate and the total rinse volume should equal or exceed 100 mls of reagent (acetone).

5.8 **Sample Transport:** Same as EPA Method 5 Section 8.8.

## 6.0 **Quality Control**

6.1 **Miscellaneous Quality Control Procedures:** Same as EPA Method 5 Section 9.1 with the following additions:

6.1.1 Analytical balance calibration and auditing procedures as per Section 7.8 of this method.

6.2 **Volume Metering System Checks:** Same as EPA Method 5 Section 9.2.

## 7.0 **Calibration and Standardization**

7.1 **Documentation:** The calibration data and/or calibration curves shall be included in the source test report.

7.2 **Nozzles:** Same as EPA Method 5 Section 10.1.

7.3 **Pitot Tube:** Same as EPA Method 5 Section 10.2 with the following addition:

7.3.1 If calibrated against a standard pitot, Type S pitot tubes shall be recalibrated at least once every six months.

7.3.2 If default Cp value used based on measured pitot features, measurements must be conducted pre and post test.

7.4 **Metering System:** Same as EPA Method 5 Section 10.3.

7.5 **Probe Heater Calibration:** Same as EPA Method 5 Section 10.4.

7.6 **Temperature Sensors:** Same as EPA Method 5 Section 10.5 with the following additions:

7.6.1 Thermometers that measure the filter-oven, impinger exit, and dry-gas meter temperatures are to be calibrated at 32° F and 212°F against an ASTM mercury thermometer or NIST traceable thermometer. At a minimum, the filter-oven, impinger exit, and dry-gas meter thermometers are to be calibrated before initial use and at least once every six months thereafter.

7.6.2 Alternatively, in-stack temperature thermometers are to be calibrated at 32° F and 212°F against an ASTM mercury thermometer or NIST traceable thermometer. At a minimum, the in-stack temperature thermometers are to be calibrated before initial use and at least once every six months thereafter.

7.7 **Barometer:** Same as EPA Method 5 Section 10.6.

7.8 **Analytical Balance:** The following calibration and standardization procedures must be performed on the analytical balance:

7.8.1 The balance must be audited utilizing 0.500 g, 1.0000 g, 10.0000 g, 50.0000 g, and 100.0000 g Class-S standard weights. Alternatively, five (5) Class-S standard weights may be substituted that accurately represent the anticipated measurement range. The balance results must agree within  $\pm 1$  mg of the Class-S weights. At a minimum, the balance calibration must be performed subsequent to disturbing the analytical balance and annually thereafter.

- 7.8.2 Prior to weighing filters before and after sampling, adjust the analytical balance to zero and check the accuracy with a 0.5 g Class-S weight. A Class-S standard weight within 1 g of the filter weight may be used as an alternate. The balance results must agree within  $\pm 0.5$  mg and the relative humidity in the weighing environment must be  $\leq 50\%$ .
- 7.8.3 Prior to weighing beakers before and after sampling, adjust the analytical balance to zero and check the accuracy with a 100 g Class-S standard weight. A Class-S standard weight within 1 g of the beaker weight may be used as an alternate. The balance results must agree within  $\pm 0.5$  mg and the relative humidity in the weighing environment must be  $\leq 50\%$ .

## 8.0 Analytical Procedures

- 8.1 **Documentation:** Analytical documentation shall be consistent with the data entry forms presented in Figures 5-2a through 5-2c.
- 8.2 **Analysis:** Same as EPA Method 5 Section 11.2 with following additions:
- 8.2.1 **Container No. 1:** The sample (filter) must be desiccated and weighed to a constant final weight, even if it is oven dried.
- 8.2.2 **Container No. 4:** Transfer the contents of Container No. 4 to a separator funnel (Teflon<sup>1</sup> stoppered). Rinse the container with distilled water and add to the separatory funnel. Add 50 ml of methylene chloride or hexane. Stopper the separatory funnel and vigorously shake for 1 minute. Take care to momentarily release the funnel pressure several times during the shaking process. Allow the sample to separate into two distinct layers and transfer the methylene chloride (lower layer) into a tared beaker or evaporating dish made of glass, Teflon<sup>1</sup>, or other inert material. Repeat the extraction process twice more.
- NOTE:** Always leave a small amount of methylene chloride in the separatory funnel to ensure that water does not get into the extracted sample. If water is present in the extracted sample, it will be difficult to completely evaporate the sample to dryness for gravimetric analysis.
- 8.2.2.i Transfer the remaining water in the separator funnel to a tared beaker or evaporating dish and evaporate at 105°C. Desiccate for 24 hours and weigh to a constant weight.
- 8.2.2.ii Evaporate the combined impinger water extracts from Section 8.2.2 at laboratory temperature ( $\leq 70^\circ\text{F}$ ) and pressure, desiccate for 24 hours and weigh to a constant weight.
- 8.2.3 **Container No. 5:** Transfer the contents of container No. 5 to a tared beaker or evaporating dish, evaporate at laboratory temperature and pressure, desiccate for 24 hours, and weigh to a constant weight.

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<sup>1</sup> Mention of trade names or specific products does not constitute endorsement by DEQ.

- 8.2.4 **Solvent Blanks:** Evaporate a portion of the solvents in a manner similar to the sample evaporation to determine the solvent blanks.

## 9.0 Calculations

- 9.1 **Nomenclature:** Same as EPA Method 5 Section 12.1 with following additions:

$C_m$  = Methylene chloride (or hexane) blank residue concentration, mg/g.  
 $C_w$  = Distilled water blank residue concentration, mg/g.  
 $m_m$  = Mass of residue of methylene chloride (or hexane) after evaporation, mg.  
 $m_w$  = Mass of residue of distilled water after evaporation, mg.  
 $V_{mb}$  = Volume of methylene chloride (or hexane) blank, ml.  
 $V_{mc}$  = Volume of methylene chloride (or hexane) used for extracting the impinger water, ml.  
 $V_{wb}$  = Volume of distilled water blank, ml.  
 $V_{ws}$  = Volume of distilled water for charging the impingers and for recovery, ml.  
 $W_m$  = Weight of residue in methylene chloride (or hexane), mg.  
 $W_w$  = Weight of residue of distilled water, mg.  
 $\rho_m$  = Density of methylene chloride (or hexane), g/ml (see label on bottle).  
 $\rho_w$  = Density of distilled water, g/ml (1.0 g/ml).

- 9.2 **Dry Gas Volume:** Same as EPA Method 5 Section 12.3.

- 9.3 **Volume of Water Vapor Condensed:** Same as EPA Method 5 Section 12.4.

- 9.4 **Moisture Content:** Same as EPA Method 5 Section 12.5.

- 9.5 **Acetone Blank Concentration:** Same as EPA Method 5 Section 12.6.

- 9.6 **Acetone Blank Deduction:** Same as EPA Method 5 Section 12.7 with the following addition: The acetone reagent blank weight correction will not exceed 0.001%, or 0.01 mg/ml. An acetone blank deduction value ( $W_a$ ) of 0.0 mg shall be used when the acetone blank concentration ( $C_a$ ) is less than or equal to zero.

**9.7 Water Blank Concentration:**

$$C_w = \frac{m_w}{V_{wb} \times \rho_w} \quad (\text{Eq. 5.9-1})$$

**9.8 Water Blank Deduction:**

$$W_w = C_w \times V_{ws} \times \rho_w \quad (\text{Eq. 5.9-2})$$

**NOTE:** The distilled water reagent blank weight correction will not exceed 0.001%, or 0.01 mg/ml. A water blank deduction value ( $W_w$ ) of 0.0 mg shall be used when the water blank concentration ( $C_w$ ) is less than or equal to zero.

**9.9 Methylene Chloride (or Hexane) Blank Concentration:**

$$C_m = \frac{m_m}{V_{mb} \times \rho_m} \quad (\text{Eq. 5.9-3})$$

**9.10 Methylene Chloride (or Hexane) Blank Deduction:**

$$W_m = C_m \times V_{mc} \times \rho_m \quad (\text{Eq. 5.9-4})$$

**NOTE:** The methylene chloride reagent blank weight correction will not exceed 0.001%, or 0.01 mg/ml. A methylene chloride (or hexane) blank deduction value ( $W_m$ ) of 0.0 mg shall be used when the methylene chloride blank concentration ( $C_m$ ) is less than or equal to zero.

**9.11 Total Particulate Weight:**

Determine the total particulate matter catch from the sum of the weights obtained from Containers 1, 2, 4, 5 (including the organic solvent extract of the water from Container No. 4), less the acetone, methylene chloride (or hexane), and distilled water blanks (see Figures 5-2a, 5-2b, and 5-2c).

**9.12 Particulate Concentration:** Same as EPA Method 5 Section 12.9.

**9.13 Isokinetic Variation:** Same as EPA Method 5 Section 12.11.

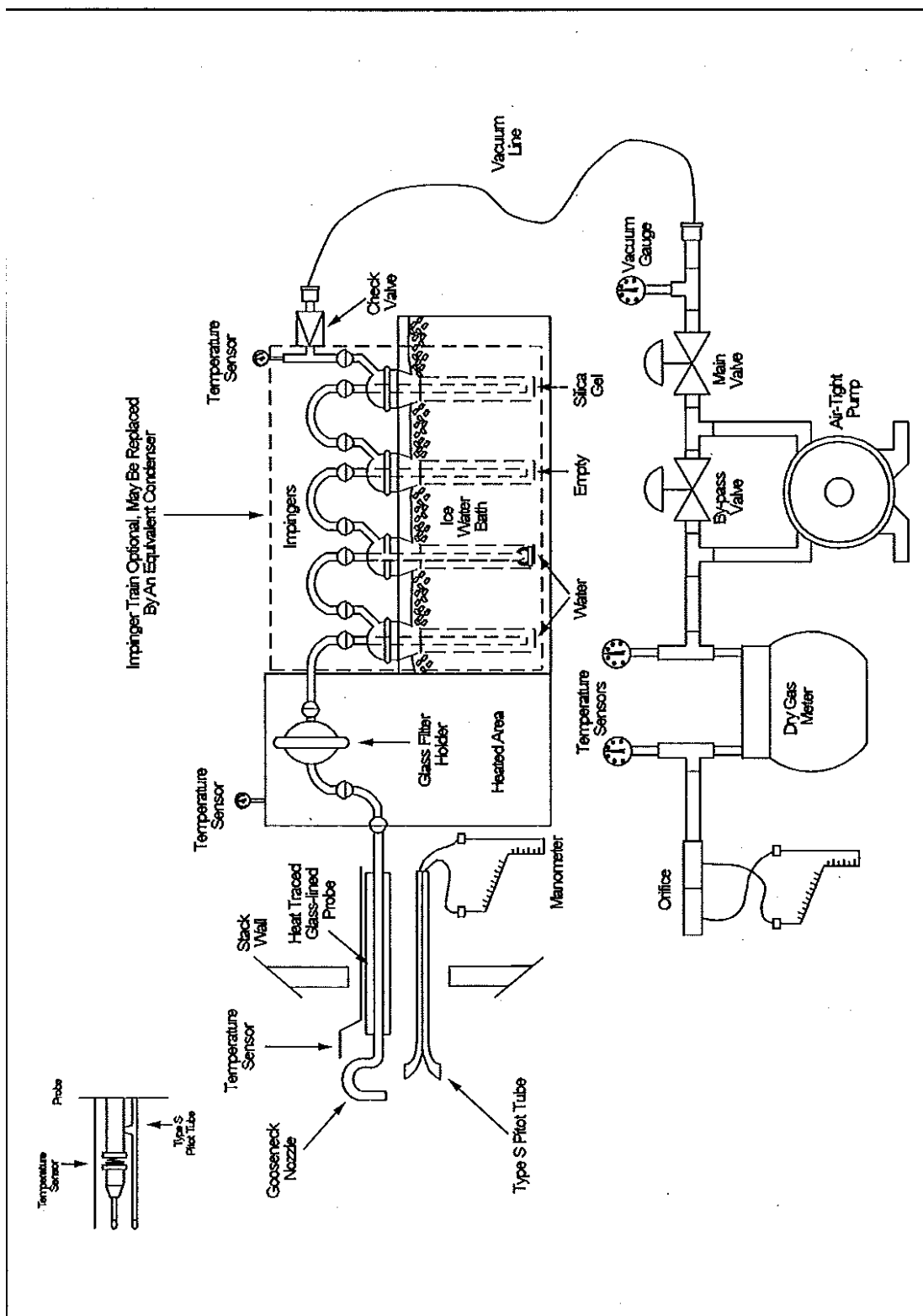
**9.14 Stack Gas Velocity and Volumetric Flow Rate:** Same as EPA Method 5 Section 12.12.



**10.0 Alternative Procedures, Bibliography, Sampling Train Schematic, Example Data Sheets, Etc.:**

Same as EPA Method 5 Sections 16, 17 and Figures 5-1 through 5-12 excluding Figure 5-6 (use ODEQ Method 5 Figures 5-2a through 5-2b in place of EPA Method 5 Figure 5-6).

Figure 5-1: Particulate Sampling Train



C-5.8

**Figure 5-2a**  
**METHOD 5 DATA ANALYSIS FORM**

**Plant** \_\_\_\_\_ **Run Number** \_\_\_\_\_

**Sample Location** \_\_\_\_\_ **Test Date** \_\_\_\_\_

**Sample Recovered by** \_\_\_\_\_

| Reagent                             | Date/Time | Weight<br>(g) | Audit*<br>(g) | Lab<br>Temp.<br>°F | Lab<br>RH<br>% | Analyst |
|-------------------------------------|-----------|---------------|---------------|--------------------|----------------|---------|
| <b>FRONT HALF:</b>                  |           |               |               |                    |                |         |
| <u>Filter</u>                       |           |               |               |                    |                |         |
| Filter ID: _____                    |           |               |               |                    |                |         |
| Tare Wt.: _____                     |           |               |               |                    |                |         |
| Date/time into<br>desiccator: _____ |           |               |               |                    |                |         |
| <u>Acetone</u>                      |           |               |               |                    |                |         |
| Beaker ID: _____                    |           |               |               |                    |                |         |
| Tare Wt.: _____                     |           |               |               |                    |                |         |
| Solv. Vol.: _____                   |           |               |               |                    |                |         |
| Solv. ID: _____                     |           |               |               |                    |                |         |
| Date/time into<br>desiccator: _____ |           |               |               |                    |                |         |
| <b>BACK HALF:</b>                   |           |               |               |                    |                |         |
| <u>Acetone</u>                      |           |               |               |                    |                |         |
| Beaker ID: _____                    |           |               |               |                    |                |         |
| Tare Wt.: _____                     |           |               |               |                    |                |         |
| Solv. Vol.: _____                   |           |               |               |                    |                |         |
| Solv. ID: _____                     |           |               |               |                    |                |         |
| Date/time into<br>desiccator: _____ |           |               |               |                    |                |         |
| <u>Water</u>                        |           |               |               |                    |                |         |
| Beaker ID: _____                    |           |               |               |                    |                |         |
| Tare Wt.: _____                     |           |               |               |                    |                |         |
| Water Vol.: _____                   |           |               |               |                    |                |         |
| Water ID: _____                     |           |               |               |                    |                |         |
| Date/time into<br>desiccator: _____ |           |               |               |                    |                |         |
| <u>MeCl or Hexane</u>               |           |               |               |                    |                |         |
| Beaker ID: _____                    |           |               |               |                    |                |         |
| Tare Wt.: _____                     |           |               |               |                    |                |         |
| Solv. Vol.: _____                   |           |               |               |                    |                |         |
| Solv. ID: _____                     |           |               |               |                    |                |         |
| Date/time into<br>desiccator: _____ |           |               |               |                    |                |         |

\*filter 0.5000 g ± 0.5 mg tolerance – NIST traceable Class S weight  
beaker 100.0000 g ± 0.5 mg tolerance – NIST traceable Class S weight

**Figure 5-2b**  
**METHOD 5 BLANK ANALYSIS DATA FORM**

Sample Prepared \_\_\_\_\_

Date \_\_\_\_\_

| Reagent                             | Date/Time | Weight<br>(g) | Audit*<br>(g) | Lab<br>Temp.<br>°F | Lab<br>RH<br>% | Analyst |
|-------------------------------------|-----------|---------------|---------------|--------------------|----------------|---------|
| <u>Filter</u>                       |           |               |               |                    |                |         |
| Filter ID: _____                    |           |               |               |                    |                |         |
| Tare Wt.: _____                     |           |               |               |                    |                |         |
| Date/time into<br>desiccator: _____ |           |               |               |                    |                |         |
|                                     |           |               |               |                    |                |         |
|                                     |           |               |               |                    |                |         |
| <u>Acetone</u>                      |           |               |               |                    |                |         |
| Beaker ID: _____                    |           |               |               |                    |                |         |
| Tare Wt.: _____                     |           |               |               |                    |                |         |
| Solv. Vol.: _____                   |           |               |               |                    |                |         |
| Solv. ID: _____                     |           |               |               |                    |                |         |
| Date/time into<br>desiccator: _____ |           |               |               |                    |                |         |
|                                     |           |               |               |                    |                |         |
|                                     |           |               |               |                    |                |         |
| <u>Water</u>                        |           |               |               |                    |                |         |
| Beaker ID: _____                    |           |               |               |                    |                |         |
| Tare Wt.: _____                     |           |               |               |                    |                |         |
| Water Vol.: _____                   |           |               |               |                    |                |         |
| Water ID: _____                     |           |               |               |                    |                |         |
| Date/time into<br>desiccator: _____ |           |               |               |                    |                |         |
|                                     |           |               |               |                    |                |         |
|                                     |           |               |               |                    |                |         |
| <u>MeCl or Hexane</u>               |           |               |               |                    |                |         |
| Beaker ID: _____                    |           |               |               |                    |                |         |
| Tare Wt.: _____                     |           |               |               |                    |                |         |
| Solv. Vol.: _____                   |           |               |               |                    |                |         |
| Solv. Wt.: _____                    |           |               |               |                    |                |         |
| Date/time into<br>desiccator: _____ |           |               |               |                    |                |         |
|                                     |           |               |               |                    |                |         |
|                                     |           |               |               |                    |                |         |

\*filter 0.5000 g  $\pm$  0.5 mg tolerance – NIST traceable Class S weight  
 beaker 100.0000 g  $\pm$  0.5 mg tolerance – NIST traceable Class S weight

**Figure 5-2c**  
**METHOD 5 TARE WEIGHT RECORD**

Indicate: filters or evaporation containers

[illegible]

# **SUB-APPENDIX C-7**

## **OREGON DEQ SOURCE SAMPLING METHOD 7**

## Oregon Method 7

### State of Oregon Department of Environmental Quality Source Sampling Method 7

#### Sampling Condensable Particulate Emissions from Stationary Sources

##### 1.0 Principle and Applicability

1.1 **Principle:** Particulate matter including condensable gases is withdrawn isokinetically from a flowing gas stream. The particulate matter is determined gravimetrically after extraction with an organic solvent and evaporation.

1.2 **Applicability:** This method is applicable to stationary sources whose primary emissions are condensable gases. It should be considered a modification of Source Sampling Method 5, and applied only when directed to do so by DEQ.

2.0 **Acceptability.** Results of this method will be accepted as demonstration of compliance (or non-compliance) provided that the methods included or referenced in this procedure are strictly adhered to and a report is prepared according to Section 2.11 of DEQ's Source Sampling Manual, Volume I. Deviations from the procedures described herein will be permitted only if permission from DEQ is obtained in writing in advance of the tests.

3.0 **Equipment and Supplies:** Same as Oregon Source Sampling Method 5 Sections 3.1 through 3.5 with the following addendum:

3.1 **Sampling train (Figure 7-1):** Same as Oregon Source Sampling Method 5 Section 3.1 with the following exceptions:

3.1.1 The heated filter and/or cyclone are optional, but should be used if a significant quantity of filterable particulate matter is present.

3.1.2 An unheated glass fiber filter is placed at the inlet to the silica gel impinger (generally Impinger 4).

4.0 **Reagents and Standards:** Same as Oregon Source Sampling Method 5 Section 4.1 through 4.3.

5.0 **Sample Collection, Preservation, Storage, and Transport:** Same as Oregon Source Sampling Method 5 Sections 5.1 through 5.8 with the following addenda:

5.1 **Preparation of Sampling Train:** Same as Oregon Source Sampling Method 5 Section 5.3 with the following addition:

- 5.1.1 Insert numbered and pre-weighed filters into each of the front (heated if used) and back (non-heated) filter holders.
- 5.2 **Sample Recovery:** Same as Oregon Source Sampling Method 5 Section 5.7 with the following addition:
  - 5.2.1 Container 6: Transfer the back filter to container No. 6.
- 6.0 **Quality Control:** Same as Oregon Source Sampling Method 5 Sections 6.1 and 6.2.
- 7.0 **Calibration and Standardization:** Same as Oregon Source Sampling Method 5 Sections 7.1 through 7.8.
- 8.0 **Analytical Procedures:** Same as Oregon Source Sampling Method 5 Sections 8.1 through 8.2 with the following addendums:
  - 8.1 Documentation: Analytical documentation shall be consistent with the data entry forms presented in Figure 7-2 of Oregon Source Sampling Method 7, and Figures 5-2b through 5-2c of Oregon Source Sampling Method 5
  - 8.2 Analysis: Same as Oregon Source Sampling Method 5 Section 8.2 with the following addition:
    - 8.2.1 **Container No. 6:** Desiccate the back filter in Container No. 6 for 24 hours at 70°F or less. Weigh the filter to a constant weight.

**Note:** In some cases, desiccation may cause slow vaporization of the condensable material. Therefore, if the weights continue to decrease over time and the sample is obviously dry, use the average of the first three weights to determine the particulate matter catch.
- 9.0 **Calculations:** Same as Oregon Source Sampling Method 5 Sections 9.1 through 9.14 with the following addendum:
  - 9.1 Total Particulate Weight: Determine the total particulate matter catch from the sum of the weights obtained from Containers 1 (if front filter is used), 2, 4, 5, & 6 (including the organic solvent extract of the water from Container No. 4), less the acetone, methylene chloride (or hexane), and distilled water blanks (see Figure 7-2).
- 10.0 **Alternative Procedures, Bibliography, Sampling Train Schematic, Example Data Sheets, Etc.:** Same as Oregon Source Sampling Method 5 Section 10.0 with the following addenda:
  - 10.1 An unheated glass fiber filter is placed at the inlet to the silica gel impinger (generally Impinger 4).
  - 10.2 Use ODEQ Method 7 Figure 7-2 in place of ODEQ Method 5 Figure 5-2a.



FIGURE 7-1. OREGON METHOD 7 SAMPLING APPARATUS

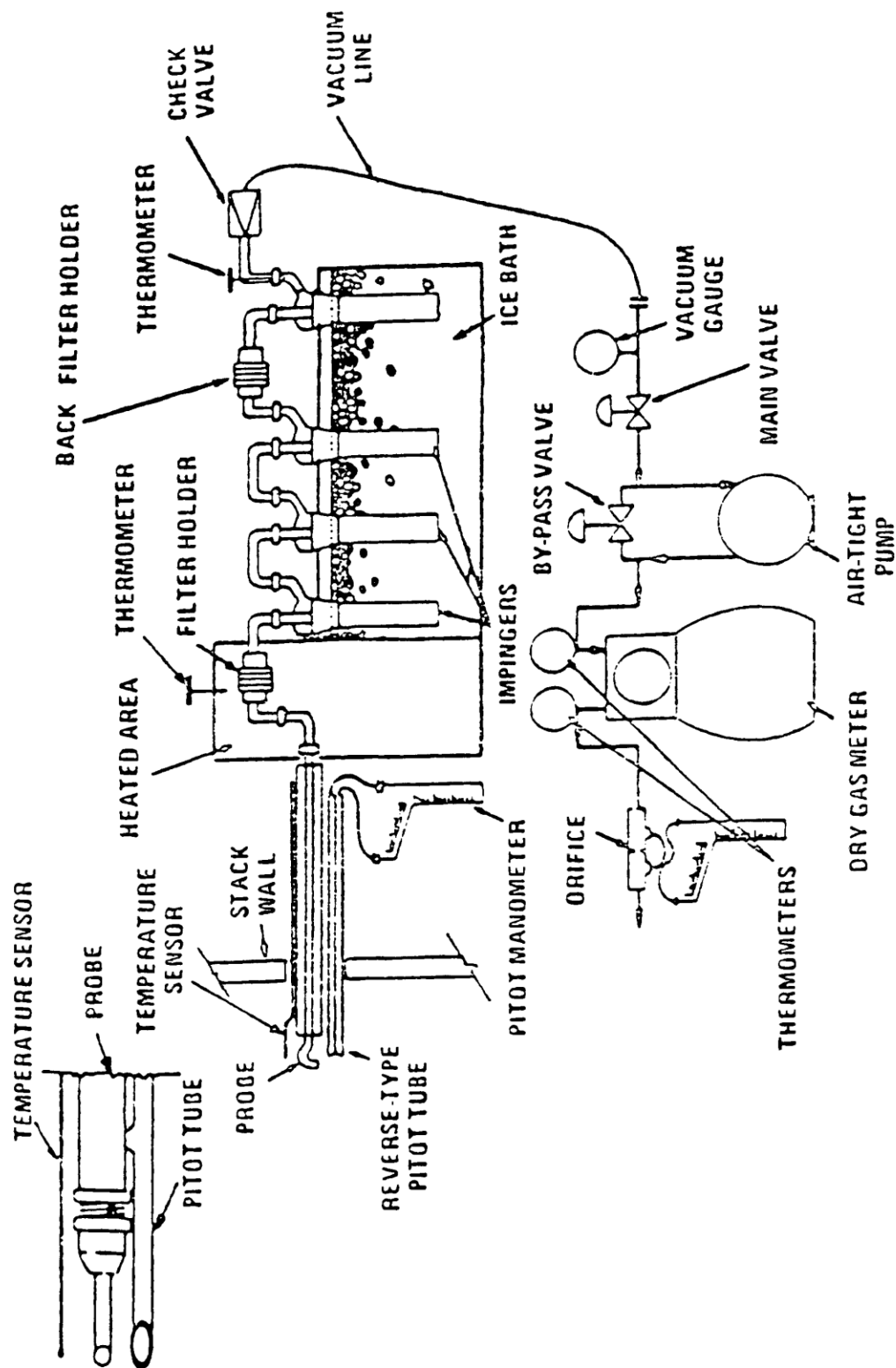


**Figure 7-2**  
**OREGON METHOD 7 DATA ANALYSIS FORM**

Facility \_\_\_\_\_ Run Number \_\_\_\_\_  
 Sample Location \_\_\_\_\_ Test Date \_\_\_\_\_  
 Sample Recovered by \_\_\_\_\_

| Reagent                             | Date/Time | Weight<br>(g) | Audit*<br>(g) | Lab<br>Temp.<br>°F | Lab<br>RH<br>% | Analyst |
|-------------------------------------|-----------|---------------|---------------|--------------------|----------------|---------|
| <b>FRONT HALF:</b>                  |           |               |               |                    |                |         |
| <u>Front Filter</u>                 |           |               |               |                    |                |         |
| Filter ID: _____                    |           |               |               |                    |                |         |
| Tare Wt.: _____                     |           |               |               |                    |                |         |
| Date/time into<br>desiccator: _____ |           |               |               |                    |                |         |
|                                     |           |               |               |                    |                |         |
| <u>Acetone</u>                      |           |               |               |                    |                |         |
| Beaker ID: _____                    |           |               |               |                    |                |         |
| Tare Wt.: _____                     |           |               |               |                    |                |         |
| Solv. Vol.: _____                   |           |               |               |                    |                |         |
| Solv. ID: _____                     |           |               |               |                    |                |         |
| Date/time into<br>desiccator: _____ |           |               |               |                    |                |         |
|                                     |           |               |               |                    |                |         |
| <b>BACK HALF:</b>                   |           |               |               |                    |                |         |
| <u>Back Filter</u>                  |           |               |               |                    |                |         |
| Filter ID: _____                    |           |               |               |                    |                |         |
| Tare Wt.: _____                     |           |               |               |                    |                |         |
| Date/time into<br>desiccator: _____ |           |               |               |                    |                |         |
|                                     |           |               |               |                    |                |         |
| <u>Acetone</u>                      |           |               |               |                    |                |         |
| Beaker ID: _____                    |           |               |               |                    |                |         |
| Tare Wt.: _____                     |           |               |               |                    |                |         |
| Solv. Vol.: _____                   |           |               |               |                    |                |         |
| Solv. ID: _____                     |           |               |               |                    |                |         |
| Date/time into<br>desiccator: _____ |           |               |               |                    |                |         |
|                                     |           |               |               |                    |                |         |
| <u>Water</u>                        |           |               |               |                    |                |         |
| Beaker ID: _____                    |           |               |               |                    |                |         |
| Tare Wt.: _____                     |           |               |               |                    |                |         |
| Water Vol.: _____                   |           |               |               |                    |                |         |
| Water ID: _____                     |           |               |               |                    |                |         |
| Date/time into<br>desiccator: _____ |           |               |               |                    |                |         |
|                                     |           |               |               |                    |                |         |
| <u>MeCl or Hexane</u>               |           |               |               |                    |                |         |
| Beaker ID: _____                    |           |               |               |                    |                |         |
| Tare Wt.: _____                     |           |               |               |                    |                |         |
| Solv. Vol.: _____                   |           |               |               |                    |                |         |
| Solv. ID: _____                     |           |               |               |                    |                |         |
| Date/time into<br>desiccator: _____ |           |               |               |                    |                |         |
|                                     |           |               |               |                    |                |         |

\*filter 0.5000 g ± 0.5 mg tolerance – NIST traceable Class S weight  
 beaker 100.0000 g ± 0.5 mg tolerance – NIST traceable Class S weight

# **SUB-APPENDIX C-8**

## **OREGON DEQ SOURCE SAMPLING METHOD 8**

## Oregon Method 8

### State of Oregon Department of Environmental Quality Source Sampling Method 8

#### Sampling Filterable Particulate Emissions from Stationary Sources (High Volume Method)

##### 1. Principle and Applicability

1.1 **Principle:** Particulate matter is withdrawn isokinetically from a flowing gas stream and deposited on a glass fiber filter. The particulate matter is determined gravimetrically after removal of uncombined water.

1.2 **Applicability:** This method is applicable to stationary sources whose exhaust points do not meet minimum EPA Method 1 flow disturbance requirements and whose primary emissions are solid (filterable) particulate. Its primary application is intended to be for wood product handling cyclones and baghouse exhaust systems. Caution must be taken when applying this method to sources with elevated exhaust temperatures and/or moistures as they may diminish the integrity of the sampling filter and damage the sampling apparatus.

2.0 **Acceptability:** Results from this method will be accepted as a demonstration of compliance (or non-compliance) provided that the methods included or referenced in this procedure are strictly adhered to and a report containing at least the minimum amount of information regarding the source is included as described in Section 2.11 of Oregon DEQ's Source Sampling Manual, Volume I. Deviations from the procedures described herein will be permitted only if permission from DEQ is obtained in writing in advance of the tests.

##### 3.0 Sampling Apparatus (Figure 8-1)

3.1 **Nozzle** - smooth metal construction with sharp leading edge. The nozzle shall be connected to the probe by means of a joint designed to minimize particulate matter deposition.

3.2 **Probe** - smooth metal construction. The probe shall be attached to the nozzle and filter holder with air-tight joints designed to minimize particulate matter deposition. The probe should be as short as possible.

3.3 **Filter Holder** - air-tight with support screen for the filter.

3.4 **Metering system** - a calibrated orifice followed by a thermometer or thermocouple and flow control device. The metering system shall be connected to the filter holder by means of an air-tight joint.

- 3.5 **Pitot Tube** – Standard pitot same as EPA Method 2, Sec. 6.7.1, or S-type same as EPA Method 2, Sec. 6.1, or equivalent.
- 3.6 **Blower** - high capacity (typically 60 cfm free air). The blower may be connected to the metering system by a flexible hose if desired.
- 3.7 **Probe-Nozzle Brush** - flexible, nylon bristle brush at least as long as the probe and nozzle.
- 3.8 **Differential Pressure Gauges** - liquid manometer, Magnehelic<sup>2</sup>, or equivalent.
- 3.9 **Barometer** - mercury, aneroid, or other type capable of measuring atmospheric pressure to within 0.1”Hg. If the barometric pressure is obtained from a nearby weather bureau station, the true station pressure (not corrected for elevation) must be obtained and an adjustment for elevation differences between the station and sampling site must be applied.
- 3.10 **Temperature Gauges** - Same as EPA Method 2 Section 6.3.
- 3.11 **Timer** - integrating type, accurate and readable to the nearest 6 seconds (tenth of a minute).
- 3.12 **Wash Bottles**: Same as EPA Method 5 Section 6.2.2 .
- 3.13 **Filter Storage Container** - clean manila envelopes and tagboards, or suitable equivalent.
- 3.14 **Sample Storage Containers** - glass with leak-tight cap that is resistant to attack by the solvent used, and allows complete recovery of particulate matter. Polyethylene bottles are also acceptable.

#### 4.0 Reagents and Standards

- 4.1 **Filters** - glass fiber filters, free of pinhole leaks or other imperfections and exhibiting at least 99.95% efficiency on 0.3 micron DOP smoke particles. Desiccate individually numbered filters for 24-hours and weigh to the nearest 0.5 mg before use.
- 4.2 **Rinse Solvent** - acetone, reagent-grade,  $\leq 0.001\%$  (0.008 mg/ml) residue. For aluminum probes and nozzles, methanol may be substituted for acetone. The same purity is required.

#### 5.0 Sample Train Preparation

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<sup>2</sup> Mention of trade names or specific products does not constitute endorsement by DEQ.

- 5.1 All parts of the sampling train shall be cleaned and properly calibrated as directed in Section 10.
- 5.2 Place a filter in the filter holder with the coarse side facing the flow, being careful not to damage it. Be certain that the filter is positioned so that no air can be drawn around the filter.
- 5.3 Assemble the sample train with the appropriate nozzle and length of probe. Perform a leak check by plugging the nozzle, turning on the blower, and observing the deflection of the flow orifice pressure gauge. The acceptable leakage rate shall not exceed 5% of the expected sample flow rate.

## 6.0 **Sample Collection, Preservation, Storage, and Transport**

- 6.1 Use a pitot tube to roughly map the velocity distribution across the face of the exhaust opening or duct. Areas of zero or negative flow should also be indicated if present. At each point at which the velocity is measured, measure the flow in the direction giving maximum deflection of the pitot pressure gauge. Record the data on a form similar to Figure 8-6.
- 6.2 Select six or more points of outgoing (positive) flow from the points measured in Section 6.1 to sample. The points shall be representative of the flow pattern, and shall include the point of maximum velocity. If six points of positive flow cannot be obtained, use the maximum number possible. Do not choose any points closer than 2 inches to the exhaust duct wall.

Alternatively, sample point locations may be determined utilizing criteria specified within EPA Method 1 if the minimum distances from upstream and downstream flow disturbances are met (Figure 1-1 of EPA Method 1).

- 6.3 Measure the exhaust temperature.
- 6.4 Determine the nozzle size required for isokinetic sampling. An estimate of the orifice temperature is required. For low temperature exhausts, the orifice temperature is usually very close to the exhaust temperature. For higher temperature exhausts, a trial run may be necessary to determine the expected orifice temperature.
- 6.5 Calculate the required orifice pressure drop for each chosen sampling point to obtain an isokinetic sample rate. With the probe out of the exhaust stream, turn on the blower and adjust the sample flow rate to that calculated for the first sampling point in Section 6.2. Locate the probe nozzle at the first sampling point, and immediately start the timer. Move the probe around until the velocity pressure matches that for which the sampling flow rate was pre-set. The probe nozzle must be pointing directly into the flow.
- 6.6 Continually monitor the velocity during the sampling period and move the probe around as required to keep it in an area where the velocity matches the original

velocity used to calculate the pre-set sampling rate. Record the sampling time, the orifice temperature, and orifice pressure drop on a data sheet similar to Figure 8-7. Record data every 5 minutes or once per sampling point, whichever is more frequent. Sample for a length of time so that the total sampling time for all points is at least 15 minutes and a minimum of 100 mg of particulate matter is collected.

- 6.7 Repeat steps 6.5 and 6.6 for each sampling point. The blower need not be turned off between points if readjustments to the new sampling rate can be made rapidly (less than 15 seconds).
- 6.8 Care should be taken so that the nozzle does not touch the walls of the exhaust stack because particulate matter may be dislodged and enter the sample train. If there is reason to believe this has happened, discontinue the sample, clean the train, and restart the test.
- 6.9 If excessive loading of the filter should occur such that isokinetic conditions cannot be maintained, replace the filter and continue the test.
- 6.10 At the conclusion of the sampling period, remove the probe from the exhaust and turn off the blower (do not reverse this order because the filter may be broken and sample lost). Plug the nozzle to prevent sample loss, and transport to the sample recovery area.
- 6.11 Conduct a post-test leak check (as per Section 5.3).
- 6.12 Measure the moisture content, molecular weight, and the pressure (absolute) of the exhaust gas. In most cases, the moisture may be measured by the wet bulb/dry bulb technique as described in Oregon Source Sampling Method 4. The molecular weight shall be measured by EPA Method 3 or 3a. If the exhaust gas being sampled is ambient air, the dry molecular weight can be assumed to equal 29 lbs/lb mol (29 g/g mol). If feasible, these supplemental measurements should be conducted during each PM sample run. Otherwise, these supplemental measurements should be conducted immediately prior to and immediately following each PM sample run. The process operating parameters realized during these supplemental measurements must be consistent with the parameters encountered during the PM sampling collection.

## 7.0 **Sample Recovery**

- 7.1 Remove the nozzle plug, turn on the blower, insert the probe brush into the nozzle, and brush the particulate from the nozzle and probe onto the filter. Do not insert the brush so far in that it will come into contact with the filter. Turn off the blower and recover the PM adhered to the brush. This brushing process must be performed after every PM sample run.
- 7.2 Open the filter holder and carefully remove the filter. Inspect the filter for holes or tears. A leak around the filter is likely if particulate deposits are found at the edge of the filter. If any of these problems are found, the observations should be recorded on

the field data sheet and the sample should be voided (repeat the run). Fold the filter once lengthwise with the dirty side in, and place in a folded manila tagboard (or equivalent), folded edge down. Fasten the outside edge of the tagboard (or equivalent) with a paper clip, and place in the manila envelope (or equivalent). Be aware that some filter material will likely remain on the gasket and filter support. If possible, these filter remains should be removed with a spatula and placed within the folded filter.

- 7.3 Rinse the inside front of the filter holder, probe, and nozzle with a measured amount of acetone or methanol while brushing. Repeat the rinsing/brushing until all particulate and filter remains is removed as evidenced by a lack of visible residue on the inside surfaces after evaporation of the acetone or methanol. Be sure to also recover the PM matter adhered to the recovery brushes. Retain the acetone or methanol rinse and a blank sample of the acetone or methanol in labeled containers for laboratory analysis. This rinsing process must be performed after every PM sample run.

## 8.0 Analytical Procedures

- 8.1 Desiccate the filter for 24-hours at room temperature (70°F or less), and weigh to a constant weight to the nearest 0.5mg.

**NOTE:** Make certain that any particulate that may have dislodged from the filter into the tagboard or envelope (or their equivalent) is returned to the filter before weighing. Alternatively, the filter and corresponding filter receptacle (envelope) may be tared simultaneously and analyzed collectively. In this case, the filter receptacle must be opened prior to being placed in the desiccator to instigate sample drying.

Since the relatively large filter and particulate catch may be hygroscopic, weigh immediately upon removal from the desiccator.

- 8.2 Filter blanks shall be run in the field before and after the complete source testing activity. A minimum of 2 filter blanks shall be collected for each source test. This is accomplished by inserting a pre-weighed filter into the filter holder, performing a leak check, removing the filter, and treating it as a sample filter in accordance with Section 7.2.
- 8.3 Quantitatively transfer the solvent rinse and blank solvent to tared beakers or evaporating dishes, evaporate at room temperature (70°F or less) and pressure, desiccate, and weigh to a constant weight to the nearest 0.5 mg.

- 8.4 Record the data on forms similar to Figures 8-2, 8-3, 8-4, and 8-5.

## 9.0 Exhaust Gas Flow Rate Measurement

- 9.1 If the PM sampling location does not satisfy the flow disturbance requirements of EPA Method 1, then an alternate sampling location shall be selected for a velocity



traverse. The velocity traverse location shall meet EPA Method 1 requirements and should accurately represent the flow rate to the atmosphere at the particulate sampling point (i.e., no air flows should be added to or removed from the system between the velocity and the particulate sampling points).

- 9.2 The dry molecular weight of the gas stream shall be determined as per EPA Method 3 or 3a. If the exhaust gas being sampled is ambient air, the dry molecular weight can be assumed to equal 29 lbs/lb mol (29 g/g mol).
- 9.3 In most cases, the moisture may be measured by the wet bulb/dry bulb technique as described in Oregon Source Sampling Method 4. If Oregon Source Sampling Method 4 is not applicable, then exhaust moisture must be measured as per EPA Method 4.
- 9.4 The flow rate shall be measured as per EPA Method 2 at the location specified by Section 9.1 of this DEQ method.
- 9.5 If possible, the flow rate (including velocity, molecular weight, & moisture) should be measured during each PM sample run. Alternatively, these supplemental measurements should be conducted immediately prior to and immediately following each PM sample run. The process operating parameters realized during these supplemental measurements must be consistent with the parameters encountered during the PM sampling collection.

## 10.0 Calibration

- 10.1 The orifice flow meter shall be calibrated at least once within twelve months of the sampling date using a primary standard or a device which has been calibrated against a primary standard. The calibration data and calibration curves for the orifice and intermediate standard shall be included in the source test report, along with documentation of the primary standard.
- 10.2 All S-type pitot tubes, differential pressure gauges, and thermometers or thermocouples, shall be calibrated at least once within six months of the sampling date. The calibration data and/or calibration curves shall be included in the source test report.
- 10.3 The calibration records shall include the date, place, and method of calibration.
- 10.4 Differential pressure gauges (if not liquid manometers) shall be calibrated against a liquid manometer.
- 10.5 The following calibration and standardization procedures must be performed on the analytical balance:
  - 10.5.1 The balance must be audited utilizing 0.500 g, 1.0000 g, 10.0000 g, 50.0000 g, and 100.0000 g Class-S standard weights. Alternatively, five (5) Class-S standard weights may be substituted that accurately represent the anticipated measurement range. The balance results must agree within  $\pm 1$  mg of the Class-S

weights. At a minimum, the balance calibration must be performed subsequent to disturbing the analytical balance and annually thereafter.

10.5.2 Prior to weighing filters before and after sampling, adjust the analytical balance to zero and check the accuracy with a 5 g Class-S weight. A Class-S standard weight within 1 g of the filter weight may be used as an alternate. The balance results must agree within  $\pm 0.5$  mg and the temperature in the weighing environment must be  $\leq 70^\circ\text{F}$ .

10.5.3 Prior to weighing beakers before and after sampling, adjust the analytical balance to zero and check the accuracy with a 100 g Class-S standard weight. A Class-S standard weight within 1 g of the beaker weight may be used as an alternate. The balance results must agree within  $\pm 0.5$  mg and the temperature in the weighing environment must be  $\leq 70^\circ\text{F}$ .

## 11.0 Calculations

11.1 Total particulate emissions from the system shall be calculated by multiplying the measured particulate concentration by the flow rate through the exhaust system. An index to the parameters utilized in these calculations are as follows:

$B_{ws}$  = Moisture content of sample stream as per EPA 4 or ODEQ 4, vol./vol.

$C_g$  = Calculated PM concentration, gr/dscf.

$C_p$  = Pitot tube coefficient for Method 8 apparatus, typically 0.99

$D_n$  = Sample nozzle diameter, inches.

$\sqrt{dp}$  = Average square root of velocity pressures measured at sample points,  $(\text{H}_2\text{O})^{1/2}$ .

$E$  = PM emission rate, lb/hr

$I$  = Isokinetic sampling rate percentage, %

$M_c$  = Molecular weight of gas stream used to calibrate orifice, typically 29.0 #/mol.

$m_n$  = Mass of PM recovered from sampling apparatus, mg

$M_s$  = Molecular weight of sample gas stream on a wet basis, #/mol.

$P_{b_s}$  = Barometric pressure during the course of sampling, "Hg.

$P_s$  = Absolute exhaust pressure at sampling location, "Hg.

$Q_{s_{std}}$  = Standard exhaust gas flow rate, dscfm

$SR_{std}$  = Standard sample rate (wet) as indicated by calibration curve, scfm

$SR_{std}'$  = Corrected standard sample rate (wet) for temp., pressure, & molecular weight, scfm.

$SR_{std}'_i$  = Corrected standard sample rate (wet) at sample point "i", scfm.

$T_{o_s}$  = Orifice temperature measured at sample point, °R.

$T_s$  = Average exhaust temperature at sampling location, °R

$V_{std}'$  = Standard sample volume (dry) of entire test replicate, dscf.

$\emptyset$  = Sampling time of entire test replicate, min.

$\emptyset_i$  = Sampling time at sample point "i", min.

11.2 Particulate Concentration: The following calculations shall be conducted for each test run:

11.2.1 Total Sample Weight: Calculate the total sample weight from laboratory results by adding the net weight gain of the filter sample(s), adjusted for a blank value, to the net weight of particulate matter collected in the acetone (or methanol) rinse, corrected for an acetone (or methanol) blank. Record the results on a laboratory form similar to Figure 8-5.

11.2.2 Sampling Rate: Sample flow rates for each point shall be determined from the orifice calibration curve. Typically, the orifice calibration curve is a plot of orifice pressure drop versus sample flow rates at standard temperature and pressure. Some calibration curves account for varying orifice temperatures, but rarely do they adjust for orifice pressure and gaseous molecular weight.

Consequently, the calibration curve must be corrected to accurately reflect the relationship between the orifice differential pressure and the standard sampling flow rate. The correction to the standard sampling flow rate for a constant orifice differential is specified by Equation 8.11-1.

$$SRstd' = 4.2 \times SRstd \times \sqrt{\frac{Pb_s}{To_s}} \times \sqrt{\frac{Mc}{Ms}} \quad (Eq. 8.11-1)$$

Note: Equation 8.11-1 only applies to the calibration curve that represents an orifice temperature of 68° F and an orifice pressure of 29.92”Hg. Set Mc equal to Ms (Mc:Ms ratio of 1) if sample gas is mainly comprised of air with Bws less than 0.05 vol./vol.

11.2.3 Total Sample Gas Volume: Calculate the sample gas volume by multiplying each sample point duration in minutes, times the average sample rate (wet standard cubic feet per minute – wscfm) as determined using the orifice calibration curve and the corrected sample rate from Equation 8.11-1. Add the volume of all sample points and adjust for exhaust gas moisture to get the total dry standard sample gas volume for the entire test run as shown by Equation 8.11-2.

$$Vstd' = \left[ \sum_{i=1}^n SRstd'_i \times \phi_i \right] \times [1 - Bws] \quad (Eq. 8.11-2)$$

- 11.2.4 Calculate the particulate concentration in gr/dscf by the following equation:

$$C_g = 0.0154 \times \frac{m_n}{V_{std}'} \quad (Eq. 8.11-3)$$

- 11.3 Total Exhaust Gas Flow Rate: Use EPA Method 2 calculations to determine the total exhaust gas flow rate using the data obtained from Section 9 of this DEQ method. For some cyclones, the total flow may be adjusted to account for air purposely vented out the bottom of the cyclone.

- 11.4 Total Emissions: Calculate the total particulate emission rate (lb/hr) by the following equation:

$$E = 0.00857 \times C_g \times Q_{s_{std}} \quad (Eq. 8.11-4)$$

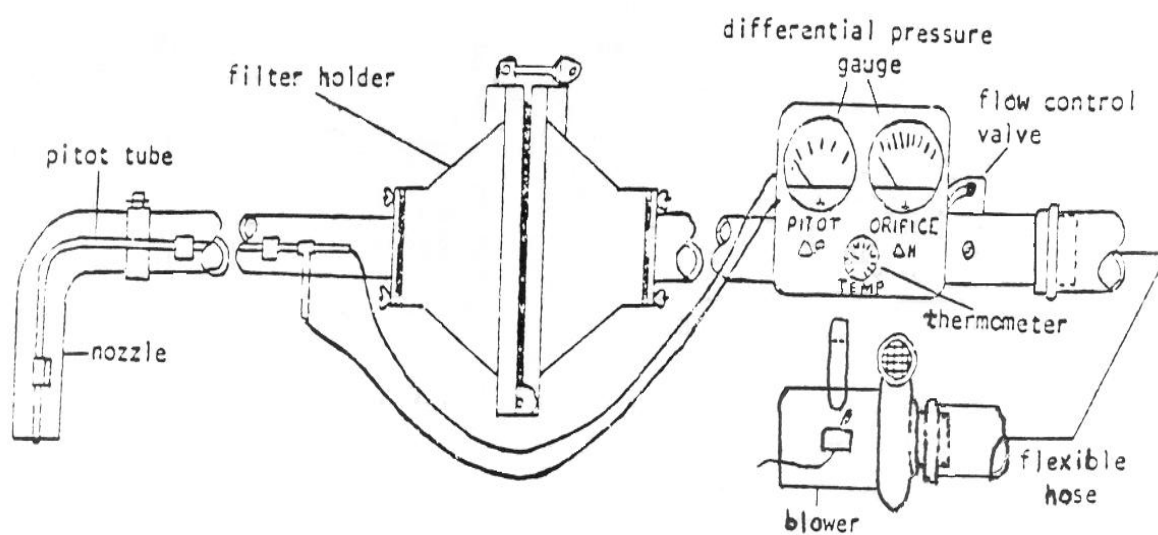
- 11.5 Percent Isokinetic Sampling Rate: Calculate the isokinetic sampling rate, defined as the ratio of the average velocity of the sample gas entering the sample nozzle to the average sample point velocity. In order to achieve acceptable results, the value of this parameter must be between 80% and 120%. Test results falling outside this range shall be discarded, and the test repeated.

$$I = 0.2017 \times \frac{V_{std}'}{\phi \times (1 - Bws) \times Dn^2 \times Cp \times \sqrt{dp}} \times \sqrt{\frac{(Ts + 460) \times Ms}{Ps}} \quad (Eq. 8.11-5)$$

## 12.0 Test Reports

The test report shall include as a minimum the information requested in Section 2.11 of this manual.

Figure 8-1



C-8.10

**Figure 8-2**  
**METHOD 8 DATA ANALYSIS FORM**

Facility \_\_\_\_\_ Run Number \_\_\_\_\_  
 Sample Location \_\_\_\_\_ Test Date \_\_\_\_\_  
 Sample Recovered by \_\_\_\_\_

| Reagent        | Date/Time | Weight<br>(g) | Audit*<br>(g) | Lab<br>Temp.<br>°F | Lab<br>RH<br>% | Analyst |
|----------------|-----------|---------------|---------------|--------------------|----------------|---------|
| <u>Filter</u>  |           |               |               |                    |                |         |
| Filter         |           |               |               |                    |                |         |
| ID: _____      |           |               |               |                    |                |         |
| Tare           |           |               |               |                    |                |         |
| Wt.: _____     |           |               |               |                    |                |         |
| Date/time into |           |               |               |                    |                |         |
| desiccator:    |           |               |               |                    |                |         |
| _____          |           |               |               |                    |                |         |
| <u>Acetone</u> |           |               |               |                    |                |         |
| Beaker         |           |               |               |                    |                |         |
| ID: _____      |           |               |               |                    |                |         |
| Tare           |           |               |               |                    |                |         |
| Wt.: _____     |           |               |               |                    |                |         |
| Solv.          |           |               |               |                    |                |         |
| Vol.: _____    |           |               |               |                    |                |         |
| Solv.          |           |               |               |                    |                |         |
| ID: _____      |           |               |               |                    |                |         |
| Date/time into |           |               |               |                    |                |         |
| desiccator:    |           |               |               |                    |                |         |
| _____          |           |               |               |                    |                |         |

\*filter 5.0000 g  $\pm$  0.5 mg tolerance – NIST traceable Class S weight  
 beaker 100.0000 g  $\pm$  0.5 mg tolerance – NIST traceable Class S weight

**Figure 8-3**  
**METHOD 8 BLANK ANALYSIS DATA FORM**

**Samples Prepared by** \_\_\_\_\_ **Date** \_\_\_\_\_

| Reagent                | Date/Time | Weight<br>(g) | Audit*<br>(g) | Lab<br>Temp.<br>°F | Lab<br>RH<br>% | Analyst |
|------------------------|-----------|---------------|---------------|--------------------|----------------|---------|
| <u>Pre Test Blank</u>  |           |               |               |                    |                |         |
| <u>Filter</u>          |           |               |               |                    |                |         |
| Filter<br>ID: _____    |           |               |               |                    |                |         |
| Tare                   |           |               |               |                    |                |         |
| Wt.: _____             |           |               |               |                    |                |         |
|                        |           |               |               |                    |                |         |
| <u>Post Test Blank</u> |           |               |               |                    |                |         |
| <u>Filter</u>          |           |               |               |                    |                |         |
| Filter<br>ID: _____    |           |               |               |                    |                |         |
| Tare                   |           |               |               |                    |                |         |
| Wt.: _____             |           |               |               |                    |                |         |
|                        |           |               |               |                    |                |         |
| <u>Blank Acetone</u>   |           |               |               |                    |                |         |
| Beaker                 |           |               |               |                    |                |         |
| ID: _____              |           |               |               |                    |                |         |
| Tare                   |           |               |               |                    |                |         |
| Wt.: _____             |           |               |               |                    |                |         |
| Solv.                  |           |               |               |                    |                |         |
| Vol.: _____            |           |               |               |                    |                |         |
| Solv.                  |           |               |               |                    |                |         |
| ID: _____              |           |               |               |                    |                |         |
|                        |           |               |               |                    |                |         |

\*filter 5.0000 g  $\pm$  0.5 mg tolerance – NIST traceable Class S weight

beaker 100.0000 g  $\pm$  0.5 mg tolerance – NIST traceable Class S weight

**Figure 8-4**  
**METHOD 8 TARE WEIGHT RECORD**

Indicate: filters or evaporation containers (beakers)

[illegible]



**Figure 8-5**  
**METHOD 8 ANALYSIS SUMMARY**

Facility \_\_\_\_\_ Run Number \_\_\_\_\_  
 Sample Location \_\_\_\_\_ Test Date \_\_\_\_\_  
 Sample Recovered by \_\_\_\_\_

| ANALYSIS                      | RUN _____ | RUN _____ | RUN _____ | RUN _____ | RUN _____ |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|
| <b>SAMPLE FILTER</b>          |           |           |           |           |           |
| Filter ID                     |           |           |           |           |           |
| Gross Weight, mg              |           |           |           |           |           |
| Tare Weight, mg               |           |           |           |           |           |
| Net Weight, mg                |           |           |           |           |           |
| <b>PRE TEST BLANK FILTER</b>  |           |           |           |           |           |
| Filter ID                     |           |           |           |           |           |
| Gross Weight, mg              |           |           |           |           |           |
| Tare Weight, mg               |           |           |           |           |           |
| Net Weight, mg                |           |           |           |           |           |
| <b>POST TEST BLANK FILTER</b> |           |           |           |           |           |
| Filter ID                     |           |           |           |           |           |
| Gross Weight, mg              |           |           |           |           |           |
| Tare Weight, mg               |           |           |           |           |           |
| Net Weight, mg                |           |           |           |           |           |
| <b>ACETONE RINSE</b>          |           |           |           |           |           |
| Acetone ID                    |           |           |           |           |           |
| Acetone Volume, mls           |           |           |           |           |           |
| Gross Weight, mg              |           |           |           |           |           |
| Tare Weight, mg               |           |           |           |           |           |
| Net Weight, mg                |           |           |           |           |           |
| <b>ACETONE BLANK</b>          |           |           |           |           |           |
| Acetone ID                    |           |           |           |           |           |
| Acetone Blk Vol., mls         |           |           |           |           |           |
| Gross Weight, mg              |           |           |           |           |           |
| Tare Weight, mg               |           |           |           |           |           |
| Net Weight, mg                |           |           |           |           |           |
| Net Weight, mg/ml             |           |           |           |           |           |
| <b>TOTAL PM RECOVERY*</b>     |           |           |           |           |           |
| PM Recovered, mg              |           |           |           |           |           |

\*Total PM = (Filter) – (Average (pre-test blank & post-test blank)) + (Acetone Rinse) – (Acetone Blank Corrected for Rinse Volume). Note: The blank corrections for the filter and/or rinse samples are '0', if the blank filter or rinse samples yield negative weight gains.

**Figure 8-6**  
**VELOCITY PRE-SURVEY**

Plant Name & Location \_\_\_\_\_  
 Date \_\_\_\_\_ Time \_\_\_\_\_ By (name) \_\_\_\_\_  
 Source Location or ID \_\_\_\_\_

☐ Low Pressure System    ☐ High Pressure System

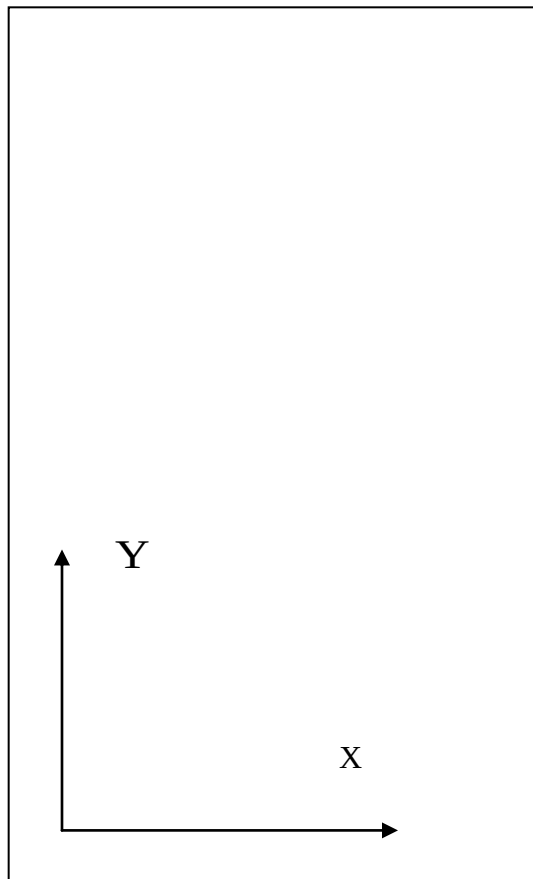
Type of Exhaust:    ☐ Straight Vertical    ☐ China Hat

☐ Goose-Neck    ☐ Other (specify) \_\_\_\_\_

Temperature: Dry Bulb \_\_\_\_\_°F    Wet Bulb \_\_\_\_\_°F

Velocity Survey:    Record velocity head at enough points to roughly map the velocity distribution across the exhaust cross-section. Select six points for sample collection and show in diagram.

| Point | X<br>inches | Y<br>inches | $\Delta P$<br>“ H <sub>2</sub> O | Check if<br>selected<br>( ) |
|-------|-------------|-------------|----------------------------------|-----------------------------|
| 1     |             |             |                                  |                             |
| 2     |             |             |                                  |                             |
| 3     |             |             |                                  |                             |
| 4     |             |             |                                  |                             |
| 5     |             |             |                                  |                             |
| 6     |             |             |                                  |                             |
| 7     |             |             |                                  |                             |
| 8     |             |             |                                  |                             |
| 9     |             |             |                                  |                             |
| 10    |             |             |                                  |                             |
| 11    |             |             |                                  |                             |
| 12    |             |             |                                  |                             |



C-8.15

|         |  |  |  |  |
|---------|--|--|--|--|
| Average |  |  |  |  |
|---------|--|--|--|--|

Figure 8-7

## Sampling Data and Field Analysis

Plant Name/Location \_\_\_\_\_ Source Identification \_\_\_\_\_ Run # \_\_\_\_\_

Date \_\_\_\_\_ Time \_\_\_\_\_ By (name) \_\_\_\_\_ Process Operation During Test: \_\_\_\_\_

Temperature: Dry bulb \_\_\_\_\_, Wet bulb \_\_\_\_\_ %Moisture \_\_\_\_\_ Ambient \_\_\_\_\_

Gas composition: %O<sub>2</sub> \_\_\_\_\_ %CO<sub>2</sub> \_\_\_\_\_ Pitot factor (C<sub>p</sub>) \_\_\_\_\_Static Press (P<sub>g</sub>) \_\_\_\_\_ "H<sub>2</sub>ONozzle Dia. \_\_\_\_\_ Nozzle area (A<sub>n</sub>) \_\_\_\_\_ Barometric Pressure(P<sub>b</sub>) \_\_\_\_\_ in. H<sub>g</sub>

| Pt.           | Location |   | Velocity Pressure |     | Orifice ΔH                    |                             | Orifice Temperature<br>°F | Sample Time<br>minutes | Sample Rate Indicated by Calibration Curve<br>scfm | Sample Rate Corrected for Sampling Conditions<br>scfm | Sample Volume<br>dscf |
|---------------|----------|---|-------------------|-----|-------------------------------|-----------------------------|---------------------------|------------------------|----------------------------------------------------|-------------------------------------------------------|-----------------------|
|               | X        | Y | ΔP                | √ΔP | Pre-set<br>" H <sub>2</sub> O | Actual<br>"H <sub>2</sub> O |                           |                        |                                                    |                                                       |                       |
| 1             |          |   |                   |     |                               |                             |                           |                        |                                                    |                                                       |                       |
| 2             |          |   |                   |     |                               |                             |                           |                        |                                                    |                                                       |                       |
| 3             |          |   |                   |     |                               |                             |                           |                        |                                                    |                                                       |                       |
| 4             |          |   |                   |     |                               |                             |                           |                        |                                                    |                                                       |                       |
| 5             |          |   |                   |     |                               |                             |                           |                        |                                                    |                                                       |                       |
| 6             |          |   |                   |     |                               |                             |                           |                        |                                                    |                                                       |                       |
| Avg. or Total |          |   | --                |     | --                            | --                          |                           |                        | --                                                 |                                                       |                       |

|                              |  |
|------------------------------|--|
| Sample Filter ID:            |  |
| Acetone ID:                  |  |
| Acetone Volume, mls.         |  |
| Pre Test Blank Filter ID:    |  |
| Post Test Blank Filter , ID: |  |



# **APPENDIX D**

## **GENERAL CALIBRATION REQUIREMENTS**

### **FOR OREGON SOURCE SAMPLING METHODS**

**Table D-1: CALIBRATION REQUIREMENTS FOR OREGON DEQ SOURCE SAMPLING METHODS**

| Measurement Equipment                                                                                                                                                                                                                                                                                        | Reference                                                                  | Calibration Points                      | Frequency                 | Acceptance Criteria                           | Applicable ODEQ Method |    |    |    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|-----------------------------------------|---------------------------|-----------------------------------------------|------------------------|----|----|----|
|                                                                                                                                                                                                                                                                                                              |                                                                            |                                         |                           |                                               | M4                     | M5 | M7 | M8 |
| TEMPERATURE MEASURING DEVICES                                                                                                                                                                                                                                                                                |                                                                            |                                         |                           |                                               |                        |    |    |    |
| Stack/Exhaust                                                                                                                                                                                                                                                                                                | ASTM mercury thermometer, NIST traceable, or thermocouple/potentiometer    | 32°F & 212°F or Sec. 10.3 of EPA M2     | every 6 months or EPA M2  | ±1.5% absolute                                | X                      | X  | X  | X  |
| Oven/Filter                                                                                                                                                                                                                                                                                                  | ASTM mercury thermometer, or NIST traceable                                | 32°F & 212°F                            | every 6 months            | ±1.5% absolute                                |                        | X  | X  |    |
| Impinger Exit                                                                                                                                                                                                                                                                                                | ASTM mercury thermometer, or NIST traceable                                | 32°F & 212°F                            | every 6 months            | ±1.5% absolute                                |                        | X  | X  |    |
| Dry Gas Meter                                                                                                                                                                                                                                                                                                | ASTM mercury thermometer, or NIST traceable                                | 32°F & 212°F                            | every 6 months            | ±1.5% absolute                                |                        | X  | X  |    |
| Orifice Meter                                                                                                                                                                                                                                                                                                | ASTM mercury thermometer, or NIST traceable                                | 32°F & 212°F                            | every 6 months            | ±1.5% absolute                                |                        |    |    | X  |
| Note: The entire measurement system including readout shall be calibrated. All thermocouples should be checked before each source test. This could be accomplished by noting on the field data sheets that all of the thermocouples and/or thermometers register the same temperature at ambient conditions. |                                                                            |                                         |                           |                                               |                        |    |    |    |
| SAMPLE NOZZLE                                                                                                                                                                                                                                                                                                |                                                                            |                                         |                           |                                               |                        |    |    |    |
| Sample Nozzle (initial & thereafter)                                                                                                                                                                                                                                                                         | micrometer                                                                 | 3 diameters                             | 12 months & after repair  | high minus low ≤0.004”                        |                        | X  | X  | X  |
| Sample Nozzle (pre-test)                                                                                                                                                                                                                                                                                     | visual inspection                                                          | tapered edge of opening                 | prior to each field use   | no nicks, dents, or corrosion                 |                        | X  | X  | X  |
| PITOT TUBES                                                                                                                                                                                                                                                                                                  |                                                                            |                                         |                           |                                               |                        |    |    |    |
| S-type pitot tube (preferred procedure)                                                                                                                                                                                                                                                                      | standard pitot tube (Cp=0.99)                                              | 800; 1,500; 3,000; & 4,500 fpm          | every 6 months            | mean deviation ≤0.01<br>A & B deviation ≤0.01 |                        | X  | X  | X  |
| S-type pitot tube (D <sub>i</sub> , P <sub>A</sub> , P <sub>B</sub> , x, Z, & W in limits)                                                                                                                                                                                                                   | specifications illustrated in Method 2, Figures, 2-2, 2-3, 2-4, 2-7, & 2-8 | face alignments & dynamic interferences | pre & post each field use | EPA Method 2                                  |                        | X  | X  | X  |
| Standard pitot tube                                                                                                                                                                                                                                                                                          | specifications of EPA Method 2, Section 6.7 and Figure 2-5                 | static pressure holes location & size   | prior to initial use      | ≥ 6 D to tip, ≥8 D to bend, 0.1D hole diam.   |                        | X  | X  | X  |

Note: Where inconsistencies exist, quality assurance requirements specified by method supersede those presented within Tables D-1 & D-2.

**Table D-2: CALIBRATION REQUIREMENTS FOR OREGON DEQ SOURCE SAMPLING METHODS**

| Measurement Equipment                         | Reference                                          | Calibration Points                                       | Frequency                  | Acceptance Criteria                                            | Applicable ODEQ Method |    |    |    |
|-----------------------------------------------|----------------------------------------------------|----------------------------------------------------------|----------------------------|----------------------------------------------------------------|------------------------|----|----|----|
|                                               |                                                    |                                                          |                            |                                                                | M4                     | M5 | M7 | M8 |
| SAMPLE VOLUME METERING EQUIPMENT              |                                                    |                                                          |                            |                                                                |                        |    |    |    |
| Dry Gas Meter (pre test)                      | standard meter                                     | 3 orifice pressures (1.0”, 2.0”, & 3.0”H <sub>2</sub> O) | every 6 months             | Y ± 0.02 from average<br>ΔH@ ±0.2 from average                 |                        | X  | X  |    |
| Dry Gas Meter (post test)                     | standard meter                                     | 3 replicates at avg. ΔH and max. vacuum during test      | following each source test | Y <sub>post</sub> ±5% of Y <sub>pre</sub>                      |                        | X  | X  |    |
| Standard Gas Meter (dry gas meter)            | spirometer or wet test meter                       | 5 orifice pressures over range                           | annual                     | Y <sub>max</sub> – Y <sub>min</sub> ≤ 0.030<br>0.95 ≤ Y ≤ 1.05 |                        | X  | X  |    |
| Standard Gas Meter (wet test meter)           | spirometer                                         | 3 flow rates (0.25, 0.5, & 0.75 cfm)                     | annual                     | deviation ≤ 1%                                                 |                        | X  | X  |    |
| High-Volume Orifice (pre test)                | standard orifice or meter (or approved equivalent) | 7 settings over full range of orifice                    | every 12 months            | demonstrate linearity on a logarithmic plot                    |                        |    |    | X  |
| Critical Orifices (as a calibration standard) | standard meter                                     | duplicate runs for each orifice                          | every 6 months             | K’ ± 0.5% from average                                         |                        | X  | X  |    |
| MISCELLANEOUS EQUIPMENT                       |                                                    |                                                          |                            |                                                                |                        |    |    |    |
| Magnehelic <sup>3</sup>                       | liquid manometer                                   | 3 points over range                                      | after each field use       | ±5%                                                            |                        | X  | X  | X  |
| Barometer (aneroid type)                      | mercury barometer                                  | one point                                                | annual                     | ± 0.1”Hg                                                       | X                      | X  | X  | X  |

Note: Where inconsistencies exist, quality assurance requirements specified by method supersede those presented within Table D-1 & D-2.

<sup>3</sup> Mention of trade names or specific products does not constitute endorsement by DEQ.

# **Draft Source Sampling Manual**

## **Volume II**



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and enhancing the  
quality of Oregon's air,  
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# DEQ METHOD 30

Test Procedures for Determining the Efficiency of  
Gasoline Vapor Recovery Systems at Service Stations

STATE OF OREGON  
DEPARTMENT OF ENVIRONMENTAL QUALITY

DEQ Air Quality Program  
Portland, Oregon  
December 1, 1980

Revisions:  
May 15, 1981  
January 23, 1992

# Method 30

## Test Procedures for Determining the Efficiency of Gasoline vapor recovery systems at Service Stations and Similar Facilities with Small Storage Tanks

### 1.0 Introduction

The following test procedures are for determining the efficiency of vapor recovery systems for controlling gasoline vapors emitted during the filling of small storage tanks.

The test procedure for determining the efficiency of systems for controlling gasoline vapors displaced during filling of storage tanks requires determination of the weight of gasoline vapors vented through the storage tank vent and the volume of gasoline dispersed. The percentage effectiveness of control is then calculated from these values.

During the performance test, maintenance, adjustment, replacement of components or other such alteration of the control system is not allowed unless such action is specifically called for in the system's maintenance manual. Any such allowable alteration shall be recorded and included in the test report. During the testing, the control system will be sealed in such a manner that unauthorized maintenance may be detected. Maintenance is to be performed only after notification of the person in charge of the testing, except in case of emergency. Unauthorized maintenance may be reason for immediate failure of the test.

For systems which are identical in design and include the same components as systems tested and found to comply with the test procedures, but differ, primarily in size, the owner or vendor may demonstrate compliance capability and obtain approval by submitting engineering and/or test data demonstrating the relationship between capacity and throughput of each component whose performance is a function of throughput. Examples of such components include: blowers, catalyst, carbon or other absorbent, compressors, heat exchangers, combustors, piping, etc.

For the purpose of determining compliance with applicable Administrative Rules, equipment on systems with 90 percent or greater control efficiency shall be considered to be vapor tight.

### 2.0 Acceptance of Test Results

Results of this method will be accepted as a demonstration of compliance status of the equipment tested, provided that the methods included or referenced in this procedure are strictly adhered to. A statement containing at least the minimum amount of information regarding the test procedures applied should be included with the results.

Deviations from the procedure described herein will be permitted only if permission from DEQ is obtained in writing in advance of the test.



## 3.0 Small Storage Tank Filling (Phase I Systems):

### 3.1 Principle and Applicability:

**3.1.1 Principle:** During a fuel delivery, the volume of gasoline delivered from the tank to the storage tank is recorded and the concentration of gasoline vapor returning to the tank truck is measured. The weight of gasoline vapor discharged from the vent of the storage tank and, if applicable, from the vent of the vacuum assisted secondary processing unit during the same period is determined. The efficiency of control is calculated from these determinations.

**3.1.2. Applicability:** The method is applicable to all control systems which have a vapor line connecting the storage tank to the tank truck.

The storage tank is filled by submerged fill.

### 3.2. Test Equipment

**3.2.1.** For each vent, including restricted vents and vents of any processing units, a positive displacement meter, with a capacity of 3,000 standard cubic feet per hour (SCFH), a pressure drop of no more than 0.05 inches of water at an air flow of 30 SCFH, and equipped with an automatic data gathering system that can differentiate direction of flow and record volume vented in such a manner that this data can be correlated with simultaneously recorded hydrocarbon concentration data. A manifold for meter outlet with taps for a hydrocarbon (HC) analyzer, a thermocouple, and a pressure sensor is to be used with the positive displacement meter.

**3.2.2.** Coupling for the vent vapor line to connect the gas meter. Coupling to be sized so as to create no significant additional pressure drop in the system.

**3.2.3.** Coupling for the vent of the vacuum assisted secondary processing unit to connect the gas meter. Coupling to be sized as to create no significant additional pressure drop on the system.

**3.2.4.** Coupling for tank truck vapor line with thermocouple, manometer and HC analyzer taps. Coupling to be the same diameter as the vapor return line.

**3.2.5.** Coupling for tank truck fuel drop line with thermocouple tap. Coupling to be the same diameter as the fuel line.

**3.2.6.** Two (2) hydrocarbon analyzers (Flame Ionization Detector, FID, or DEQ approved equivalent) with recorders and with a capacity of measuring total gasoline vapor concentration of 100 percent as propane. Both analyzers to be of same make and model.

**3.2.7.** Three (3) flexible thermocouples or thermistors (0-150°F) with a recorder system.

**3.2.8.** Explosimeter

**3.2.9.** Barometer

**3.2.10.** Three (3) manometers or other pressure sensing devices capable of measuring zero to ten inches of water.

**3.2.11.** Thermometer

### **3.3 Testing Procedure:**

**3.3.1.** The test during filling operating will be conducted under, as closely as feasible, normal conditions for the station. Normal conditions will include delivery time and station operating conditions.

**3.3.2.** Connect manifold to outlet of positive displacement meter and restriction to system vent of underground tank using the coupler, or if the vent has a restriction, remove the restriction and connect the coupler, manifold and outlet. If appropriate, connect another manifold and meter to the vent of the vacuum assisted secondary processing unit. If the system uses an incinerator to control emissions, use test procedures set forth in Section 4.0.

**3.3.3.** Connect the HC analyzer with recorder, thermocouple and manometer to the vent manifold. Calibrate the equipment in accordance with Section 6.0.

**3.3.4.** Connect the couplers to the tank truck fuel and vapor return lines.

**3.3.5.** Connect an HC analyzer with a recorder, a manometer and a thermocoupler to the taps on the coupler on the vapor return line.

**3.3.6.** Connect tank fuel and vapor return lines to appropriate underground tank lines in accordance with written procedure for the system.

**3.3.7.** Check the tank truck and all vapor line connections for a tight seal before and during the test with the explosimeter.

**3.3.8.** Record the initial reading of gas meter(s).

**3.3.9.** Start filling of the storage tank in accordance with manufacturers' established normal procedure.

**3.3.10.** Hydrocarbon concentrations, temperature and pressure measurements should be recorded using stripchart recorders within the first 15 seconds of the unloading period. The gas meter reading is to be taken at 120 second intervals.

**3.3.11.** Record at the start and the end of the test, barometric pressure and ambient temperature.

**3.3.12.** At the end of the drop, disconnect the tank truck from the storage tank in accordance with manufacturers' instructions (normal procedures). Leave the underground vent instrumentation in place.

**3.3.13.** Continue recording hydrocarbon concentrations, temperature, pressure and gas meter readings at the storage tank vent and/or the exhaust of any processing unit at 20 minute intervals. Do this for one hour for balance systems and until the system returns to normal conditions as specified by the manufacturer for secondary systems.

**3.3.14.** Disconnect instrumentation from the vent(s).

**3.3.15.** Record volume of gasoline that is delivered.

**3.3.16.** Record final reading of gas meter.

### 3.4. Calculations:

**3.4.1.** Volume of gas discharged through "i<sub>th</sub>" vent (V<sub>vi</sub>). This includes underground tank vent and any other control system vent.

$$V_{vsi} = \frac{V_{vi} \times 528 \times P_b}{T_{vi} \times 29.92} \text{ (ft}^3\text{)}$$

Where:

V<sub>vsi</sub> = Volume of gas discharged through "i<sub>th</sub>" vent, corrected to 68°F and 29.92 in. Hg; (ft<sup>3</sup>).

P<sub>b</sub> = Barometric Pressure, (in. Hg).

V<sub>vi</sub> = Volume of gas recorded by meter on "i<sub>th</sub>" vent, corrected for amount of vapor removed for the hydrocarbon analysis, (ft<sup>3</sup>).

T<sub>vi</sub> = Average temperature in "i<sub>th</sub>" vent line, (°R).

"i<sub>th</sub>" = The vent under consideration.

**3.4.2.** Volume of gas returned to the tank truck, (V<sub>t</sub>) corrected to 68°F and 29.92 in. Hg.

$$V_t = \frac{0.1337 \times G_t \times [528(P_b + \Delta H)]}{T_t \times 29.92} \text{ (ft}^3\text{)}$$

Where:

G<sub>t</sub> = Volume of gasoline delivered, (gal)

$\Delta H$  = Final gauge pressure of truck tank, (in Hg)

T<sub>t</sub> = Average temperature of gas returned to tank truck, (°R)

P<sub>b</sub> = Barometric pressure, (in. Hg)

$T_t$  = Average temperature of gas returned to tank truck, (°R)

$P_b$  = Barometric pressure, (in. Hg)

0.1337 = Conversion factor gallons to  $ft^3$

### 3.4.3. Control Efficiency (E%):

$$E\% = \frac{V_t \times C_t \times 100}{(V_t \times C_t) + \sum(C_{vi} \times V_{vsi})}$$

Where:

$E\%$  = the efficiency of control in percent.

$V_t$  = From 3.4.2 above

$C_t$  = The average fractional volume concentration of gasoline vapor in the return line to the truck as determined by the hydrocarbon analyzer, (decimal fraction).

$C_{vi}$  = The average fractional volume concentration of gasoline vapor in the "ith" vent as determined by the hydrocarbon analyzer, (decimal fraction).

$V_{vsi}$  = From 3.4.1. above.

## 4.0 Test Procedure for Determining the Control Efficiency of Gasoline Vapor Incinerators

### 4.1. Principle and Applicability:

**4.1.1. Principle:** Hydrocarbon and carbon dioxide concentrations in the exhaust gases, and gas volume and HC concentrations in the inlet vapor, and ambient carbon dioxide concentrations are measured. These values are used to calculate the incinerator HC control efficiency and mass emission rate based on a carbon balance.

**4.1.2. Applicability:** This method is applicable as a performance test method for gasoline vapor control incinerators.

### 4.2. Test Scope and Conditions:

**4.2.1. Station Status:** The procedure is designed to measure incinerator control efficiency under conditions that may be considered normal for the station under test. All dispensing pumps interconnected with or sharing the control system under test shall remain open as is normal. Vehicles shall be fueled as is normal for the test period.

**4.2.2. Fuel Reid Vapor Pressure (RVP):** The RVP of the fuel dispensed during the test shall be within the range normal for the geographic location and time of the year.

### **4.3. Test Equipment:**

**4.3.1. HC Analyzers:** HC analyzers using flame ionization detectors calibrated with known concentrations of propane in air are used to measure HC concentrations at both the incinerator inlet and exhaust. A suitable continuous recorder is required to record real-time output from the HC analyzers.

**4.3.2 Sample System:** The sample probe is to be of a material unaffected by combustion gases (S.S. 307, 316, 3365, etc.). The sample pump should be oil-less and leak-tight. Sample lines are to be inert, teflon is recommended. A thermocouple (0-2000°F) shall be used to monitor temperature of exhaust gases at the inlet to sampling system.

**4.3.3 Carbon Dioxide Analyzer:** A non-dispersive infrared analyzer calibrated with known quantities of CO<sub>2</sub> concentrations in the exhaust gas.

**4.3.4** Other equipment is specified in Section 3.2.

### **4.4 Test Procedure:**

**4.4.1** The sampling point should be located in the exhaust stack down-stream of the burner far enough to permit complete mixing of the combustion gases. For most sources, this point is at least eight stack diameters downstream of any interference and two diameters upstream of the stack exit. There are many cases where these conditions cannot be met. The sample point should be no less than one stack diameter from the stack exit and one stack diameter above the high point of the flame and be a point of maximum velocity head as determined by the number of equal areas of a cross-section of the stack. The inlet sampling location is in the system inlet line routing vapors to the burner. A HC sample tap, a pressure sensor tap, and a thermocouple connection to monitor gas temperature must be installed on the inlet side of the volume meter.

**4.4.2** Span and calibrate all monitors. Connect sampling probes, pumps and recorders to the monitors and mount sampling probes in the stack and at the inlet.

**4.4.3** Mark strip charts at the start of the test period and proceed with HC, CO<sub>2</sub>, and volume measurements for at least three burning cycles of the system. The total sampling time should be at least three hours. Sampling for HCs and CO<sub>2</sub> must occur simultaneously. At the end of each cycle, disconnect CO<sub>2</sub> instrument and obtain an ambient air sample. This step requires that the CO<sub>2</sub> instrument be calibrated for the lower concentrations expected at ambient levels.

**4.4.4** The quantity of gasoline dispensed during each test shall be recorded.

### **4.5 Calculations:**

$CO_{2e}$  = Carbon dioxide concentration in the exhaust gas (ppmv).

$CO_{2a}$  = Average carbon dioxide concentration in the ambient air (ppmv).

$HC_i$  = Hydrocarbon concentration in the inlet gas to the burner (ppmv as propane).

$HC_e$  = Hydrocarbon concentration in the exhaust (ppmv as propane).

$L_d$  = Gasoline liquid volume dispensed during test period (gallons).

$P_i$  = Static pressure at inlet meter (in Hg).

$T_i$  = Temperature of gas at inlet meter ( $^{\circ}R$ ).

$V_i$  = Inlet gas volume ( $ft.^3$ ).

$F$  = Dilution Factor.

$51.8 \times 10^{-6}$  = Multiplication factor to convert parts per million by volume as propane to grams per cubic foot at  $68^{\circ}F$ . ( $52.7 \times 10^{-6}$  at  $68^{\circ}F$ )

**4.5.1** Calculate the standard total gas volume ( $V_s$ ) at the burner inlet for each test. (Standard temperature  $68^{\circ}F$ , standard pressure 29.92 in Hg)

$$V_s = V_i \times \frac{(P_i + P_b)}{(T_i)} \times \frac{528}{29.92} \text{ (SCF)} \quad (1)$$

**4.5.2** Calculate an average vapor volume to liquid volume ( $v/l$ ) at the inlet for each test.

$$(v/l)_i = \frac{V_s}{L_d}, \text{ (SCF/gal)} \quad (2)$$

**4.5.3** Calculate the mass emission rate  $(m/l)_i$  at the inlet for each test.

$$(m/l)_i = 51.8 \times 10^{-6} \times HC_i \times (v/l)_i, \text{ (g/gal)} \quad (3)$$

**4.5.4** A carbon dilution factor ( $F$ ) can be calculated for the incinerator using the inlet and outlet HC concentrations and the ambient  $CO_2$  concentration. The important criterion for this is that all the significant carbon sources be measured. The values used in the calculation should represent average values obtained from strip chart readings using integration techniques. Some systems have more than one burning mode of operation. For these, it is desirable to have high and low emission levels calculated. This requires that corresponding dilution factors,  $(v/l)$  values and  $(m/l)_i$  values be calculated for each period in question.

$$F = \frac{HC_i}{HC_e + \frac{(CO_{2e} - CO_{2a})}{3}} \quad (4)$$

- 4.5.5** The mass emission rate at the exhaust,  $(m/l)_e$ , is calculated using the inlet  $(m/l)_i$  from equation (3) and the carbon dilution factor from equation (4). The exhaust HC concentration will vary with time and operation of the system. It is likely that, in addition to an overall average mass emission rate using an average  $HC_i$ , several peak values of  $(m/l)_e$  will be required as discussed above. If some correlations between  $HC_i$  and  $HC_e$  occur over the burning cycle of the system, this calculation should be used to show the change in mass emission rate.

$$(m/l)_e = \frac{F \times HC_e}{HC_i} \times (m/l)_i \text{ g/gal} \quad (5)$$

- 4.5.6** Mass control efficiency (E%) can be calculated for an average value over each interval. It represents the reduction of hydrocarbon mass achieved by the incinerator system and this efficiency can vary depending on the loading cycle or the inlet loading.

$$E\% = 100 [1 - (F \times HC_e)/(HC_i)] \quad (6)$$

## 5.0 Acceptance of Systems:

When a system is accepted, it will have certain physical features, such as piping sizes and configurations, which may have to be modified to accommodate the requirements of each installation. Because the pressure drops and other characteristics of the system are influenced by these features and these in turn influence effectiveness, it may be necessary to condition acceptance upon certain criteria which account for physical parameters such as pressure drops and flow rates. When systems are tested for acceptance, these parameters must be ascertained. Some of the conditions that may be imposed upon an acceptance are:

- 5.1** Allowable pressure drop in the lines leading from the dispensing nozzle to the underground tank.
- 5.2** The method of calculating the pressure drop.
- 5.3** The model of dispensing nozzle which may be used.
- 5.4** The manner in which vapor return lines may be manifolded.
- 5.5** The type of restriction to be placed on the vent of the underground tank.
- 5.6** The number of dispensing nozzles which may be serviced by a secondary system.
- 5.7** Allowable delivery rates.
- 5.8** Use of the system on full-service stations only.

## **6.0 Calibration of Equipment:**

- 6.1** Standard methods of equipment shall be used to calibrate the flow meters. The calibration curves to be traceable to National Institute of Standards & Technology (NIST) standards.
- 6.2** Calibrate temperature recording instruments immediately prior to test period and immediately following test period using ice water (32°F) and a known temperature source about 100°F.
- 6.3** Calibrate pressure sensing and recording instructions (transducers) prior to the Phase I test with a static pressure calibrator for a range of -3 to +3 inches water or appropriate range of operation. Zero the transducers after each individual test.
- 6.4** Flame ionization detectors or equivalent total hydrocarbon analyzers are acceptable for measurement of exhaust hydrocarbon concentrations. Calibrations should be performed following the manufacturer's instructions for warm-up time and adjustments. Calibration gases should be propane in hydrocarbon-free air prepared with measured quantities of 100 percent propane. A calibration curve shall be produced using a minimum of five (5) prepared calibration gases in the range of concentrations expected during testing. The calibration of the instrument need not be performed on site, but shall be performed prior to and immediately following the test program. During the test program, the HC analyzer shall be spanned on site with zero gas (3 ppmv C) and with 30 percent and 70 percent concentrations of propane in hydrocarbon-free air at a level near the highest concentration expected. The spanning procedure shall be performed at least twice each test day.

The HC calibration cylinders must be checked against a reference cylinder maintained in the laboratory before each field test. This information must be entered into a log identifying each cylinder by serial number. The reference cylinder must be checked against a primary standard every six months and the results recorded. The reference cylinder is to be discarded when the assayed value changes more than one percent, and when the cylinder pressure drops to 10 percent of the original pressure.

- 6.5** Non-dispersive infrared analyzers are acceptable for measurement of exhaust CO<sub>2</sub> concentrations. Calibrations should be performed following the manufacturer's instructions. Calibration gases should be known concentrations of CO<sub>2</sub> in the air. A calibration shall be prepared using a minimum of five prepared calibration gases in the range of concentration expected. The calibration of the instrument need not be performed on site but shall be performed immediately prior to and immediately following the test program. During the testing, the analyzer shall be spanned with a known concentration of CO<sub>2</sub> in the air at a level near the highest concentration expected. The spanning procedure shall occur at least twice per test day.
- 6.6** The barometer shall be calibrated against an NIST traceable standard at least once every 6 months.
- 6.7** A record of all calibrations must be maintained and submitted with the test report.



## **7.0 Alternate Equipment**

Alternate equipment and techniques may be used if prior written approval is obtained from DEQ.

## **8.0 Recordkeeping:**

A record of the results for tests which are performed for compliance determination shall be maintained at the facility site according to OAR 340-232-0080 and 340-232-0100.

## FIGURE A – DISPLACEMENT SYSTEM

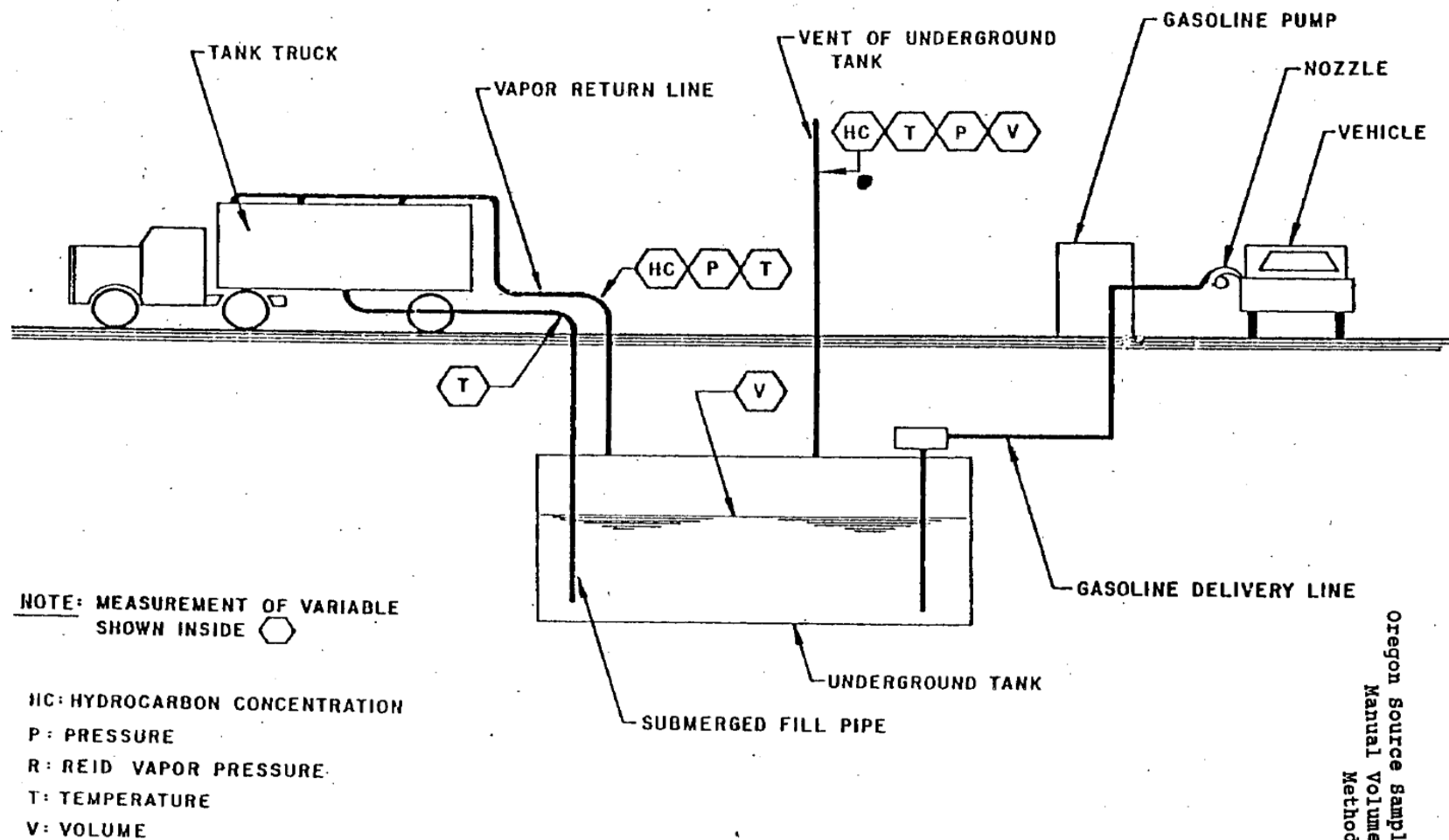
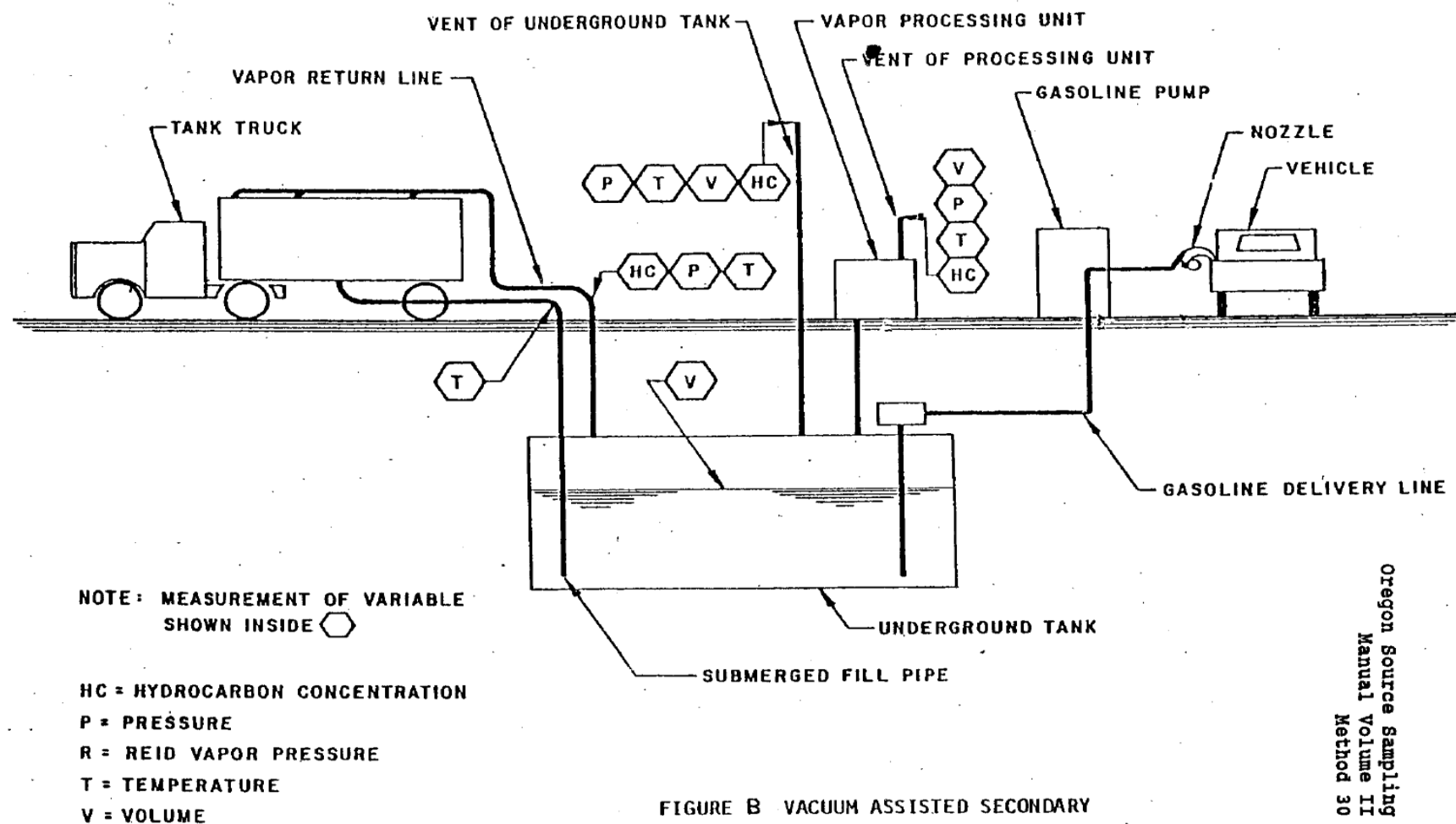


FIGURE A DISPLACEMENT SYSTEM

Oregon Source Sampling  
Manual Volume II  
Method 30

# FIGURE B – VACUUM ASSISTED SECONDARY



# DEQ METHOD 31

Test Procedures for Determining the Efficiency of  
Vapor Control Systems at Gasoline Bulk Plants

STATE OF OREGON  
DEPARTMENT OF ENVIRONMENTAL QUALITY

DEQ Air Quality Program  
Portland, Oregon  
December 1, 1980

Revisions:  
May 15, 1981  
January 23, 1992

# Method 31

## Test Procedures for Determining the Efficiency of Vapor Control Systems at Gasoline Bulk Plants

### 1.0 Introduction:

#### 1.1 Principle:

Hydrocarbon mass emissions are determined directly using flowmeters and hydrocarbon analyzers.

The mass of hydrocarbon vapor to be controlled or recovered is determined from the volume of gasoline dispensed (either to the bulk storage tank or delivery tank) by pressure, temperature, and concentration measurements of the vapor.

The efficiency of the gasoline vapor control system is determined from the mass of the hydrocarbons emitted and the mass of hydrocarbons controlled.

For purposes of determining compliance with applicable Administrative Rules, equipment on systems with 90 percent or greater control efficiency shall be considered to be vapor tight.

#### 1.2 Applicability:

These procedures are applicable for testing gasoline vapor recovery systems installed at bulk plants for controlling gasoline vapors emitted during the load of bulk storage tanks and for loading of delivery tanks from bulk tanks. Filling of storage tanks will be by submerged fill.

### 2.0 Acceptance Of Test Results:

**2.1** Results of this method will be accepted as a demonstration of compliance of the equipment tested, provided that the methods included or referenced in this procedure are strictly adhered to. A statement containing at least the minimum amount of information regarding the test procedures applied should be included with the results.

Deviations from the procedure described herein will be permitted only if permission from DEQ is obtained in writing in advance of the test.

### 3.0 Definitions:

#### 3.1 Bulk Gasoline Plant:

"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.

### **3.2 Delivery Vessel:**

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

### **3.3 Vapor Balance System:**

"Vapor Balance System" means a combination of pipes and/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.

### **3.4 Secondary Processing Unit:**

"Secondary Processing Unit" means a gasoline vapor control system which utilizes some process as a means of elimination or recovering gasoline vapors which otherwise would be vented to the atmosphere during the transfer of gasoline to or from a bulk plant.

## **4.0 Test Of Vapor Recovery System For Delivery Of Gasoline To The Bulk Plants:**

### **4.1 Application:**

The following test procedures are for determining the efficiency of vapor recovery systems controlling gasoline vapors emitted during the loading of bulk plant storage tanks.

### **4.2 Principle and Test Conditions:**

**4.2.1 Principle:** During a fuel delivery to the bulk plant, direct measurements of hydrocarbon concentrations and volume of hydrocarbon vapors vented (including emissions from any vapor processing unit) are made. All possible points of emission are checked for vapor leads. The volume of gasoline delivery from the delivery tank to the bulk plant is recorded and the concentration of the hydrocarbon vapors returned to the delivery tank is measured. The efficiency of control is calculated from these determinations.

**4.2.2 Test Conditions:** The number of transport deliveries to be tested shall be established by DEQ based on an engineering evaluation of the system. As close as possible, the system shall be tested under normal operating conditions. (Dispensing rates shall be at the maximum rate possible consistent with safe and normal operating practices. The processing unit, if any, shall be operated in accordance with the manufacturer's established parameters. Simultaneous use of more than one dispenser during loading of bulk storage tanks shall occur to the extent that such would normally occur.)

### **4.3 Equipment Required for Bulk Plant Testing:**

**4.3.1** Two (2) positive displacement dry gas meters each with a capacity of 3,000 standard cubic feet per hour (SCFH) a readability of one cubic foot and a maximum pressure drop of not more than 0.50 inches of water at a flowrate of 30 SCFH.

- 4.3.2 Two (2) hydrocarbon (HC) analyzers with recorders and with the capability of measuring total gasoline vapor concentration of 100 percent as propane. Both analyzers to be of same make and model, either Flame Ionization Detector or a DEQ approved equivalent.
- 4.3.3 Three (3) flexible thermocouples or thermistors (0-150°F) with a temperature recorder system having a readability of 1°.
- 4.3.4 Barometer (Aneroid or Mercury),  $\pm 0.1$  in. Hg. readability.
- 4.3.5 Two (2) manometers or other pressure sensing devices capable of measuring zero to ten inches of water with a readability of 0.1 inches of water.
- 4.3.6 Coupling for the vent vapor line to accommodate the gas meter, with thermocouple and pressure taps. Coupling to be sized for a minimum pressure drop.
- 4.3.7 Coupling for the vent of the secondary processing unit, if used, to accommodate the flow measuring device with the thermocouple, pressure and hydrocarbon analyzer taps. Coupling to be sized for a minimum pressure drop.
- 4.3.8 Coupling for delivery tank vapor return line with thermocouple, pressure and hydrocarbon analyzer taps. Coupling to be the same diameter as the vapor return line.
- 4.3.9 Two (2) adjustable pressure/vacuum (PV) relief valves capable of replacing the PV relief valve on the storage tank vent.
- 4.3.10 Coupling for attaching the PV valve to the dry gas meter. (Appendix Figure A)
- 4.3.11 Explosimeter.

#### **4.4 Bulk Plant Storage Tank Loading Test Procedure (Figure A):**

- 4.4.1 Connect appropriate coupler to vent of bulk plant, or if the vent has a PV valve, remove the PV valve and then connect the coupler to the vent. If a Secondary Processing Unit is used, also connect a coupler to the vent of the secondary processing unit.
- 4.4.2 Connect the appropriate gas meter, HC analyzer with recorder, thermocouple and manometer to the vent coupler and connect the PV valve to the gas meter.
- 4.4.3 Connect appropriate coupler to the delivery tank vapor return lines.
- 4.4.4 Connect the HC analyzer with a recorder, a manometer and a thermocouple to the taps on the vapor return line.
- 4.4.5 Connect delivery tank fuel and vapor return lines to appropriate bulk tank lines in accordance with the owner's or operator's established procedures for the system.
- 4.4.6 Check the delivery tank and all connections for a tight seal with explosimeter before and during the test.

- 4.4.7** Record the initial reading of the gas meter(s).
- 4.4.8** Start loading of the bulk tank in accordance with owner's or operator's established normal procedure.
- 4.4.9** Hydrocarbon concentrations, temperature and pressure measurements should be recorded starting after the first 15 seconds of the loading periods followed by 60 second intervals. The gas meter readings must be taken at least every 120 seconds.
- 4.4.10** Record barometric pressure and ambient temperature during the test.
- 4.4.11** At the end of the bulk tank delivery, disconnect the delivery tank from the bulk tank in accordance with owner's or operator's instructions (normal procedure). Leave the bulk tank vent instrumentation in place.
- 4.4.12** Continue recording hydrocarbon concentrations, temperature, pressure, and gas meter readings at the bulk tank vent at 20 minute intervals for one hour after the last bulk transfer is made.
- 4.4.13** Disconnect instrumentation from the vent.
- 4.4.14** Record volume of gasoline that is delivered.
- 4.4.15** Record final reading of gas meter(s).

## **4.5 Calculations:**

- 4.5.1** Volume of gas discharged through "i th" vent. This includes bulk tank vent and any control system vent.

$$V_{vsi} = \frac{V_{vi} \times 528 \times P_b}{T_{vi} \times 29.92}$$

Where:

$V_{vsi}$  = Volume of gas discharged through "i th" vent corrected to 68°F and 29.92 in. Hg, \ (ft<sup>3</sup>).

$P_b$  = Barometric pressure, (in. Hg).

$V_{vi}$  = Volume of gas recorded by meter on "ith" vent corrected for amount of vapor removed for the hydrocarbon analysis, (ft<sup>3</sup>).

$T_{vi}$  = Average temperature in "i th" vent line, (°R).

- 4.5.2** Volume of gasoline vapor returned to the tank truck.

$$V_t = 0.1337G_t \times 528(P_b + P)$$



$$T_t \times 29.92$$

Where:

$P_b$  = Barometric pressure, (in. Hg).

$V_t$  = Volume of gasoline vapor, corrected to 68°F and 29.92 in. Hg., (ft<sup>3</sup>)

$G_t$  = Volume of gasoline delivered, (gal.).

$P$  = Final Gauge pressure of tank truck, (in. Hg).

$T_t$  = Average temperature of vapor returned to tank truck (°R).

0.1337 = Conversion factor, (gallons to ft<sup>3</sup>). 1 US gal. = 0.1337 ft<sup>3</sup>.

#### 4.5.3 Efficiency of Vapor Control System

$$E = \frac{V_t \times C_t - (C_{vi} \times V_{vsi})}{(V_t \times C_t)} \times 100$$

Where:

$E$  = the efficiency of control in percent.

$C_t$  = The average fractional volumetric concentration of gasoline vapors in the return line to the truck as determined by the hydrocarbon analyzer, (decimal fraction).

$C_{vi}$  = The average fractional volumetric concentration of gasoline vapors in the "i<sub>th</sub>" vent as determined by the hydrocarbon analyzer, (decimal fraction).

## 5.0 Testing Of Vapor Recovery System For Filling of A Delivery Tank At A Bulk Plant:

### 5.1 Application:

The following test procedures shall be used for determining the efficiency of vapor recovery systems controlling gasoline vapors emitted during the filling of delivery tanks at a bulk plant.

### 5.2 Principle and Test Conditions:

**5.2.1 Principle:** During loading of a delivery tank at the bulk plant, direct measurements of hydrocarbon concentrations and volume of hydrocarbons vented (including emissions from any vapor processing unit) are made. All possible points of emission are checked for vapor leaks. The volume of gasoline dispensed to the delivery tank is recorded and the concentration of the hydrocarbon vapors returned to the bulk storage tank is measured. The efficiency of control is calculated from these determinations.

**5.2.2 Test Conditions:** The number of delivery tank loadings to be testing shall be established by DEQ based on an engineering evaluation. The system shall be tested under normal operating conditions as close as possible. (Dispensing rates shall be at the maximum rate possible consistent with safe and normal operating practices, and simultaneous use of more than one dispenser during loading of delivery tanks shall occur to the extent that such use would represent normal operation of the system).

### **5.3 Equipment Required for Delivery Tank Testing at the Bulk Plant:**

**5.3.1** Same as that required in Section 4.3.

### **5.4 Delivery Tank Loading Test Procedures:**

**5.4.1** Connect coupler to vent of bulk tank, or if the vent has a PV valve, remove the PV valve and then connect the coupler to the vent. If a secondary processing unit is used, also connect a coupler to the vent of the secondary processing unit.

**5.4.2** Connect the appropriate gas meter, HC analyzer with recorder, thermocouple and manometer to the vent coupler and connect the PV valve to the gas meter.

**5.4.3** Connect a coupler to the bulk storage tank vapor return lines.

**5.4.4** Connect a HC analyzer with a recorder, a manometer and a thermocouple to the taps on the coupler on the vapor return line.

**5.4.5** Connect bulk storage tank fill and vapor return lines to the delivery tank in accordance with owner's or operator's established procedures for the system.

**5.4.6** Check the delivery tank and all connections for a tight seal with the explosimeter before and during the test.

**5.4.7** Record the initial reading of the gas meter(s).

**5.4.8** Start fueling of the delivery tank in accordance with manufacturer's established normal procedure.

**5.4.9** Hydrocarbon concentrations, temperature and pressure measurements are to be recorded starting after the first 15 seconds of the unloading period followed by 60 second intervals. The gas meter readings may be taken at 120 second intervals.

**5.4.10** Record the barometric pressure and ambient temperature before and after the test.

**5.4.11** At the end of the delivery tank loading disconnect the delivery tank from the bulk tank in accordance with owner's or operator's instructions (normal procedure). Leave the bulk tank vent instrumentation in place.

**5.4.12** Continue recording hydrocarbon concentrations, temperatures, pressure and gas meter readings at the bulk tank vent at 20 minute intervals for one hour, or until the system returns to normal conditions as specified by the manufacturer.

**5.4.13** Disconnect instrumentation from the vent.

**5.4.14** Record volume of gasoline that is delivered.

**5.4.15** Record final reading of gas meter.

**5.4.16** Repeat procedure as necessary for additional delivery tank loading.

## **5.5 Calculations:**

**5.5.1** Volume of gas discharged through "i th" vent. This includes bulk tank vent and any control system vent.

$$V_{vsi} = \frac{V_{vi} \times 528 \times P_b}{T_{vi} \times 29.92}$$

Where:

$V_{vsi}$  = Volume of gas discharged through "i<sub>th</sub>" vent corrected to 68° F and 29.92 in. Hg, (ft<sup>3</sup>).

$P_b$  = Barometric pressure, (in. Hg).

$V_{vi}$  = Volume of gas recorded by meter on "i<sub>th</sub>" vent (ft<sup>3</sup>, corrected for amount of vapor removed for the hydrocarbon analysis).

$T_{vi}$  = Average temperature in "i<sub>th</sub>" vent line, (°R).

"i<sub>th</sub>" = The vent under consideration.

**5.5.2** Volume of gas returned to the bulk storage tank.

$$V_t = \frac{0.1337G_t \times 528(P_b + P)}{T_t \times 29.92}$$

Where:

$P_b$  = Barometric pressure, (in. Hg).

$V_t$  = Volume of gas returned to the bulk storage tank corrected to 68°F and 29.92 in. Hg, (ft<sup>3</sup>).

$G_t$  = Volume of gasoline delivered, (gallons).

$P$  = Final gauge pressure of bulk storage tank, (in. Hg).

$T_t$  = Average temperature of vapor returned to bulk storage tank, (°R).

0.1337 = Conversion factor, (gallons to Ft<sup>3</sup>). 1 US gal. = 0.1337 ft<sup>3</sup>.

### 5.5.3 Efficiency of Vapor Control System

$$E_j = \frac{V_t \times C_t - \sum (C_{vi} \times V_{vsi}) \times 100}{(V_t \times C_t)}$$

Where:

$E_j$  = The efficiency of control per individual fueling in percent.

$C_t$  = The average fractional volume concentration of gasoline vapors in the return line to the bulk storage tank as determined by the hydrocarbon analyzer, (decimal fraction).

$C_{vi}$  = The average fractional volume concentration of gasoline vapors in the "i<sub>th</sub>" vent as determined by the hydrocarbon analyzer, (decimal fraction).

$j$  = The individual loading considered.

$$E_{ave} = \frac{\sum_{j=1}^n E_j}{n}$$

Where:

$E_{ave}$  = The average efficiency of control in percent.

$E_j$  = From 5.5.3 above.

$n$  = Number of Loadings Tested.

## 6.0 Calibrations

### 6.1 Flow meters

Standard methods and equipment shall be used to calibrate the flow meters within thirty (30) days prior to any test or test series. The calibration curves are to be traceable to NIST.

### 6.2 Temperature measuring instruments

Calibrate immediately prior to any test period and immediately following test period using ice water (32°F.) and a known temperature source of about 100°F.

### **6.3 Pressure measuring instruments**

Calibrate pressure transducers within thirty (30) days prior to the test period and immediately after the test period with a static pressure calibrator of known accuracy.

### **6.4 Total hydrocarbon analyzer**

Follow the manufacturer's instruction concerning warm-up time and adjustments. On each test day prior to testing and at the end of the day's testing, zero the analyzer with a zero gas (3 ppm C) and span with 30 percent and 70 percent concentrations of propane.

**6.5** A record of all calibrations made is to be maintained.

## **7.0 Recordkeeping**

A copy of the results of these tests which are performed for compliance determination shall be maintained at the facility site according to OAR 340-232-0080 and 340-232-0100.

## FIGURE A - BULK TANK TEST APPARATUS

Oregon Source Sampling  
Manual Volume II  
Method 31

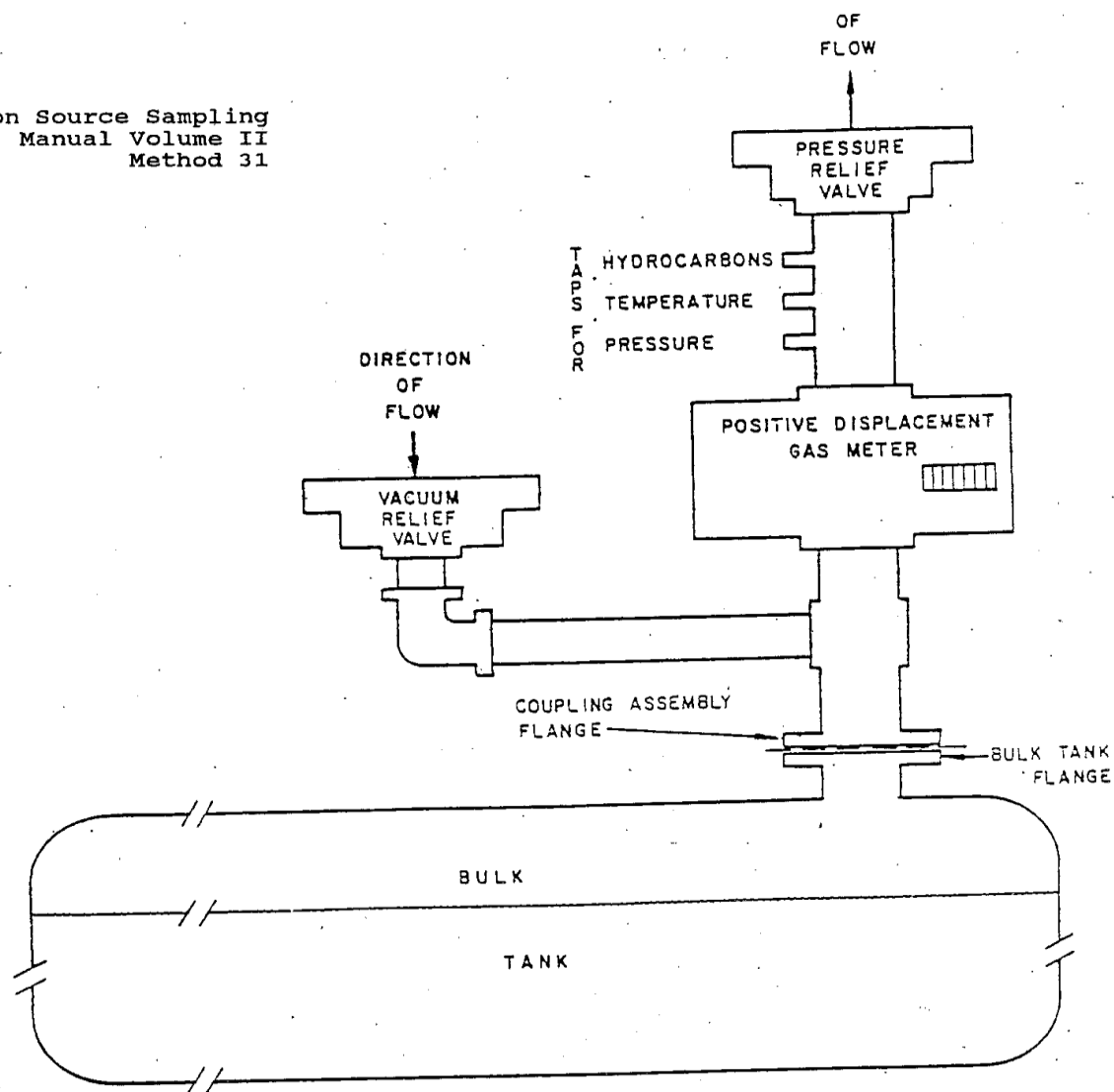
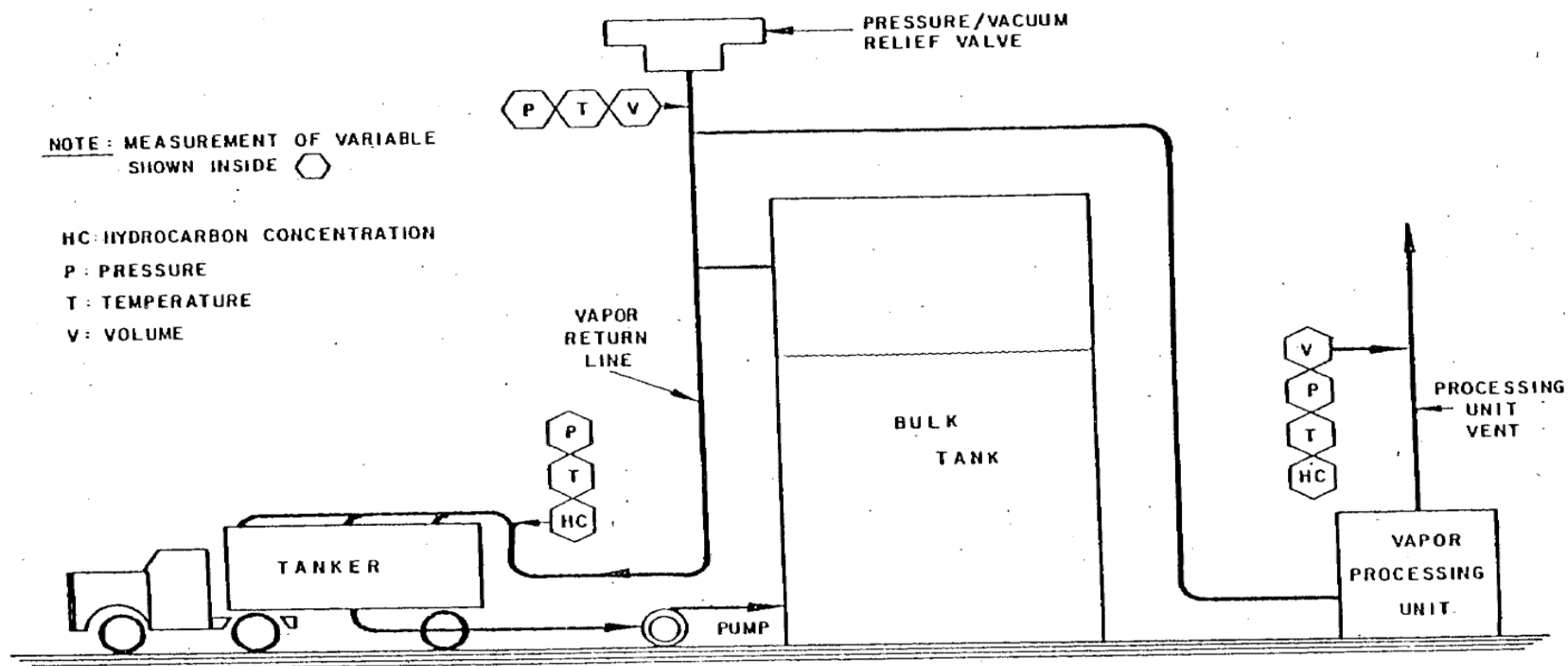


FIGURE A  
BULK TANK  
TEST APPARATUS

METHOD 31

## FIGURE B - GASOLINE TRANSFER FROM DELIVERY TANK TO BULK PLANT

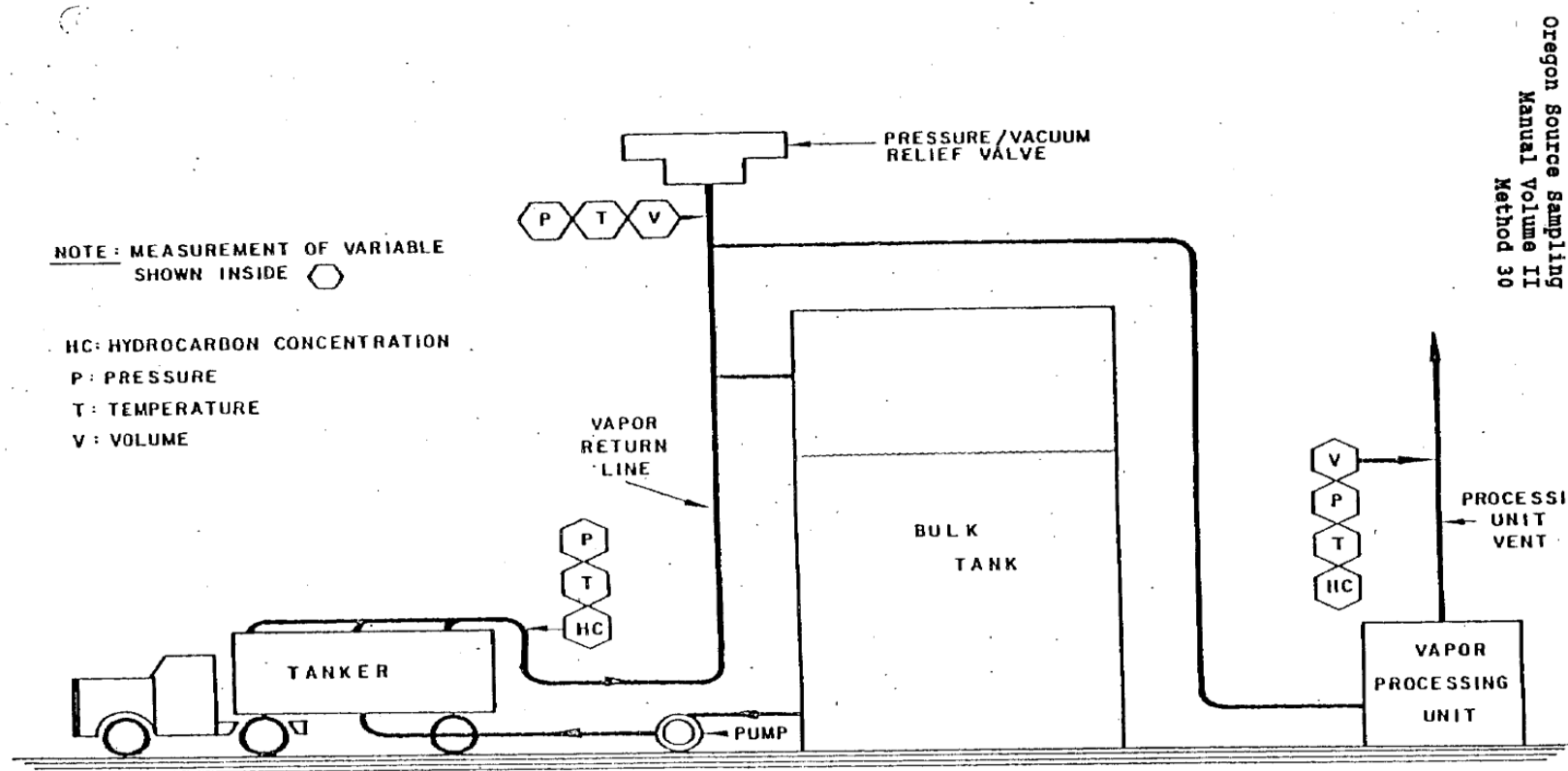


METHOD 31

FIGURE B  
GASOLINE TRANSFER  
FROM DELIVERY TANK TO BULK PLANT

Manual Volume 11  
Method 31

# FIGURE C - GASOLINE TRANSFER FROM BULK PLANT TO DELIVERY TANK



Oregon Source Sampling Manual Volume II Method 30

FIGURE C  
GASOLINE TRANSFER  
FROM BULK PLANT TO DELIVERY TANK

METHOD 31



Plant \_\_\_\_\_  
Address \_\_\_\_\_  
Operator \_\_\_\_\_

[illegible]

# FIGURE E – CALCULATION SHEET

## Vapor Control Equipment Efficiency Determination

Test Method: \_\_\_\_\_ Plant \_\_\_\_\_  
 Date: \_\_\_\_\_ Address \_\_\_\_\_  
 Test Run # \_\_\_\_\_

Test Equipment Location: \_\_\_\_\_

Calculations: (Refer to Paragraphs 4.5 or 5.5 in test Procedure.)

Volume of gas discharged through "i th" vent.

$$V_{si} = \frac{V_{vi} \times 520 \times P_b}{T_{vi} \times 29.92}$$

Volume of gasoline vapor returned to bulk tank or tank truck

$$V_t = \frac{0.1337 G_r \times 520 (P_b + \Delta P)}{T_t \times 29.92}$$

Efficiency of Vapor Control System

$$E_{or} = \frac{V_t \times C_t - \sum (C_{vi} \times V_{vs})}{V_t \times C_t} \times 100$$

E = Bulk Plant Loading Test  
 E<sub>j</sub> = Delivery Tank Loading Test

Average Efficiency of All Loadings Tested

$$E_{ave} = \frac{\sum_{j=1}^n E_j}{n}$$

METHOD 31

# DEQ METHOD 32

Test Procedures for Vapor Control  
Effectiveness of Gasoline Delivery Tanks

STATE OF OREGON  
DEPARTMENT OF ENVIRONMENTAL QUALITY

DEQ Air Quality Program  
Portland, Oregon  
December 1, 1980

Revisions:  
May 15, 1981  
January 23, 1992

# Method 32

## Test Procedures for Vapor Control Effectiveness of Gasoline Delivery Tanks

### 1.0 Introduction:

#### 1.1 Principles:

Pressure and vacuum are applied to the compartments of gasoline truck tanks and the change in pressure/vacuum is recorded after a specified period of time.

#### 1.2 Applicability:

This method is applicable to determining the leak tightness of gasoline truck tanks in use and equipped with vapor collected equipment.

### 2.0 Acceptance Of Test Results

- 2.1** Results from this method will be accepted as a demonstration of compliance provided that the methods included or referenced in this procedure are strictly adhered to. A report containing at least the minimum amount of information regarding the test should be included with the results. Deviations from the procedures described herein will be permitted only if permission from DEQ is obtained in writing in advance of the test.

### 3.0 Definitions

#### 3.1 Delivery Tank:

Any container, including associated pipes and fittings, that is used for the transport of gasoline.

#### 3.2 Compartment

A liquid-tight division in a delivery tank.

#### 3.3 Delivery Tank Vapor Collection System

The entire delivery tank, including domes, dome vents, cargo tank, piping, hose connections, hoses and delivery elbow, and vapor recovery lines.

### 4.0 Apparatus

#### 4.1 Pressure Source (See Figure B)

Pump or compressed gas cylinder of air or inert gas sufficient to pressurize the delivery tank to 6250 Pascals (25 inches H<sub>2</sub>O) above atmospheric pressure.

## **4.2 Regulator**

Low pressure regulator for controlling pressurization tank.

## **4.3 Vacuum Source**

Vacuum pump of sufficient capacity to evacuate a tank to 2500 Pascals (10 inches H<sub>2</sub>O) below atmospheric pressure. (The intake manifold of an "idling" gasoline engine is a very good vacuum source).

## **4.4 Manometer**

Liquid manometer, or equivalent, capable of measuring up to 6250 Pascals (25 inches H<sub>2</sub>O) gauge pressure with  $\pm 25$  Pascals ( $\pm 0.1$  inches H<sub>2</sub>O) readability. Manometer must be positioned vertically.

## **4.5 Test Cap for Vapor Recovery Hose Fittings**

This cap should have a tap for the manometer connection with a fitting with shut-off valve and pressure/vacuum relief valves for connection to the pressure/vacuum supply hose.

## **4.6 Cap for Liquid Delivery Hose Fitting**

## **4.7 Pressure/Vacuum Supply Hose**

## **4.8 Pressure/Vacuum Relief Valves**

The test apparatus shall be equipped with an in-line pressure/vacuum relief valve set to activate at 7000 Pascals (28 inches H<sub>2</sub>O) above atmospheric pressure or 3000 Pascals (12 inches H<sub>2</sub>O) below atmospheric pressure, with a capacity equal to the pressurizing or evacuating pumps.

# **5.0 Pretest Condition**

## **5.1 Purging of Vapor**

The delivery tank shall be purged of gasoline vapors and tested empty. The tank may be purged by any safe method such as flushing with diesel fuel, heating fuel or jet fuel. (Hauling a load of above fuel before test may be performed.)

## **5.2 Location**

The delivery tank shall be tested where it will be protected from direct sunlight or any other heat source which may affect the pressure/vacuum test results.

# **6.0 Visual Inspection**

## **6.1 Inspection Procedure**

The entire delivery tank including domes, dome vents, cargo tank, piping, hose connections, hoses and delivery elbow shall be inspected for any evidence of wear, damage or

misadjustment that could be a potential lead source. Any part found to be defective shall be adjusted, repaired or replaced, as necessary, before the test.

## **7.0 Pressure Test Procedure**

### **7.1 Pressure Test**

- 7.1.1** The dome covers are to be opened and closed.
- 7.1.2** Connect static electrical ground connections to delivery tank. Attach the delivery and vapor hoses, remove the delivery elbows and plug the liquid delivery hose fitting with cap.
- 7.1.3** Attach the test cap vapor recovery hose of the delivery tank.
- 7.1.4** Connect the pressure/vacuum supply hose to the pressure/vacuum relief valve and the shut-off valve. Attach the pressure source to the supply hose. Attach a manometer to the pressure tap.
- 7.1.5** Connect compartments of the tank internally to each other, if possible.
- 7.1.6** Applying air pressure slowly, pressurize the tank, or alternatively the first compartment, to 4500 Pascals (18 inches of water).
- 7.1.7** Close the shut-off valve, allow the pressure in the delivery tank to stabilize. Adjust the pressure, if necessary, to maintain 4500 Pascals (18 inches of H<sub>2</sub>O). Record the initial time and pressure.
- 7.1.8** At the end of five minutes, record the final time and pressure and then slowly vent tank to atmospheric pressure.
- 7.1.9** Repeat for each compartment if they were not interconnected.
- 7.1.10** If the reading is less than 3750 Pascals (15 inches of water), the tank or compartment fails the test. Delivery tanks which do not pass the pressure test are to be repaired and retested.

## **8.0 Vacuum Test Procedure**

- 8.1** Connect vacuum source to pressure and vacuum supply hose.
- 8.2** Slowly evacuate the tank, or alternatively the first compartment to 1500 Pascals (6 inches of H<sub>2</sub>O) vacuum.
- 8.3** Close the shut-off valve, allow the pressure in the delivery tank to stabilize. Adjust the vacuum, if necessary, to maintain 1500 Pascals (6 inches of water). Record initial time and pressure.

- 8.4** At the end of five minutes, record the final time and pressure and then slowly vent back to atmospheric pressure.
- 8.5** Repeat for each compartment if they were not interconnected.
- 8.6** If the reading is less than 750 Pascals (3 inches of water) vacuum, the tank or compartment fails the test. Delivery tanks which do not pass the vacuum test are to be repaired and retested.

## **9.0 Alternative Test Methods**

- 9.1** Techniques, other than those specified above, may be used for purging, pressurizing, or evacuating the delivery tanks, if prior approval is obtained from DEQ. Such approval will be based upon demonstrated equivalency with the methods above.

## **10.0 Test Reports**

The contents of the following report form example shall be considered the minimum acceptable contents for reporting the results of the tests.

## **11.0 Recordkeeping**

A copy of the results of these tests which are performed for compliance determination shall be maintained at the facility site and by the delivery tank owner according to OAR 340-232-0080 and 340-232-0100.

# FIGURE A - DATA SHEET

## TANK LEAK CHECK DATA SHEET

Oregon Source Sampling  
Manual Volume II  
Method 32

### I. GENERAL

1. Truck/Trailer Owner \_\_\_\_\_  
Address \_\_\_\_\_
2. Test Site \_\_\_\_\_ Date \_\_\_\_\_
3. Owner's Unit No. \_\_\_\_\_
4. Truck TP\* or AP\* Oregon License No. \_\_\_\_\_
5. Tank Trailer HTP\* or ATP\* Oregon License No. (1981) \_\_\_\_\_
6. Tank DOT\* Certification Plate - Mfg. Serial No. \_\_\_\_\_  
- Specification - MC \_\_\_\_\_

### II. PRESSURE CHECK (INITIAL)

| 1. Pressure Readings         | Initial<br>(In H <sub>2</sub> O) | After 5 min.<br>(In H <sub>2</sub> O) | Pressure<br>Change | Tank<br>(Compartment)<br>Volume |
|------------------------------|----------------------------------|---------------------------------------|--------------------|---------------------------------|
| (a) Complete Tank            | 18                               | _____                                 | _____              | _____                           |
| (b) Compartment #1           | _____                            | _____                                 | _____              | _____                           |
| (c) " #2                     | _____                            | _____                                 | _____              | _____                           |
| (d) " #3                     | _____                            | _____                                 | _____              | _____                           |
| (e) " #4                     | _____                            | _____                                 | _____              | _____                           |
| (f) " #5                     | _____                            | _____                                 | _____              | _____                           |
| (g) Pass _____ Fail _____    |                                  |                                       |                    |                                 |
| (h) Reason for failure _____ |                                  |                                       |                    |                                 |

### 2. PRESSURE CHECK (after rework - if failure noted above)

|                    |       |       |       |       |
|--------------------|-------|-------|-------|-------|
| (a) Complete Tank  | _____ | _____ | _____ | _____ |
| (b) Compartment #1 | _____ | _____ | _____ | _____ |
| (c) Compartment #2 | _____ | _____ | _____ | _____ |
| (d) Compartment #3 | _____ | _____ | _____ | _____ |



## FIGURE A - DATA SHEET (Con't)

|                              | Initial<br>(In H <sub>2</sub> O) | After 5 min.<br>(In H <sub>2</sub> O) | Pressure<br>Change | Tank<br>(Compartment)<br>Volume |
|------------------------------|----------------------------------|---------------------------------------|--------------------|---------------------------------|
| (e) Compartment #4           | _____                            | _____                                 | _____              | _____                           |
| (f) Compartment #5           | _____                            | _____                                 | _____              | _____                           |
| (g) Pass _____ Fail _____    |                                  |                                       |                    |                                 |
| (h) Reason for failure _____ |                                  |                                       |                    |                                 |

### 3. VACUUM CHECK

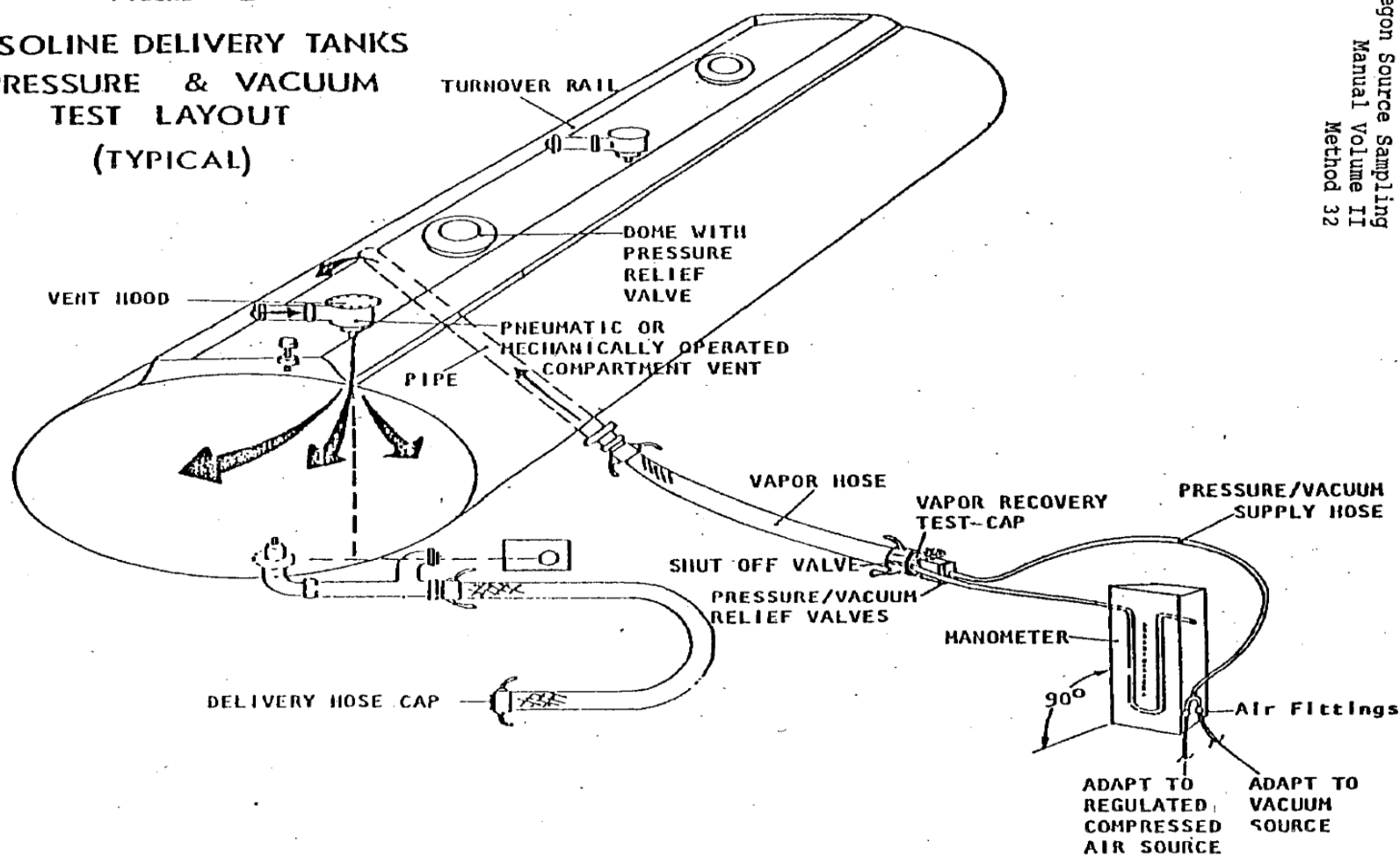
|                              |       |       |       |       |
|------------------------------|-------|-------|-------|-------|
| (a) Complete Tank            | _____ | _____ | _____ | _____ |
| (b) Compartment #1           | _____ | _____ | _____ | _____ |
| (c) Compartment #2           | _____ | _____ | _____ | _____ |
| (d) Compartment #3           | _____ | _____ | _____ | _____ |
| (e) Compartment #4           | _____ | _____ | _____ | _____ |
| (f) Compartment #5           | _____ | _____ | _____ | _____ |
| (g) Pass _____ Fail _____    |       |       |       |       |
| (h) Reason for Failure _____ |       |       |       |       |

Signature of Person Conducting Test \_\_\_\_\_  
Date \_\_\_\_\_

\*TP - Truck Plate (use Item 4 if truck and tank are on the same chassis)  
AP - Apportionment Plate (use Item 4 if truck and tank are on the same chassis)  
HTP - Heavy Trailer Plate (use Item 5 for a tank trailer)  
ATP - Apportionment Trailer Plate (use Item 5 for a tank trailer)  
DOT - Department of Transportation

## FIGURE B – GASOLINE TANKS

FIGURE B  
GASOLINE DELIVERY TANKS  
PRESSURE & VACUUM  
TEST LAYOUT  
(TYPICAL)



Oregon Source Sampling  
Manual Volume II  
Method 32

# DEQ METHOD 33

Test Procedures for Gasoline Vapor  
Control Systems at Bulk Gasoline Terminals

STATE OF OREGON  
DEPARTMENT OF ENVIRONMENTAL QUALITY

DEQ Air Quality Program  
Portland, Oregon  
December 1, 1980

Revisions:  
January 23, 1992

# METHOD 33

## 1.0 Introduction

### 1.1 Principle:

Hydrocarbon mass emissions are determined directly, using flowmeters and hydrocarbon analyzers.

The mass of hydrocarbon vapor to be controlled or recovered is determined from the volume of gasoline dispensed (either to the bulk terminal facilities or to delivery tanks), and by temperature, pressure and concentration measurements of the released vapor.

The efficiency of the gasoline vapor control systems is determined from the mass of the hydrocarbons emitted and the mass of the hydrocarbons controlled.

### 1.2 Applicability:

These test procedures are applicable for gasoline vapor recovery systems installed at bulk gasoline terminals for controlling gasoline vapors emitted during the loading of delivery tanks or from the loading of fixed roof gasoline storage tanks as a result of fixed roof tank breathing. These procedures are also applicable for marketing operations at refineries.

## 2.0 Acceptance Of Test Results

**2.1** Results of these tests will be accepted as a demonstration of compliance determination of the equipment tested provided that the methods included or referred to in this procedure are strictly adhered to. A statement containing at least the minimum amount of information regarding the test procedures applied should be included with the report of the test results.

Deviations from the procedure described herein will be permitted only if permission from DEQ is obtained in writing in advance of the test.

## 3.0 Definitions

### 3.1 Bulk Gasoline Terminal

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

### **3.2 Delivery Vessel**

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

### **3.3 Vapor Balance System**

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

## **4.0 Test Procedures For Determining the Efficiency of Gasoline Vapor Control Systems at Terminals**

### **4.1 Application**

The following test procedures are for determining the efficiency of vapor recovery systems controlling gasoline vapors emitted during the storage of gasoline and the filling of delivery tanks at terminals.

### **4.2 Principle**

During the normal operations at a terminal (loadings of delivery tanks and loadings of the storage tanks), all possible points of emission are checked for vapor leaks. The volume of gasoline delivered from the terminal storage tanks to the delivery tanks is recorded, the volume of gasoline delivered to any fixed roof storage tank(s) is recorded (as required), and the mass of the hydrocarbon vapors emitted from the processing unit measured. The mass emission of hydrocarbons is calculated from these determinations.

### **4.3 Test Conditions**

The processing unit may be tested for a series of 24 consecutive one hour periods and pressures in the vapor holder and any fixed roof gasoline storage tanks may be monitored for 30 consecutive days. DEQ shall determine whether testing for longer or shorter periods may be necessary for properly evaluating any system's compliance with performance<sup>3</sup> standards. During the test of the processing unit, the pressure during the filling of a number of delivery tanks will be monitored. As much as possible, the system shall be tested under normal operating conditions. Dispensing rate shall be at the maximum rate possible consistent with safe and normal operating practices. Simultaneous use of more than one dispenser during transfer operations shall occur to the extent that such would normally occur and the processing unit shall be operated in accordance with the manufacturer's established parameters as well as in accordance with the owner's or operator's established operating procedures.

## **4.4 Calibrations**

### **4.4.1 Flowmeters**

Standard methods and equipment shall be used to calibrate the flowmeters every month or every five tests, whichever comes first. The calibration curves are to be traceable to NIST standards.

### **4.4.2 Temperature measuring instruments**

Calibrate prior to test period and immediately following test period using ice water (32°F) and a known temperature source of about 100°F.

### **4.4.3 Pressure measuring instruments**

Calibrate pressure transducers every month and immediately after each test with a static pressure calibrator of known accuracy.

### **4.4.4 Total hydrocarbon analyzer**

Follow the manufacturer's instructions concerning warm-up time and adjustments. On each test day prior to testing and at the end of the day's testing, zero the analyzer with a zero gas (<3ppm C) and span with 5, 10, 30, and 70 percent concentrations of propane.

**4.4.5** A record of all calibration is to be maintained by the source testing person for at least 1 year.

## **5.0 Testing Vapor Control Systems (Other Than Incineration Units) When Loading Delivery Tanks**

### **5.1 Equipment Required**

**5.1.1** Flowmeter with a capacity sufficient to determine the volume of exhaust from the vent of processing unit.

**5.1.2** Coupler for attaching the flowmeter to vent of processing unit with thermocouple and HC analyzer taps.

**5.1.3** Coupler for delivery tank vapor return line with pressure tap.

**5.1.4** One hydrocarbon analyzer (either FID or DEQ approved equivalent) with recorder and with a capability of measuring total gasoline vapor concentration of 30 percent as propane.

**5.1.5** One (1) flexible thermocouple or thermistor (0-150°F) with recorder system having a readability of 1°F.

- 5.1.6** Two (2) pressure sensing devices (transducers or equivalent) capable of measuring zero to ten inches of water with recorder systems having a readability of 0.01 in. H<sub>2</sub>O.
- 5.1.7** Coupler with pressure tap for use between pressure-vacuum (PV) relief valve and fixed roof storage tank vent.
- 5.1.8** Coupler with pressure tap for use between PV valve and vent on vapor holder tank.
- 5.1.9** One manometer capable of measuring zero to ten inches of water with a readability of 0.1 in. H<sub>2</sub>O.
- 5.1.10** Explosimeter.
- 5.1.11** Barometer (Aneroid or Mercury),  $\pm 0.1$  in. Hg. readability.

## **5.2 Test Procedure**

- 5.2.1** Connect appropriate coupler to vent of processing unit and connect flowmeter.
- 5.2.2** Connect hydrocarbon analyzer, with recorder, to appropriate tap on coupler on processing unit vent.
- 5.2.3** Connect thermocouple with recorder to appropriate tap on coupler on processing unit vent.
- 5.2.4** Connect coupler between PV valve and vent of vapor holder tank and connect pressure sensing device, with recorder, to coupler.
- 5.2.5** Connect coupler between PV valve and fixed roof bulk storage tank and connect pressure sensing device, with recorder, to coupler.
- 5.2.6** Connect the appropriate coupler to vapor return line from delivery tank. Connect the manometer to the coupling in vapor return line from delivery tank. Check the delivery tank and all connections for a tight seal, before and during fueling, with the explosimeter. Record the pressure in the vapor return line from the delivery tank at 5 minute intervals during the filling of the delivery tank. Repeat for the required number of delivery tanks.
- 5.2.7** Record the pressure on the bulk storage at the start and finish of the test period.
- 5.2.8** Record the pressure on the vapor-holder tank at the start and the finish of the test period.
- 5.2.9** Record the hydrocarbon concentrations, temperature and exhaust gas flowrate from the processor vent at the start and the finish of the test period.
- 5.2.10** At the end of the specified times, disconnect all instrumentation and couplings from the vapor recovery systems.

**5.2.11** Record the volume of gasoline that is delivered over the time of the test period.

### 5.3 Calculations

**5.3.1** Review pressures recorded during the filling of delivery tanks to determine if any equaled or exceeded one (1) pound per square inch.

**5.3.2** Volume of gas discharged through the processing unit vent.

$$V = \frac{V_p \times 528 \times P_b}{T_p \times 29.92}$$

Where:

V = Volume of gas discharged through processor vent, corrected to 68°F and 29.92 in. Hg, (ft<sup>3</sup>).

P<sub>b</sub> = Barometric pressure, (in. Hg).

V<sub>p</sub> = Volume of gas determined by flowmeter on the processing vent, corrected for amount of vapor removed for the hydrocarbon analysis, (ft<sup>3</sup>).

T<sub>p</sub> = Average temperature in the processing vent line, (°R.)

**5.3.3** Weight of hydrocarbons discharged through the processing vent per 1,000 gallons of gasoline loaded into the delivery tanks.

$$W = \frac{C \times V \times M \times 1000}{379 \times G}$$

Where:

W = Weight of hydrocarbons discharged through the processor vent per 1000 gallons of gasoline loaded into delivery tanks, (lbs).

C = Average fractional concentration of hydrocarbons at vent, (decimal fraction)

V = From 5.3.2 above.

M = Molecular weight of hydrocarbon compound used to calibrate hydrocarbon analyzer, (lbs/lb Mole).

G = Total quantity of gasoline loaded into delivery tanks (gals).



Review the pressure recording from the transducers on the storage tanks and vapor holder and determine the number of times and total time (hours), if any, that the pressure exceeded the setting of the PV valve on either the vapor holder or on the fixed roof storage tank.

## **6.0 Testing Vapor Control Systems (Other Than Incineration Units) When Loading Fixed Roof Storage Tanks**

### **6.1 Equipment Required**

Same equipment as in Section 5.1.

### **6.2 Test Procedures**

- 6.2.1** Connect appropriate coupler to vent of processing unit and connect flowmeter.
- 6.2.2** Connect hydrocarbon analyzer, with recorder, to appropriate tap on coupler on processing unit vent.
- 6.2.3** Connect thermocouple with recorder to appropriate tap on coupler on processing unit vent.
- 6.2.4** Connect coupler between PV valve and vent of vapor holding tank and connect pressure sensing device, with recorder, to coupler.
- 6.2.5** Connect coupler between PV valve and fixed roof storage tank and connect pressure sensing device, with recorder, to coupler.
- 6.2.6** Record the pressure on the bulk storage tank and connect pressure sensing device, with recorder, to coupler.
- 6.2.7** Record the pressure on the vapor-holding tank at the start and finish of the test period.
- 6.2.8** Record the hydrocarbon concentration, temperature and exhaust gas flowrate from the processor vent at the start and finish of the test.
- 6.2.9** At the end of the specified times, disconnect all instrumentation and couplings from the vapor recovery systems.
- 6.2.10** Record the volume of gasoline that is delivered during the specified testing times.
- 6.2.11** Pressure monitoring of delivery tanks is to be performed, as appropriate, in accordance with Section 5.2.6.

## 6.3 Calculations

### 6.3.1 Volume of gas discharged through the processing unit vent.

$$V = \frac{V_p \times 528 \times P_b}{T_p \times 29.92}$$

Where:

V = Volume of gas discharged through processor vent, corrected to 68°F and 29.92 in. Hg, (ft<sup>3</sup>).

P<sub>b</sub> = Barometric pressure, (in. Hg).

V<sub>p</sub> = Volume of gas determined by flow meter on the processing vent, corrected for amount of vapor removed by hydrocarbon analysis, (ft<sup>3</sup>).

T<sub>p</sub> = Average temperature in the processing vent line, (°R).

### 6.3.2 Weight of hydrocarbons discharged through the processing vent per 1000 gallons loaded into the delivery tanks.

$$W = \frac{C \times V \times M \times 1000}{379 \times G}$$

Where:

W = Weight of hydrocarbons discharged through the processor vent per 1000 gallons of gasoline loaded into delivery tanks, (lbs).

C = Average fractional concentration of hydrocarbons at vent, (decimal fraction).

V = From 6.3.1 above.

M = Molecular weight of hydrocarbon compound used to calibrate hydrocarbon analyzer, (lbs/lb Mole); (44 for propane).

G = Total quantity of gasoline loaded into fixed roof storage tank(s), (gals).

Review the pressure recording from the transducers on the storage tanks and vapor holder and determine the number of times and total time (hours), if any, that the pressure exceeded the setting of the PV valve on either the vapor holder or on the fixed roof storage tank.

## **7.0 Testing Exhaust Emissions From Incineration-Type Processing Unit**

### **7.1 Equipment Required**

- 7.1.1** One (1) positive displacement flowmeter (capacity of 11,000 SCFH) with a coupler with pressure and temperature taps.
- 7.1.2** One (1) hydrocarbon analyzer (FID or DEQ approved equivalent) capable of measuring hydrocarbons in the range 0 to 10 percent as propane.
- 7.1.3** One (1) oxygen analyzer (paramagnetic or DEQ approved equivalent) capable of measuring oxygen in the range 0 to 25 percent by volume.
- 7.1.4** Apparatus for performing the State of Oregon, DEQ source sampling Method #2 (Determination of Stack Velocity and Volumetric Flow Rate).
- 7.1.5** One (1) sample conditioner capable of adjusting the temperature of the exhaust gas sample to a range acceptable to the hydrocarbon and oxygen analyzers.
- 7.1.6** One (1) 1/4" ID stainless steel sampling probe (SS316 or equivalent), of appropriate length.
- 7.1.7** One (1) dry gas meter sufficiently accurate to measure the sample volume within one percent.
- 7.1.8** One (1) needle valve, or equivalent, to adjust flow rate.
- 7.1.9** One (1) rotameter, or equivalent, to measure a 0 to 10 SCFH flow range, with a readability of 0.1°.
- 7.1.10** One (1) pump of a leak-free, vacuum type.
- 7.1.11** One (1) thermocouple with recorder, 0 - 150°F with a readability of 1°.
- 7.1.12** One (1) pressure sensor with recorder for a range of -2 to +2 psig.
- 7.1.13** Calibration of test equipment according to recommended procedure, Section 4.4, page 3.

### **7.2 Test Procedure**

- 7.2.1** Insert the flowmeter (0-11,000 SCFH) into the pipe supplying the incinerator, connect thermocouple and pressure sensor and record initial volume.
- 7.2.2** Using the apparatus and procedure for Method 2, 7.1.4, perform a velocity traverse of the incinerator exhaust vapor.

- 7.2.3** Insert the sample probe to the location of the average exhaust velocity, leaving the Method 2 apparatus in place. Connect the sample conditioner, hydrocarbon analyzer, oxygen analyzer, sample pump, rotameter, needle valve and dry gas meter to the sample probe.
- 7.2.4** Start analyzer recorders.
- 7.2.5** Adjust the sample flow rate proportional to the stack gas velocity and sample until the dry gas meter registers one (1) ft.<sup>3</sup>. Mark on analyzer recorder strip charts beginning and ending of sample period.
- 7.2.6** At the end of the test period, record the total volume of vapors going to the incinerator and average temperature and pressure.
- 7.2.7** Record the average hydrocarbon and oxygen concentration in the incinerator exhaust. Repeat as required.
- 7.2.8** Record the volume of gasoline delivered during the test period.
- 7.2.9** Pressure monitoring of delivery tanks and fixed roof storage tanks is to be performed, as appropriate, in accordance with Section 5.2.6 and 6.2.6.

### 7.3 Calculations

**7.3.1** 
$$V_p = \frac{V \times 528 \times PA}{T \times 29.92}$$

Where:

$V_p$  = Volume of vapor going to the incinerator (ft.<sup>3</sup>)

$V$  = Volume of gas recorded by meter (ft.<sup>3</sup>).

$PA$  = Absolute pressure in the pipe going to the incinerator, (in. Hg).

$T$  = Average absolute temperature of the vapor, (°R).

**7.3.2** 
$$EA = \frac{O_2\%}{.264N_2\% - O_2\%}$$

Where:

$EA$  = Excess air in the incinerator exhaust gas.

$O_2\%$  = Percent by volume oxygen in the incinerator exhaust.

$N_2\%$  = Percent by volume nitrogen in the incinerator exhaust.

### 7.3.3

$$W = \frac{V_p \times C \times M \times (EA) \times 1000}{379 \times G}$$

Where:

W = Weight of hydrocarbons discharged through the incinerator vent per 1000 gallons of gasoline into delivery tanks, or, as appropriate, fixed roof tanks, (lbs).

V<sub>p</sub> = From 7.3.1 above.

M = Molecular weight of hydrocarbon compound used to calibrate hydrocarbon analyzer, (lbs/lb Mole).

EA = From 7.3.2 above.

G = Total quantity of gasoline loaded into delivery tanks, or, as appropriate, fixed roof storage tanks, (gals).

C = Average fractional concentration of hydrocarbons at vent, (decimal fraction).

## 8.0 Alternative Test Methods

Techniques, other than those specified above, may be used for testing vapor recovery systems at terminals if prior written approval is obtained from DEQ. Such approval will be based upon demonstrated equivalency with the methods in Section 5 through Section 8.

## 9.0 Recordkeeping

A record of the results for tests which are performed for compliance determination shall be maintained at the facility site according to OAR 340-232-0080 and 340-232-0100.

# Appendix I, Submerged Fill Inspection Guideline, May 1, 1981

Department of Environmental Quality  
Air Program  
VOC Compliance Determination Guideline  
Submerged Fill

## Gasoline Dispensing Facilities

~~VOC Rules, OAR 340-22-110 to 340-244-0240(3) 0100, requires~~ submerged filling ~~for of~~ gasoline storage tanks at gasoline dispensing facilities (service stations, motor pools, etc.) ~~marketing in the Portland AQMA, the Salem SATS area, and the Medford-Ashland AQMA.~~

“Submerged Fill” is defined in OAR 340-244-0030(29) as “the filling of a gasoline storage tank through a submerged fill pipe whose discharge is no more than the applicable distance specified in OAR 340-244-0240(3) from the bottom of the tank. Bottom filling of gasoline storage tanks is included in this definition.”

The applicable distance in OAR 340-244-0240(3) is no more than 12 inches from the bottom of the storage tank for submerged fill pipes installed on or before November 9, 2006 or no more than 6 inches from the bottom of the storage tank for submerged fill pipes installed after November 9, 2006. Submerged fill pipes not meeting these specifications are allowed if can be demonstrated that the liquid level in the tank is always above the entire opening of the fill pipe. Documentation providing such demonstration must be made available for inspection by DEQ during the course of a site visit.

## Bulk Gasoline Plants

~~This means that "splash fill" is forbidden, as it generates considerably more VOC emissions.~~

~~"Submerged Fill" is defined in 340-232-0030(58) as "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 28 inches, or twice the diameter of the fill pipe, whichever is greater, above the bottom of the tank."~~

OAR 340-232-0080(1)(a), ~~340-232-0080(1)(a), and 340-232-0085(1)(a)~~ requires submerged fill; ~~ing at small gasoline storage tanks~~ at bulk gasoline plants in the Portland-Vancouver Air Quality Maintenance Area, Medford-Ashland Air Quality Maintenance Area, and Salem-Keizer Area Transportation Study (SKATS) Area.

“Submerged Fill” is defined in OAR 340-232-0030(70) as “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 28 inches, or twice the diameter of the fill pipe, whichever is greater, above the bottom of the tank.”

40 CFR 63.11086(a) requires submerged filling at bulk gasoline plants statewide.

Submerged Fill” is defined in 40 CFR 63.11100 as “the filling of a gasoline cargo tank or a stationary storage tank through a submerged fill pipe whose discharge is no more than the applicable distance specified in 40 CFR 63.11086(a) from the bottom of the tank. Bottom filling of gasoline cargo tanks or storage tanks is included in this definition.

The applicable distance in 40 CFR 63.11086(a) is no more than 12 inches from the bottom of the storage tank for submerged fill pipes installed on or before November 9, 2006 or no more than 6 inches from the bottom of the storage tank for submerged fill pipes installed after November 9, 2006. Submerged fill pipes not meeting these specifications are allowed if can be demonstrated that the liquid level in the tank is always above the entire opening of the fill pipe. Documentation providing such demonstration must be made available for inspection by DEQ during the course of a site visit.

#### Gasoline Delivery Vessels

~~, respectively.~~ OAR 340-232-0085(1)(a) requires submerged filling of delivery vessels receiving gasoline 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.

“Submerged Fill” is defined in OAR 340-232-0030(70) as “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 28 inches, or twice the diameter of the fill pipe, whichever is greater, above the bottom of the tank.”

~~The technique to determine compliance with submerged fill rules is:~~

- (1) For underground tanks, open the fill pipe and determine that a submerged fill pipe extends down into the tank.

- (2) Take a 20 foot measure tape or equivalent stick with an L extension on the bottom (11) and lower it down the fill tube, forcing the tape catch to scrape against the tube side, or catch on the bottom of the fill pipe.
- (3) Note when scraping ceases; the bottom of the fill tube has been reached. Read the tape or mark the stick.
- (4) Extend the tape on down to the bottom of the tank. Read the tape, or marking stick.
- (5) If the difference in tape readings is at ~~6 inches or~~ or less ~~than the applicable distance~~ the source is in compliance with the submerged fill pipe rule.
- (6) Bulk plants or above-ground-tanks which are bottom filled can be considered in compliance, so long as the top of the fill line is less than twice the diameter of fill pipe or less than 18 inches above the tank bottom.
- (7) Cylindrical tanks with horizontal fill pipes that do not meet requirements of (6) but have an elbow extending down toward the bottom of the tank must meet the requirements of (6).
- (8) Horizontal tanks with side fill which do not meet the requirements of (6) but which have an elbow extending toward the bottom shall meet the requirements of (5).
- (9) Remember gasoline is explosive, dangerous, toxic and non-spark measuring devices shall be used. Close all openings which were opened to conduct the test. A clean rag should be available for wiping during the test process to prevent gasoline burns to hands, etc.
- (10) Good judgment relative to safety and courtesy is a must at all times.





# Oregon Department of Environmental Quality

## **September 2, 2014 Update to DEQ proposal Initially issued June 16, 2014 and Updated July 9, 2014, July 30, 2014 and August 26, 2014 Notice of Proposed Rulemaking**

**Air quality permitting, Heat Smart and gasoline dispensing facility updates**

### **September 2, 2014 Update to DEQ proposal**

DEQ received a request from the U.S. Forest Service and Friends of the Columbia Gorge to extend the public comment period for the proposed air quality permitting, Heat Smart, and gasoline dispensing facility updates, which closed Aug. 28, 2014. DEQ reopened the public comment period for this rulemaking until Monday, Sept. 15, 2014 at 5:00 p.m. to provide additional time for comment. This is DEQ's fourth update to its initial proposal issued June 16, 2014.

### **August 26, 2014 Update to DEQ proposal**

DEQ extended the public comment period for the air quality permitting, Heat Smart and gasoline dispensing facility updates with regard to certain Oregon greenhouse gas permitting rules. Specifically, DEQ extended the public comment period for OAR 340-200-0020, 340-216-0020, 340-216-8010, 340-216-8020 and 340-224-0010 of Chapter 340 of the Oregon Administrative Rules from Aug. 28, 2014 to Sept. 15, 2014.

DEQ extended the public comment period in anticipation that people will want more time to comment on the greenhouse gas permitting rules in light of recent action by the U.S. Supreme Court described on the next page. DEQ requests public comment on whether Oregon's rules should be retained as they are or revised to agree with the court's ruling.

This is DEQ's third update to its initial proposal issued June 16, 2014. The close of the public comment period for all of the rules in DEQ's initial proposal remains 5:00 p.m., Aug. 28, 2014, except OAR 340-200-0020, 340-216-0020, 340-216-8010, 340-216-8020 and 340-224-0010. To consider comments on OAR 340-200-0020, 340-216-0020, 340-216-8010, 340-216-8020 and 340-224-0010, DEQ must receive the comment by 5:00 p.m., Sept. 15, 2014.

## July 30, 2014 Update to DEQ proposal

DEQ received a request from Associated Oregon Industries to extend the public comment period for the proposed air quality permitting, Heat Smart, and gasoline dispensing facility updates, which had been scheduled to close on Aug. 14, 2014. DEQ extended the public comment period for this rulemaking until Thursday, Aug. 28, 2014 at 5:00 p.m. to provide additional time for comment.

This is DEQ's second update to its initial proposal issued June 16, 2014. In DEQ's first update issued July 9, 2014, as seen below, DEQ extended the comment deadline from July 31, 2014 to Aug. 14, 2014, added public hearings and provided information about recent action by the U.S. Supreme Court.

## July 9, 2014 Update to initial DEQ proposal

DEQ received a request from Neighbors for Clean Air to extend the public comment period for the proposed air quality permitting, Heat Smart, and gasoline dispensing facility updates, which had been scheduled to close on July 31, 2014. DEQ extended the public comment period for this rulemaking until Thursday, Aug. 14, 2014 at 5:00 p.m. to provide additional time for comment.

In addition, DEQ received a request from Associated Oregon Industries to increase opportunities for people to attend public hearings. DEQ added Springfield and Pendleton to the July 16, 2014 public hearings. See the Public Hearing section of this document for details.

Considering recent action by the U.S. Supreme Court, DEQ requests public comment on the applicability of Oregon's Prevention of Significant Deterioration requirements and Title V operating permit program requirements for greenhouse gases. DEQ requests public comment on whether Oregon's rules should be retained as they are, revised to agree with the court's ruling, or revised in other ways.

In 2011, the Oregon Environmental Quality Commission adopted Oregon rules equivalent to the U.S. Environmental Protection Agency's greenhouse gas regulations known as the Tailoring Rule. On June 23, 2014, the U.S. Supreme Court invalidated portions of the federal Tailoring Rule. As a result of the court's ruling, industrial sources of air pollution are no longer subject to federal air quality requirements known as Prevention of Significant Deterioration for greenhouse gases alone. In addition, as a result of the court's ruling, industrial sources are no longer subject to federal Title V permitting requirements for greenhouse gases alone. The ruling retains the requirement that industrial sources triggering Prevention of Significant Deterioration for other pollutants and which also emit greenhouse gases are required to perform Best Available Control Technology analysis for greenhouse gases under specific conditions. The court's action does not invalidate any part of Oregon's rules and those rules remain in effect in Oregon.

Following this section is the initial DEQ proposal issued June 16, 2014

## Overview

Short summary

DEQ proposes to streamline, reorganize and update Oregon's air quality permit rules. The Source Sampling Manual Volumes I and II and Continuous Monitoring Manual are part of the proposed rules.

DEQ also proposes changes to statewide particulate matter emission standards and the preconstruction permitting program. The changes would help Oregon comply with the U.S. Environmental Protection Agency's ambient air quality standard for fine particulates, commonly called PM<sub>2.5</sub> and protect air quality through Oregon's permitting programs.

In addition, DEQ proposes rules to:

- Expand preconstruction permitting flexibility for small facilities,
- Allow DEQ to use technology such as teleconferencing for public meetings to improve community outreach, and
- Improve program implementation by proposing minor amendments to:
  - o The woodstove replacement program called Heat Smart, and
  - o The gasoline dispensing facility rules.

This document describes the proposed rules under the following nine categories:

1. Clarify and update air quality rules
2. Update particulate matter emission standards
3. Change permitting requirements for emergency generators and small natural gas or oil-fired equipment
4. Establish two new state air quality area designations, "sustainment" and "reattainment," to help areas avoid and more quickly end a federal nonattainment designation
5. Designate Lakeview as a state sustainment area while retaining its federal attainment designation
6. Change the New Source Review preconstruction permitting program
7. Modernize methods allowed for holding public hearings and meetings
8. Re-establish the Heat Smart woodstove replacement program exemption for small commercial solid fuel boilers regulated under the permitting program
9. Remove annual reporting requirements for small gasoline dispensing facilities

DEQ proposes the Environmental Quality Commission approve the proposed rules for incorporation into Oregon's State Implementation Plan. With EQC's approval, DEQ would submit the proposed rules to the U. S. Environmental Protection Agency to be included in revisions to the State Implementation Plan required under the Clean Air Act.

Note: See DEQ's [crosswalk of rules changes](#), including the rules in the State Implementation Plan, for details.

## Regulated parties

The proposed rules affect:

- All businesses, agencies, local governments and other entities holding air quality permits;

- Businesses and other entities required to submit construction approval notices;
- Businesses and other entities that sell small solid fuel boilers; and
- Businesses and other entities that dispense less than 10,000 gallons of gasoline a month.

#### Request for other options

During the public comment period, DEQ requests public comment on whether to consider other options for achieving the proposed rule's substantive goals while reducing any negative economic impact of the rules on business.

DEQ requests public comment on the ability of owners and operators of equipment to meet the proposed particulate standards, specifically the proposed grain loading and opacity standards.

Since DEQ is clarifying that state rules apply to Lane Regional Air Protection Agency unless they adopt their own rules, DEQ also requests public comment on which existing LRAPA rules are equivalent to or more strict than DEQ's proposed rules to ensure that LRAPA is authorized and required to implement in Lane County any new state rules that are more strict than existing LRAPA rules.

## Statement of need

### 1. Clarify and update air quality rules

After years of rulemakings and updates, DEQ proposes to clarify, update and reorganize Oregon's air quality rules. Previous improvements to these programs began with EQC's adoption of revisions to point source air management rules in 2001 and air quality permit program streamlining and updates in 2007. The existing rules contain multiple definitions for the same term, missing details, obsolete or outdated rules and rules that do not align with federal rules adopted by the U.S. Environmental Protection Agency, which causes confusion. This proposal would clarify and update the rules to address the needs listed in this table.

| What need would the proposed rules address?                                                                                                                                                                                                                                 | How would the proposed rules address the need?                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Some important details are missing from the rules, such as specific compliance methods for determining compliance with an emission standard. This creates uncertainty for DEQ and regulated parties implementing the air quality programs.                                  | The proposed rules would incorporate the missing compliance methods and help businesses understand how to comply with the standards.                                                                                                                                                                                                                                       |
| Some procedures are in definitions rules instead of procedural rules, creating confusion for regulated parties. For example, the procedures to determine a major modification, actual emissions and netting basis are in the definitions rules instead of procedural rules. | The proposed rules would move procedures from definitions rules to procedural rules.                                                                                                                                                                                                                                                                                       |
| The rules contain different definitions for the same term and definitions are located in multiple divisions, making it difficult for regulated parties to find definitions or know how to apply the definitions.                                                            | The proposed rules would move all common definitions to division 200, General Air Pollution Procedures and Definitions. The proposed rules would provide only one definition per term and add definitions for undefined terms such as <i>control efficiency</i> , <i>internal combustion engine</i> and <i>removal efficiency</i> .                                        |
| Some of the tables in the rules are difficult to find and understand.                                                                                                                                                                                                       | The proposed rules change the layout of these tables and move rule language from the tables into the text to make information easier to find and understand. This includes information about significant emission rates, de minimis emission levels, generic Plant Site Emission Limits, significant impact levels and Prevention of Significant Deterioration increments. |

## 1. Clarify and update air quality rules

| What need would the proposed rules address?                                                                                                                                                                          | How would the proposed rules address the need?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The rules contain requirements for industries that no longer operate in Oregon.                                                                                                                                      | <p>DEQ proposes to repeal rules for the following industries that no longer operate in Oregon:</p> <ul style="list-style-type: none"><li>• Neutral sulfite semi-chemical pulp mills</li><li>• Sulfite pulp mills</li><li>• Primary aluminum standards</li><li>• Laterite ore production of ferronickel</li><li>• Charcoal producing plants</li></ul> <p>If a business in these industries wants to build in Oregon and requires an air quality permit, DEQ would issue the permit under more stringent federal requirements for new sources. Oregon rules incorporate the federal rules by reference.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| When Oregon adopted federal and state standards, some of DEQ's rules became unnecessary. These rules do not align with EPA's more stringent standards and this creates conflict between DEQ's rules and federal law. | <p>DEQ proposes to repeal the following rules:</p> <ul style="list-style-type: none"><li>• Spray paint rules for sale or use in the Portland area.<p>Federal rules that apply to manufacturers of consumer spray paint will continue to reduce ozone from consumer products.</p></li><li>• Western Backstop (WEB) Sulfur Dioxide (SO<sub>2</sub>) Trading Program rules.<p>Oregon no longer needs the general sulfur dioxide trading program to address regional haze because Oregon adopted individual emission limits (based on Best Available Retrofit Technology requirements) to directly reduce haze-causing emissions from sources like the PGE Boardman plant.</p></li><li>• Open burning rules that regulate emissions from forced-air pit or air curtain incinerators.<p>Federal rules for commercial and industrial solid waste incineration require facilities with forced-air pit or air curtain incinerators to obtain Title V permits. Therefore, DEQ must repeal the rules that allow forced-air pit incineration as an alternative to open burning.</p></li></ul> |

## 1. Clarify and update air quality rules

### What need would the proposed rules address?

The excess emission rules do not contain all of the sources required to report excess emissions. They also do not contain source specific criteria for determining enforcement action.

The excess emission rules require sources to report excess emissions to DEQ as follows:

- Large sources must report all excess emissions immediately (within one hour of the event)

A “large” source is defined as any Title V source, any source whose emissions are equal to or exceed 100 tons per year of any regulated air pollutant, or which is subject to a National Emissions Standard for Hazardous Air Pollutants.

- Small sources must notify DEQ immediately only of excess emissions events that could endanger public health.

A “small” source means any other stationary source with a basic, general, simple or standard Air Contaminant Discharge Permit. In the definition of “small” sources in the excess emission rules, DEQ inadvertently did not include sources that are on basic permits.

Since EQC’s initial adoption of the excess emission rules, EPA adopted NESHAPs for many smaller sources, such as gas stations, hospital ethylene oxide sterilizers, and dry cleaners. These sources are missing from DEQ’s rules, creating conflict between DEQ’s rules and federal law.

The general provisions for NESHAP sources and some individual NESHAPs include excess emission reporting; therefore, DEQ’s rules do not need to include these small sources with the large sources that are required to report excess emissions immediately.

### How would the proposed rules address the need?

The proposed rules would add omitted sources required to report excess emissions and add the criteria for determining whether to take enforcement action for excess emissions, including

- Whether any federal New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants apply and whether the excess emission event caused a violation of the federal standard; and
- Whether the excess emissions event was due to an emergency.

## 1. Clarify and update air quality rules

### What need would the proposed rules address?

Source-specific technology-based standards such as federal New Source Performance Standards and NESHAPs consider the achievable emissions of a facility that uses best demonstrated technology. Adding this criterion when determining whether to take enforcement action for excess emissions allows DEQ to recognize that while a source may violate the general statewide standard, the source is still complying with the source-specific technology-based standard.

The excess emission rules allow affirmative defense in incorrect circumstances. Affirmative defense is the ability to avoid civil penalties for violations. On Feb. 12, 2013, EPA proposed a new rule limiting the circumstances in which sources could claim affirmative defenses, and clarifying how such provisions may apply under Title V permits versus other permits under the SIP. Under EPA's interpretation, DEQ's excess emissions rules incorrectly allow all permitted sources to assert an affirmative defense, rather than just Title V sources.

Portions of the Source Sampling Manual Volumes I and II and the Continuous Monitoring Manual are no longer current, which creates problems for DEQ staff and regulated parties implementing the manuals. DEQ last updated the manuals in 1992.

### How would the proposed rules address the need?

In addition, DEQ proposes to limit affirmative defenses to Title V permitted sources only and not sources that are regulated under the State Implementation Plan.

The proposed rules update the Source Sampling Manual Volumes I and II and the Continuous Monitoring Manual.

DEQ extensively revised the Source Sampling Manual Volume I to incorporate revised EPA methods for measuring fine particulate matter and other changes to sampling and monitoring methods made since 1992. The manual addresses air emissions source sampling practices and procedures for sampling projects conducted within the State of Oregon.

DEQ also extensively revised the Continuous Monitoring Manual to address:

- Continuous Emission Monitoring Systems;
- Continuous Parameter Monitoring Systems;
- Continuous Opacity Monitoring Systems;
- Federal monitoring requirements pertaining to NSPS, NESHAP, and Acid Rain programs; and
- DEQ specific monitoring requirements.



## 1. Clarify and update air quality rules

| What need would the proposed rules address?                                                                                                                    | How would the proposed rules address the need?                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                | <p>Revisions to the Continuous Monitoring Manual primarily concern:</p> <ul style="list-style-type: none"><li>• Commercial operations that are required to install and operate Continuous Monitoring Systems;</li><li>• Contractors that audit or certify Continuous Monitoring Systems; and</li><li>• Venders who sell or design Continuous Monitoring Systems.</li></ul> <p>The manuals are part of the proposed rules in this rulemaking package.</p> |
| <p>The Lane Regional Air Protection Agency's authority is unclear in some rules. LRAPA implements Oregon's air quality permitting programs in Lane County.</p> | <p>The proposed rules clarify LRAPA's authority in rules that LRAPA implements in Lane County. LRAPA generally must implement DEQ rules unless it adopts its own rules that are at least as strict as DEQ rules.</p>                                                                                                                                                                                                                                     |

## 2. Update particulate matter emission standards

DEQ proposes more stringent particulate matter standards to help prevent violations of the federal fine particulate standard.

Like many other states, Oregon adopted statewide particulate matter standards in 1970 as part of Oregon's initial State Implementation Plan. Since 1970, health researchers have concluded that exposure to particulate pollution is more harmful than previously indicated. As a result, EPA lowered the ambient air quality standard for particulates from 260 micrograms per cubic meter; it established separate standards, including a coarse particulates standard at 150 micrograms per cubic meter and a fine particulates standard at 35 micrograms per cubic meter.

EPA designates areas that violate air quality standards as nonattainment areas and designates all other areas as attainment or unclassified areas. With EPA's adoption of the fine particulate ambient air quality standard in 2011, Klamath Falls and Oakridge are now designated as nonattainment areas for fine particulate. Lakeview also violates the standard, but was not designated nonattainment because its data was not available at the time EPA designated Klamath Falls and Oakridge. Numerous other areas in Oregon are only slightly below the standard. More stringent state particulate matter standards may help prevent additional violations of the federal fine particulate standard in the future, especially if EPA continues to lower the standard.

Oregon's initial State Implementation Plan included less protective emission standards for businesses that were in operation in 1970; these are known as grandfathered businesses. However, emissions from grandfathered businesses subject to the particulate matter standards do not

## 2. Update particulate matter emission standards

adequately protect air quality. Routine exposure to air pollution at these levels can cause significant adverse health impacts to sensitive individuals.

In addition, emissions from these businesses can create barriers to economic development in the community. If a single business consumes the majority of an airshed's acceptable pollution levels, other businesses may not be able to expand and new businesses may not be able to come into the area. Work on the Klamath Falls fine particulate attainment plan showed when the background particulate matter concentration is added to a business's impacts, the impacts from a single grandfathered business could consume a significant portion of the available airshed. DEQ found similar results when analyzing emissions from a grandfathered business near Lakeview.

DEQ relies on two types of general standards to control emissions from permitted sources of particulate matter such as dust or smoke. One type of standard sets concentration-based emission limits as mass per unit volume of exhaust gas. A second type of standard, referred to as a visible emissions standard, limits the maximum visual density, or opacity, of a plume. Existing rules include different particulate concentration and opacity standards for units installed before or after 1970:

|                |                                                                    |
|----------------|--------------------------------------------------------------------|
| Pre-1970 unit  | 0.2 grain/dry standard cubic foot (gr/dscf) and 40 percent opacity |
| Post-1970 unit | 0.1 gr/dscf and 20 percent opacity                                 |

### What need would the proposed rules address?

Particulate matter emissions put Oregon areas at risk of exceeding ambient air quality standards and being designated as nonattainment areas by EPA. Once EPA designates an area as nonattainment for fine particulate emission, DEQ and the local government must develop and implement a federally approved attainment plan, which is costly to all involved and can require severe restrictions for businesses that want to build or expand in these areas. Attainment plans for fine particulate nonattainment areas typically include stringent regulations to reduce emissions from existing and new industry, residences and commercial establishments. An example of the type of restrictions imposed on businesses are in the rules adopted for the Medford/Ashland air quality maintenance area PM<sub>10</sub> attainment plan under OAR 340-240-0100 through 340-240-0250.

### How would the proposed rules address the need?

Reducing emissions from grandfathered businesses before areas exceed ambient air quality standards and are designated as nonattainment areas helps Oregon avoid the costs of developing and implementing attainment plans. This would also help avoid severe restrictions for businesses that want to build or expand in these areas.

The proposed rules would affect both the statewide particulate matter and opacity standards for grandfathered units built before June 1970 by phasing in a requirement for these businesses to meet lower standards based on typically available control technology, such as multiclones.

The particulate matter standard for all businesses (both pre- and post-1970) that are currently emitting less than 0.080 grains per dry standard cubic foot will be reduced to 0.10 gr/dscf from 0.2 gr/dscf and 0.1 gr/dscf, respectively. Under current rules, businesses are required to operate at their highest and best practicable treatment and control of air contaminant so as to maintain overall air quality at the highest possible levels, and to maintain pollution at the lowest possible levels. Therefore, businesses that are operating at levels much lower than existing standards must continue to do so.

## 2. Update particulate matter emission standards

| What need would the proposed rules address?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | How would the proposed rules address the need?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <p>Pre-1970 businesses will be required to meet 0.15 gr/dscf rather than 0.2 gr/dscf. Post-1970 businesses will be required to meet 0.14 gr/dscf. The standard for equipment or modes of operation that are used less than 876 hours per year remains at 0.20 gr/dscf.</p> <p>The opacity standard would be reduced for all businesses to 20 percent with the following exceptions:</p> <ul style="list-style-type: none"><li>• 40 percent during 12 minutes in an hour; and</li><li>• 40 percent during grate cleaning operations for wood fired boilers.</li></ul> <p>The proposal would allow a five-year transition period, ending no later than Jan. 1, 2020, but includes an opportunity for a one-year extension, if necessary.</p> <p>The proposed rules provide an option to request a source-specific limit if boiler or multiclone optimization does not result in emissions low enough to meet the revised standards. This would ensure the proposed rules would not require any business to replace a boiler or convert to fossil fuel.</p> |
| <p>DEQ's rules conflict with federal guidance. Oregon's current particulate matter standards have only one significant figure (e.g., 0.1 gr/dscf) whereas EPA expects all standards to have two significant figures (e.g., 0.10 gr/dscf) when comparing measured emissions data to the standards.</p>                                                                                                                                                                                                                                                      | <p>The proposed rules add a significant figure to all particulate matter standards to align with the EPA guidance that standards have two significant figures. The intent of the proposed rules is to ensure that Oregon's particulate standards are consistent with current EPA policy for significant figures when determining compliance with standards.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <p>DEQ's rules do not contain a reference method necessary to demonstrate compliance with opacity standards.</p> <p>Oregon based its first adopted opacity standard on an aggregate of three minutes in a 60-minute period. However, Oregon didn't develop a reference test method for the three-minute aggregate limit. As a workaround to demonstrate compliance with this standard, Oregon businesses used a modified version of EPA's Method 9 reference test method; however, this workaround is inconsistent with EPA and other states' methods.</p> | <p>The proposed rules would help ensure Oregon businesses use a reliable and defined method to measure compliance with statewide opacity standards that are consistent with EPA and other states' methods.</p> <p>The proposed rules would amend all opacity standards, both statewide and industry specific, to a six-minute block average except for the recovery furnace opacity limit that remains the same. This six-minute block average is consistent with other states in the region and EPA and is compatible with EPA's Method 9 reference test method. DEQ does</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

## 2. Update particulate matter emission standards

| What need would the proposed rules address?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | How would the proposed rules address the need?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>In addition, current rules for the four-county area around Portland include a 20 percent opacity standard that is an aggregate of 30 seconds in a 60-minute period for non-fuel burning equipment such as material handling equipment. However, just like the statewide standard, Oregon didn't develop a reference method for the 30-second aggregate limit.</p> <p>Not having reference methods for these opacity standards makes it difficult for businesses to demonstrate compliance with the standards, and creates difficulty for DEQ to assure compliance with and enforce the standards.</p>                                                                                                                                                                                                                                                                                                                                                                                         | <p>not expect this to change the overall stringency of the standards.</p> <p>The proposed rules would repeal the 20 percent opacity standard for the four-county area around Portland to eliminate the difficulty of complying with or enforcing the standard. Equipment in the four-county area would be subject to the statewide opacity standard. The 30 second visible emissions standard in OAR 340-208-0600 is more stringent than the current statewide standard, but the rule has limited applicability in the four counties. More importantly, emissions standards are only enforceable if there are defined reference methods for determining compliance.</p>                                                                                                                                           |
| <p>DEQ needs a different method for addressing opacity from fugitive emission sources. DEQ and businesses currently use EPA Method 9 to determine compliance with opacity standards and ensure fugitive emissions are not causing a nuisance, but this method isn't specific for fugitive sources. Fugitive particulate matter emissions are not emitted from a smoke stack and typically originate from storage piles, material conveying systems, unpaved roads or other dusty activities. In many situations, it is possible to take opacity readings to determine if the emitting source exceeded the opacity standard and then require action to abate the emissions. However, in other situations, opacity readings are difficult to take or the emissions do not exceed the opacity standard, but are nevertheless objectionable to surrounding neighbors. Therefore, rules are needed to control fugitive emissions from leaving a business's property, regardless of their opacity.</p> | <p>The proposed rules would require businesses to take reasonable precautions to prevent fugitive emissions. DEQ may request a business develop and implement a fugitive emissions control plan to prevent visible emissions from leaving the property for more than 18 seconds in a six minute period. This is a simpler, more comprehensive and effective approach to controlling these emissions than the current approach that requires DEQ to make a nuisance determination outside of special control areas. DEQ and businesses would use EPA Method 22, Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares to determine compliance. Method 22 is specific for fugitive sources, making it a much better method for determining compliance than Method 9.</p> |

## 3. Change permitting requirements for emergency generators and small natural gas or oil-fired equipment

Federal law requires Title V permits to account for emissions from all activities at a regulated facility, including insignificant activities that do not warrant the kind of effort applied to the main emitting activities. When Oregon established the Title V permitting program in 1993, DEQ developed a list of "categorically insignificant activities" that may take place at a source but are not addressed individually in

### 3. Change permitting requirements for emergency generators and small natural gas or oil-fired equipment

the permit. This list includes activities such as:

- Janitorial activities
- Groundskeeping activities
- Emergency generators

Businesses indicate they have categorically insignificant activities in their permit applications, but these activities are exempt from rigorous monitoring requirements because DEQ determined emissions from these activities are insignificant compared to other activities onsite.

#### What need would the proposed rules address?

EPA recently adopted National Emission Standards for Hazardous Air Pollutants for stationary reciprocating internal combustion engines. EPA's adoption added requirements for emergency generators currently exempt from permitting in Oregon because DEQ lists them as categorically insignificant activities. In addition, the growing need for large amounts of backup power from emergency generators at data centers has shown that emissions from emergency generators can be significant.

DEQ also determined that small fuel burning equipment, currently listed as categorically insignificant because each unit has low emissions, could have significant aggregate emissions if a business has multiple units. For example, DEQ identified one business that has eight small boilers that together have significant potential emissions of approximately 12 tons per year of nitrogen oxides.

#### How would the proposed rules address the need?

The proposed rules would remove emergency generators and small natural gas or oil-fired equipment from the list of categorically insignificant activities if:

- Those units are above size thresholds that make them subject to emission limits, or
- Their aggregate emissions are greater than de minimis levels.

DEQ would add these activities to existing permits.

In cases where emissions from a non-permitted business with these activities exceed permitting thresholds, the non-permitted business might need to obtain a permit for these activities alone. If the aggregate emissions are less than permitting thresholds, the owner or operator may only need to obtain preconstruction approval from DEQ when installing new units and not a permit.

### 4. Establish two new state air quality area designations, "sustainment" and "reattainment," to help areas avoid and more quickly end a federal nonattainment designation

EPA designates areas that violate air quality standards as "nonattainment" areas and designates all other areas as "attainment" or "unclassified" areas. Oregon law designates former nonattainment areas that EPA reclassified to attainment as "maintenance" areas to ensure those areas avoid future violations. DEQ proposes to establish two new Oregon air quality area designations, "sustainment" and "reattainment," to help areas avoid and more quickly end a federal nonattainment designation. If EQC approves these proposed rules, it would be able to designate specific areas of the state as "sustainment" or "reattainment" based on a local air quality analysis and public comment. To designate a specific area as "sustainment" or "reattainment" would require public notice and a rule

#### 4. Establish two new state air quality area designations, “sustainment” and “reattainment,” to help areas avoid and more quickly end a federal nonattainment designation

change. These designations would provide communities and businesses with additional tools and incentives to improve air quality. Please view DEQ’s [Lakeview Sustainment Area](#) document for supplemental information about the sustainment area designation.

##### What need would the proposed rules address?

There are gaps in the current designation system, described in the next two sections, that can create disincentives for affected communities to improve air quality and unnecessarily impede economic development. While EPA does not establish designations for these areas, there is a need for Oregon to establish designations to help these areas avoid and more quickly end a federal nonattainment designation.

##### How would the proposed rules address the need?

The proposed rules would establish two new designations with different permitting requirements for companies proposing a new or modified facility in areas that are close to or violating air quality standards:

- *Sustainment* area for a federally designated attainment area that is in danger of failing to meet air quality standards and which EPA has not yet designated a nonattainment area.
- *Reattainment* area for a federally designated nonattainment area that is meeting air quality standards and which EPA has not yet redesignated an attainment area.

EQC would designate specific areas of the state as sustainment or reattainment based on a local air quality analysis, DEQ recommendations and public comment. These classifications would provide communities and businesses with additional tools and incentives to improve air quality, as described below.

Communities are not provided sufficient opportunities to avoid nonattainment designation.

This first gap in area designations is for attainment areas where the air quality is in danger of failing to meet air quality standards. While air pollution in these areas can cause health effects, new or modified businesses are not necessarily the sources that contribute to the problem. However, air pollution levels in the area make it difficult or impossible for new and expanding businesses to demonstrate that their added emissions will not cause or contribute to air quality violations. The current permitting rules for attainment areas do not include provisions for these businesses to offset

Establishing *sustainment* areas would provide communities more opportunities to avoid nonattainment designation.

The proposed rules would allow DEQ to work with the local community to determine if a state sustainment designation would be the best approach to improve air quality and prevent a nonattainment designation. DEQ would identify potential sustainment areas based on an air quality analysis that may include monitoring, development of an emission inventory, and air quality modeling. The analysis would identify the air pollution sources that primarily contribute to public health concerns, and a boundary for the potential sustainment area. Upon approval by the local community, DEQ would then



#### 4. Establish two new state air quality area designations, “sustainment” and “reattainment,” to help areas avoid and more quickly end a federal nonattainment designation

##### What need would the proposed rules address?

their emission increases by a reduction in emissions from existing sources in the area. Designating these areas as nonattainment areas may be appropriate in some cases. However, in other cases, a nonattainment designation could impose prescriptive federal requirements and timelines that interfere with the more effective local efforts to improve air quality.

Communities designated as nonattainment areas must continue to require costly elements of an attainment plan when those elements are no longer necessary to protect air quality.

This second gap in area designations is for nonattainment areas that have met federal ambient air quality standards by implementing an approved attainment plan. For these areas to be designated as federal attainment areas and state maintenance areas, DEQ must develop and EPA must approve a long-term air quality maintenance plan. In developing the maintenance plan, DEQ may determine that some elements of the attainment plan are no longer required to maintain air quality. However, until EPA redesignates the area to attainment – a process that can take years – the area must continue implementing all elements of the attainment plan.

##### How would the proposed rules address the need?

propose the sustainment designation for public comment through its rulemaking process.

An EQC-designated sustainment area would remain a federal attainment area and new and modified facilities above the federal major source threshold would continue to be subject to federal attainment area requirements. However, the proposed rules for sustainment areas would address industrial source emissions below federal major source thresholds that the community could rely upon as part of an overall plan, such as EPA’s PM Advance program, for improving the ambient air quality. Within a sustainment area, new and modified facilities would receive incentives to obtain emission offsets from those existing air pollution sources that are identified as the primary cause of degraded air quality in the sustainment area under category six below (Change the New Source Review preconstruction permitting program). An area designated as a sustainment area could still become a federal nonattainment if air quality continued to degrade.

Establishing *re attainment* areas would allow communities to discontinue costly elements of an attainment plan when those elements are no longer necessary to protect air quality.

The proposed rules would allow DEQ to propose to EQC a state reattainment designation for a federal nonattainment area with an approved attainment plan where air quality reliably meets the federal ambient air quality standards. The potential for a reattainment area designation would create an incentive for a community to improve air quality as quickly as possible. The boundary for the reattainment area would be the same as the nonattainment area boundary.

An EQC designated reattainment area would remain a federal nonattainment area. All elements of the area’s attainment plan would continue to apply until

#### 4. Establish two new state air quality area designations, “sustainment” and “re attainment,” to help areas avoid and more quickly end a federal nonattainment designation

What need would the proposed rules address?

How would the proposed rules address the need?

EPA approves a maintenance plan and redesignates the area to attainment. However, within the reattainment area, new and modified facilities that fall below the federal major source threshold would be subject to less stringent requirements unless DEQ has identified the facility as a significant contributor to the air quality problems in the area under category six below (Change the New Source Review preconstruction permitting program).

#### 5. Designate Lakeview as a state sustainment area while retaining its federal attainment designation

Air quality in Lakeview currently does not meet the ambient air quality standards for fine particulates. However, EPA has not yet designated Lakeview a nonattainment area because Lakeview was not exceeding the standard at the time EPA made its designations throughout the United States. Oregon did not have the required three years of monitoring data to determine if the area was violating the federal standards.

Please view DEQ’s [Lakeview Sustainment Area](#) document for supplemental information about the designation for Lakeview.

What need would the proposed rules address?

How would the proposed rules address the need?

Lakeview’s status as violating the federal air quality standard without a nonattainment designation has created problems in permitting new and modified facilities. The construction approval process for attainment and unclassified areas includes an analysis that a new or expanding major pollution source will not cause or contribute to a violation of air quality standards. However, meeting this test is not possible for an area that already violates the standards. This, in effect, prevents DEQ from approving construction permits for new and expanding facilities in Lakeview.

The proposed rules would designate Lakeview as a state sustainment area proposed under category four above. While Lakeview would retain its federal designation as an attainment area, a state designation of sustainment would help the community in its efforts to improve air quality by:

- Providing more flexible permitting requirements for non-federal major emission sources and
- Avoiding a federal nonattainment designation.

The Lakeview Sustainment Area document includes DEQ’s technical analysis to identify the boundary and primary sources of air pollution in the proposed sustainment area.



## 5. Designate Lakeview as a state sustainment area while retaining its federal attainment designation

| What need would the proposed rules address?                                                                                                                              | How would the proposed rules address the need?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Designating Lakeview as a nonattainment area would preclude the community's active voluntary efforts to meet federal air quality standards under the PM Advance program. | <p>The Lakeview community voluntarily participates in EPA's "PM Advance" program to develop an air quality improvement and prevention plan. Local officials expect to bring the area quickly back into attainment with the standard to avoid a federal nonattainment designation and the resulting impacts on costs for businesses seeking to locate there. DEQ assists the community with technical analysis and administrative support for the PM Advance planning process.</p> <p>The PM Advance plan that Lakeview is currently developing outside the rulemaking process will address all PM<sub>2.5</sub> emission sources, including residential wood stoves and open burning. DEQ determined that the PM Advance plan and designation as a sustainment area would complement each other to address stationary sources within the Lakeview area.</p> <p>Under the sustainment area designation, new and expanding businesses that do not exceed the federal major source threshold for particulate matter could be permitted by obtaining offsets under category six below (Change the New Source Review preconstruction permitting program). As an incentive, the offset requirement would be lowered for businesses that obtain offsets from residential wood heating, which is the primary cause of air quality violations in Lakeview.</p> |

## 6. Change the New Source Review preconstruction permitting program

DEQ proposes changes to the New Source Review program to improve air quality in all areas of the state, especially those that are close to or exceed ambient air quality standards. New Source Review is a federally required preconstruction program that ensures new or modified facilities install the latest control technologies and do not have adverse impacts on ambient air quality standards. The intent of the Prevention of Significant Deterioration portion of the New Source Review program is to prevent degradation of air quality in areas that meet federal air quality standards. The intent of the nonattainment New Source Review program is to improve the air quality in designated nonattainment areas that violate air quality standards. DEQ's proposal would also establish New Source Review requirements for the proposed new sustainment and reattainment area designations described in category four above.

## 6. Change the New Source Review preconstruction permitting program

Please view DEQ's [NSR Program Supplemental Discussion](#) for supplemental information about these changes.

### What need would the proposed rules address?

The current New Source Review program rules apply to facilities that emit more than the federal major source threshold and to some facilities that emit less. Federal law requires states to have both a major and a minor New Source Review program. The requirements for the federal major New Source Review program are very prescriptive. States have more flexibility in designing a state minor New Source Review program if the state demonstrates that it will protect air quality. Oregon's current requirements for major and minor New Source Review are the same. This limits DEQ's ability to use the minor New Source Review program in the most effective way to protect air quality while enabling economic development.

Current criteria for determining if a major new or modified facility would improve air quality in or near a nonattainment or maintenance area are known as Net Air Quality Benefit. Problems with the criteria include:

- Based solely on air quality modeling,
- Sometimes impossible for businesses to meet, unless the increasing and offsetting businesses are co-located,
- Prevent potentially more beneficial local air pollution reduction projects from occurring, thereby creating an unnecessary construction ban, and
- Require new or modified businesses to reduce emissions from other existing businesses and demonstrate that together the emission increases and reductions result in improved air quality at most modeled receptors within the area.

The current New Source Review program rules allow extensions of construction permits for good cause. The rules do not include criteria for approving or denying extensions of construction

### How would the proposed rules address the need?

The proposed rules for new and modified facilities would distinguish facilities above the federal major source threshold from facilities below the threshold. To do this, the proposed rules would:

- Establish a minor New Source Review program for smaller facilities called "State New Source Review."
- Tailor New Source Review requirements for smaller facilities to the air quality needs of an area in ways that are not allowed for larger businesses subject to EPA requirements.

The proposed rules would establish a new process for companies proposing a new or modified facility in or near a nonattainment, sustainment or maintenance area. The proposal provides a simplified modeling demonstration that requires emission offsets to be greater than emission increases. The offset ratio would depend on:

- The area classification, and
- Whether the new or modified source of emissions is a federal major source or minor source.

The proposed rules would provide incentives for new or modified businesses to help address ambient air quality problems. The incentives would reduce the emission-offset ratio if the business obtains reductions from priority sources, those that primarily cause air quality problems in the local area. In addition, the proposed rules would ensure no degradation of air quality in relation to the ambient monitoring for the area.

The proposed rules provide two 18-month extensions and procedures for requesting and approving extensions for New Source Review construction permits:

## 6. Change the New Source Review preconstruction permitting program

### What need would the proposed rules address?

permits or the number of extensions allowed.

Allowing construction permits to be extended multiple times without limit or additional review could:

- Tie up the business's designated allowable emissions portion of the airshed indefinitely,
- Result in the installation of less effective control technology if control technology has improved since the approval of the original construction permit, and
- Unnecessarily impair air quality.

### How would the proposed rules address the need?

- For the first extension, the proposed rules would require a review of any new pollution control technologies that could be applied to the proposed source.
- For the second extension, the proposed rules would require a review of the pollution control technology and a review of the impacts on the ambient air quality in the area.

## 7. Modernize methods allowed for holding public hearings and meetings

DEQ is committed to public engagement and staying current with emerging and innovative ways to reach people and hold hearings. This proposal would make it easier and more cost effective for DEQ to hold, and people to participate in, permit actions and public hearings. Current rules require DEQ to hold informational meetings on the most complex permit actions and public hearings.

### What need would the proposed rules address?

The existing rules are very prescriptive regarding how DEQ holds public hearings and meetings for air quality permits. These rules, first adopted by Oregon in 1974, do not allow for technological advances like Internet-based virtual meetings in lieu of statewide travel. Having staff travel to local hearings and meetings around the state can be resource intensive and wasteful if no one attends to present comments or gather information.

### How would the proposed rules address the need?

The proposed rules would make it easier and more cost-effective for DEQ to hold and people to participate in public hearings and meetings by removing the prescriptive language from the rules. For example, with the option to hold Internet-based virtual meetings, DEQ could hold more meetings across the state using fewer resources. In addition, after DEQ has established the necessary technology, it would have the option to allow people to call in to hearings and meetings from any location instead of requiring people to travel to the hearing or meeting.

## 8. Re-establish Heat Smart woodstove replacement program exemption for small commercial solid fuel boilers regulated under the permitting program

DEQ proposes revisions to residential wood heating rules to remedy the inadvertent prohibition of selling small commercial biomass boilers in Oregon. DEQ's Heat Smart program requires biomass and other solid fuel burning devices that have heat output of less than one million Btu per hour to meet certification requirements. The existing rules exempt small biomass boilers from certification requirements if they are subject to federal National Emission Standards for Hazardous Air Pollutants. However, EPA revised its rules in 2012 to exempt small biomass boilers from these standards. DEQ's proposed rules reestablish the Heat Smart exemption for small commercial biomass boilers regulated through the construction approval or permit programs.

## 8. Re-establish Heat Smart woodstove replacement program exemption for small commercial solid fuel boilers regulated under the permitting program

### What need would the proposed rules address?

Small commercial biomass boilers with heat output less than one million Btu per hour cannot be sold in Oregon. DEQ's existing rules exempt small biomass boilers from the Heat Smart program if they are subject to National Emission Standards for Hazardous Air Pollutants. The Heat Smart Program is intended to ensure that commercial and residential wood stoves and other wood heating devices meet certification standards. The certification standards were not designed to apply to biomass boilers. However, EPA recently exempted small biomass boilers from the National Emission Standards for Hazardous Air Pollutants. EPA's exemption subjected these devices to Oregon's Heat Smart rules unintentionally.

### How would the proposed rules address the need?

The proposed rule changes would allow small scale commercial biomass boilers to be sold in Oregon again, while ensuring they are still subject to existing state limits on particulate matter and opacity. This proposal would eliminate the reference to the federal regulations and allow boilers with a heat output less than one million Btu per hour to be sold in Oregon.

## 9. Remove annual reporting requirements for small gasoline dispensing facilities

DEQ proposes repealing the annual reporting requirement for small gasoline dispensing facilities after finding the reports unnecessary to ensure compliance with emission standards for preventing leaks and spills.

### What need would the proposed rules address?

The annual reporting requirement for these small gasoline-dispensing facilities is unnecessary. A gasoline dispensing facility with a monthly throughput of fewer than 10,000 gallons of gasoline is currently required to:

- Meet work practice standards,
- Have a submerged fill tube installed on any tank at the facility that has a capacity of 250 gallons or more,
- Submit to DEQ a one-time initial notification and later a notification of compliance status, if subject to the submerged fill tube requirement, and
- Submit annual reports of throughput.

These facilities are not required to have an air quality permit. DEQ collected one-time throughput data from these facilities and has authority to request additional information if needed.

### How would the proposed rules address the need?

The proposed rules would remove the annual reporting requirement for facilities with monthly throughput less than 10,000 gallons. DEQ would still have authority to request throughput information from these facilities but would only do so as needed for businesses close to the 10,000-gallon threshold to determine if they trigger permitting requirements.

How will DEQ know the rules have addressed the needs stated above?

To determine whether the rulemaking met its objectives, DEQ would confirm, as part of ongoing interaction with regulated parties, whether regulated parties have a clearer understanding of the program and their obligations. DEQ expects to see a reduction in the number of business that request help interpreting the rules.

DEQ expects to see an improvement in air quality, which could result in fewer nonattainment areas, based on the following reductions in emissions from:

- Updates to the particulate matter standards;
- Offsets of priority sources causing air quality problems in areas that chose to become sustainment areas;
- Changes to the New Source Review preconstruction permitting program,

DEQ expects to have more flexibility in how DEQ holds public meetings and hearings, more participation from the public, and reduced costs.

If EQC adopts the proposed rules after considering public comments, DEQ would submit the rules to EPA to update Oregon's State Implementation Plan. DEQ would know the goals of this rulemaking have been addressed when EPA reviews and approves the State Implementation Plan revision.

## Rules affected, authorities, supporting documents

### Adopt OAR:

340-200-0035, 340-202-0225, 340-204-0300, 340-204-0310, 340-204-0320, 340-206-8010, 340-206-8020, 340-206-8030, 340-206-8040, 340-208-0005, 340-212-0005, 340-214-0005, 340-216-8010, 340-216-8020, 340-222-0035, 340-222-0046, 340-222-0048, 340-222-0051, 340-222-0055, 340-224-0025, 340-224-0034, 340-224-0038, 340-224-0045, 340-224-0055, 340-224-0245, 340-224-0250, 340-224-0255, 340-224-0260, 340-224-0270, 340-224-0500, 340-224-0510, 340-224-0520, 340-224-0530, 340-224-0540, 340-226-0005, 340-226-8010, 340-234-0005, 340-234-0540, 340-236-0005, 340-236-8010, 340-240-0050

### Amend OAR:

340-200-0010, 340-200-0020, 340-200-0025, 340-200-0030, 340-200-0040, 340-200-0050, 340-200-0100, 340-200-0110, 340-200-0120, 340-202-0010, 340-202-0020, 340-202-0050, 340-202-0070, 340-202-0100, 340-202-0110, 340-202-0130, 340-202-0200, 340-202-0210, 340-202-0220, 340-204-0010, 340-204-0020, 340-204-0030, 340-204-0040, 340-204-0050, 340-204-0060, 340-204-0070, 340-204-0080, 340-204-0090, 340-206-0010, 340-206-0020, 340-206-0030, 340-206-0040, 340-206-0050, 340-206-0060, 340-206-0070, 340-208-0010, 340-208-0110, 340-208-0210, 340-208-0300, 340-208-0310, 340-208-0320, 340-208-0450, 340-209-0010, 340-209-0020, 340-209-0030, 340-209-0040, 340-209-0050, 340-209-0060, 340-209-0080, 340-210-0010, 340-210-0020, 340-210-0100, 340-210-0110, 340-210-0120, 340-210-0205, 340-210-0215, 340-210-0225, 340-210-0230, 340-210-0240, 340-210-0250, 340-212-0010, 340-212-0110, 340-212-0120, 340-212-0130, 340-212-0140, 340-212-0150, 340-212-0200, 340-212-0210, 340-212-0220, 340-212-0230, 340-212-0240, 340-212-0250, 340-212-0260, 340-212-0270, 340-212-0280, 340-214-0010, 340-214-0100, 340-214-0110, 340-214-0114, 340-214-0130, 340-214-0200, 340-214-0210, 340-214-0220, 340-214-0300, 340-214-0310, 340-214-0320, 340-214-0330, 340-214-0340, 340-214-0350, 340-214-0360, 340-216-0010, 340-216-0020, 340-216-0025, 340-216-0030, 340-216-0040, 340-216-0052, 340-216-0054, 340-216-0056, 340-216-0060, 340-216-0062, 340-216-0064, 340-216-0066, 340-216-0068, 340-216-0070, 340-216-0082, 340-216-0084, 340-216-0090, 340-216-0094, 340-218-0010, 340-218-0020, 340-218-0030, 340-218-0040, 340-218-0050, 340-218-0060, 340-218-0070, 340-218-0080, 340-218-0090, 340-218-0100, 340-218-0110, 340-218-0120, 340-218-0140, 340-218-0150, 340-218-0160, 340-218-0170, 340-218-0180, 340-218-0190, 340-218-0200, 340-218-0210, 340-218-0220, 340-218-0230, 340-218-0240, 340-220-0010, 340-220-0020, 340-220-0060, 340-220-0070, 340-220-0080, 340-220-0090, 340-220-0100, 340-220-0110, 340-220-0120, 340-220-0130, 340-220-0140, 340-220-0150, 340-220-0160, 340-220-0170, 340-220-0180, 340-220-0190, 340-222-0010, 340-222-0020, 340-222-0030, 340-222-0040, 340-222-0041, 340-222-0042, 340-222-0043, 340-222-0045, 340-222-0060, 340-222-0080, 340-222-0090, 340-224-0010, 340-224-0020, 340-224-0030, 340-224-0040, 340-224-0050, 340-224-0060, 340-224-0070, 340-224-0080, 340-224-0100, 340-225-0010, 340-225-0020, 340-225-0030, 340-225-0040, 340-225-0045, 340-225-0050, 340-225-0060, 340-225-0070, 340-225-0090, 340-226-0010, 340-226-0100, 340-226-0110, 340-226-0120, 340-226-0130, 340-226-0140, 340-226-0210, 340-226-0310, 340-226-0320, 340-226-0400, 340-228-0010, 340-228-0020, 340-228-0100, 340-228-0110, 340-228-0120, 340-228-0130, 340-228-0200, 340-228-0210, 340-228-0300, 340-232-0010, 340-232-0020, 340-232-0030, 340-232-0040, 340-232-0050, 340-232-0060, 340-232-0080, 340-232-0085, 340-232-0090, 340-232-0100, 340-232-0110, 340-232-0120, 340-232-0130, 340-232-0140, 340-232-0150, 340-232-0160, 340-232-0170, 340-232-0180, 340-232-0190, 340-232-0200, 340-232-0210,

340-232-0220, 340-232-0230, 340-234-0010, 340-234-0100, 340-234-0140, 340-234-0200, 340-234-0210, 340-234-0220, 340-234-0240, 340-234-0250, 340-234-0270, 340-234-0500, 340-234-0510, 340-234-0520, 340-234-0530, 340-236-0010, 340-236-0310, 340-236-0320, 340-236-0330, 340-236-0400, 340-236-0410, 340-236-0420, 340-236-0440, 340-236-0500, 340-240-0010, 340-240-0020, 340-240-0030, 340-240-0100, 340-240-0110, 340-240-0120, 340-240-0130, 340-240-0140, 340-240-0150, 340-240-0160, 340-240-0180, 340-240-0190, 340-240-0210, 340-240-0220, 340-240-0250, 340-240-0300, 340-240-0320, 340-240-0330, 340-240-0340, 340-240-0350, 340-240-0360, 340-240-0400, 340-240-0410, 340-240-0420, 340-240-0430, 340-240-0440, 340-240-0510, 340-240-0550, 340-240-0560, 340-240-0610, 340-242-0400, 340-242-0410, 340-242-0420, 340-242-0430, 340-242-0440, 340-242-0500, 340-242-0510, 340-242-0520, 340-242-0600, 340-242-0610, 340-242-0620, 340-242-0630, 340-244-0040, 340-244-0232, 340-244-0234, 340-244-0236, 340-244-0238, 340-244-0239, 340-244-0240, 340-244-0242, 340-244-0244, 340-244-0246, 340-244-0248, 340-244-0250, 340-246-0230, 340-262-0450, 340-264-0010, 340-264-0020, 340-264-0030, 340-264-0040, 340-264-0050, 340-264-0060, 340-264-0070, 340-264-0075, 340-264-0078, 340-264-0080, 340-264-0100, 340-264-0110, 340-264-0120, 340-264-0130, 340-264-0140, 340-264-0150, 340-264-0160, 340-264-0170, 340-264-0175, 340-264-0180, 340-268-0010, 340-268-0020, 340-268-0030

Repeal OAR:

340-208-0100, 340-208-0200, 340-208-0600, 340-209-0070, 340-214-0400, 340-214-0410, 340-214-0420, 340-214-0430, 340-218-0250, 340-222-0070, 340-225-0090, 340-226-0200, 340-228-0400, 340-228-0410, 340-228-0420, 340-228-0430, 340-228-0440, 340-228-0450, 340-228-0460, 340-228-0470, 340-228-0480, 340-228-0490, 340-228-0500, 340-228-0510, 340-228-0520, 340-228-0530, 340-234-0300, 340-234-0310, 340-234-0320, 340-234-0330, 340-234-0340, 340-234-0350, 340-234-0360, 340-234-0400, 340-234-0410, 340-234-0420, 340-234-0430, 340-236-0100, 340-236-0110, 340-236-0120, 340-236-0130, 340-236-0140, 340-236-0150, 340-236-0200, 340-236-0210, 340-236-0220, 340-236-0230, 340-236-0430, 340-240-0170, 340-240-0230, 340-240-0310, 340-242-0700, 340-242-0710, 340-242-0720, 340-242-0730, 340-242-0740, 340-242-0750, 340-242-0760, 340-242-0770, 340-242-0780, 340-242-0790, 340-264-0190

Divisions 210, 216 and 218 include rules, programs or activities considered land use programs under the DEQ State Agency Coordination Program.

Statutory authority

ORS 192, 468 and 468A

Statutes implemented

ORS 183, 192, 468, 468A, 477, Or. Laws 2009, chapter 754

Documents relied on for rulemaking ORS 183.335(2)(b)(C)

| Document title                                                                        | Document location                                                                                       |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| 06/06/90 EPA guidance titled "Performance Test Calculation"                           | <a href="http://www.epa.gov/ttn/emc/rounding.pdf">http://www.epa.gov/ttn/emc/rounding.pdf</a>           |
| EPA Method 9—Visual Determination of the Opacity of Emissions From Stationary Sources | <a href="http://www.epa.gov/ttn/emc/promgate/m-09.pdf">http://www.epa.gov/ttn/emc/promgate/m-09.pdf</a> |



| Document title                                                                                                                                                                                            | Document location                                                                                                                                                                                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Method 22 - Visual Determination of Fugitive Emissions From Material Sources and Smoke Emissions From Flares                                                                                              | <a href="http://www.epa.gov/ttn/emc/promgate/m-22.pdf">http://www.epa.gov/ttn/emc/promgate/m-22.pdf</a>                                                                                                                                             |
| Standards of Performance for Stationary Compression Ignition Internal Combustion Engines                                                                                                                  | <a href="http://www.gpo.gov/fdsys/pkg/CFR-2011-title40-vol6/pdf/CFR-2011-title40-vol6-part60-subpartIII.pdf">http://www.gpo.gov/fdsys/pkg/CFR-2011-title40-vol6/pdf/CFR-2011-title40-vol6-part60-subpartIII.pdf</a>                                 |
| Standards of Performance for Stationary Spark Ignition Internal Combustion Engines                                                                                                                        | <a href="http://www.gpo.gov/fdsys/pkg/CFR-2011-title40-vol6/pdf/CFR-2011-title40-vol6-part60-subpartJJJ.pdf">http://www.gpo.gov/fdsys/pkg/CFR-2011-title40-vol6/pdf/CFR-2011-title40-vol6-part60-subpartJJJ.pdf</a>                                 |
| National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines; New Source Performance Standards for Stationary Internal Combustion Engines                       | <a href="http://www.gpo.gov/fdsys/pkg/FR-2013-01-30/pdf/2013-01288.pdf">http://www.gpo.gov/fdsys/pkg/FR-2013-01-30/pdf/2013-01288.pdf</a>                                                                                                           |
| Standards of Performance for Stationary Spark Ignition Internal Combustion Engines and National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines; Final Rule | <a href="http://www.epa.gov/ttn/atw/area/fr18ja08.pdf">http://www.epa.gov/ttn/atw/area/fr18ja08.pdf</a>                                                                                                                                             |
| Regulations Pertaining to NPDES and WPCF Permits (OAR 340-45)                                                                                                                                             | <a href="http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_045.html">http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_045.html</a>                                                                                       |
| 2011 Oregon Air Quality Data Summaries                                                                                                                                                                    | <a href="http://www.deq.state.or.us/aq/forms/2011AirQualityAnnualReport.pdf">http://www.deq.state.or.us/aq/forms/2011AirQualityAnnualReport.pdf</a>                                                                                                 |
| National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers; Final Rule                                                                  | <a href="http://www.gpo.gov/fdsys/pkg/FR-2013-02-01/pdf/2012-31645.pdf">http://www.gpo.gov/fdsys/pkg/FR-2013-02-01/pdf/2012-31645.pdf</a>                                                                                                           |
| Stationary Source Reporting Requirements - OAR 340-214-0110                                                                                                                                               | <a href="http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_214.html">http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_214.html</a>                                                                                       |
| 40 CFR Part 58, Appendix D — Network Design Criteria for Ambient Air Quality Monitoring                                                                                                                   | <a href="http://www.gpo.gov/fdsys/granule/CFR-2012-title40-vol6/CFR-2012-title40-vol6-part58-appD/content-detail.html">http://www.gpo.gov/fdsys/granule/CFR-2012-title40-vol6/CFR-2012-title40-vol6-part58-appD/content-detail.html</a>             |
| Air Contaminant Discharge Permits – Table 1, DEQ relied on OAR 340-216-0020                                                                                                                               | <a href="http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_tables/340-216-0020_10-24.pdf">http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_tables/340-216-0020_10-24.pdf</a>                                             |
| Consumer Price Index Conversion Factors 1774 to estimated 2021 to Convert to Dollars of 1998. 2013 Robert C. Sahr, Political Science, Oregon State University, Rev 05/08/2013                             | <a href="http://oregonstate.edu/cla/polisci/sites/default/files/faculty-research/sahr/inflation-conversion/excel/cv1998.xls">http://oregonstate.edu/cla/polisci/sites/default/files/faculty-research/sahr/inflation-conversion/excel/cv1998.xls</a> |
| EPA Cost Control Manual, Sixth Edition. U.S EPA report #EPA/452/B-02-001, January 2002.                                                                                                                   | <a href="http://www.epa.gov/ttn/catc/dir1/c_allchs.pdf">http://www.epa.gov/ttn/catc/dir1/c_allchs.pdf</a>                                                                                                                                           |
| Emission Controls for Small Wood-Fired Boilers, Prepared for: United States Forest Service, Western Forestry Leadership Coalition, May 2010                                                               | <a href="http://www.wflccenter.org/news_pdf/361_pdf.pdf">http://www.wflccenter.org/news_pdf/361_pdf.pdf</a>                                                                                                                                         |



## Fee Analysis

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This rulemaking does not involve any change in fees.

## Fiscal and economic impacts

The proposed rules would have fiscal and economic impacts on the public, businesses, state agencies and units of local governments. DEQ proposes to:

- Streamline, reorganize and update Oregon's air quality permit programs to improve air quality with more efficient and effective permitting programs,
- Amend statewide particulate matter standards and the preconstruction permitting program to help Oregon comply with EPA's adoption of the ambient air quality standard for fine particulate, also known as PM<sub>2.5</sub> and respond to problems identified with Oregon's permitting program that must be addressed to protect air quality,
- Add preconstruction permitting flexibility for smaller facilities,
- Improve community outreach, and
- Make minor changes to the woodstove replacement program called Heat Smart and the gasoline dispensing facility rules to improve program implementation.

## Statement of Cost of Compliance

This section organizes the cost of compliance by the nine categories of rule changes.

## Impacts on state agencies, local government and the public

**1. Clarify and update air quality rules**

The proposed rules to improve the organization and increase the clarity of the rules may have slight positive fiscal and economic impacts on state agencies, local governments and the public because the rules would be easier for people to understand. DEQ lacks information to estimate individuals' time savings in using rules that are easier to understand. DEQ expects the clarifications and updates would have no negative impacts except DEQ's permitting staff would experience a slight workload increase until staff become familiar with the proposed rules followed by a workload decrease.

**2. Update particulate matter emission standards**

State agencies and local government: The proposed particulate emission standards would have positive and negative fiscal and economic impacts on state agencies and local governments.

The proposed rules would create positive fiscal and economic impacts indirectly in the form of cost savings for DEQ and Oregon communities. Reducing emissions before an area exceeds ambient air quality standards would help Oregon avoid additional nonattainment designations by EPA. As a result, DEQ and Oregon communities could avoid the costs to develop and implement attainment plans for these areas. DEQ is unable to estimate the cost savings because each plan is unique, but the recent plan for Klamath Falls took two years to develop and required resources from EPA, DEQ, the Klamath Falls Air Quality Advisory Committee and other community

members. DEQ expects its permitting staff would experience a slight workload increase until staff become familiar with the proposed rules followed by a workload decrease.

The proposed rules would have no fiscal and economic impacts on state agencies and local governments holding permits because these facilities already meet the lower emission standards so none of these agency- or government-owned facilities would be required to make any changes to comply with the proposed rules. State agencies own 30 permitted facilities, federal agencies and tribes own 8 permitted facilities, and local governments own 68 permitted facilities.

Public: DEQ expects the proposed lower particulate matter standards would have no fiscal or economic impacts on the public directly. The proposed rules could affect the public indirectly if businesses change the price of goods and services to offset the costs of compliance. DEQ expects any such price increases to be small but lacks available information to estimate potential increases accurately.

The proposed rules could create positive economic benefits and improvements in public health and welfare indirectly by reducing particulate matter emissions statewide. Particulate matter causes serious health problems ranging from increased respiratory and pulmonary symptoms, hospital admissions and emergency room visits, to premature death for people with heart and lung disease. These health problems have negative economic impacts. DEQ lacks available information to estimate the health and welfare benefits, but when EPA adopted the current 24-hour PM<sub>2.5</sub> national ambient air quality standard in 2006, EPA estimated the following:

- The nationwide cost of meeting the revised 24-hour PM<sub>2.5</sub> standards at \$5.4 billion in 2020. This estimate includes the costs of purchasing and installing controls for reducing pollution to meet the standard.
- The revised standards will yield \$9 billion to \$76 billion a year in health and visibility benefits in 2020. Health benefits include reductions in premature death, diseases and symptoms associated with fine particle pollution exposure.

### **3. Change permitting requirements for emergency generators and small natural gas or oil-fired equipment**

State agencies and local governments: The proposed changes to permitting requirements for emergency generators and small natural gas or oil-fired equipment would have a negative fiscal and economic impact on state agencies and local governments required to obtain a new permit for these generators or equipment. The initial cost to obtain a new permit is \$1,200 plus permit holders pay approximately \$1,300 in annual fees. However, DEQ expects no state agencies and local governments would be required to obtain new permits as a result of the proposed rules because most facilities that have generators or equipment subject to the proposed rules already hold air quality permits. State agencies own 30 permitted facilities, federal agencies and tribes own 8 permitted facilities, and local governments own 68 permitted facilities.

If any state agencies and local governments that already hold air quality permits are subject to the proposed requirements for emergency generators and small natural gas or oil-fired equipment, DEQ would add the new requirements to these facilities' permits at the time of permit renewal. The proposed rules would not affect these facilities' permit fees. These businesses might experience costs associated with additional recordkeeping depending on their

current environmental managements systems. DEQ lacks available information to estimate those costs of additional recordkeeping accurately.

DEQ workload would increase initially and could level off or decrease depending on the number of new facilities that require permits.

Public: DEQ does not anticipate any fiscal or economic impacts from the proposed rules directly on the public. The proposed rules could affect the public indirectly if businesses change the price of goods and services to offset the costs obtaining a new permit. DEQ expects any such price increases to be small but lacks available information to estimate potential increases accurately. The proposed rules could create positive economic benefits and improvements in public health and welfare indirectly by helping Oregon protect air quality.

**4. Establish two new state air quality area designations, “sustainment” and “re attainment,” to help areas avoid and more quickly end a federal nonattainment designation.**

The proposed rules to establish new state air quality area designations would have positive fiscal and economic impacts.

State agencies: DEQ expects the proposed rules to reduce the likelihood EPA will designate an area as nonattainment. By designating sustainment areas before areas exceed ambient air quality standards and are designated as nonattainment areas, DEQ and Oregon communities would avoid the costs of developing and implementing attainment plans. DEQ is unable to estimate the costs savings because each plan is unique. Designating reattainment areas would require approximately the same work as designating a maintenance area, but reattainment designation could happen more quickly than maintenance designation. DEQ’s workload would initially increase as staff become familiar with the proposed rules followed by a workload decrease. The proposed rules would have no fiscal or economic impacts on other state agencies because they do not permit businesses or hold permits in the areas affected by the proposed rules. The only two federally owned facilities with permits in the affected area are so small that they are not affected by the sustainment or reattainment area designations.

Local government: The proposed rules would have a positive fiscal and economic impact in sustainment areas indirectly by allowing businesses to build or expand in the areas as long as air quality is protected. The proposed rules would have a positive fiscal and economic impact in reattainment areas indirectly because new and modified facilities that fall below the federal major source threshold would be subject to less stringent requirements provided they were not identified as significant contributors to the air quality problems in the area. The proposed rules would have positive fiscal and economic impacts on local governments by avoiding the costs of developing and implementing attainment plans, such as convening advisory committee meetings required under the nonattainment and maintenance area designations. DEQ lacks available information to estimate these impacts accurately.

Public: DEQ does not anticipate the proposed rules under this category to have any direct fiscal or economic impacts on the public. Positive fiscal or economic impacts to the public could occur indirectly, such as increased access to goods and services, if more businesses build or expand in the sustainment or reattainment areas. DEQ lacks available information to estimate these impacts accurately.

**5. Designate Lakeview as a state sustainment area while retaining its federal attainment designation**

The proposed rules to identify Lakeview as a state sustainment area would have the same fiscal and economic impacts on state agencies, local governments and the public as establishing the new state air quality area designation described in category 4 above. In addition, if a new business locates in Lakeview and buys woodstove offsets, some members of the public may benefit from woodstove replacements.

**6. Change the New Source Review preconstruction permitting program**

State agencies and local government: DEQ expects the proposed changes to the preconstruction permitting program would have no negative fiscal and economic impacts on state and federal agencies and local governments because it's unlikely these entities' permitted facilities would ever trigger requirements for New Source Review.

DEQ expects the proposed rules would not change the workload of U.S. Forest Service and National Park Service land managers who currently review New Source Review permit applications for businesses located close to Class I areas, which are usually designated wilderness areas. DEQ expects its permitting staff would experience a slight workload increase until staff become familiar with the proposed rules followed by a workload decrease.

The proposed rules would create positive fiscal and economic impacts indirectly in the form of cost savings for DEQ and Oregon communities. Reducing emissions before an area exceeds ambient air quality standards would help Oregon avoid additional nonattainment designations by EPA. As a result, DEQ and Oregon communities would avoid the costs to develop and implement attainment plans for these areas. DEQ is unable to estimate the cost savings because each plan is unique, but the recent plan for Klamath Falls took two years to develop and required resources from EPA, DEQ, the Klamath Falls Air Quality Advisory Committee and other community members.

Public: DEQ expects the proposed rules would have no fiscal or economic impacts on the public directly. The proposed rules could affect the public indirectly if businesses change the price of goods and services to offset the costs of complying with the proposed rules. DEQ expects any such price increases for goods or services to be small and lacks available information upon which it could accurately estimate potential increases.

**7. Modernize methods allowed for holding public hearings and meetings**

State agencies and local government: The proposed rules to increase flexibility for public hearings and meetings would have positive fiscal and economic impacts on state agencies, local governments and the public. After DEQ has established the necessary technology, it would have the option to allow people to call into hearings and meetings from any location instead of requiring people to travel to the hearing or meeting. The proposed rules would have positive impacts by indirectly decreasing travel and associated expenses for state agencies, local governments and others who attend or participate in DEQ hearings and meetings. Cost savings depend on the physical location of the hearing or meeting. DEQ lacks available information to estimate costs to attendees because the travel distance and frequency is unknown.

In addition, with the option to hold Internet-based virtual meetings, DEQ would experience cost savings by holding meetings across the state using fewer resources. Currently, DEQ staff travel to numerous public hearings and meetings as required by the existing rules. DEQ's cost for using a state car is \$0.56 per mile and accommodation rates for staff are approximately \$83 to \$126 per night. The average hourly rate of a DEQ permit writer who typically represents DEQ at these hearings and meetings is \$70 to \$85 per hour including benefits. The total cost of the hearing or meeting depends on how far staff must travel. If the physical location of the hearing or meeting is two hours from staff's home city, DEQ's cost could be approximately \$2,000. At least \$800 of this is transportation costs. DEQ's workload may increase initially depending on implementation of the proposed rules, but is expected to decrease as staff become familiar with the procedures of holding virtual hearings and meetings.

Public: The public may experience positive indirect fiscal or economic impacts due to DEQ's more efficient use of state resources. DEQ expects costs to be small per individual and lacks available information to estimate potential decreases accurately.

## **8. Re-establish Heat Smart woodstove replacement program exemption for small commercial solid fuel boilers regulated under the permitting program**

State agencies, local government and the public: The proposed re-establishment of the woodstove replacement program exemption would have no fiscal or economic impacts on state agencies, local governments and the public because these entities do not sell commercial solid fuel boilers. DEQ's workload would not change because the proposed rules would allow DEQ to continue the pre-existing program.

### **Prior**

## **9. Remove annual reporting requirement for small gasoline dispensing facilities**

State agencies, local government and the public: The proposed elimination of annual reporting requirements for certain small gasoline dispensing facilities would have small positive fiscal and economic impacts on any state agencies and local governments who own or operate these facilities. The proposed rules would eliminate their costs associated with the annual reports, such as recordkeeping and administrative activities. DEQ estimates that any positive impact on gasoline dispensing facilities would be very small and would probably not be passed on to the public indirectly in the form of reduced costs for goods or services.

### **Large businesses - businesses with more than 50 employees**

DEQ anticipates the proposed rules would have the following fiscal and economic impact on approximately 1340 large businesses.

## **1. Clarify and update air quality rules**

The proposed rules to improve the organization and to increase clarity of the rules may have slight positive fiscal or economic impacts on businesses because the rules would be easier to use and understand. DEQ lacks information to estimate large businesses' time savings in using rules that are easier to understand.

## 2. Update particulate matter emission standards

The proposed particulate emission standards would have positive and negative fiscal and economic impacts on large businesses holding air quality permits.

**Positive:** The proposed rules have positive fiscal and economic impacts on business indirectly by helping DEQ and Oregon communities avoid severe restrictions for businesses that want to build or expand in some areas that are exceeding or are close to exceeding ambient air quality standards. Reducing emissions in these areas would help Oregon avoid nonattainment designations by EPA. When EPA designates an area as nonattainment, federal requirements automatically apply to industrial sources, such as requiring the most stringent control equipment for new or expanding sources or reasonable control measures, such as more strict opacity standards, and requirements for operation and maintenance plans and fugitive emission plans for existing sources. These restrictions may also prevent some industries from expanding or moving to the nonattainment area.

**Negative:** DEQ reviewed ten years of source test data submitted to DEQ and the Lane Regional Air Protection Agency and determined approximately two businesses that own wood-fired boilers may need to optimize boiler or control equipment performance to comply with the proposed opacity and grain loading limits. One of these wood-fired boilers has no controls and is not currently operating; the owner and operator of this boiler might be required to install a multiclone system if the business decides to operate the boiler.

The costs depend on the methods of compliance or pollution control technology, such as boiler tune-ups or replacement, multiclone optimization or installation and source testing. Based on inquiries with boiler manufacturers, pollution control vendors, engineering design consultants, and the regulated businesses, as well as information provided by the fiscal advisory committee, DEQ estimates the cost of complying with the proposed standards as follows:

Boiler tune-ups: Conducting annual tune-ups is one way to optimize performance of a boiler. Vendors estimated a typical boiler tune-up that requires no replacement parts would cost between \$2,000 and \$11,000. A typical tune-up may include:

- A visual inspection of the system while operating, looking for obvious things that need repair
- Review of past performance checks and expected performance data
- Gathering performance data (oxygen and carbon dioxide readings, stack temperature, feed water temperature, fuel moisture and steam flow)
- Making adjustments to boiler air delivery settings

A more comprehensive boiler tune-up costs from \$33,000 to \$65,000. A boiler tune-up may or may not allow sources to comply with the new standards over time but could provide other benefits such as reduced fuel costs. Newly adopted federal law already requires wood-fired boilers to be tuned up every two to five years so this may not be an additional cost.

Multiclone optimization: If a tune-up is not adequate to comply with the standard, an owner or operator may choose to do a one-time optimization of its multiclone control technology. Nearly all wood-fired boilers in the state already have multiclones. Emissions from these boilers can be

reduced by inspecting the integrity of all parts of the multiclone and checking for and repairing plugged or damaged tubes annually. A thorough multiclone inspection costs approximately \$3,000 to \$4,000. As part of the inspection, it may be necessary to install access panels and a gauge for accurately measuring the pressure drop across the multiclone at an additional cost of \$1,000 to \$2,000. Most wood-fired boilers with multiclones already have gauges to measure pressure drop. According to one vendor, the repair or upgrade of a multiclone is estimated to range in cost from \$10,000 to a \$200,000 per boiler, depending on upgrades employed. The upper-end cost estimate may be atypical since it exceeds other vendors' estimates for the cost of a new multiclone.

Another option for multiclone optimization is flue gas recirculation. Optimum performance of a multiclone occurs within a pressure drop range of about two to four inches of water column. However, the pressure drop can vary significantly, depending on the gas flow rate through the multiclone. The actual gas flow rate for a wood-fired boiler varies due to many factors, including firing rate and fuel quality. It is possible, however, to optimize multiclone performance with varying firing rates by using flue gas recirculation, which provides a nearly constant gas flow rate and a consistent pressure drop across the multiclone. Installation of flue gas recirculation ranges in cost from \$30,000 to \$100,000.

Engineering analysis: If a boiler tune-up or multiclone optimization does not enable a wood-fired boiler to meet the proposed particulate matter standard of 0.15 gr/dscf, the owner or operator of the boiler may request a source specific particulate matter limit of 0.17 gr/dscf. Before receiving a source specific particulate matter limit, the owner or operator must submit to DEQ a report by a registered professional engineer that specializes in boiler and multiclone optimization to evaluate existing equipment optimization options and certify a 0.15 gr/dscf standard cannot be met without installing additional controls. The cost of this engineering report will vary, depending on the reasons for the source specific particulate matter limit, but is expected to be within the range of \$8,000 to \$24,000.

Source test data shows all boilers currently operating in the state can meet 0.17 gr/dscf except for the one backup boiler described previously that is currently not in use. If boiler optimization does not allow this boiler to meet 0.17 gr/dscf, this facility may choose to install a multiclone if it decides to operate the backup boiler on wood rather than using the existing natural gas boiler.

Multiclone Installation: An owner or operator may choose to install multiclone pollution control equipment. Vendors state that compliance with a 0.15 gr/dscf particulate matter standard is possible with multiclones, especially with ceramic high-efficiency multiclones, but is not guaranteed. Ceramic high-efficiency multiclones have been shown to reduce particulate matter to as low as 0.06 gr/dscf, cost approximately \$110,000 to \$120,000, and last three to five times longer than iron multiclones. Typical iron multiclones cost approximately \$60,000 to \$150,000 for the purchase and installation and last approximately 12 to 15 years before needing replacement.

Source Testing: An owner or operator that makes changes to its wood-fired boilers or pollution control equipment to meet the standard must perform source testing to determine if the changes were effective. A particulate matter source test costs approximately \$12,000. Businesses are already required to perform periodic compliance source testing and could save \$12,000 if the tests could be aligned.



Continuous opacity monitoring systems: An owner or operator may voluntarily choose to install a continuous opacity monitor to ensure it complies with opacity limits at all times. The responsible official for each Title V source is already required to submit a compliance certification report every six months stating whether compliance is continuous or intermittent. Opacity is a good indicator of how well a boiler is operating. High opacity is a result of high emissions and can inform the operator that adjustments are needed to reduce emissions. Adding a continuous opacity monitoring system, along with flue gas recirculation, would help the operator run the boiler efficiently and in compliance with the emissions standards at all times.

A continuous opacity monitoring system ranges in costs from \$13,000 to \$30,000. Installation costs range from \$5,000 to \$40,000 depending on the situation at the facility. Annual operating costs range from \$300 to \$6,000 per year. Equipment and installation cost of a recently installed system on a wood-fired boiler was \$27,800. These costs do not include the cost of a computer, which is a necessary component to these monitoring systems.

Electrostatic precipitators: Installation of an electrostatic precipitator is not required to meet the proposed standards, but a business could voluntarily elect to install electrostatic precipitators to reduce emissions. An electrostatic precipitator can easily meet the 0.15gr/dscf standard because it controls emissions over the wide range of operating conditions that may occur due to changing steam demand and fuel quality. Based on input from vendors, DEQ determined a new electrostatic precipitator costs from approximately \$700,000 to \$2.7 million. This cost could vary by plus or minus 40 percent. However, a facility could use a smaller electrostatic precipitator if its goal were simply to comply with the 0.15 gr/dscf standard. Smaller electrostatic precipitators suitable for the affected wood-fired boilers range in costs from approximately \$420,000 to \$700,000 installed. In early discussions on the proposed changes to the particulate matter standards, one business informed DEQ it was considering a used wood-fired package boiler with an electrostatic precipitator for approximately \$500,000.

Boiler replacement: Boiler replacement is not required to meet the proposed standards, but a business could voluntarily elect to replace a boiler to reduce emissions. A new wood-fired boiler with an electrostatic precipitator installed in 2006 cost about \$7 million. Boilers that provide 25,000 to 200,000 pounds of steam per hour are estimated to cost in the range of \$5.5 million to \$17.9 million. These costs include electrostatic precipitators and continuous opacity monitors.

Summary of annualized costs: The following table summarizes and compares the cost effectiveness of several pollution control devices for controlling PM<sub>10</sub> emissions.

| Cost Effectiveness for Controlling PM <sub>10</sub> Emissions |                    |                                                |                                     |                        |                    |                            |
|---------------------------------------------------------------|--------------------|------------------------------------------------|-------------------------------------|------------------------|--------------------|----------------------------|
| Pollution Control Device                                      | Control Efficiency | PM <sub>10</sub> Emissions Removed (tons/year) | Installed Capital Cost of Equipment | Annual Operating Costs | Total Annual Costs | Total Cost per Ton Removed |
| Cyclone                                                       | 50%                | 0.9                                            | \$2,243                             | \$580                  | \$791              | \$930                      |
| Multiclone                                                    | 75%                | 1.3                                            | \$9,424                             | \$580                  | \$1,469            | \$1,151                    |
| High Efficiency Multiclone                                    | 99%                | 1.3                                            | \$62,878                            | \$800                  | \$6,980            | \$4,159                    |
| High Efficiency Multiclone (valved)                           | 99%                | 1.7                                            | \$125,756                           | \$800                  | \$12,915           | \$7,695                    |

| Cost Effectiveness for Controlling PM <sub>10</sub> Emissions |                    |                                                |                                     |                        |                    |                            |
|---------------------------------------------------------------|--------------------|------------------------------------------------|-------------------------------------|------------------------|--------------------|----------------------------|
| Pollution Control Device                                      | Control Efficiency | PM <sub>10</sub> Emissions Removed (tons/year) | Installed Capital Cost of Equipment | Annual Operating Costs | Total Annual Costs | Total Cost per Ton Removed |
| Core Separator (12")                                          | 94%                | 1.7                                            | \$111,709                           | \$1,239                | \$12,350           | \$7,685                    |
| Core Separator (24")                                          | 72%                | 1.2                                            | \$63,337                            | \$1,459                | \$8,004            | \$6,519                    |
| Cyclone + Baghouse                                            | 99%                | 1.7                                            | \$109,878                           | \$3,920                | \$14,291           | \$8,483                    |
| ESP                                                           | 95%                | 1.6                                            | \$138,005                           | \$1,867                | \$14,894           | \$9,213                    |

Note: This table is from "Emission Control for Small Wood-Fired Boilers" prepared for the U.S. Forest Service's Western Forestry Leadership Coalition in May 2010

DEQ estimated costs based on information from equipment vendors and EPA's Cost Control Manual. In addition to the size of the wood-fired boiler, the following are factors, which cause variability in capital costs and are not accounted for in the EPA Cost Control Manual:

- Change in the price of steel
- Foreign exchange rates for equipment purchased overseas
- Pollution control device design
- Fuel characteristics such as variable firing rates and wet fuels
- Space requirements
- Ancillary equipment such as ductwork.
- Shipping costs.

Note: DEQ originally considered proposing a much more stringent statewide particulate matter emission standard (0.10 gr/dscf and 20 percent opacity)). DEQ determined 11 businesses were at risk of non-compliance with the more stringent standard. Seven of these businesses were wood products facilities with wood-fired boilers, one was a pulp mill that operates its boiler on residual oil during natural gas curtailment, and three were asphalt plants. After receiving input from businesses and stakeholders following DEQ's August 2013 workshops, DEQ determined that compliance with the original proposal could have significant negative fiscal and economic impacts and possibly require process changes or expensive controls such as electrostatic precipitators. DEQ mitigated the negative impacts by proposing alternative standards that are based on well maintained and typically available control technology, often multiclones for wood-fired boilers. The three asphalt plants that were at risk of exceeding the original proposal are older plants that use wet scrubber controls and are exempt because of the hours of operation exemption in DEQ's proposed rules. As a result of the mitigation, DEQ does not anticipate that the proposed rules would require any business to shut down, replace a boiler or change fuel types.

### 3. Change permitting requirements for emergency generators and small natural gas or oil-fired equipment

The proposed rules to change permitting requirements for emergency generators and small natural gas or oil-fired equipment would have a negative fiscal and economic impact on any facilities required to obtain a new permit for these generators and equipment. The initial cost to obtain a new permit is \$1,200 plus these permit holders pay approximately \$1,300 in annual fees. However, DEQ expects no current facilities would be required to obtain a new permit as a result

of the proposed rules because most facilities that have generators or small natural gas or oil-fired equipment already hold air quality permits. DEQ would add the permitting requirements to these facilities' permits at the time of their permit renewals. The proposed rules would not affect these facilities' permit fees. These facilities might experience costs associated with additional recordkeeping depending on their current environmental managements systems. DEQ lacks available information to estimate the costs of additional recordkeeping accurately.

- 4. Establish two new state air quality area designations, “sustainment” and “reattainment,” to help areas avoid and more quickly end a federal nonattainment designation; and**
- 5. Designate Lakeview as a state sustainment area while retaining its federal attainment designation**

The proposed sustainment and reattainment area rules would have positive fiscal and economic impacts on large businesses. Without the new area designations, it will continue to be nearly impossible for businesses to obtain a permit to construct new smaller sources of air pollution in these areas. Although there is a cost associated with obtaining a permit, DEQ believes the proposed rules have a net positive fiscal and economic impact by reducing restrictions and creating opportunities for new businesses to be constructed and operated. The proposed rules do not change the permitting requirements for Oregon's largest sources of air pollution, known as federal major sources, and therefore have no fiscal or economic impact on these sources. DEQ expects creating the new area designations to have no negative fiscal or economic impacts on businesses.

#### **6. Change the New Source Review preconstruction permitting program**

The proposed rules to change the preconstruction permitting program would have positive and may have negative fiscal and economic impacts on large businesses. DEQ is unable to quantify the magnitude of the impact accurately because New Source Review permitting requires DEQ to perform a case-by-case analysis and the type of pollution controls and computer modeling varies for each case.

**Positive:** Establishing a preconstruction permitting program for small sources of air pollution (called State New Source Review) distinct from the New Source Review program for federal major sources, would have positive fiscal and economic impacts on businesses because the changes would eliminate restrictions on some smaller sources that wish to build or modify their facilities. The proposed rules would allow construction and modification as long as the area's air quality is protected.

The proposed rules would likely reduce costs for businesses in the State New Source Review program in areas DEQ wants to transition from nonattainment to maintenance more quickly than EPA could redesignate the area to attainment (EPA does not have a maintenance area designation). The proposed rules allow these businesses to meet requirements for maintenance areas instead of more stringent requirements for nonattainment areas. The control technology required in a maintenance area is typically less expensive than technology required in a nonattainment area. If the technology required in maintenance areas results in fewer emission reductions than the business could achieve with technology required in nonattainment areas, the business might be required to purchase more offsets. As a result, there may be higher emission

offset costs in maintenance areas if the less expensive control technology allows higher emissions.

The proposed rules clarify how DEQ provides extensions of a construction permit when construction is delayed. This would have a positive fiscal and economic impact on a business that needs an extension because the permit fees for extensions are lower than the initial application fees for a construction permit. In addition, the business would be allowed to continue to use any offsets obtained under the original application as long as the offsets did not expire.

**Negative:** The proposed rules improve air quality by raising the amount of offsets a new or modified business would be required to purchase, which would have negative fiscal and economic impacts on businesses. The cost of offsets for industrial facilities varies from \$2,500 per ton to \$100,000 per ton, depending on the pollutant and the supply and demand for offsets. In areas where air quality is close to an ambient air quality standard, the proposed rules also create incentives by allowing fewer offsets to be obtained by a business that chooses to obtain its offsets from sources that are the greatest contributors to the area's air quality problems. The proposed rules would provide businesses the opportunity to obtain offsets from woodstoves. The cost to replace an uncertified woodstove is approximately \$3,000. A certified woodstove reduces emissions by about 0.03 tons per woodstove on an annual basis. The cost of one ton of offsets from woodstoves is approximately \$100,000.

## **7. Modernize methods allowed for holding public hearings and meetings**

The proposed rules to provide DEQ more flexibility for public hearings and meetings would have a positive fiscal and economic impact on large businesses indirectly because they would have more options and cost savings when participating in hearings and meetings. Cost savings depend on the physical location of the hearing or meeting and distance of travel for attendees. DEQ expects adding flexibility for public hearings and meetings to have no negative fiscal or economic impacts on businesses.

## **8. Re-establish Heat Smart woodstove replacement program exemption for small commercial solid fuel boilers regulated under the permitting program**

The proposed rules to re-establish the woodstove replacement program exemption would have a positive economic benefit on large businesses directly because it would allow them to once again sell small biomass boilers for commercial, industrial and institutional uses in Oregon. By allowing these sales, the proposed rules also have a positive impact on businesses that manufacture, purchase or use small biomass heating systems in commercial, industrial and institutional applications in Oregon. DEQ expects re-establishing the program to its former state, before sales were inadvertently prohibited, to have no negative fiscal or economic impacts on businesses.

## **9. Remove annual reporting requirement for small gasoline dispensing facilities**

The proposed elimination of annual reporting requirement for certain gasoline dispensing facilities would have small positive fiscal and economic impacts on 60 large businesses directly by eliminating their costs associated with the annual reports, such as recordkeeping and administrative activities. DEQ expects removing the reporting requirement to have no negative fiscal or economic impacts on businesses.

## Impact on small businesses (those with 50 or fewer employees) ORS 183.336

In addition to the fiscal and economic impact described under the section above “Large businesses - businesses with more than 50 employees”, the proposed rules could have the following impacts on small business.

|                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a) Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule.                                                       | <p>The proposed rules would affect approximately 1333 small businesses, such as asphalt plants, rock crushers and grain elevators. The proposed rules would affect approximately 440 small businesses that own or operate small gasoline dispensing facilities and approximately 60 small businesses that own or operate emergency generators and small natural gas or oil-fired equipment.</p> <p>Many of the small businesses subject to the lower grain loading and opacity standards already have the lower standards in their permits. Current compliance information indicates that all small businesses already comply with the proposed standards and would not experience fiscal or economic impacts.</p> |
| b) Projected reporting, recordkeeping and other administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule. | <p>The proposed rules would eliminate annual reporting, recordkeeping and administrative activities associated with the annual reporting requirements for gasoline dispensing facilities with monthly throughput of less than 10,000 gallons of gasoline.</p> <p>The proposed rules would increase recordkeeping and reporting for emergency generators and small natural gas or oil-fired equipment over permitting thresholds.</p>                                                                                                                                                                                                                                                                               |
| c) Projected equipment, supplies, labor and increased administration required for small businesses to comply with the proposed rule.                                                 | <p>DEQ expects the proposed rules would result in no additional costs for equipment, supplies, labor or administration.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| d) Describe how DEQ involved small businesses in developing this proposed rule.                                                                                                      | <p>DEQ notified small businesses during rule development by mail and email, announcements on the DEQ website, stakeholder meetings, a fiscal advisory committee meeting, and the DEQ Small Business Compliance Advisory Panel. At the onset of the public comment period, DEQ notified small businesses by mail, email, notices in the Secretary of State Bulletin, and ads in newspapers.</p>                                                                                                                                                                                                                                                                                                                     |

### Documents relied on for fiscal and economic impact

Air Contaminant Discharge Permits – Table 1, DEQ relied on OAR 340-216-0020  
[http://arcweb.sos.state.or.us/pages/rules/oars\\_300/oar\\_340/340\\_tables/340-216-0020\\_10-24.pdf](http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_tables/340-216-0020_10-24.pdf)

EPA Air Pollution Control Cost Manual, Report No. 452/B-02-001, January 2002, Section 6, Chapter 1, Baghouses and Filters [http://www.epa.gov/ttn/catc/dir1/cost\\_toc.pdf](http://www.epa.gov/ttn/catc/dir1/cost_toc.pdf)

Consumer Price Index Conversion Factors 1774 to estimated 2021 to Convert to Dollars of 1998. 2013 Robert C. Sahr, Political Science, Oregon State University, Rev 05/08/2013  
<http://oregonstate.edu/cla/polisci/sites/default/files/faculty-research/sahr/inflation-conversion/excel/cv1998.xls>

Emission Controls for Small Wood-Fired Boilers, Prepared for: United States Forest Service, Western Forestry Leadership Coalition, May 2010  
[http://www.wflccenter.org/news\\_pdf/361\\_pdf.pdf](http://www.wflccenter.org/news_pdf/361_pdf.pdf)

#### Advisory committee for fiscal and economic impact statement

DEQ appointed an advisory committee for the sole purpose of making recommendations on this fiscal and economic impact statement.

To comply with [ORS 183.333](#), DEQ asked for the committee's recommendations on:

- Whether the proposed rules would have a fiscal impact,
- The extent of the impact, and
- Whether the proposed rules would have a significant impact on small businesses and comply with [ORS 183.540](#).

The committee reviewed the draft fiscal and economic impact statement, specifically the impact on small businesses, and documented its recommendations in the [Fiscal Impact Advisory Committee Meeting Summary](#). The committee concluded that the proposed rules will have a fiscal and economic impact but found it difficult to assess the extent of the impact. The committee had mixed opinions on whether the rules will have a significant impact on small business, although most concluded that the direct impacts would not be significant. To meet requirements in [ORS 183.540](#), the committee considered how to reduce the economic impact on small business. One committee member suggested that economic impacts on small businesses could be reduced by providing funds such as tax credits or sinking funds. No other committee members offered suggestions.

DEQ considered input from the advisory committee and DEQ's standing Small Business Compliance Advisory Panel when completing this fiscal and economic impact statement.

#### Housing cost

To comply with ORS 183.534, DEQ determined the following three categories of the proposed rules may have an effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel.

**Update particulate matter emission standards:** The costs of compliance could be passed through by businesses providing products and services for such development and construction.

**Change permitting requirements for emergency generators and small natural gas or oil-fired equipment:** The costs for additional permits could be passed through by businesses providing products and services for such development and construction.

**Change the New Source Review preconstruction permitting program:** The costs for additional permits, control or process equipment could be passed through by businesses providing products and services for such development and construction.

The possible impact of these proposed changes appears to be minimal. DEQ cannot quantify the impact at this time because the available information does not indicate whether the costs would be passed on to consumers and any such estimate would be speculative.

The other proposed changes do not have an effect on housing costs. The other proposed changes would make it easier for people to use and understand air quality rules, modernize methods allowed for holding public hearings and meetings, remove reporting requirements, affect the sales of small biomass boilers, and affect whether businesses can construct or modify air contaminant sources in sustainment or reattainment areas.

## Federal relationship

*"It is the policy of this state that agencies shall seek to retain and promote the unique identity of Oregon by considering local conditions when an agency adopts policies and rules. However, since there are many federal laws and regulations that apply to activities that are also regulated by the state, it is also the policy of this state that agencies attempt to adopt rules that correspond with equivalent federal laws and rules..." [ORS 183.332](#)*

### Relationship to federal requirements

This section complies with [OAR 340-011-0029](#) and [ORS 468A.327](#) to clearly identify the relationship between the proposed rules and applicable federal requirements.

The following six categories of DEQ's proposed changes contain rules that are "in addition to federal requirements."

- 1. Clarify and update air quality rules:** EPA has no rules that clarify and update existing DEQ rules.

What alternatives did DEQ consider, if any?

DEQ considered doing nothing, but did not pursue this alternative because the existing rules contain errors and create confusion and misinterpretations for regulated parties.

- 2. Update particulate matter standards:** The proposed rules protect public health and the environment. DEQ has statewide opacity limits for new and existing sources, including fugitive emission sources. While some of EPA's New Source Performance Standards have opacity and particulate matter limits for specific regulated industries, EPA regulations do not apply an equivalent opacity standard to all sources.

The proposed rules are in addition to federal requirements for two New Source Performance Standards that have opacity limits for fugitive emissions but different than federal requirements. The proposed rules would require a permit holder to abate any fugitive emissions that leave the permit holder's property. Using EPA Method 9 to determine compliance, the New Source Performance Standard for Metallic Mineral Processing Plants (Subpart LL) requires fugitive emissions to meet 10 percent opacity and the NSPS for Nonmetallic Mineral Processing Plants (Subpart OOO) contains a limit of 7 percent opacity and allows an affected facility to rely on water carryover from upstream water sprays to control fugitive emissions.

DEQ's proposed changes to the current statewide visible emission standards that apply to non-fugitive sources would make DEQ's standards substantively equivalent to EPA's visible emissions standards. DEQ proposes changing the standards from an aggregate period to a six-minute average in order for DEQ and permit holders to use EPA Method 9 for determining compliance.

The proposed change to add a significant figure to the particulate matter standard from 0.1 gr/dscf to 0.10 gr/dscf would align DEQ rules with applicable federal requirements and policies.



What alternatives did DEQ consider, if any?

DEQ considered not amending Oregon's particulate matter standards, but did not pursue this alternative because protecting air quality and supporting economic development are important to Oregon. Most businesses constructed before 1970 have already updated their facilities and now meet the lower particulate matter standards.

DEQ considered phasing out the standards that apply to pre-1970 sources and requiring all sources to meet the post-1970 standard with the addition of a significant digit (0.10 gr/dscf, for example) by Jan. 1, 2020. Based on input from stakeholders suggesting that complying with a limit of 0.10 gr/dscf would present a significant economic hardship, DEQ proposes a different set of standards that will not require any businesses to replace existing equipment or change the type of fuel being used. The proposed changes to the standards are based on well maintained typically available control technology that will minimize particulate matter emissions to the extent practicable with existing equipment.

DEQ considered not amending the averaging time for opacity standards, but did not pursue this alternative because DEQ's ability to enforce the standards is uncertain without a reference test method for demonstrating compliance.

DEQ considered not amending the opacity limits for fugitive emission sources, but did not pursue this alternative because implementation issues would still exist and the proposed new standard will reduce emissions more effectively than would trying to determine compliance with a 20 percent opacity limit.

3. **Change permitting requirements for emergency generators and small natural gas or oil-fired equipment:** The proposed rules protect public health and the environment. The proposed rules would require facilities to obtain construction approvals or permits when emissions from emergency generators and small natural gas or oil-fired equipment are significant; these units' operations were previously treated as insignificant activities. Oregon's Plant Site Emission Limit rules require DEQ permits to regulate smaller units than EPA requires. EPA requires states to have permitting programs for smaller emission units, but does not specify the details of a minor New Source Review program.

What alternatives did DEQ consider, if any?

DEQ did not consider alternatives because failure to change the permitting requirements would result in small sources potentially violating the internal combustion engine standards and DEQ rules for operating without a permit.

4. **Establish two new state air quality area designations, "sustainment" and "reattainment," to help areas avoid and more quickly end a federal nonattainment designation; and**
5. **Designate Lakeview as a state sustainment area while retaining its federal attainment designation:** The proposed rules would designate sustainment and reattainment areas. EPA has no equivalent designations. The changes would protect public health by improving air quality, while improving Oregon's New Source Review Program and increasing DEQ's flexibility in permitting smaller businesses.

What alternatives did DEQ consider, if any?

DEQ considered doing nothing, but did not pursue this alternative because EPA, Lakeview and county officials support the new area designations.

- 6. Change the New Source Review preconstruction permitting program:** The proposed rules would continue to protect public health and the environment while addressing economic concerns. DEQ's program, although different from EPA's regulations, provides a workable program equivalent to, and in some cases, more stringent than EPA's to accomplish the same Clean Air Act goal of preventing significant deterioration of air quality. EPA considers DEQ's program substantively equivalent.

- DEQ has separated the New Source Review program for federal major sources from that of minor sources with different requirements for large and small facilities. The program for smaller facilities would be called State New Source Review. This change, along with the designation of sustainment and reattainment areas, would increase DEQ's flexibility in permitting smaller facilities while protecting ambient air quality.
- The proposed rules would create new differences between the Oregon and EPA New Source Review preconstruction programs by defining two new area designations, sustainment and reattainment. These two new designations would help areas avoid exceeding ambient air quality standards and encourage economic development when a nonattainment area has improved air quality.

What alternatives did DEQ consider, if any?

DEQ considered doing nothing, but did not pursue this alternative because the existing preconstruction permitting program essentially creates a construction ban in areas that exceed the ambient air quality standard, but are still designated as attainment areas. The existing rules governing demonstration of net air quality benefit in nonattainment areas are too prescriptive and do not meet the goals of the program.

The following three categories of the proposed rules are not "different from or in addition to federal requirements" and impose stringency equivalent to federal requirements.

- 7. Modernize methods allowed for holding public hearings and meetings:** EPA has no rules regarding the technology DEQ uses at public hearings and meetings.

What alternatives did DEQ consider, if any?

DEQ considered doing nothing, but did not pursue this alternative because DEQ's proposal would create economic benefits and improve access to hearings and meetings.

- 8. Re-establish Heat Smart woodstove replacement program exemption for small commercial solid fuel boilers regulated under the permitting program:** Sales of small commercial biomass boilers were inadvertently prohibited in Oregon when EPA amended National Emission Standards for Hazardous Air Pollutants.

What alternatives did DEQ consider, if any?

DEQ did not consider alternatives. DEQ's proposal would return the woodstove replacement program to its previous state, before EPA amended the NESHAP.

## **9. Remove annual reporting requirement for small gasoline dispensing facilities**

The proposed rules are consistent with the federal gasoline dispensing facility NESHAP that does not require gasoline dispensing facilities with monthly throughput of less than 10,000 gallons of gasoline to submit annual reports.

What alternatives did DEQ consider, if any?

DEQ considered doing nothing, but did not pursue this alternative because annual reports from these small gasoline dispensing facilities are unnecessary and create additional work for regulated parties.

### **Request for other options**

During the public comment period, DEQ requests public comment on whether to consider other options for achieving the proposed rule's substantive goals while reducing any negative economic impact of the rules on business.

## Land use

*“It is the Commission's policy to coordinate the Department's programs, rules and actions that affect land use with local acknowledged plans to the fullest degree possible.”* [OAR 340-018-0010](#)

### Land-use considerations

To determine whether the proposed rules involve programs or actions that are considered a *land-use action*, DEQ considered:

- Statewide planning goals for specific references. Section III, subsection 2 of the DEQ State Agency Coordination Program document identifies the following statewide goal relating to DEQ's authority:

| Goal | Title                                                         |
|------|---------------------------------------------------------------|
| 5    | Open Spaces, Scenic and Historic Areas, and Natural Resources |
| 6    | Air, Water and Land Resources Quality                         |
| 11   | Public Facilities and Services                                |
| 16   | Estuarial resources                                           |
| 19   | Ocean Resources                                               |
- [OAR 340-018-0030](#) for EQC rules on land-use coordination. Division 18 requires DEQ to determine whether proposed rules would significantly affect land use. If yes, how will DEQ:
  - Comply with statewide land-use goals, and
  - Ensure compatibility with acknowledged comprehensive plans, which DEQ most commonly achieves by requiring a Land Use Compatibility Statement.
- DEQ's mandate to protect public health and safety and the environment.
- Whether DEQ is the primary authority that is responsible for land-use programs or actions in the proposed rules.
- Present or future land uses identified in acknowledged comprehensive plans.

### Determination

DEQ determined that the following proposed rules, listed under the Rules affected, authorities, supporting documents section above, are existing rules that affect programs or activities that the DEQ State Agency Coordination Program considers a land-use program:

|             |                                   |
|-------------|-----------------------------------|
| OAR 340-210 | Source Notification Requirements  |
| OAR 340-216 | Air Contaminant Discharge Permits |
| OAR 340-218 | Oregon Title V Operating Permits  |

The air quality permit programs require that a new business provide a Land Use Compatibility Statement from local government when applying for a permit. This assures that the business has an approved use for the property where it is located. Existing permittees have provided Land Use Compatibility Statements, which are on file with DEQ. This rule proposal does not include any changes to land use procedures in the air quality permitting program.

DEQ's statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules.

- OAR 340-018-0040(1) - compliance with statewide planning goals achieved by ensuring compatibility with acknowledged comprehensive plans
- OAR 340-018-0050(2)(a) - ensuring compatibility with acknowledged comprehensive plans may be accomplished through a Land Use Compatibility Statement.

## Stakeholder and public involvement

### Advisory committee

DEQ convened a fiscal and economic impact advisory committee on Jan. 23, 2014. DEQ requested the committee provide comments and recommendations on DEQ's draft notice of proposed rulemaking, which included the statement of fiscal and economic impact. DEQ also offered a second opportunity for the fiscal and economic impact advisory committee to provide additional comments or recommendations regarding the fiscal and economic impact of all of the proposed rules when the advisory committee meeting minutes were sent out for approval.

The 12-member committee included representatives from affected businesses, environmental groups and the general public. The committee met once. The committee's recommendations are summarized under the Statement of Fiscal and Economic Impact section above.

### Roster

| Name           | Representing                 |
|----------------|------------------------------|
| Aubrey Baldwin | Earthrise Law Center         |
| Bart Barlow    | Boise Cascade                |
| Peter Brewer   | Jeld-Wen                     |
| Jess Brown     | Collins Pine Company         |
| Tony Flagor    | Interfor Pacific             |
| Paul Fouch     | Save Our Rural Oregon        |
| Jim Huddleston | Asphalt Pavement Association |
| Cameron Krauss | Swanson Group                |
| Glen Keown     | Columbia Forest Products     |
| Bill Moir      | Steam Engineering            |
| Randy Walker   | Frank Lumber                 |
| Chris Winter   | Crag Law Center              |

DEQ sent advisory committee meeting notifications to all people who signed up for notices described under [ORS 192.640](#), representatives of permit holders, and people subscribed to receive information about the Title V permit program and air quality permits. DEQ sent the meeting notices by email using Oregon's GovDelivery system, a free e-mail subscription service, and posted the announcement on the DEQ website. DEQ mailed a postcard to representatives of permit holders not signed up for email notices.

The committee reviewed the fiscal impact statement, specifically the impact on small businesses. The committee concluded that the proposed rules will have a fiscal and economic impact but found it difficult to assess the extent of the impact. The committee had mixed opinions on whether the rules will have a significant impact on small business although most concluded that the direct impacts would not be significant. Only one committee member suggested that economic impacts on small businesses

could be reduced by providing funds such as tax credits or sinking funds. No other committee members offered suggestions.

#### Information meetings

DEQ held stakeholder meetings in Portland, Pendleton, Eugene and Medford in Aug. 2013 for preliminary input on the potential rules. DEQ sent meeting information to all permitted facilities and people who expressed interest in air quality rulemakings. DEQ sent meeting notices by email to permit holders and postcards to permit holders not signed up for email notices. DEQ also sent meeting notices by email using Oregon's GovDelivery system, a free e-mail subscription service that provides subscribers with automatic notices of updates to the Oregon DEQ Web page on topics they select; and posted the announcement on the DEQ website.

In fall of 2013, DEQ called all the businesses DEQ identified as affected by the more stringent particulate standards and offered to meet with them individually. DEQ met with these businesses and some stakeholders, and these businesses also served on the fiscal and economic impact advisory committee.

If the proposed rules are approved by EQC, DEQ plans to hold additional meetings for businesses to explain the rule changes. DEQ staff will participate in the December Northwest Environmental Conference in Portland informing people about the rulemaking. Attendees at this conference include representatives from large and small businesses.

#### EQC prior involvement

DEQ shares general rulemaking information with EQC through the monthly Directors Report and Information Items. DEQ shared information about this rulemaking with the commission in the February 2014 Director's Report.

#### Public notice

DEQ will provide Notice of Proposed Rulemaking with Hearing for this rulemaking June 16, 2014, by:

- Posting notice on the DEQ Rulemaking Web page at <http://www.oregon.gov/deq/RulesandRegulations/Pages/2014/AQPerm.aspx>
- Email to:
  - Environmental Protection Agency, Region 10, Seattle
  - 6,763 interested parties through GovDelivery including subscribers of the groups Rulemaking, Title V Permit Program Public, and Air Quality Permits
  - 1,482 representatives of permit holders
  - 20 representatives of source test firms
  - 240 interested parties and stakeholders provided to DEQ by LRAPA
  - 25 fiscal and economic impact advisory committee members, Small Business Compliance Advisory Panel, and interested parties
  - The following key legislators required under ORS 183.335:
    - o Senator Michael Dembrow, Chair, Senate Environment and Natural Resources

- o Representative Paul Hovley, Chair, House Energy and Environment
- The following legislators as interested parties:
  - o Senator Doug Whitsett
  - o Senator Betsy Close
  - o Senator Alan Olsen
  - o Representative Sherrie Sprenger
- U.S. Postal Service to:
  - 498 representatives of permit holders not signed up for email notification
  - 242 interested parties and stakeholders provided to DEQ by LRAPA

DEQ will provide legal notice in the following newspapers:

- *The Oregonian* publication date – June 15, 2014
- *Daily Journal of Commerce* publication date – June 16, 2014

## Public hearings

DEQ plans to hold one statewide public hearing accessible at the five locations listed in the table below. DEQ initially planned to hold the hearing in Portland, Bend and Medford. DEQ added locations in Springfield and Pendleton to increase opportunities for people to attend.

Before taking public comment and according to Oregon Administrative Rule 137-001-0030, the staff presenter will summarize the content of the notice given under Oregon Revised Statute 183.335 and respond to any questions about the rulemaking.

DEQ will add the names, addresses and affiliations of all hearing attendees to the interested parties list for this rule if provided on a registration form or the attendee list. DEQ will consider all oral and written comments received at the hearing before completing the draft rules. DEQ will summarize all comments and respond to comments on the EQC staff report.

| Hearing                          |                                     |                              |                  |                 |
|----------------------------------|-------------------------------------|------------------------------|------------------|-----------------|
| Wednesday, July 16, 2014         |                                     |                              |                  |                 |
| 6 pm                             |                                     |                              |                  |                 |
| 811 SW 6th Ave.<br>EQC A         | 475 NE Bellevue<br>Dr.<br>Suite 110 | 221 Stewart Ave<br>Suite 201 | 1010 Main Street | 800 SE Emigrant |
| Portland                         | Bend                                | Medford                      | Springfield      | Pendleton       |
| DEQ staff                        |                                     |                              |                  |                 |
| Jill Inahara, Program Operations |                                     |                              |                  |                 |

## Updated close of public comment period

The comment period will close Monday, Sept. 15, 2014 at 5 p.m.