

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION 200

GENERAL AIR POLLUTION PROCEDURES AND DEFINITIONS

340-200-0020

General Air Quality Definitions

As used in 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 pollutant from an emissions source during a specified time period.
 - (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) ~~The Department~~ [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, ~~the~~

~~Department~~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) ~~The Department~~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 Act, and each criteria pollutant, except lead;

(b) 120 pounds for lead;

(c) 600 pounds for fluoride;

(d) 500 pounds for PM10 in a PM10 nonattainment area;

(e) 500 pounds for direct PM2.5 in a PM2.5 nonattainment area;

(f) The lesser of the amount established in ~~OAR 340-244-0040, Table 1 or 340-244-0230, Table 340~~
[CFR 68.130](#), or 1,000 pounds;

(g) An aggregate of 5,000 pounds for all Hazardous Air Pollutants;

(h) 2,756 tons CO2e for greenhouse gases.

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

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

(10) "Alternative method" means any method of sampling and analyzing for an air pollutant that is not a reference or equivalent method but has been demonstrated to ~~the Department~~DEQ's satisfaction to, in

specific cases, produce results adequate for determination of compliance. 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 ~~the Department~~[DEQ](#).

(11) "Ambient 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 that implements the relevant requirements of the 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 ~~the Department~~[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 ~~the Department~~[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 ~~the Department~~[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 Act, including section 111(d);
- (h) Any standard or other requirement under section 112 of the Act, including any requirement concerning accident prevention under section 112(r)(7) of the Act;
- (i) Any standard or other requirement of the acid rain program under Title IV of the Act or the regulations promulgated thereunder;
- (j) Any requirements established pursuant to section 504(b) or section 114(a)(3) of the Act;
- (k) Any standard or other requirement under section 126(a)(1) and(c) of the Act;
- (l) Any standard or other requirement governing solid waste incineration, under section 129 of the Act;
- (m) Any standard or other requirement for consumer and commercial products, under section 183(e) of the Act;
- (n) Any standard or other requirement for tank vessels, under section 183(f) of the Act;
- (o) Any standard or other requirement of the program to control air pollution from outer continental shelf sources, under section 328 of the Act;
- (p) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the Act, 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 Act, but only as it would apply to temporary sources permitted pursuant to section 504(e) of the Act.

- (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.
- (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 PM_{2.5}.
- (b) 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.
- (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.
- (14) "Baseline Period" means:
- (a) Any consecutive 12 calendar month period during the calendar years 1977 or 1978 for any regulated pollutant other than greenhouse gases. ~~The Department~~ [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.
- (15) "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 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.
- (16) "~~CS~~Biomass~~"22~~" 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.
- (17) "Capacity" means the maximum regulated pollutant emissions from a stationary source under its physical and operational design.
- (18) "Capture system" means the equipment (including but not limited to hoods, ducts, fans, and booths) used to contain, capture and transport a pollutant to a control device.

(19) "~~“Carbon dioxide equivalent”~~ or "~~“CO₂e”~~" means an amount of a greenhouse gas or gases expressed as the equivalent amount of carbon dioxide, and shall 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.

(20) "Categorically insignificant activity" means any of the following listed 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% 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% 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 gasoline fuel burning equipment rated at less than or equal to 0.4 million Btu/hr;

(d) Natural gas and propane burning equipment rated at less than or equal to 2.0 million Btu/hr;

(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 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) Emergency 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 ~~the Department~~[DEQ](#);
 - (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) Oil/water separators in effluent treatment systems;
 - (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.
- (21) "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.

(23) "Class I area" means any Federal, State or Indian reservation land which is classified or reclassified as Class I area. Class I areas are identified in OAR 340-204-0050.

(24) "Commence" or "commencement" means that the owner or operator has obtained all necessary preconstruction approvals required by the Act 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.

(25) "Commission" or "EQC" means Environmental Quality Commission.

(26) "Constant Process Rate" 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.

(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.

(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.

(29) "Continuous Monitoring Systems" means sampling and analysis, in a timed sequence, using techniques which will adequately reflect actual emissions or concentrations on a continuing basis in accordance with ~~the Department~~ [DEQ](#)'s Continuous Monitoring Manual, and includes continuous emission monitoring systems, continuous opacity monitoring system (COMS) and continuous parameter monitoring systems.

(30) "Control device" means equipment, other than inherent process equipment that is used to destroy or remove air 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 pollutants from forming, such as the use of seals, lids, or roofs to prevent the release of 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 pollutant-specific emissions unit, then that definition will be binding for purposes of OAR 340-212-0200 through 340-212-0280.

- (31) "Criteria Pollutant" means nitrogen oxides, volatile organic compounds, particulate matter, PM10, PM2.5, sulfur dioxide, carbon monoxide, or lead.
- (32) "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.
- (33) "De minimis emission levels" mean the levels for the pollutants listed in Table 4.
NOTE: De minimis is compared to all increases that are not included in the PSEL.
- (34) "Department":
(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.
- (35) "Device" means any machine, equipment, raw material, product, or byproduct at a source that produces or emits a regulated pollutant.
- (36) ~~"Direct PM2.5"~~ has the meaning provided in the definition of PM2.5.
- (37) "Director" means the Director of ~~the Department~~ [DEQ](#) or the Director's designee.
- (38) "Draft permit" means the version of an Oregon Title V Operating Permit for which ~~the Department~~ [DEQ](#) or Lane Regional Air Protection Agency offers public participation under OAR 340-218-0210 or the EPA and affected State review under 340-218-0230.
- (39) "Effective date of the program" means the date that the EPA approves the Oregon Title V Operating Permit program submitted by ~~the Department~~ [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.
- (40) "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.
- (41) "Emission" means a release into the atmosphere of any regulated pollutant or any air contaminant.
- (42) "Emission Estimate Adjustment Factor" or "EEAF" means an adjustment applied to an emission factor to account for the relative inaccuracy of the emission factor.
- (43) "Emission Factor" means an estimate of the rate at which a 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).
- (44)(a) Except as provided in subsection (b) of this section, "Emission Limitation" and "Emission Standard" mean a requirement established by a State, local government, or the EPA which limits the quantity, rate, or concentration of emissions of 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 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 SO2 per hour, pounds of SO2 per million British thermal units of fuel input, kilograms of VOC per liter of applied coating solids, or parts per million by volume

of SO₂) or as the relationship of uncontrolled to controlled emissions (e.g., percentage capture and destruction efficiency of VOC or percentage reduction of SO₂). 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 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 good air pollution control practices, to develop and maintain a malfunction abatement plan, to keep records, submit reports, or conduct monitoring.

(45) "Emission Reduction Credit 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.

(46) "Emission Reporting Form" means a paper or electronic form developed by ~~the Department~~[DEQ](#) that must be completed by the permittee to report calculated emissions, actual emissions, or permitted emissions for interim emission fee assessment purposes.

(47) "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 pollutant by 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 340-224-0050 through 340-224-0070, or 340 division 210, or for determining the applicability of any New Source Performance Standard (NSPS).

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

(49) "Equivalent method" means any method of sampling and analyzing for an air pollutant that has been demonstrated to ~~the Department~~[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 ~~the Department~~[DEQ](#).

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

(51) "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.

- (52) "Excess emissions" means emissions in excess of a permit limit or any applicable air quality rule.
- (53) "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.
- (54) "Federal Land Manager" means with respect to any lands in the United States, the Secretary of the federal department with authority over such lands.
- (55) ~~"Federal Major Source"~~ means a source with potential to emit any individual regulated pollutant, excluding hazardous air pollutants listed in OAR 340 division 244, 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. In addition, for greenhouse gases, a federal major source must also have the potential to emit CO₂e greater than or equal to 100,000 tons per year. The fugitive emissions and insignificant activity emissions of a stationary source are considered in determining whether it is a federal major source. Potential to emit calculations must include emission increases due to a new or modified source and may include emission decreases.
- (a) Fossil fuel-fired steam electric plants of more than 250 million BTU/hour heat input;
 - (b) Coal cleaning plants with thermal dryers;
 - (c) Kraft pulp mills;
 - (d) Portland cement plants;
 - (e) Primary Zinc Smelters;
 - (f) Iron and Steel Mill Plants;
 - (g) Primary aluminum ore reduction plants;
 - (h) Primary copper smelters;
 - (i) Municipal Incinerators capable of charging more than 50 tons of refuse per day;
 - (j) Hydrofluoric acid plants;
 - (k) Sulfuric acid plants;
 - (l) Nitric acid plants;
 - (m) Petroleum Refineries;
 - (n) Lime plants;
 - (o) Phosphate rock processing plants;
 - (p) Coke oven batteries;
 - (q) Sulfur recovery plants;
 - (r) Carbon black plants, furnace process;
 - (s) Primary lead smelters;
 - (t) Fuel conversion plants;
 - (u) Sintering plants;
 - (v) Secondary metal production plants;
 - (w) Chemical process plants;
 - (x) Fossil fuel fired boilers, or combinations thereof, totaling more than 250 million BTU per hour heat input;
 - (y) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
 - (z) Taconite ore processing plants;
 - (aa) Glass fiber processing plants;
 - (bb) Charcoal production plants.
- (56) "Final permit" means the version of an Oregon Title V Operating Permit issued by ~~the~~ [Department DEQ](#) or Lane Regional Air Protection Agency that has completed all review procedures required by OAR 340-218-0120 through 340-218-0240.

(57) ~~"Form"~~ means a paper or electronic form developed by ~~the Department~~ [DEQ](#).

(58) "Fugitive Emissions":

(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.

(59) "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.

(60) "Generic PSEL" means the levels for the pollutants listed in Table 5.

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.

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

(b) 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.

(62) "Growth Allowance" means an allocation of some part of an airshed's capacity to accommodate future proposed major sources and major modifications of sources.

(63) "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.

(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.

(65) "Insignificant Activity" means an activity or emission that ~~the Department~~ [DEQ](#) has designated as categorically insignificant, or that meets the criteria of aggregate insignificant emissions.

(66) "Insignificant 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.

(67) "Late Payment" means a fee payment which is postmarked after the due date.

(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.

(69) "Maintenance 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.

(70) "Maintenance Pollutant" means a pollutant for which a maintenance area was formerly designated a nonattainment area.

(71) "Major Modification" means any physical change or change in the method of operation 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 PM_{2.5} precursors also constitute major modifications for ozone and PM_{2.5}, 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 PM_{2.5} 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.

(72) "Major 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 340-216-0066 Standard ACDPs, 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), (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 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 (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 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 tpy 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 pollutants, as defined in section 302 of the Act, that directly emits or has the potential to emit 100 tpy or more of any regulated air pollutant, except greenhouse gases, including any major source of fugitive emissions of any such 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 Act, 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 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;
 - (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 Act.
- (C) Beginning July 1, 2011, a major stationary source of air pollutants, as defined by Section 302 of the Act, that directly emits or has the potential to emit 100 tpy or more of greenhouse gases and directly emits or has the potential to emit 100,000 tpy or more CO₂e, 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 (PM₁₀) nonattainment areas classified as "serious," sources with the potential to emit 70 tpy or more of PM₁₀.
- (73) "Material Balance" 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.
- (74) "Modification," except as used in the term "major modification," means any physical change to, or change in the method of operation of, a stationary source that results in an increase in the stationary

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 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 by using component upgrades that would not otherwise be necessary for the stationary source to function.

(75) "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.

(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.

(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_{2.5} 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_{2.5} fraction of the PM₁₀ netting basis in effect on May 1, 2011. DEQ may increase the initial PM_{2.5} netting basis by up to 5 tons if necessary to avoid exceedance of the PM_{2.5} 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_{2.5} fraction of the PM₁₀ 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).
- (77) "Nitrogen Oxides" or "NO_x" means all oxides of nitrogen except nitrous oxide.
- (78) "Nonattainment Area" means a geographical area of the State, as designated by the Environmental Quality Commission or the EPA, that exceeds any state or federal primary or secondary ambient air quality standard.
- (79) "Nonattainment Pollutant" means a pollutant for which an area is designated a nonattainment area.
- (80) "Normal Source Operation" means operations which do not include such conditions as forced fuel substitution, equipment malfunction, or highly abnormal market conditions.
- (81) "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.
- (82) "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 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 ~~the~~ Department 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.

(83) "Oregon Title V Operating Permit" means any permit covering an Oregon Title V Operating Permit source that is issued, renewed, amended, or revised pursuant to division 218.

(84) "Oregon Title V Operating Permit program" means a program approved by the Administrator under 40 CFR Part 70.

(85) "Oregon Title V Operating Permit program source" means any source subject to the permitting requirements, OAR 340 division 218.

(86) ~~"Ozone Precursor"~~ means nitrogen oxides and volatile organic compounds as measured by an applicable reference method in accordance with ~~the Department~~ [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.

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

(88) "Particulate Matter" means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air. 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 ~~the Department~~ [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.

(89) "Permit" means an Air Contaminant Discharge Permit or an Oregon Title V Operating Permit.

(90) "Permit modification" means a permit revision that meets the applicable requirements of OAR 340 division 216, 340 division 224, or 340-218-0160 through 340-218-0180.

(91) "Permit revision" means any permit modification or administrative permit amendment.

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

(93) "Permittee" means the owner or operator of the facility, authorized by the ACDP or the Oregon Title V Operating Permit to operate the source.

(94) "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.

(95) "Plant Site Emission Limit" or "PSEL" means the total mass emissions per unit time of an individual air pollutant specified in a permit for a source. The PSEL for a major source may consist of more than one permitted emission.

(96) "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 reference method in accordance with ~~the Department~~ [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 40 CFR Part 50, Appendix J.

(97) "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 EPA reference methods 201A and 202 in 40 CFR Part 51, appendix M.

(b) When used in the context of PM2.5 precursor emissions, means sulfur dioxide (SO₂) and nitrogen oxides (NO_x) emitted to the ambient air as measured by EPA reference methods in 40 CFR Part 60, appendix A.

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

(98) "PM2.5 fraction" means the fraction of PM2.5 to PM10 for each emissions unit that is included in the netting basis and PSEL.

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

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

(a) The capacity of a stationary source; or

(b) The maximum allowable emissions taking into consideration any physical or operational limitation, including air pollution control equipment 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 or the term "capacity factor" as used in Title IV of the Act and the regulations promulgated thereunder.

Secondary emissions are not considered in determining the potential to emit.

(101) "Predictive emission monitoring system (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.

(102) "Process Upset" means a failure or malfunction of a production process or system to operate in a normal and usual manner.

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

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

(105) "Regional Agency" means Lane Regional Air Protection Agency.

(106) "Regulated air pollutant" or "Regulated 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 a 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;

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

(E) Any pollutant listed under OAR 340-244-0040 or [40 CFR 68.130](#) ~~340-244-0230~~; and

(F) Greenhouse Gases.

(b) As used in OAR 340 division 220, regulated pollutant means particulates, volatile organic compounds, oxides of nitrogen and sulfur dioxide.

(c) As used in OAR 340 division 224, regulated pollutant does not include any pollutant listed in divisions 244 and 246, unless the pollutant is listed in ~~OAR 340 division 200~~ Table 2 (significant emission rates).

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

(108) "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 ~~the Department~~[DEQ](#) or Lane Regional Air Protection Agency.

(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 (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 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.

(109) "Secondary Emissions" 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.

(110) "Section 111" means section 111 of the FCAA which includes Standards of Performance for New Stationary Sources (NSPS).

(111) "Section 111(d)" means subsection 111(d) of the FCAA 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.

(112) "Section 112" means section 112 of the FCAA which contains regulations for Hazardous Air Pollutants (HAP).

(113) "Section 112(b)" means subsection 112(b) of the FCAA which includes the list of hazardous air pollutants to be regulated.

(114) "Section 112(d)" means subsection 112(d) of the FCAA 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.

(115) "Section 112(e)" means subsection 112(e) of the FCAA which directs the EPA to establish and promulgate emissions standards for categories and subcategories of sources that emit hazardous air pollutants.

- (116) "Section 112(r)(7)" means subsection 112(r)(7) of the FCAA which requires the EPA to promulgate regulations for the prevention of accidental releases and requires owners or operators to prepare risk management plans.
- (117) "Section 114(a)(3)" means subsection 114(a)(3) of the FCAA which requires enhanced monitoring and submission of compliance certifications for major sources.
- (118) "Section 129" means section 129 of the FCAA which requires the EPA to establish emission standards and other requirements for solid waste incineration units.
- (119) "Section 129(e)" means subsection 129(e) of the FCAA which requires solid waste incineration units to obtain Oregon Title V Operating Permits.
- (120) "Section 182(f)" means subsection 182(f) of the FCAA which requires states to include plan provisions in the State Implementation Plan for NO_x in ozone nonattainment areas.
- (121) "Section 182(f)(1)" means subsection 182(f)(1) of the FCAA which requires states to apply those plan provisions developed for major VOC sources and major NO_x sources in ozone nonattainment areas.
- (122) "Section 183(e)" means subsection 183(e) of the FCAA which requires the EPA to study and develop regulations for the control of certain VOC sources under federal ozone measures.
- (123) "Section 183(f)" means subsection 182(f) of the FCAA which requires the EPA to develop regulations pertaining to tank vessels under federal ozone measures.
- (124) "Section 184" means section 184 of the FCAA which contains regulations for the control of interstate ozone air pollution.
- (125) "Section 302" means section 302 of the FCAA which contains definitions for general and administrative purposes in the Act.
- (126) "Section 302(j)" means subsection 302(j) of the FCAA which contains definitions of "major stationary source" and "major emitting facility."
- (127) "Section 328" means section 328 of the FCAA which contains regulations for air pollution from outer continental shelf activities.
- (128) "Section 408(a)" means subsection 408(a) of the FCAA which contains regulations for the Title IV permit program.
- (129) "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 Title I modification.
- (130) "Section 504(b)" means subsection 504(b) of the FCAA which states that the EPA can prescribe by rule procedures and methods for determining compliance and for monitoring.
- (131) "Section 504(e)" means subsection 504(e) of the FCAA which contains regulations for permit requirements for temporary sources.
- (132) "Significant Air Quality Impact" means an additional ambient air quality concentration equal to or greater than in the concentrations listed in Table 1 [of this rule](#). The threshold concentrations listed in Table 1 are used for comparison against the ambient air quality standard and do not apply for protecting PSD Class I increments or air quality related values (including visibility). For sources of VOC or NO_x, a major source or major modification has a significant impact if it is located within the Ozone Precursor Distance defined in OAR 340-225-0020.
- (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 [of this rule](#).

(a) For the Medford-Ashland Air Quality Maintenance Area, the Significant Emission Rate for PM10 is defined in Table 3.

(b) For regulated air pollutants not listed in Table 2 or 3 [of this rule](#), the significant emission rate is zero unless ~~the Department~~ [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 [of this rule](#) 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 ug/m3 (24 hour average) is emitting at a significant emission rate. This provision does not apply to greenhouse gas emissions.

(134) "Significant Impairment" occurs when ~~the Department~~ [DEQ](#) determines that visibility impairment interferes with the management, protection, preservation, or enjoyment of the visual experience within a Class I area. ~~The Department~~ [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.

(135) ~~"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.

(136) "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 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.

(137) "Source category":

- (a) Except as provided in subsection(b) of this section, means all the 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 ~~the Department~~[DEQ](#) determines are using similar raw materials and have equivalent process controls and pollution control equipment.
- (138) "Source Test" means the average of at least three test runs conducted in accordance with ~~the Department~~[DEQ](#)'s Source Sampling Manual.
- (139) "Startup" and "shutdown" means that time during which an air contaminant source or emission-control equipment is brought into normal operation or normal operation is terminated, respectively.
- (140) "State Implementation Plan" or "SIP" means the State of Oregon Clean Air Act Implementation Plan as adopted by the Commission under OAR 340-200-0040 and approved by EPA.
- (141) "Stationary source" means any building, structure, facility, or installation at a source that emits or may emit any regulated air pollutant.
- (142) "Substantial Underpayment" means the lesser of ten percent (10%) of the total interim emission fee for the major source or five hundred dollars.
- (143) "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 air pollutants contained in a permit issued by ~~the Department~~[DEQ](#) under OAR 340 division 216 or 218.
- (144) "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;
 - (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;
 - (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.
- (145) "Total Reduced 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(H₂S).
- (146) "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 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 ~~the Department~~[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. ~~The Department~~[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.
- (147) "Unassigned Emissions" means the amount of emissions that are in excess of the PSEL but less than the Netting Basis.

(148) "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.

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

(150) "Visibility Impairment" 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.

(151) "Volatile Organic Compounds" 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 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(C4F9OCH3 or HFE-7100); 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane((CF3)2CFCF2OCH3); 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane(C4F9OC2H5 or HFE-7200); 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF3)2CFCF2OC2H5); methyl acetate; 1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane(n-C3F7OCH3, 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 (HCOOCH3); (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:

(A) Cyclic, branched, or linear, completely fluorinated alkanes;

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

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

(D) 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 Department~~ [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 ~~the Department~~DEQ approves the exclusion.

(c) ~~The Department~~DEQ may require an owner or operator to provide monitoring or testing methods and results demonstrating, to ~~the Department~~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.

(152) "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 under OAR 340-200-0040.

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

[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

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]

TABLE 1
OAR 340-200-0020
SIGNIFICANT AIR QUALITY IMPACT

Pollutant	Averaging Time	Air Quality Area Designation		
		Class I	Class II	Class III
SO ₂ (µg/m ³)*	Annual	0.10	1.0	1.0
	24-hour	0.20	5.0	5.0
	3-hour	1.0	25.0	25.0
PM ₁₀ (µg/m ³)	Annual	0.20	0.2	0.2
	24-hour	0.30	1.0	1.0
PM _{2.5} (µg/m ³)	Annual	0.06	0.3	0.3
	24-hour	0.07	1.2	1.2
NO ₂ (µg/m ³)	Annual	0.10	1.0	1.0
CO (mg/m ³)**	8 hour	---	0.5	0.5
	1-hour	---	2.0	2.0
* micrograms/cubic meter				
** milligrams/cubic meter				

TABLE 2
OAR 340-200-0020
SIGNIFICANT EMISSION RATES

<i>Pollutant</i>	<i>Emission Rate</i>
Greenhouse Gases (CO ₂ e)	75,000 tons/year
Carbon Monoxide	100 tons/year
Nitrogen Oxides (NO _x)	40 tons/year
Particulate Matter	25 tons/year
PM ₁₀	15 tons/year
Direct PM _{2.5}	10 tons/year
PM _{2.5} precursors (SO ₂ or NO _x)	40 tons/year
Sulfur Dioxide (SO ₂)	40 tons/year
Volatile Organic Compounds (VOC)	40 tons/year
Ozone precursors (VOC or NO _x)	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

TABLE 3
OAR 340-200-0020
SIGNIFICANT EMISSION RATES FOR THE MEDFORD-ASHLAND AIR QUALITY
MAINTENANCE AREA

<i>Air Contaminant</i>	<i>Emission Rate</i>	
	<i>Annual</i>	<i>Day</i>
PM ₁₀	(5.0 tons)	(50.0 lbs.)

TABLE 4
OAR 340-200-0020(33)
De minimis EMISSION LEVELS

Pollutant	De minimis (tons/year, except as noted)
Greenhouse Gases (CO ₂ e)	2,756
CO	1
NO _x	1
SO ₂	1
VOC	1
PM	1
PM ₁₀ (except Medford AQMA)	1
PM ₁₀ /PM _{2.5} (Medford AQMA)	0.5 [5.0 lbs/day]
Direct PM _{2.5}	1
Lead	0.1
Fluorides	0.3
Sulfuric Acid Mist	0.7
Hydrogen Sulfide	1
Total Reduced Sulfur (including hydrogen sulfide)	1
Reduced Sulfur	1
Municipal waste combustor organics (Dioxin and furans)	0.0000005
Municipal waste combustor metals	1
Municipal waste combustor acid gases	1
Municipal solid waste landfill gases	1
Single HAP	1
Combined HAP (aggregate)	1

TABLE 5
OAR 340-200-0020(60)
GENERIC PSELS

Pollutant	Generic PSEL (tons/year, except as noted)
GreenhouseGases (CO ₂ e)	74,000
CO	99
NO _x	39
SO ₂	39
VOC	39
PM	24
PM ₁₀ (except Medford AQMA)	14
PM ₁₀ /PM _{2.5} (Medford AQMA)	4.5 [49 lbs/day]
Direct PM _{2.5}	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

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 ~~the Department of Environmental Quality~~ [DEQ](#) and is adopted as the state implementation plan (SIP) of the State of Oregon pursuant to the federal Clean Air Act, **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's rulemaking procedures in division 11 of this chapter and any other requirements contained in the SIP and will be submitted to the United States Environmental Protection Agency for approval. The State Implementation Plan was last modified by the Commission on ~~December 6, 2012~~ [March 20, 2013](#).

(3) Notwithstanding any other requirement contained in the SIP, ~~the Department~~ [DEQ](#) may:

(a) Submit to the Environmental Protection Agency any permit condition implementing a rule that is part of the federally-approved SIP as a source-specific SIP revision after ~~the Department~~ [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 if the regional authority adopts verbatim any standard that the Commission has adopted, and submit the standards to EPA for approval as a SIP revision.

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

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.035

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

DIVISION 210

STATIONARY SOURCE NOTIFICATION REQUIREMENTS

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 ~~the Department~~ [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 approved environmental certification program and subject to an Area Source NESHAP may register the source with ~~the Department~~ [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 ~~the Department~~ [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 -- \$240.00.

(B) Dry cleaners using perchloroethylene -- \$180.00.

(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 ~~the Department~~ [DEQ](#), unless prior arrangements for payment have been approved in writing by ~~the Department~~ [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 ~~the Department~~ [DEQ](#) pursuant to OAR 340-210-0110 through 340-210-0120 if requested in writing by ~~the Department~~ [DEQ](#) (or by EPA at ~~the Department~~ [DEQ](#)'s request).

(4) Revocation. ~~The Department~~ [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 under OAR 340-200-0040.

Stat. Auth.: ORS 468.020, 468A.025, 468A.035, 468A.050, 468A.070 & 468A.310

Stats. Implemented: ORS 468 & 468A

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

DIVISION 216

AIR CONTAMINANT DISCHARGE PERMITS

340-216-0020

Applicability

This division applies to all sources referred to in 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 340-224-0010. Sources referred to in **Table 1** are subject to fees as set forth in **Table 2**.

(1) No person may construct, install, establish, develop or operate any air contaminant source which is referred to in Table 1 [of this rule](#) without first obtaining an Air Contaminant Discharge Permit (ACDP) from ~~the Department~~[DEQ](#) or Regional Authority, unless otherwise deferred from the requirement to obtain an ACDP in subsection (1)(c) ~~or (d)~~ of this rule [or DEQ has granted an exemption from the requirement to obtain an ACDP under subsection \(1\)\(f\) 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 ~~the Department~~[DEQ](#) and Regional Authorities.

(b) ~~The Department~~[DEQ](#) or Regional Authority where the portable source's 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, ~~the Department~~[DEQ](#) will be responsible for issuing the permit.

(c) An air contaminant source required to obtain an ACDP or ACDP Attachment pursuant to a NESHAP or NSPS 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's adoption of the NESHAP or NSPS, and is not required to obtain an ACDP or ACDP Attachment until six months after the Commission's adoption of the NESHAP or NSPS. In addition, ~~the Department~~[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.

~~(d) Gasoline dispensing facilities are not required to submit an application for an ACDP or ACDP Attachment until May 1, 2010 or obtain an ACDP or ACDP attachment until June 1, 2010. The Department may defer the requirement to submit an application for, or to obtain an ACDP or ACDP Attachment, or both, for up to an additional six months.~~

~~(de)~~ Deferrals of Oregon permitting requirements do not relieve an air contaminant source from the responsibility of complying with federal NESHAP or NSPS requirements.

[\(e\) 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.](#)

[\(f\) 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.](#)

(2) 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 ~~the Department~~[DEQ](#) or Regional Authority.

(3) 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.

(4) 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.

(5) No person may increase emissions above the PSEL by more than the de minimis levels specified in OAR 340-200-0020 without first applying for and obtaining a modified ACDP.

(6) Subject to the requirements in this Division, the Lane Regional Air Protection Agency is designated by the Commission as the permitting agency to implement the Air Contaminant Discharge Permit program within its area of jurisdiction. The Regional Agency's program is subject to ~~DEQ~~[Department](#) oversight. The requirements and procedures contained in this Division pertaining to the Air Contaminant

Discharge Permit program shall be used by the Regional Agency to implement its permitting program until the Regional Agency adopts superseding rules which are at least as restrictive as state rules.

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-211-0040.

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

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 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 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

OAR 340-216-0020

AIR CONTAMINANT DISCHARGE PERMITS

Table 1

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.)

1. ** Autobody Repair or Painting Shops painting more than 25 automobiles in a year.
2. Concrete Manufacturing including Redimix and CTB more than 5,000 but less than 25,000 cubic yards per year output.
3. Crematory and Pathological Waste Incinerators with less than 20 tons/yr. material input.
4. Natural gas and propane fired boilers (with or without #2 diesel oil back-up****) of 10 or more MMBTU but less than 30 MMBTU/hr heat input constructed after June 9, 1989.
5. Prepared feeds for animals and fowl and associated grain elevators more than 1,000 tons/yr. but less than 10,000 tons per year throughput.
6. Rock, Concrete or Asphalt Crushing both portable and stationary more than 5,000 tons/yr. but less than 25,000 tons/yr. crushed.
7. Surface coating operations whose actual or expected usage of coating materials is greater than 250 gallons per month, 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.
1. Aerospace or Aerospace Parts Manufacturing
 2. Aluminum, Copper, and Other Nonferrous Foundries subject to an Area Source NESHAP
 3. Aluminum Production - Primary
 4. Ammonia Manufacturing
 5. Animal Rendering and Animal Reduction Facilities
 6. Asphalt Blowing Plants
 7. Asphalt Felts or Coating
 8. Asphaltic Concrete Paving Plants both stationary and portable
 9. Bakeries, Commercial over 10 tons of VOC emissions per year
 10. Battery Separator Manufacturing
 11. Battery Manufacturing and Re-manufacturing
 12. Beet Sugar Manufacturing
 13. Boilers and other Fuel Burning Equipment over 10 MMBTU/hr. heat input, except exclusively Natural Gas and Propane fired units (with or without #2 diesel backup) under 30 MMBTU/hr. heat input
 14. Building paper and Buildingboard Mills
 15. Calcium Carbide Manufacturing
 16. *** Can or Drum Coating
 17. Cement Manufacturing
 18. * Cereal Preparations and Associated Grain Elevators 10,000 or more tons/yr. throughput
 19. Charcoal Manufacturing
 20. Chlorine and Alkalies Manufacturing
 21. Chrome Plating
 22. Clay Ceramics Manufacturing subject to an Area Source NESHAP
 23. Coffee Roasting (roasting 30 or more tons per year)
 24. Concrete Manufacturing including Redimix and CTB 25,000 or more cubic yards per year output
 25. Crematory and Pathological Waste Incinerators 20 or more tons/yr. material input
 26. Degreasers (halogenated solvents subject to a NESHAP)
 27. Electrical Power Generation from combustion, excluding units used exclusively as emergency generators and units less than 500 kW
 28. Commercial Ethylene Oxide Sterilization, excluding facilities using less than 1 ton of ethylene oxide within all consecutive 12-month periods after December 6, 1996
 29. Ferroalloy Production Facilities subject to an Area Source NESHAP
 30. *** Flatwood Coating regulated by Division 232
 31. *** Flexographic or Rotogravure Printing subject to RACT
 32. * Flour, Blended and/or Prepared and Associated Grain Elevators 10,000 or more tons/yr. throughput
 33. Galvanizing and Pipe Coating (except galvanizing operations that use less than 100 tons of zinc/yr.)
 34. Gasoline Bulk Plants, Bulk Terminals, and Pipeline Facilities
 35. Gasoline dispensing facilities, excluding gasoline dispensing facilities with monthly throughput of less than 10,000 gallons of gasoline per month*****
 36. Glass and Glass Container Manufacturing
 37. * Grain Elevators used for intermediate storage 10,000 or more tons/yr. throughput
 38. Grain terminal elevators
 39. Gray iron and steel foundries, malleable iron foundries, steel investment foundries, steel foundries 100 or more tons/yr. metal charged (not elsewhere identified)

40. Gypsum Products Manufacturing
41. Hardboard Manufacturing (including fiberboard)
42. Hospital sterilization operations subject to an Area Source NESHAP.
43. Incinerators with two or more ton per day capacity
44. Lime Manufacturing
45. *** Liquid Storage Tanks subject to OAR Division 232
46. Magnetic Tape Manufacturing
47. Manufactured and Mobile Home Manufacturing
48. Marine Vessel Petroleum Loading and Unloading
49. Metal Fabrication and Finishing Operations subject to an Area Source NESHAP, excluding facilities that meet all the following:
 - a. Do not perform any of the operations listed in OAR 340-216-0060(2)(b)(Y)(i) ~~and~~ through (iii);
 - b. Do not perform shielded metal arc welding (SMAW) using metal fabrication and finishing hazardous air pollutant (MFHAP) containing wire or rod; and
 - c. Use less than 100 pounds of MFHAP containing welding wire and rod per year
50. Millwork (including kitchen cabinets and structural wood members) 25,000 or more bd. ft./maximum 8 hr. input
51. Molded Container
52. Motor Coach Manufacturing
53. Motor Vehicle and Mobile Equipment Surface Coating Operations subject to an Area Source NESHAP, 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 Gas and Oil Production and Processing and associated fuel burning equipment
55. Nitric Acid Manufacturing
56. Non-Ferrous Metal Foundries 100 or more tons/yr. of metal charged
57. Organic or Inorganic Chemical Manufacturing and Distribution with ½ or more tons per year emissions of any one criteria pollutant (sources in this category with less than ½ ton/yr. of each criteria pollutant are not required to have an ACDP)
58. Paint and Allied Products Manufacturing subject to an Area Source NESHAP
59. Paint Stripping and Miscellaneous Surface Coating Operations subject to an Area Source 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 Substrate Coating
61. Particleboard Manufacturing (including strandboard, flakeboard, and waferboard)
62. Perchloroethylene Dry Cleaning Operations subject to an Area Source NESHAP, excluding perchloroethylene dry cleaning operations registered pursuant to OAR 340-210-0100(2)
63. Pesticide Manufacturing 5,000 or more tons/yr. annual production
64. Petroleum Refining and Re-refining of Lubricating Oils and Greases including Asphalt Production by Distillation and the reprocessing of oils and/or solvents for fuels
65. Plating and Polishing Operations subject to an Area Source NESHAP
66. Plywood Manufacturing and/or Veneer Drying
67. Prepared Feeds Manufacturing for animals and fowl and associated grain elevators 10,000 or more tons per year throughput
68. Primary Smelting and/or Refining of Ferrous and Non-Ferrous Metals
69. Pulp, Paper and Paperboard Mills
70. Rock, Concrete or Asphalt Crushing both portable and stationary 25,000 or more tons/yr. crushed

71. Sawmills and/or Planing Mills 25,000 or more bd. ft./maximum 8 hr. finished product
72. Secondary Nonferrous Metals Processing subject to an Area Source NESHAP
73. Secondary Smelting and/or Refining of Ferrous and Non-Ferrous Metals
74. * Seed Cleaning and Associated Grain Elevators 5,000 or more tons/yr. throughput
75. Sewage Treatment Facilities employing internal combustion for digester gasses
76. Soil Remediation Facilities stationary or portable
77. Steel Works, Rolling and Finishing Mills
78. *** Surface Coating in Manufacturing subject to RACT
79. Surface Coating Operations with actual emissions of VOCs before add on controls of 10 or more tons/yr.
80. Synthetic Resin Manufacturing
81. Tire Manufacturing
82. Wood Furniture and Fixtures 25,000 or more bd. ft./maximum 8 hr. input
83. Wood Preserving (excluding waterborne)
84. All Other Sources not listed herein that ~~the Department~~[DEQ](#) determines an air quality concern exists or one which would emit significant malodorous emissions
85. All Other Sources not listed herein which would have actual emissions, if the source were to operate uncontrolled, of 5 or more tons a year of PM₁₀ if located in a PM₁₀ non-attainment or maintenance area, or 10 or more tons of any single criteria pollutant in any part of the state

Part C: Activities and Sources

The following sources must obtain a Standard ACDP under the procedures set forth in 340-216-0066:

1. Incinerators for PCBs and / or other hazardous wastes
2. All Sources that ~~the Department~~[DEQ](#) determines have emissions that constitute a nuisance
3. All Sources electing to maintain the source's baseline emission rate, or netting basis
4. 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:
 - a. Source categories for which a General ACDP has been issued.
 - 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.
 - c. Sources registered pursuant to OAR 340-210-0100(2).
 - d. Electrical power generation units used exclusively as emergency generators and units less than 500 kW.
 - e. Gasoline dispensing facilities, provided the gasoline dispensing facility has monthly throughput of less than 10,000 gallons of gasoline per month
 - f. 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\(2\).](#)
 - g. [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](#)
 - h. Commercial ethylene oxide sterilization operations using less than 1 ton of ethylene oxide within all consecutive 12-month periods after December 6, 1996.
 - i. Metal fabrication and finishing operations that meet all the following:
 - A. Do not perform any of the operations listed in OAR 340-216-0060(2)(b)(Y)(i) [through](#)~~and~~ (iii);

- B. Do not perform shielded metal arc welding (SMAW) using metal fabrication and finishing hazardous air pollutant (MFHAP) containing wire or rod; and
 - C. Use less than 100 pounds of MFHAP containing welding wire and rod per year.
 - j. [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.](#)
 - k. [Prepared feeds manufacturing facilities with less than 10,000 tons per year throughput.](#)
5. All sources having the ~~p~~Potential to ~~e~~Emit more than 100,000 tons CO₂e of GHG emissions in a year.
 6. All Sources having the Potential to Emit more than 100 tons of any regulated air contaminant in a year
 7. All Sources having the Potential to Emit more than 10 tons of a single hazardous air pollutant in a year
 8. All Sources having the Potential to 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 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](#)

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 (PSD/NSR)	\$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

*The payment due date for dry cleaners or gasoline dispensing facilities may be extended by the Department until March 1st.

Part 3. Specific Activity Fees:

a. Non-Technical Permit Modification (1)	\$360.00
b. Non-PSD/NSR Basic Technical Permit Modification (2)	\$360.00
c. Non-PSD/NSR Simple Technical Permit Modification(3)	\$1,200.00
d. Non-PSD/NSR Moderate Technical Permit Modification (4)	\$6,000.00
e. Non-PSD/NSR Complex Technical Permit Modification (5)	\$12,000.00
f. PSD/NSR Modification	\$42,000.00
g. Modeling Review (outside PSD/NSR)	\$6,000.00
h. Public Hearing at Source's Request	\$2,400.00
i. State MACT Determination	\$6,000.00
j. Compliance Order Monitoring (6)	\$120.00/month
k. Greenhouse Gas Reporting, as required by OAR 340-215-	15% of the applicable annual fee in Part 2

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.

340-216-0060

General Air Contaminant Discharge Permits

(1) Applicability.

(a) ~~The Department~~ [DEQ](#) may issue a General ACDP under the following circumstances:

- (A) There are several 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 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 pollutants emitted at more than the de minimis level in accordance with 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 procedures: A new General ACDP requires public notice and opportunity for comment in accordance with OAR 340 division 209 for Category III permit actions. A reissued General ACDP or a modification to a General ACDP requires public notice and opportunity for comment in accordance with OAR 340 division 209 for Category II permit actions. All General ACDPs are on file and available for review at ~~the Department~~ [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 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 Table 2 of OAR 340-216-0020. The fee class for each General ACDP is as follows:

(A) Hard chrome platers — Fee Class Three;

(B) Decorative chrome platers — Fee Class Two;

~~(C) Halogenated solvent degreasers — batch cold — Fee Class Two;~~

~~(D) Halogenated solvent degreasers — batch vapor and in-line — 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;

- (~~FH~~) Rock crushers — Fee Class Two;
- (~~GI~~) Ready-mix concrete — Fee Class One;
- (~~HJ~~) Sawmills, planing mills, millwork, plywood manufacturing and veneer drying — Fee Class Three;
- (~~IK~~) Boilers — Fee Class Two;
- (~~JE~~) Crematories — Fee Class ~~One~~Two;
- (~~KM~~) Grain elevators — Fee Class One;
- (~~LN~~) Prepared feeds, flour, and cereal — Fee Class One;
- (~~MO~~) Seed cleaning — Fee Class One;
- (~~NP~~) Coffee roasters — Fee Class One;
- (~~OQ~~) Bulk gasoline plants — Fee Class One;
- (~~PR~~) Electric power generators — Fee Class Two;
- (~~QS~~) Clay ceramics — Fee Class One;
- (~~RT~~) Hospital sterilizers — Fee Class Four;
- (~~SU~~) Secondary nonferrous metals — Fee Class One;
- (~~TV~~) Gasoline dispensing facilities — stage I — Fee Class Five;
- (~~UW~~) Gasoline dispensing facilities — stage II — Fee Class Four;
- (~~VX~~) Wood preserving — Fee Class Four;
- (~~WY~~) 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);
- (~~XZ~~) Metal fabrication and finishing — with only one of the operations listed in subparagraphs (2)(b)(Y)(i) through (iii) of this rule — Fee Class One;
- (~~YAA~~) Metal fabrication and finishing — with none of the operations listed in subparagraphs (2)(b)(Y)(i) through (iii) of this rule — Fee Class Four;
- (~~ZBB~~) Plating and polishing — Fee Class One;
- (~~AAEE~~) Surface coating operations — Fee Class One;
- (~~BBDD~~) Paint stripping — Fee Class One;
- (~~CCFF~~) Aluminum, copper, and nonferrous foundries — Fee Class Two;
- (~~DDFF~~) Paints and allied products manufacturing — Fee Class Two;
- (~~EEGG~~) 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 OAR 340, division 209.
 - (B) A person is not a permittee under the General ACDP until ~~the Department~~[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 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 OAR 340-216-0062, for a source category in a higher annual fee class than the General ACDP 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~~~~Department~~ Initiated Modification. If ~~the Department~~~~DEQ~~ determines that the conditions have changed such that a General ACDP for a category needs to be modified, ~~the Department~~~~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), ~~the Department~~~~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. Upon rescinding a source's assignment to a General ACDP ~~the Department~~~~DEQ~~ will place the source on a Simple or Standard ACDP. ~~The Department~~~~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 under OAR 340-200-0040.

[ED. NOTE: Tables referenced are available from ~~the agency~~~~DEQ~~.]

Stat. Auth.: ORS 468 & 468A

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

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) ~~The Department~~~~DEQ~~ may issue a General ACDP Attachment under the following circumstances:

(A) There are several 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 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 this 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 procedures: A General ACDP Attachment requires public notice and opportunity for comment in accordance with OAR 340 division 209 for Category II permit actions. All General ACDP Attachments will be on file and available for review at ~~the Department~~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 must pay an annual fee of \$120 for each assigned General ACDP Attachment.
 - (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 OAR 340, division 209.
 - (B) A person is not a permittee under the General ACDP Attachment until ~~the Department~~DEQ assigns the General ACDP Attachment to the person.
 - (C) Assignments to a General ACDP Attachments terminate 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 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 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~~s~~ ACDP in accordance with this Division.

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

Stat. Auth.: ORS 468 & 468A

Stats. Implemented: ORS 468.020 & 468A.025

Hist.: DEQ 8-2009, f. & cert. ef. 12-16-09

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) ~~The Department~~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.
- (2) Application Requirements. Any person requesting a new, modified, or renewed Simple ACDP must submit an application in accordance with OAR 340-216-0040.
- (3) Fees. Applicants for a new or modified Simple ACDP must pay the fees set forth in Table 2 of 340-216-0020. Annual fees for Simple ACDPs will be assessed based on the following:
- (a) Low Fee — A Source may qualify for the Low Fee if:
 - (A) the source is, or will be, permitted under only one of the following categories from ~~OAR 340-216-0020~~ Table 1, Part B (category 27~~5~~. 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;
 - (iii) Category 33. Galvanizing & 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 Storage Tanks subject to OAR division 232;
 - (vii) Category 56. Non-Ferrous Metal Foundries 100 or more tons/yr. of metal charged;
 - (viii) Category 57. Organic or Inorganic Industrial Chemical Manufacturing;
 - (ix) Category 62. Perchloroethylene Dry Cleaning;
 - (x) Category 73. Secondary Smelting and/or Refining of Ferrous and Non-Ferrous Metals; or
 - (xi) Category 85. All Other Sources not listed in 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; and
 - (B) The actual emissions from the 12 months immediately preceding the invoice date, and future projected emissions are less than 5 tons/yr. PM10 in a PM10 nonattainment or maintenance area, and less than 10 tons/yr. for each criteria pollutant; and
 - (C) The source is not considered an air quality problem or nuisance source by ~~the Department~~DEQ.
 - (b) High Fee — Any source required to have a Simple ACDP (~~OAR 340-216-0020~~ Table 1, Part B of OAR 340-216-0020) that does not qualify for the Low Fee will be assessed the High Fee.
 - (c) If ~~the Department~~DEQ determines that a source was invoiced for the Low Annual Fee but does not meet the Low Fee criteria outlined above, the source will be required to pay the difference between the Low and High Fees, plus applicable late fees in accordance with ~~OAR 340-216-0020~~ Table 2 of OAR 340-216-0020. Late fees start upon issuance of the initial invoice. In this case, ~~the Department~~DEQ will issue a new invoice specifying applicable fees.
- (4) Permit Content.
- (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 pollutants emitted at more than the de minimis level in accordance with 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.
 - (5) Permit issuance procedures:
 - (a) Issuance of a new or renewed Simple ACDP requires public notice in accordance with 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) Non-technical and non-NSR/PSD Basic and Simple technical modifications require public notice in accordance with OAR 340, division 209 for Category I permit actions; or
 - (B) Issuance of non-NSR/PSD Moderate and Complex technical modifications require public notice in accordance with OAR 340 division 209 for Category II permit actions.
- [ED. NOTE: Tables referenced are available from ~~the agency~~[DEQ](#).]
Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 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

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 OAR 340-216-0040 and include the following additional information as applicable:
 - (a) For new or modified Standard ACDPs that are not subject to NSR (OAR 340 division 224) but have emissions increases above the significant emissions rate, the application must include an analysis of the air quality and visibility (federal major sources only) 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.
 - (b) For new or modified Standard ACDPs that are subject to NSR (OAR 340 division 224), the application must include the following additional information as applicable:
 - (A) A detailed description of the air pollution control equipment and emission reductions processes which are planned for the source or 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 visibility (federal major sources only) 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
 - (C) An analysis of the air quality and 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, in the area the source or modification would affect.
- (2) Fees. Applicants for a Standard ACDP must pay the fees set forth in Table 2 of 340-216-0020.
- (3) Permit content. A Standard ACDP is a permit that contains:
 - (a) ~~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 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 as follows:
 - (A) For non-NSR permit actions, 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 Category II permit actions if no emissions increase is allowed.
 - (B) For NSR permit actions, 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 one of the following, as applicable:
 - (A) Non-technical modifications and non-NSR Basic and Simple technical modifications require public notice in accordance with OAR 340 division 209 for Category I permit actions.
 - (B) Non-NSR/PSD Moderate and Complex technical modifications require public notice in accordance with OAR 340 division 209 for Category II permit actions if no increase in allowed emissions, or Category III permit actions if an increase in emissions is allowed.
 - (C) NSR/PSD modifications require public notice in accordance with OAR 340 division 209 for Category IV permit actions.
- [ED. NOTE: Tables referenced are available from ~~the agency~~[DEQ](#).]
Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 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

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 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 renewal.
- (2) ACDP Attachment issuance procedures:
 - (a) An ACDP Attachment requires public notice and opportunity for comment in accordance with OAR 340 division 209 for Category II 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.
 - (b) A source is not a permittee under the ACDP Attachment until DEQ assigns the ACDP Attachment to the source.
 - (c) 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.

(d) If EPA or DEQ action caused 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. 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 under OAR 340-200-0040.

Stat. Auth.: ORS 468 & 468A

Stats. Implemented: ORS 468.020 & 468A.025

DIVISION 228

REQUIREMENTS FOR FUEL BURNING EQUIPMENT AND FUEL SULFUR CONTENT

340-228-0602

Definitions

The terms used in OAR 340-228-0606 through 0639 are defined as follows, in 40 CFR 63.10042, and in Appendix A to 40 CFR part 63 subpart UUUUU:

~~(1) "Acid rain emissions limitation" means a limitation on emissions of sulfur dioxide or nitrogen oxides under the Acid Rain Program.~~

~~(2) "Acid Rain Program" means a multi-state sulfur dioxide and nitrogen oxides air pollution control and emission reduction program established by the Administrator under title IV of the CAA and 40 CFR parts 72 through 78.~~

~~(3) "Automated data acquisition and handling system or DAHS" means that component of the continuous emission monitoring system (CEMS), or other emissions monitoring system approved for use under OAR 340-228-0609 through 0637, designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required OAR 340-228-0609 through 0637.~~

~~(4) "Biomass" means:~~

~~(a) Any organic material grown for the purpose of being converted to energy;~~

~~(b) Any organic byproduct of agriculture that can be converted into energy; or~~

~~(c) Any material that can be converted into energy and is nonmerchantable for other purposes, that is segregated from other nonmerchantable material, and that is;~~

~~(A) A forest-related organic resource, including mill residues, precommercial thinnings, slash, brush, or byproduct from conversion of trees to merchantable material; or~~

~~(B) A wood material, including pallets, crates, dunnage, manufacturing and construction materials (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.~~

~~(15) "Boiler" means an enclosed fossil or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.~~

~~(6) "Bottoming cycle cogeneration unit" means a cogeneration unit in which the energy input to the unit is first used to produce useful thermal energy and at least some of the reject heat from the useful thermal energy application or process is then used for electricity production.~~

~~(7) "Coal" means any solid fuel classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials (ASTM) Standard Specification for Classification of Coals by Rank D388-77, 90, 91, 95, 98a, or 99 (Reapproved 2004) & epsiv; (incorporated by reference, see 40 CFR 60.17).~~

(2) "CFR" means Code of Federal Regulations and, unless otherwise expressly identified, refers to the July 1, 2012 edition.

~~(38) "Coal-derived fuel" means any fuel (whether in a solid, liquid, or gaseous state) produced by the mechanical, thermal, or chemical processing of coal.~~

~~(49) "Coal-fired" means combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during any year.~~

~~(10) "Cogeneration unit" means a stationary, coal-fired boiler or stationary, coal-fired combustion turbine:~~

~~(a) Having equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy; and~~

~~(b) Producing during the 12-month period starting on the date the unit first produces electricity and during any calendar year after which the unit first produces electricity:~~

~~(A) For a topping-cycle cogeneration unit,~~

~~(i) Useful thermal energy not less than 5 percent of total energy output; and~~

~~(ii) Useful power that, when added to one-half of useful thermal energy produced, is not less than 42.5 percent of total energy input, if useful thermal energy produced is 15 percent or more of total energy output, or not less than 45 percent of total energy input, if useful thermal energy produced is less than 15 percent of total energy output.~~

~~(B) For a bottoming-cycle cogeneration unit, useful power not less than 45 percent of total energy input.~~

~~(544) "Combustion turbine" means:~~

(a) An enclosed device comprising a compressor, a combustor, and a turbine and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine; and

(b) If the enclosed device under paragraph (a) of this definition is combined cycle, any associated heat recovery steam generator and steam turbine.

~~(612) "Commence commercial operation" means, with regard to a unit serving a generator:~~

(a) To have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation.

(A) For a unit that is a coal-fired electric generating unit under OAR 340-228-0601 on the date the unit commences commercial operation as defined in paragraph (a) of this definition and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date shall remain the unit's date of commencement of commercial operation.

(B) For a unit that is a coal-fired electric generating unit under OAR 340-228-0601 on the date the unit commences commercial operation as defined in paragraph (a) of this definition and that is subsequently replaced by a unit at the same source (e.g., repowered), the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in paragraph (a) or (b) of this definition as appropriate.

(b) Notwithstanding paragraph (a) of this definition, for a unit that is not a coal-fired electric generating unit under OAR 340-228-0601 on the date the unit commences commercial operation as defined in paragraph (a) of this definition, the unit's date for commencement of commercial operation shall be the date on which the unit becomes a coal-fired electric generating unit under OAR 340-228-0601.

(A) For a unit with a date for commencement of commercial operation as defined in paragraph (b) of this definition and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date remains the unit's date of commencement of commercial operation.

(B) For a unit with a date for commencement of commercial operation as defined in paragraph (b) of this definition and that is subsequently replaced by a unit at the same source (e.g., repowered), the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in paragraph (a) or (b) of this definition as appropriate.

~~(713)~~ "Commence operation" means:

(a) To have begun any mechanical, chemical, or electronic process, including, with regard to a unit, start-up of a unit's combustion chamber.

(A) For a unit that is a coal-fired electric generating unit under OAR 340-228-0601 on the date the unit commences operation as defined in paragraph (a) of this definition and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date shall remain the unit's date of commencement of operation.

(B) For a unit that is a coal-fired electric generating unit under OAR 340-228-0601 on the date the unit commences operation as defined in paragraph (a) of this definition and that is subsequently replaced by a unit at the same source (e.g., repowered), the replacement unit shall be treated as a separate unit with a separate date for commencement of operation as defined in paragraph (a) or (b) of this definition as appropriate.

(b) Notwithstanding paragraph (a) of this definition, for a unit that is not a coal-fired electric generating unit under OAR 340-228-0601 on the date the unit commences operation as defined in paragraph (a) of this definition, the unit's date for commencement of operation shall be the date on which the unit becomes a coal-fired electric generating unit under OAR 340-228-0601.

(A) For a unit with a date for commencement of operation as defined in paragraph (b) of this definition and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date shall remain the unit's date of commencement of operation.

(B) For a unit with a date for commencement of operation as defined in paragraph (b) of this definition and that is subsequently replaced by a unit at the same source (e.g., repowered), the replacement unit shall be treated as a separate unit with a separate date for commencement of operation as defined in paragraph (a) or (b) of this definition as appropriate.

~~(14) "Common stack" means a single flue through which emissions from 2 or more units are exhausted.~~

~~(15) "Continuous emission monitoring system" or "CEMS" means the equipment required under OAR 340-228-0609 through 0637 to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes (using an automated data acquisition and handling system (DAHS)), a permanent record of Hg emissions, stack gas volumetric flow rate, stack gas moisture content, and oxygen or carbon dioxide concentration (as applicable), in a manner consistent with 40 CFR part 75 and OAR 340-228-0609 through 0637. The following systems are the principal types of CEMS required under OAR 340-228-0609 through 0637:~~

~~(a) A flow monitoring system, consisting of a stack flow rate monitor and an automated data acquisition and handling system and providing a permanent, continuous record of stack gas volumetric flow rate, in units of standard cubic feet per hour (scfh);~~

~~(b) A Hg concentration monitoring system, consisting of a Hg pollutant concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of Hg emissions in units of micrograms per dry standard cubic meter (µg/dscm);~~

~~(c) A moisture monitoring system, as defined in 40 CFR 75.11(b)(2) and providing a permanent, continuous record of the stack gas moisture content, in percent H₂O.~~

~~(d) A carbon dioxide monitoring system, consisting of a CO₂ concentration monitor (or an oxygen monitor plus suitable mathematical equations from which the CO₂ concentration is derived) and an automated data acquisition and handling system and providing a permanent, continuous record of CO₂ emissions, in percent CO₂; and~~

~~(e) An oxygen monitoring system, consisting of an O₂ concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of O₂, in percent O₂.~~

(846) "Emissions" means air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to [DEQthe Department](#) in accordance with OAR 340-228-0609 through 0637.

~~(17) "Generator" means a device that produces electricity.~~

(948) "Heat input" means, with regard to a specified period of time, the product (in MMBtu/time) of the gross calorific value of the fuel (in Btu/lb) divided by 1,000,000 Btu/MMBtu and multiplied by the fuel feed rate into a combustion device (in lb of fuel/time), as measured, recorded, and reported to [DEQthe Department](#) by the owner or operator ~~and determined by the Department in accordance with OAR 340-228-0609 through 0637~~ and excluding the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

~~(19) "Heat input rate" means the amount of heat input (in MMBtu) divided by unit operating time (in hr) or, with regard to a specific fuel, the amount of heat input attributed to the fuel (in MMBtu) divided by the unit operating time (in hr) during which the unit combusts the fuel.~~

~~(20) "Hg CEMS" means a Hg pollutant concentration monitor and an automated DAHS. A Hg CEMS provides a permanent, continuous record of Hg emissions in units of micrograms per standard cubic meter (µg/m³).~~

(1024) "Life-of-the-unit, firm power contractual arrangement" means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy generated by any specified unit and pays its proportional amount of such unit's total costs, pursuant to a contract:

(a) For the life of the unit;

(b) For a cumulative term of no less than 30 years, including contracts that permit an election for early termination; or

(c) For a period no less than 25 years or 70 percent of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

~~(22) "Lignite" means coal that is classified as lignite A or B according to the American Society of Testing and Materials (ASTM) Standard Specification for Classification of Coals by Rank D338-77, 90, 91, 95, 98a, or 99 (Reapproved 2004) & epsiv; (incorporated by reference, see 40 CFR 60.17).~~

~~(23) "Maximum design heat input" means, starting from the initial installation of a unit, the maximum amount of fuel per hour (in Btu/hr) that a unit is capable of combusting on a steady-state basis as specified by the manufacturer of the unit, or, starting from the completion of any subsequent physical change in the unit resulting in a decrease in the maximum amount of fuel per hour (in Btu/hr) that a unit is capable of combusting on a steady-state basis, such decreased maximum amount as specified by the person conducting the physical change.~~

(24) "Maximum expected Hg concentration (MEC)" means, the maximum expected Hg concentration (MEC) during normal, stable operation of the unit and emission controls. To calculate the MEC, substitute the MPC value from section (25) of this rule into Equation A-2 in section 2.1.1.2 of appendix A to 40 CFR part 75. Base the percent removal efficiency on design engineering calculations.

~~(25) “Maximum potential Hg concentration (MPC)” means the following:~~

~~(a) The maximum potential concentration depends upon the type of coal combusted. For the initial MPC determination, the MPC is one of the following:~~

~~(A) The MPC is one of the following default values: 9 µg/m³ for bituminous coal; 10 µg/m³ for sub-bituminous coal; 16 µg/m³ for lignite, and 1 µg/m³ for waste coal. If different coals are blended, the MPC is the highest MPC for any fuel in the blend; or~~

~~(B) The MPC may be based on the results of site-specific emission testing using one of the Hg reference methods in section (33) of this rule or in 40 CFR 75.22, if the unit does not have add-on Hg emission controls, or if testing upstream of these control devices. A minimum of 3 test runs are required, at the normal operating load. The highest total Hg concentration obtained in any of the tests may be used as the MPC; or~~

~~(C) The MPC is based on the maximum potential Hg concentration on 720 or more hours of historical CEMS data or data from a sorbent trap monitoring system, if the unit does not have add-on Hg emission controls (or if the CEMS or sorbent trap system is located upstream of the control device) and if the Hg CEMS or sorbent trap system has been tested for relative accuracy against one of the Hg reference methods in section (33) of this rule or in 40 CFR 75.22 and has met a relative accuracy specification of 20.0% or less.~~

~~(b) For the purposes of missing data substitution, the fuel-specific or site-specific MPC values defined in subsection (25)(a) of this rule apply to units using sorbent trap monitoring systems.~~

~~(1126) "Monitoring system" means any monitoring system that meets the requirements of OAR 340-228-0609 through 0637, including a continuous emissions monitoring system or an [approved](#) alternative monitoring system under 40 CFR part 75.~~

~~(1227) "Nameplate capacity" means, starting from the initial installation of a generator, the maximum electrical generating output (in MWe) that the generator is capable of producing on a steady-state basis and during continuous operation (when not restricted by seasonal or other deratings) as specified by the manufacturer of the generator or, starting from the completion of any subsequent physical change in the generator resulting in an increase in the maximum electrical generating output (in MWe) that the generator is capable of producing on a steady-state basis and during continuous operation (when not restricted by seasonal or other deratings), such increased maximum amount as specified by the person conducting the physical change.~~

~~(28) “NIST traceable elemental Hg standards” means either:~~

~~(a) Compressed gas cylinders having known concentrations of elemental Hg, which have been prepared according to the “EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards”; or~~

~~(b) Calibration gases having known concentrations of elemental Hg, produced by a generator that fully meets the performance requirements of the “EPA Traceability Protocol for Qualification and Certification of Elemental Mercury Gas Generators”.~~

~~(29) “NIST traceable source of oxidized Hg” means a generator that: Is capable of providing known concentrations of vapor phase mercuric chloride (HgCl₂), and that fully meets the performance requirements of the “EPA Traceability Protocol for Qualification and Certification of Oxidized Mercury Gas Generators”.~~

~~(1330) "Operator" means any person who operates, controls, or supervises a coal-fired electric [utility steam](#) generating unit and shall include, but not be limited to, any holding company, utility system, or plant manager of such a unit or source.~~

~~(1431) "Owner" means any of the following persons:~~

- (a) Any holder of any portion of the legal or equitable title in a coal-fired electric [utility steam](#) generating unit;
- (b) Any holder of a leasehold interest in a coal-fired electric [utility steam](#) generating unit; or
- (c) Any purchaser of power from a coal-fired electric [utility steam](#) generating unit under a life-of-the-unit, firm power contractual arrangement; provided that, unless expressly provided for in a leasehold agreement, owner shall not include a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based (either directly or indirectly) on the revenues or income from such coal-fired electric [utility steam](#) generating unit.

~~(32) "Potential electrical output capacity" means 33 percent of a unit's maximum design heat input, divided by 3,413 Btu/kWh, divided by 1,000 kWh/MWh, and multiplied by 8,760 hr/yr.~~

~~(33) "Reference method" means any direct test method of sampling and analyzing for an air pollutant as follows or as specified in 40 CFR 75.22:~~

~~(a) ASTM D6784-02, "Standard Test Method for Elemental, Oxidized, Particle-Bound, and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources" (Ontario Hydro Method) is the reference method for determining Hg concentration.~~

~~(b) Method 29 (40 CFR Part 60, Appendix A-8) for determining Hg concentration.~~

~~(c) Method 30A (40 CFR Part 60, Appendix A), "Determination of Total Vapor Phase Mercury Emissions from Stationary Sources (Instrumental Analyzer Procedure)" for determining Hg concentration.~~

~~(d) Method 30B (40 CFR Part 60, Appendix A), "Determination of Total Vapor Phase Mercury Emissions from Coal-Fired Combustion Sources Using Carbon Sorbent Traps" for determining Hg concentration.~~

~~(e) Method 29 (40 CFR Part 60, Appendix A-8) may be used with these caveats: The procedures for preparation of Hg standards and sample analysis in sections 13.4.1.1 through 13.4.1.3 ASTM D6784-02 must be followed instead of the procedures in sections 7.5.33 and 11.1.3 of Method 29, and the QA/QC procedures in section 13.4.2 of ASTM D6784-02 must be performed instead of the procedures in section 9.2.3 of Method 29. The tester may also opt to use the sample recovery and preparation procedures in ASTM D6784-02 instead of the Method 29 procedures, as follows: sections 8.2.8 and 8.2.9.1 of Method 29 may be replaced with sections 13.2.9.1 through 13.2.9.3 of ASTM D6784-02; sections 8.2.9.2 and 8.2.9.3 of Method 29 may be replaced with sections 13.2.10.1 through 13.2.10.4 of ASTM D6784-02; section 8.3.4 of Method 29 may be replaced with section 13.3.4 or 13.3.6 of ASTM D6784-02 (as appropriate); and section 8.3.5 of Method 29 may be replaced with section 13.3.5 or 13.3.6 of ASTM D6784-02 (as appropriate).~~

~~(f) Whenever ASTM D6784-02 or Method 29 is used, paired sampling trains are required. To validate a RATA run or an emission test run, the relative deviation (RD), calculated according to OAR 340-228-0627(12)(g), must not exceed 10 percent, when the average concentration is greater than 1.0 µg/m³. If the average concentration is ≤1.0 µg/m³, the RD must not exceed 20 percent. The RD results are also acceptable if the absolute difference between the Hg concentrations measured by the paired trains does not exceed 0.03 µg/m³. If the RD criterion is met, the run is valid. For each valid run, average the Hg concentrations measured by the two trains (vapor phase, only).~~

~~(g) When Method 29 or ASTM D6784-02 is used for the Hg emission testing required under OAR 340-228-0613(3) and (4), locate the reference method test points according to section 8.1 of Method 30A, and if Hg stratification testing is part of the test protocol, follow the procedures in sections 8.1.3 through 8.1.3.5 of Method 30A.~~

~~(1534)~~ "Repowered" means, with regard to a unit, replacement of a coal-fired boiler with one of the following coal-fired technologies at the same source as the coal-fired boiler:

- (a) Atmospheric or pressurized fluidized bed combustion;
- (b) Integrated gasification combined cycle;
- (c) Magnetohydrodynamics;
- (d) Direct and indirect coal-fired turbines;
- (e) Integrated gasification fuel cells; or
- (f) As determined by [DEQ](#)~~the Department~~ in consultation with the Secretary of Energy, a derivative of one or more of the technologies under paragraphs (a) through (e) of this definition and any other coal-fired technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of January 1, 2005.

~~(35) "Sequential use of energy" means:~~

~~(a) For a topping-cycle cogeneration unit, the use of reject heat from electricity production in a useful thermal energy application or process; or~~

~~(b) For a bottoming-cycle cogeneration unit, the use of reject heat from useful thermal energy application or process in electricity production.~~

~~(36) "Sorbent trap monitoring system" means the equipment required for the continuous monitoring of Hg emissions, using paired sorbent traps containing iodinated charcoal (IC) or other suitable reagent(s). This excepted monitoring system consists of a probe, the paired sorbent traps, a heated umbilical line, moisture removal components, an airtight sample pump, a dry gas meter, and an automated data acquisition and handling system. The monitoring system samples the stack gas at a rate proportional to the stack gas volumetric flow rate. The sampling is a batch process. Using the sample volume measured by the dry gas meter and the results of the analyses of the sorbent traps, the average Hg concentration in the stack gas for the sampling period is determined, in units of micrograms per dry standard cubic meter (µg/dscm). Mercury mass emissions for each hour in the sampling period are calculated using the average Hg concentration for that period, in conjunction with contemporaneous hourly measurements of the stack gas flow rate, corrected for the stack gas moisture content.~~

~~(37) "Subbituminous" means coal that is classified as subbituminous A, B, or C, according to the American Society of Testing and Materials (ASTM) Standard Specification for Classification of Coals by Rank D388-77, 90, 91, 95, 98a, or 99 (Reapproved 2004) (incorporated by reference, see 40 CFR 60.17).~~

~~(1638)~~ "Submit or serve" means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:

(a) In person;

(b) By United States Postal Service; or

(c) By other means of dispatch or transmission and delivery. Compliance with any "submission" or "service" deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.

~~(39) "Title V operating permit" means a permit issued under title V of the CAA and 40 CFR part 70 or 71.~~

~~(40) "Title V operating permit regulations" means the regulations that the Administrator has approved or issued as meeting the requirements of title V of the CAA and 40 CFR part 70 or 71.~~

~~(41) "Topping-cycle cogeneration unit" means a cogeneration unit in which the energy input to the unit is first used to produce useful power, including electricity, and at least some of the reject heat from the electricity production is then used to provide useful thermal energy.~~

~~(42) "Total energy input" means, with regard to a cogeneration unit, total energy of all forms supplied to the cogeneration unit, excluding energy produced by the cogeneration unit itself. Each form of energy supplied shall be measured by the lower heating value of that form of energy calculated as follows:~~

$$\text{LHV} = \text{HHV} - 10.55(W + 9H)$$

~~Where:~~

~~LHV = lower heating value of fuel in Btu/lb,~~

~~HHV = higher heating value of fuel in Btu/lb,~~

~~W = Weight % of moisture in fuel, and~~

~~H = Weight % of hydrogen in fuel.~~

~~(43) "Total energy output" means, with regard to a cogeneration unit, the sum of useful power and useful thermal energy produced by the cogeneration unit.~~

~~(1744) "Unit" means a stationary coal-fired boiler or a stationary coal-fired combustion turbine.~~

~~(45) "Unit operating day" means a calendar day in which a unit combusts any fuel.~~

~~(46) "Unit operating hour" or "hour of unit operation" means an hour in which a unit combusts any fuel.~~

~~(47) "Useful power" means, with regard to a cogeneration unit, electricity or mechanical energy made available for use, excluding any such energy used in the power production process (which process includes, but is not limited to, any on-site processing or treatment of fuel combusted at the unit and any on-site emission controls).~~

~~(48) "Useful thermal energy" means, with regard to a cogeneration unit, thermal energy that is:~~

~~(a) Made available to an industrial or commercial process (not a power production process), excluding any heat contained in condensate return or makeup water;~~

~~(b) Used in a heat application (e.g., space heating or domestic hot water heating); or~~

~~(c) Used in a space cooling application (i.e., thermal energy used by an absorption chiller).~~

~~(49) "Utility power distribution system" means the portion of an electricity grid owned or operated by a utility and dedicated to delivering electricity to customers.~~

Stat. Auth.: ORS 468.020 & 468A.310

Stats. Implemented: ORS 468A.025

Hist.: DEQ 13-2006, f. & cert. ef. 12-22-06; DEQ 15-2008, f. & cert. ef. 12-31-08

340-228-0606

Hg Emission Standards

~~(1) Mercury reduction plan. By July 1, 2009 or 1-year prior to commencement of commercial operation, whichever is later, the owner or operator of each coal-fired electric generating unit must develop and submit for Department approval a mercury reduction plan for each coal-fired electric generating unit. The plan must propose a control strategy for mercury that is most likely to result in the capture of at least 90 percent of the mercury emitted from the unit or that will limit mercury emissions to 0.60 pounds per trillion BTU of heat input. The owner or operator must demonstrate that the plan reflects technology that could reasonably be expected to meet the limits in this section if the technology operates as anticipated by the manufacturer. The plan must provide a timeframe for implementation of the selected control strategy including major milestones, installation and operation requirements, and work practice standards for the selected technology. The owner and operator of the coal-fired electric generating unit may proceed with the plan within 60 days of submittal unless, within the 60-day period, the Department notifies the owner or operator of the coal-fired electric generating unit that the plan must be revised.~~

~~(12) Mercury emission standards. On and after July 1, 2012 or at commencement of commercial operation~~startup~~, whichever is later, except as allowed under section (23) of this rule, each coal-fired electric utility steam generating unit must ~~have implemented the approved control strategy projected to~~~~

achieve at least 90 percent mercury capture or ~~that will~~ limit mercury emissions to 0.60 pounds per trillion BTU of heat input.

(~~23~~) Compliance extension. Up to a ~~22~~-year extension ~~of the requirement to implement the approved control strategy~~ may be granted by ~~the Department~~[DEQ](#) if the owner or operator of a coal-fired electric [utility steam](#) generating unit demonstrates that it is not practical to install mercury control equipment by July 1, 2012 due to supply limitations, ESP fly ash contamination, or other extenuating circumstances that are beyond the control of the owner or operator.

(~~34~~) Compliance demonstration. Commencing in July 2013 or 12 months after commercial startup or 12 months after expiration of the extension granted under section (~~23~~) of this rule, whichever is later, each coal-fired electric [utility steam](#) generating unit must thereafter demonstrate compliance with one of the standards in subsections (~~34~~)(a) or (~~34~~)(b) of this rule for each compliance period, except as allowed under sections (~~45~~) and (~~56~~) of this rule. A compliance period consists of twelve months. Each month commencing with June 2013 or the twelfth month after commencement of commercial operation or twelfth month after expiration of the extension granted under section (~~23~~) of this rule, whichever is later, is the end of a compliance period consisting of that month and the previous 11 months.

(a) A mercury emission standard of 0.60 pounds per trillion BTU of heat input calculated by dividing the Hg mass emissions determined using a mercury CEMS or sorbent trap monitoring system by heat input ~~as determined according to 40 CFR part 75, appendix F (procedure 5);~~ or

(b) A minimum 90 percent capture of inlet mercury determined as follows:

(A) Inlet mercury must be determined as specified in subparagraph (~~34~~)(b)(A)(i) or (~~43~~)(b)(A)(ii) of this rule:

(i) Coal sampling and analysis. To demonstrate compliance by coal sampling and analysis, the owner or operator of a coal-fired electric [utility steam](#) generating unit must test its coal for mercury consistent with a coal sampling and analysis plan. The coal sampling and analysis plan must be consistent with the requirements of OAR 340-228-0639.

(ii) Hg mass emissions prior to any control device(s). To demonstrate compliance by measuring Hg mass emissions, the owner or operator of a coal-fired electric [utility steam](#) generating unit must measure mercury emissions prior to any control device(s) using a Hg CEMS or sorbent trap.

(B) The mercury capture efficiency must be calculated using the Hg emissions determined using a mercury CEMS or sorbent trap monitoring system and the inlet mercury determined using the coal mercury content data obtained in accordance with subparagraph (~~34~~)(b)(A)(i) of this rule or the measured inlet mercury data obtained in accordance with subparagraph (~~34~~)(b)(A)(ii) of this rule and a calculation methodology approved by ~~the Department~~[DEQ](#).

(~~45~~) Temporary compliance alternative. If the owner or operator of a coal-fired electric [utility steam](#) generating unit properly implements the approved control strategy and the strategy fails to achieve at least 90 percent mercury capture or limit mercury emissions to 0.60 pounds per trillion BTU of heat input:

(a) The owner or operator must notify ~~the Department~~[DEQ](#) of the failure within 30 days of the end of the initial compliance period; and

(b) The owner or operator must file an application with ~~the Department~~[EQ](#) for a permit or permit modification in accordance with OAR 340 division 216 to establish a temporary alternative mercury emission limit. The application must be filed within 60 days of the end of the initial compliance period, and must include a continual program of mercury control progression able to achieve at least 90 percent mercury capture or to limit mercury emissions to 0.60 pounds per trillion BTU of heat input and all monitoring and operating data for the coal-fired electric [utility steam](#) generating unit.

- (c) ~~The Department~~ DEQ may establish a temporary alternative mercury emission limit only if the owner or operator applies for a permit or permit modification, that includes a control strategy that ~~the~~ DEQ determines constitutes a continual program of mercury control progression able to achieve at least 90 percent mercury capture or to limit mercury emissions to 0.60 pounds per trillion BTU of heat input.
- (d) Establishment of a temporary alternative mercury emission limit requires public notice in accordance with OAR 340 division 209 for Category III permit actions
- (e) If the owner or operator files an application under subsection (45)(b) of this rule, the coal-fired electric utility steam generating unit must operate according to the temporary alternative mercury emission limit proposed in the permit or permit modification application until ~~the Department~~ DEQ either denies the application or issues the permit or permit modification. Compliance with the proposed temporary alternative mercury emission limit prior to final DEQ ~~Department~~ action on the application shall constitute compliance with the limits in section (12) of this rule.
- (f) A temporary alternative mercury emission limit established in a permit expires July 1, 2016 or within 2 years of commencement of commercial operation, whichever is later.
- (56) Permanent compliance alternative. If the owner or operator of a coal-fired electric utility steam generating unit is unable to achieve at least 90 percent mercury capture or an emission level of 0.60 pounds per trillion BTU of heat input by July 1, 2016 or within 2 years of commencement of commercial operation, whichever is later, despite properly implementing the continual program of mercury progression required in section (45) of this rule:
- (a) The owner or operator of the coal-fired electric utility steam generating unit may file an application with ~~the Department~~ DEQ for a permit modification in accordance with OAR 340 division 216 to establish a permanent alternative mercury emission limit that comes as near as technically possible to achieving 90 percent mercury capture or an emission level of 0.60 pounds per trillion BTU of heat input.
- (b) ~~The Department~~ DEQ may establish a permanent alternative mercury emission limit only if the owner or operator applies for a permit modification, that proposes an alternative mercury emission limit that ~~the Department~~ DEQ determines comes as near as technically possible to achieving 90 percent mercury capture or an emission level of 0.60 pounds per trillion BTU of heat input.
- (c) Establishment of a permanent alternative mercury emission limit requires public notice in accordance with OAR 340 division 209 for Category IV permit actions.
- (d) If the owner or operator files an application under subsection (56)(a) of this rule, the coal-fired electric utility steam generating unit must operate according to the permanent alternative mercury emission limit proposed in the permit modification application until ~~the Department~~ DEQ either denies the application or modifies the permit. Compliance with the proposed permanent alternative mercury emission limit prior to final DEQ ~~Department~~ action on the application shall constitute compliance with the limits in section (14) of this rule.
- (76) Emission Caps. Beginning in calendar year 2018, the following coal-fired electric utility steam generating unit specific emission caps shall apply.
- (a) Existing Boardman coal-fired electric utility steam generating unit cap. The existing coal-fired electric utility steam generating unit in Boardman shall emit no more than:
- (A) 60 pounds of mercury in any calendar year in which there are no new coal-fired electric utility steam generating units operated in Oregon.
- (B) 35 pounds of mercury in any calendar year in which there are new coal-fired electric utility steam generating units operated in Oregon.
- (b) New coal-fired electric utility steam generating unit cap:
- (A) New coal-fired electric utility steam generating units, in aggregate, shall emit no more than:

- (i) 25 pounds of mercury in any calendar year in which the existing coal-fired electric [utility steam](#) generating unit in Boardman is operated.
 - (ii) 60 pounds of mercury in any calendar year in which the existing coal-fired electric [utility steam](#) generating unit in Boardman is not operated.
 - (B) The owner or operator of each new coal-fired electric [utility steam](#) generating unit must submit to ~~the Department~~[DEQ](#) a request, in a format specified by ~~the Department~~[DEQ](#), to receive a portion of the new coal-fired electric [utility steam](#) generating unit cap. The request may not be submitted until the new coal-fired electric [utility steam](#) generating unit has received its Site Certification from the Facility Siting Council, or if the new coal-fired electric [utility steam](#) generating unit is not required to obtain a Site Certificate, all governmental approvals necessary to commence construction.
 - (C) ~~The Department~~[DEQ](#) will allocate the new coal-fired electric [utility steam](#) generating unit cap in order of receipt of requests and, once allocated, the new coal-fired electric [utility steam](#) generating unit shall be entitled to receive an equal allocation in future years unless the new coal-fired electric [utility steam](#) generating unit permanently ceases operations.
 - (D) Each individual new coal-fired electric [utility steam](#) generating unit shall emit no more than the lesser of:
 - (i) An amount of mercury determined by multiplying the design heat input in TBtu of such coal-fired electric [utility steam](#) generating unit by 0.60 pounds per TBtu rounded to the nearest pound as appropriate, or
 - (ii) The amount of the emission cap under (67)(b) less the amount of the emission cap under (67)(b) that has been allocated to other new coal-fired electric [utility steam](#) generating units.
 - (c) Compliance demonstration. Each coal-fired electric [utility steam](#) generating unit must demonstrate compliance with the applicable calendar year emission cap in subsection (67)(a) or (67)(b) of this rule using a mercury CEMS or sorbent trap monitoring system.
- Stat. Auth.: ORS 468.020 & 468A.310
 Stats. Implemented: ORS 468A.025
 Hist.: DEQ 13-2006, f. & cert. ef. 12-22-06; 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

Monitoring Requirements

340-228-0609

General Requirements

- The owners and operators of a coal-fired electric [utility steam](#) generating unit must comply with the monitoring, ~~recordkeeping, and reporting~~ requirements as provided in this rule ~~and, 40 CFR part 63 subpart UUUUU, and OAR 340-228-0639 (if applicable)~~[OAR 340-228-0611 through 0637](#). ~~For purposes of complying with such requirements, the definitions in 340-228-0602 and in 40 CFR 72.2 shall apply, and the terms "affected unit" and "designated representative" in 40 CFR part 75 shall be deemed to refer to the terms "coal-fired electric generating unit" and "owner or operator" respectively, as defined in 340-228-0602. The owner or operator of a unit that is not a coal-fired electric generating unit but that is monitored under 340-228-0615(2)(a) must comply with the same monitoring, recordkeeping, and reporting requirements as a coal-fired electric generating unit.~~
- (1) Requirements for installation, certification, and data accounting. The owner or operator of each coal-fired electric [utility steam](#) generating unit must:
 - (a) Install all applicable monitoring systems required under this rule, ~~and 40 CFR part 63 subpart UUUUU, and OAR 340-228-0639~~[OAR 340-228-0611 through 0637](#) for monitoring Hg mass emissions, inlet Hg (if applicable), and individual unit heat input ~~(including all systems required to monitor Hg~~

~~concentration, stack gas moisture content, stack gas flow rate, and CO₂ or O₂ concentration, as applicable).~~

(b) Successfully complete all certification tests required under [40 CFR part 63 subpart UUUUU](#) ~~OAR 340-228-0621~~ and meet all other requirements of this rule ~~and, 40 CFR part 63 subpart UUUUU, and OAR 340-228-0639 OAR 340-228-0611 through 0637~~ applicable to the monitoring systems under subsection (1)(a) of this rule.

~~(c) The owner or operator must reduce all volumetric flow, CO₂ concentration or O₂ concentration, as applicable, and Hg concentration data collected by the monitors to hourly averages.~~

~~(d)~~ (c) Record, report, and quality-assure the data from the monitoring systems under subsection (1)(a) of this rule.

~~(e) Failure of a CO₂ or O₂ emissions concentration monitor, Hg concentration monitor, flow monitor, or moisture monitor to acquire the minimum number of data points for calculation of an hourly average shall result in the failure to obtain a valid hour of data and the loss of such component data for the entire hour.~~

(2) Compliance deadlines. The owner or operator must meet the monitoring system certification and other requirements of section (1) of this rule on or before the following dates. The owner or operator must record, report, and quality-assure the data from the monitoring systems under subsection (1)(a) of this rule on and after the following dates.

(a) Outlet Hg.

(A) For the owner or operator of a coal-fired electric [utility steam](#) generating unit that commences commercial operation before July 1, 2008, by January 1, 2009.

(B) For the owner or operator of a coal-fired electric [utility steam](#) generating unit that commences commercial operation on or after July 1, 2008, by the later of the following dates:

(i) January 1, 2009; or

(ii) 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which the unit commences commercial operation.

(C) For the owner or operator of a coal-fired electric [utility steam](#) generating unit for which construction of a new stack or flue or installation of add-on Hg emission controls, a flue gas desulfurization system, a selective catalytic reduction system, or a compact hybrid particulate collector system is completed after the applicable deadline under paragraph (2)(a)(A) or (B) of this rule, by 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which emissions first exit to the atmosphere through the new stack or flue, add-on Hg emissions controls, flue gas desulfurization system, selective catalytic reduction system, or compact hybrid particulate collector system.

(b) Heat input. For monitoring systems used to monitor heat input in accordance with OAR 340-228-0606(4)(a), if applicable, by the later of the following dates:

(A) July 1, 2012 or the date established under OAR 340-228-0606(3); or

(B) The date on which the unit commences commercial operation.

(c) Inlet Hg. If required to perform coal sampling and analysis in accordance with OAR 340-228-0606(4)(b)(A)(i) or measure Hg emission prior to any control device(s) in accordance with 340-228-0606(4)(b)(A)(ii), if applicable, by the later of the following dates:

(A) July 1, 2012 or the date established under OAR 340-228-0606(3); or

(B) The date on which the unit commences commercial operation.

(3) Reporting data.

(a) Except as provided in subsection (3)(b) of this rule, the owner or operator of a coal-fired electric [utility steam](#) generating unit that does not meet the applicable compliance date set forth in section (2) of this rule for any monitoring system under subsection (1)(a) of this rule must, for each monitoring

system, determine, record, and report maximum potential (or, as appropriate, minimum potential) values for Hg concentration, stack gas flow rate, stack gas moisture content, and any other parameters required to determine Hg mass emissions and heat input in accordance with OAR 340-228-0637(5).

(b) The owner or operator of a coal-fired electric utility steam generating unit that does not meet the applicable compliance date set forth in paragraph (2)(a)(C) of this rule for any monitoring system under subsection (1)(a) must, for each such monitoring system, determine, record, and report substitute data using the applicable missing data procedures in 40 CFR part 75 subpart D, ~~OAR 340-228-0631, and OAR 340-228-0633~~, in lieu of the maximum potential (or, as appropriate, minimum potential) values, for a parameter if the owner or operator demonstrates that there is continuity between the data streams for that parameter before and after the construction or installation under subsection (2)(a)(C) of this rule.

~~(4) Prohibitions:~~

~~(a) No owner or operator of a coal-fired electric generating unit shall use any alternative monitoring system, alternative reference method, or any other alternative to any requirement of this rule and OAR 340-228-0611 through 0637 without having obtained prior written approval.~~

~~(b) No owner or operator of a coal-fired electric generating unit shall operate the unit so as to discharge, or allow to be discharged, Hg emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of this rule and OAR 340-228-0611 through 0637.~~

~~(c) No owner or operator of a coal-fired electric generating unit shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording Hg 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 and OAR 340-228-0611 through 0637.~~

~~(d) No owner or operator of a coal-fired electric generating unit shall retire or permanently discontinue use of the continuous emission monitoring system, any component thereof, or any other approved emission monitoring system under this rule, except under any one of the following circumstances:~~

~~(A) The owner or operator is monitoring Hg mass emissions from the coal-fired electric generating unit with another certified monitoring system approved, in accordance with the applicable provisions of this rule and OAR 340-228-0611 through 0637, by the Department for use at that unit that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system; or~~

~~(B) The owner or operator submits notification of the date of certification testing of a replacement monitoring system for the retired or discontinued monitoring system in accordance with OAR 340-228-0621(3)(c)(A).~~

Stat. Auth.: ORS 468.020 & 468A.310

Stats. Implemented: ORS 468A.025

Hist.: DEQ 15-2008, f. & cert. ef 12-31-08

~~340-228-0611~~

~~Additional Requirements to Provide Heat Input Data~~

~~The owner or operator of a coal-fired electric generating unit that monitors and reports Hg mass emissions using a Hg concentration monitoring system and a flow monitoring system must also monitor and report heat input rate at the unit level using the procedures set forth in 40 CFR part 75, appendix F (procedure 5).~~

Stat. Auth.: ORS 468.020 & 468A.310

Stats. Implemented: ORS 468A.025

Hist.: DEQ 15-2008, f. & cert. ef 12-31-08

340-228-0613

Monitoring of Hg Mass Emissions and Heat Input at the Unit Level

The owner or operator of the affected coal-fired electric generating unit must meet the general operating requirements in 40 CFR 75.10 for the following continuous emission monitors (except as provided in accordance with 40 CFR part 75 subpart E):

(1) A Hg concentration monitoring system (as defined in OAR 340-228-0602) or a sorbent trap monitoring system (as defined in OAR 340-228-0602) to measure Hg concentration; and

(2) A flow monitoring system; and

revokes prospectively the certification status of the monitoring system. The data measured and recorded by the monitoring system must 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 owner or operator completes subsequently approved initial certification or recertification tests for the monitoring system. The owner or operator must follow the applicable initial certification or recertification procedures in 340-228-0621 for each disapproved monitoring system.

(3) When the bias test indicates that a flow monitor, a Hg concentration monitoring system or a sorbent trap monitoring system is biased low (i.e., the arithmetic mean of the differences between the reference method value and the monitor or monitoring system measurements in a relative accuracy test audit exceed the bias statistic), the owner or operator must adjust the monitor or continuous emission monitoring system to eliminate the cause of bias such that it passes the bias test or calculate and use the bias adjustment factor given in Equations A-11 and A-12 of appendix A to 40 CFR part 75, to adjust the monitored data.

Stat. Auth.: ORS 468.020 & 468A.310

Stats. Implemented: ORS 468A.025

Hist.: DEQ 15-2008, f. & cert. ef 12-31-08

340-228-0615

Monitoring of Hg Mass Emissions and Heat Input at Common and Multiple Stacks

(1) Unit utilizing common stack with other coal-fired electric generating unit(s). When a coal-fired electric generating unit utilizes a common stack with one or more coal-fired electric generating units, but no non-coal-fired electric generating units, the owner or operator must either:

(a) Install, certify, operate, and maintain the monitoring systems described in OAR 340-228-0613 at the common stack and record the combined Hg mass emissions for the units exhausting to the common stack. If reporting of the unit heat input rate is required, determine the hourly unit heat input rates either by:

(A) Apportioning the common stack heat input rate to the individual units according to the procedures in 40 CFR 75.16(e)(3); or

(B) Installing, certifying, operating, and maintaining a flow monitoring system and diluent monitor in the duct to the common stack from each unit; or

(b) Install, certify, operate, and maintain the monitoring systems and (if applicable) perform the Hg emission testing described in OAR 340-228-0613 in the duct to the common stack from each unit.

(2) Unit utilizing common stack with non-coal-fired electric generating unit(s). When one or more coal-fired electric generating units utilize a common stack with one or more non-coal-fired electric generating units, the owner or operator must either:

(a) Install, certify, operate, and maintain the monitoring systems and (if applicable) perform the Hg emission testing described in OAR 340-228-0613 in the duct to the common stack from each coal-fired electric generating unit; or

~~(b) Install, certify, operate, and maintain the monitoring systems described in OAR 340-228-0613 in the common stack; and~~

~~(A) Install, certify, operate, and maintain the monitoring systems and (if applicable) perform the Hg emission testing described in OAR 340-228-0613 in the duct to the common stack from each non-coal-fired electric generating unit. The owner or operator must submit a petition to the Department to allow a method of calculating and reporting the Hg mass emissions from the coal-fired electric generating units as the difference between Hg mass emissions measured in the common stack and Hg mass emissions measured in the ducts of the non-coal-fired electric generating units, not to be reported as an hourly value less than zero. The Department may approve such a method whenever the owner or operator demonstrates, to the satisfaction of the Department, that the method ensures that the Hg mass emissions from the coal-fired electric generating units are not underestimated; or~~

~~(B) Count the combined emissions measured at the common stack as the Hg mass emissions for the coal-fired electric generating units, for recordkeeping and compliance purposes, in accordance with section (1) of this rule; or~~

~~(C) Submit a petition to the Department to allow use of a method for apportioning Hg mass emissions measured in the common stack to each of the units using the common stack and for reporting the Hg mass emissions. The Department may approve such a method whenever the owner or operator demonstrates, to the satisfaction of the Department, that the method ensures that the Hg mass emissions from the coal-fired electric generating units are not underestimated.~~

~~(c) If the monitoring option in subsection (2)(b) of this rule is selected, and if heat input is required to be reported, the owner or operator must either:~~

~~(A) Apportion the common stack heat input rate to the individual units according to the procedures in 40 CFR 75.16(e)(3); or~~

~~(B) Install a flow monitoring system and a diluent gas (O₂ or CO₂) monitoring system in the duct leading from each affected unit to the common stack, and measure the heat input rate in each duct, according to section 5.2 of appendix F to 40 CFR part 75.~~

~~(3) Unit with a main stack and a bypass stack. Whenever any portion of the flue gases from a coal-fired electric generating unit can be routed through a bypass stack to avoid the Hg monitoring system(s) installed on the main stack, the owner and operator must either:~~

~~(a) Install, certify, operate, and maintain the monitoring systems described in OAR 340-228-0613 on both the main stack and the bypass stack and calculate Hg mass emissions for the unit as the sum of the Hg mass emissions measured at the two stacks;~~

~~(b) Install, certify, operate, and maintain the monitoring systems described in OAR 340-228-0613 at the main stack and measure Hg mass emissions at the bypass stack using the appropriate reference methods in OAR 340-228-0602(33) or in 40 CFR 75.22. Calculate Hg mass emissions for the unit as the sum of the emissions recorded by the installed monitoring systems on the main stack and the emissions measured by the reference method monitoring systems;~~

~~(c) Install, certify, operate, and maintain the monitoring systems and (if applicable) perform the Hg emission testing described in OAR 340-228-0613 only on the main stack. If this option is chosen, it is not necessary to designate the exhaust configuration as a multiple stack configuration in the monitoring plan required under 40 CFR 75.53 and OAR 340-228-0637(2), since only the main stack is monitored. For each unit operating hour in which the bypass stack is used, report, as applicable, the maximum potential Hg concentration (as defined in OAR 340-228-0602(25)), and the appropriate substitute data values for flow rate, CO₂ concentration, O₂ concentration, and moisture (as applicable), in accordance with the missing data procedures of OAR 340-228-0631 and 0633, as applicable; or~~

~~(d) If the monitoring option in subsection (3)(a) or (b) of this rule is selected, and if heat input is required to be reported, the owner or operator must:~~

~~(A) Use the installed flow and diluent monitors to determine the hourly heat input rate at each stack (MMBtu/hr), according to section 5.2 of appendix F to 40 CFR part 75; and~~

~~(B) Calculate the hourly heat input at each stack (in MMBtu) by multiplying the measured stack heat input rate by the corresponding stack operating time; and~~

~~(C) Determine the hourly unit heat input by summing the hourly stack heat input values.~~

~~(4) Unit with multiple stack or duct configuration. When the flue gases from a coal-fired electric generating unit discharge to the atmosphere through more than one stack, or when the flue gases from a coal-fired electric generating unit utilize two or more ducts feeding into a single stack and the owner or operator chooses to monitor in the ducts rather than in the stack, the owner or operator must either:~~

~~(a) Install, certify, operate, and maintain the monitoring systems and (if applicable) perform the Hg emission testing described in OAR 340-228-0613 in each of the multiple stacks and determine Hg mass emissions from the coal-fired electric generating unit as the sum of the Hg mass emissions recorded for each stack. If another unit also exhausts flue gases into one of the monitored stacks, the owner or operator must comply with the applicable requirements of sections (1) and (2) of this rule, in order to properly determine the Hg mass emissions from the units using that stack;~~

~~(b) Install, certify, operate, and maintain the monitoring systems and (if applicable) perform the Hg emission testing described in OAR 340-228-0613 in each of the ducts that feed into the stack, and determine Hg mass emissions from the coal-fired electric generating unit using the sum of the Hg mass emissions measured at each duct, except that where another unit also exhausts flue gases to one or more of the stacks, the owner or operator must also comply with the applicable requirements of sections (1) and (2) of this rule to determine and record Hg mass emissions from the units using that stack. The owner or operator must calculate Hg mass emissions and heat input rate in accordance with approved procedures; or~~

~~(c) If the monitoring option in subsection (4)(a) or (b) of this rule is selected, and if heat input is required to be reported, the owner or operator must:~~

~~(A) Use the installed flow and diluent monitors to determine the hourly heat input rate at each stack or duct (MMBtu/hr), according to section 5.2 of appendix F to 40 CFR part 75; and~~

~~(B) Calculate the hourly heat input at each stack or duct (in MMBtu) by multiplying the measured stack (or duct) heat input rate by the corresponding stack (or duct) operating time; and~~

~~(C) Determine the hourly unit heat input by summing the hourly stack (or duct) heat input values.~~

~~Stat. Auth.: ORS 468.020 & 468A.310~~

~~Stats. Implemented: ORS 468A.025~~

~~Hist.: DEQ 15-2008, f. & cert. ef 12-31-08~~

340-228-0617

Special Provisions for Measuring Hg Mass Emissions using the Sorbent Trap Monitoring Methodology

For an affected coal-fired electric generating unit, if the owner or operator elects to use sorbent trap monitoring systems to quantify Hg mass emissions, the guidelines in sections (1) through (11) of this rule must be followed for this monitoring methodology:

(1) For each sorbent trap monitoring system (whether primary or redundant backup), the use of paired sorbent traps, as described in OAR 340-228-0627, is required.

(2) Each sorbent trap must have both a main section, a backup section, and a third section to allow spiking with a calibration gas of known Hg concentration, as described in OAR 340-228-0627.

- ~~(3) A certified flow monitoring system is required.~~
- ~~(4) Correction for stack gas moisture content is required, and in some cases, a certified O₂ or CO₂ monitoring system is required.~~
- ~~(5) Each sorbent trap monitoring system must be installed and operated in accordance with OAR 340-228-0627. The automated data acquisition and handling system must ensure that the sampling rate is proportional to the stack gas volumetric flow rate.~~
- ~~(6) At the beginning and end of each sample collection period, and at least once in each unit operating hour during the collection period, the dry gas meter reading must be recorded.~~
- ~~(7) After each sample collection period, the mass of Hg adsorbed in each sorbent trap (in all three sections) must be determined according to the applicable procedures in OAR 340-228-0627.~~
- ~~(8) The hourly Hg mass emissions for each collection period are determined using the results of the analyses in conjunction with contemporaneous hourly data recorded by a certified stack flow monitor, corrected for the stack gas moisture content. For each pair of sorbent traps analyzed, the average of the two Hg concentrations must be used for reporting purposes under OAR 340-228-0637(4). Notwithstanding this requirement, if, due to circumstances beyond the control of the owner or operator, one of the paired traps is accidentally lost, damaged, or broken and cannot be analyzed, the results of the analysis of the other trap may be used for reporting purposes, provided that:~~
- ~~(a) The other trap has met all of the applicable quality assurance requirements; and~~
- ~~(b) The Hg concentration measured by the other trap is multiplied by a factor of 1.111.~~
- ~~(9) All unit operating hours for which valid Hg concentration data are obtained with the primary sorbent trap monitoring system (as verified using the quality assurance procedures in OAR 340-228-0627) must be reported in the quarterly report under OAR 340-228-0637(4). For hours in which data from the primary monitoring system are invalid, the owner or operator may report valid Hg concentration data from a certified redundant backup CEMS or sorbent trap monitoring system or from an applicable reference method under OAR 340-228-0602(33) or 40 CFR 75.22. If no quality assured Hg concentration is available for a particular hour, the owner or operator must report the appropriate substitute data value in accordance with OAR 340-228-0633.~~
- ~~(10) Initial certification requirements and additional quality assurance requirements for the sorbent trap monitoring systems are found in OAR 340-228-0627.~~
- ~~(11) Whenever the type of sorbent material used by the traps is changed, the owner or operator must conduct a diagnostic RATA of the modified sorbent trap monitoring system within 720 unit or stack operating hours after the date and hour when the new sorbent material is first used. If the diagnostic RATA is passed, data from the modified system may be reported as quality assured, back to the date and hour when the new sorbent material was first used. If the RATA is failed, all data from the modified system shall be invalidated, back to the date and hour when the new sorbent material was first used, and data from the system shall remain invalid until a subsequent RATA is passed. If the required RATA is not completed within 720 unit or stack operating hours, but is passed on the first attempt, data from the modified system shall be invalidated beginning with the first operating hour after the 720 unit or stack operating hour window expires and data from the system shall remain invalid until the date and hour of completion of the successful RATA.~~

~~Stat. Auth.: ORS 468.020 & 468A.310~~

~~Stats. Implemented: ORS 468A.025~~

~~Hist.: DEQ 15-2008, f. & cert. ef 12-31-08~~

340-228-0619

Procedures for Hg Mass Emissions

(1) Use the procedures in this rule to calculate the hourly Hg mass emissions (in pounds) at each monitored location, for the affected unit or group of units that discharge through a common stack.

(a) To determine the hourly Hg mass emissions when using a Hg concentration monitoring system that measures on a wet basis and a flow monitor, use the following equation:

$$M_h = K \times C_h \times Q_h \times t_h$$

Where:

M_h = Hg mass emissions for the hour, rounded off to three decimal places, (pounds).

K = Units conversion constant, 6.236×10^{-11} lb-m³/μg-secf

C_h = Hourly Hg concentration, wet basis, adjusted for bias if the bias test procedures show that a bias adjustment factor is necessary, (μg/wscm).

Q_h = Hourly stack gas volumetric flow rate, adjusted for bias, where the bias test procedures show a bias adjustment factor is necessary, (scfh)

t_h = Unit or stack operating time, as defined in 40 CFR 72.2, (hr)

(b) To determine the hourly Hg mass emissions when using a Hg concentration monitoring system that measures on a dry basis or a sorbent trap monitoring system and a flow monitor, use the following equation:

$$M_h = K \times C_h \times Q_h \times t_h \times (1 - B_{ws})$$

Where:

M_h = Hg mass emissions for the hour, rounded off to three decimal places, (pounds).

K = Units conversion constant, 6.236×10^{-11} lb-m³/μg-secf

C_h = Hourly Hg concentration, dry basis, adjusted for bias if the bias test procedures show that a bias adjustment factor is necessary, (μg/dscm). For sorbent trap systems, a single value of C_h (i.e., a flow proportional average concentration for the data collection period), is applied to each hour in the data collection period, for a particular pair of traps.

Q_h = Hourly stack gas volumetric flow rate, adjusted for bias, where the bias test procedures show a bias adjustment factor is necessary, (scfh)

B_{ws} = Moisture fraction of the stack gas, expressed as a decimal (equal to % H₂O/100)

t_h = Unit or stack operating time, as defined in 40 CFR 72.2, (hr)

(2) Use equation 1 to this division to calculate quarterly, year-to-date, and 12-month total Hg mass emissions in pounds.

(3) If heat input rate monitoring is required, follow the applicable procedures for heat input apportionment and summation in sections 5.3, 5.6 and 5.7 of appendix F to 40 CFR part 75.

Stat. Auth.: ORS 468.020 & 468A.310

Stats. Implemented: ORS 468A.025

Hist.: DEQ 15-2008, f. & cert. ef 12-31-08

Monitoring Certification

340-228-0621

Initial Certification and Recertification Procedures

(1) The owner or operator of a coal-fired electric generating unit shall be exempt from the initial certification requirements of this rule for a monitoring system under OAR 340-228-0609(1)(a) if the following conditions are met:

(a) The monitoring system has been previously certified; and

(b) The applicable quality assurance and quality control requirements are fully met for the certified monitoring system described in subsection (1)(a) of this rule.

~~(2) The recertification provisions of this rule shall apply to a monitoring system under OAR 340-228-0609(1)(a) exempt from initial certification requirements under section (1) of this rule.~~

~~(3) Initial certification and recertification procedures. Except as provided in section (1) of this rule, the owner or operator of a coal-fired electric generating unit must comply with the following initial certification and recertification procedures for a continuous monitoring system (e.g., a continuous emission monitoring system or sorbent trap monitoring system). The owner or operator must meet any additional requirements for Hg concentration monitoring systems, sorbent trap monitoring systems (as defined in OAR 340-228-0602(36)), flow monitors, CO₂ monitors, O₂ monitors, or moisture monitors, as set forth under OAR 340-228-0613, under the common stack provisions in OAR 340-228-0615. The owner or operator of a unit that qualifies to use an alternative monitoring system must comply with the procedures in section (4) of this rule.~~

~~(a) Requirements for initial certification. The owner or operator must ensure that each monitoring system under OAR 340-228-0609(1)(a) (including the automated data acquisition and handling system) successfully completes all of the initial certification testing by the applicable deadline in OAR 340-228-0609(2). In addition, whenever the owner or operator installs a monitoring system to meet the requirements of this rule in a location where no such monitoring system was previously installed, initial certification is required.~~

~~(b) Requirements for recertification. Whenever the owner or operator makes a replacement, modification, or change in any certified continuous emission monitoring system or sorbent trap monitoring system that may significantly affect the ability of the system to accurately measure or record the CO₂ concentration, stack gas volumetric flow rate, Hg concentration, Hg mass emissions, percent moisture, or heat input rate or to meet the quality assurance and quality control requirements of 40 CFR 75.21, OAR 340-228-0623, or appendix B to 40 CFR part 75, the owner or operator must recertify the monitoring system in accordance with 40 CFR 75.20(b). Furthermore, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that may significantly change the stack flow or concentration profile, the owner or operator must recertify each continuous emission monitoring system or sorbent trap monitoring system, whose accuracy is potentially affected by the change, in accordance with 40 CFR 75.20(b). Examples of changes to a continuous emission monitoring system that require recertification include replacement of the analyzer, complete replacement of an existing continuous emission monitoring system, or change in location or orientation of the sampling probe or site.~~

~~(c) Approval process for initial certification and recertification. Paragraphs (3)(c)(A) through (D) of this rule apply to both initial certification and recertification of a continuous monitoring system under OAR 340-228-0609(1)(a). For recertifications, apply the word "recertification" instead of the words "certification" and "initial certification" and apply the word "recertified" instead of the word "certified," and follow the procedures in 40 CFR 75.20(b)(5) in lieu of the procedures in paragraph (3)(c)(E) of this rule.~~

~~(A) Notification of certification. The owner or operator must submit to the Department written notice of the dates of certification testing, in accordance with 40 CFR 75.61.~~

~~(B) Certification application. The owner or operator must submit to the Department a certification application for each monitoring system. A complete certification application must include the information specified in 40 CFR 75.63.~~

~~(C) Provisional certification date. The provisional certification date for a monitoring system must be determined in accordance with 40 CFR 75.20(a)(3). A provisionally certified monitoring system may be used for a period not to exceed 120 days after receipt by the Department of the complete certification application for the monitoring system under paragraph (3)(c)(B) of this rule. Data measured and~~

~~recorded by the provisionally certified monitoring system will be considered valid quality assured data (retroactive to the date and time of provisional certification), provided that the Department does not invalidate the provisional certification by issuing a notice of disapproval within 120 days of the date of receipt of the complete certification application by the Department.~~

~~(D) Certification application approval process. The Department will issue a written notice of approval or disapproval of the certification application to the owner or operator within 120 days of receipt of the complete certification application under paragraph (3)(c)(B) of this rule. In the event the Department does not issue such a notice within such 120-day period, each monitoring system that meets the applicable performance requirements and is included in the certification application will be deemed certified for use.~~

~~(i) Approval notice. If the certification application is complete and shows that each monitoring system meets the applicable performance requirements, then the Department will issue a written notice of approval of the certification application within 120 days of receipt.~~

~~(ii) Incomplete application notice. If the certification application is not complete, then the Department will issue a written notice of incompleteness that sets a reasonable date by which the owner or operator must submit the additional information required to complete the certification application. If the owner or operator does not comply with the notice of incompleteness by the specified date, then the Department may issue a notice of disapproval under subparagraph (3)(c)(D)(iii) of this rule. The 120-day review period must not begin before receipt of a complete certification application.~~

~~(iii) Disapproval notice. If the certification application shows that any monitoring system does not meet the performance requirements or if the certification application is incomplete and the requirement for disapproval under subparagraph (3)(c)(D)(ii) of this rule is met, then the Department will issue a written notice of disapproval of the certification application. Upon issuance of such notice of disapproval, the provisional certification is invalidated by the Department and the data measured and recorded by each uncertified monitoring system must not be considered valid quality assured data beginning with the date and hour of provisional certification (as defined under 40 CFR 75.20(a)(3)). The owner or operator must follow the procedures for loss of certification in paragraph (3)(c)(E) of this rule for each monitoring system that is disapproved for initial certification.~~

~~(iv) Audit decertification. The Department may issue a notice of disapproval of the certification status of a monitor in accordance with OAR 340-228-0629(2).~~

~~(E) Procedures for loss of certification. If the Department issues a notice of disapproval of a certification application under subparagraph (3)(c)(D)(iii) of this rule or a notice of disapproval of certification status under subparagraph (3)(c)(D)(iv) of this rule, then:~~

~~(i) The owner or operator must substitute the following values, as applicable, for each disapproved monitoring system, for each hour of unit operation during the period of invalid data specified under 40 CFR 75.20(a)(4)(iii), 40 CFR 75.21(e) and continuing until such time, date, and hour as the continuous emission monitoring system can be adjusted, repaired, or replaced and certification tests successfully completed (or, if the conditional data validation procedures in 40 CFR 75.20(b)(3)(ii) through (ix) are used, until a probationary calibration error test is passed following corrective actions in accordance with 40 CFR 75.20(b)(3)(ii)):~~

~~(I) For a disapproved Hg pollutant concentration monitor and disapproved flow monitor, respectively, the maximum potential Hg concentration, as defined in OAR 340-228-0602(25), and the maximum potential flow rate, as defined in section 2.1.4.1 of appendix A to 40 CFR part 75; and~~

~~(II) For a disapproved moisture monitoring system and disapproved diluent gas monitoring system, respectively, the minimum potential moisture percentage and either the maximum potential CO₂~~

concentration or the minimum potential O₂ concentration (as applicable), as defined in sections 2.1.5, 2.1.3.1, and 2.1.3.2 of appendix A to 40 CFR part 75.

(III) For a disapproved sorbent trap monitoring system and disapproved flow monitor, respectively, the maximum potential Hg concentration, as defined in OAR 340-228-0602(25), and maximum potential flow rate, as defined in section 2.1.4.1 of appendix A to 40 CFR part 75.

(ii) The owner or operator must submit a notification of certification retest dates as specified in 40 CFR 75.61(a)(1)(ii) and a new certification application in accordance with paragraphs (3)(c)(A) and (B) of this rule.

(iii) The owner or operator must repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the Department's notice of disapproval, no later than 30 unit operating days after the date of issuance of the notice of disapproval.

(d) For each Hg concentration monitoring system, the owner or operator must perform the following tests for initial certification or recertification of a Hg continuous emission system:

(A) A 7 day calibration error test in accordance with section 6.3 of appendix A to 40 CFR part 75. The owner or operator may perform this test using either NIST traceable elemental Hg standards, a NIST traceable source of oxidized Hg, or other standards subject to the approval of the Department. The calibration error of a Hg concentration monitor must not deviate from the reference value of either the zero or upscale calibration gas by more than 5.0 percent of the span value, as calculated using Equation A-5 of appendix A to 40 CFR part 75. Alternatively, if the span value is 10 µg/m³, the calibration error test results are also acceptable if the absolute value of the difference between the monitor response value and the reference value, $|R - A|$ in Equation A-5 of appendix A to 40 CFR part 75, is ≤ 1.0 µg/m³. If moisture is added to the calibration gas, the added moisture must be accounted for and the dry basis concentration of the calibration gas must be used to calculate the calibration error.

(B) A linearity check in accordance with section 6.2 of appendix A to 40 CFR part 75. Design and equip each mercury monitor to permit the introduction of known concentrations of elemental Hg and HgCl₂ separately, at a point immediately preceding the sample extraction filtration system, such that the entire measurement system can be checked. If the Hg monitor does not have a converter, the HgCl₂ injection capability is not required. Follow the applicable procedures in section 6.2 of appendix A to 40 CFR part 75 when performing the 3 level system integrity checks described in paragraph (3)(d)(F) of this rule. Perform the linearity check using NIST traceable elemental Hg standards and the 3 level system integrity checks using NIST traceable source of oxidized Hg or other standards subject to the approval of the Department. If moisture is added to the calibration gas during the required linearity checks or system integrity checks, the moisture content of the calibration gas must be accounted for. Under these circumstances, the dry basis concentration of the calibration gas must be used to calculate the linearity error or measurement error (as applicable).

(C) A relative accuracy test audit (RATA) in accordance with section 6.5 of appendix A to 40 CFR part 75 and as follows:

(i) The RATA must be performed on a µg/m³ basis and while the unit is combusting coal.

(ii) Calculate the relative accuracy, in accordance with section 7.3 or 7.4 of appendix A to 40 CFR part 75, as applicable.

(iii) The relative accuracy shall not exceed 20.0 percent. Alternatively, for affected units where the average of the reference method measurements of Hg concentration during the relative accuracy test audit is less than 5.0 µg/m³, the test results are acceptable if the difference between the mean value of the monitor measurements and the reference method mean value does not exceed 1.0 µg/m³, in cases where the relative accuracy specification of 20.0 percent is not achieved.

(iv) For the RATA of a Hg CEMS using the Ontario Hydro Method, or for the RATA of a sorbent trap system (irrespective of the reference method used), the time per run must be long enough to collect a sufficient mass of Hg to analyze. For the RATA of a sorbent trap monitoring system, use the same size trap that is used for daily operation of the monitoring system. Spike the third section of each sorbent trap with elemental Hg, as described in OAR 340-228-0627(7)(a)(B). Install a new pair of sorbent traps prior to each test run. For each run, the sorbent trap data must be validated according to the quality assurance criteria in OAR 340-228-0627(8).

(v) Use the same basic approach for traverse point selection that is used for other gas monitoring system RATAs, except that the stratification test provisions in sections 8.1.3 through 8.1.3.5 of Method 30A shall apply, rather than the provisions of section 6.5.6.1 through 6.5.6.3 of appendix A to 40 CFR part 75.

(vi) Up to 336 consecutive unit or stack operating hours may be taken to complete the RATA of a Hg monitoring system, when the Ontario Hydro Method or Method 29 is used as the reference method.

(D) A bias test in accordance with section 7.6 of appendix A to 40 CFR part 75 and as follows:

(i) To calculate bias for a Hg monitoring system when using the Ontario Hydro Method or Method 29, “d” is, for each data point, the difference between the average Hg concentration value (in $\mu\text{g}/\text{m}^3$) from the paired Ontario Hydro or Method 29 sampling trains and the concentration measured by the monitoring system. For sorbent trap systems, use the average Hg concentration measured by the paired traps in calculation of “d”.

(ii) For single load RATAs of Hg concentration monitoring systems, and sorbent trap monitoring systems, the appropriate BAF is determined directly from the RATA results at normal load, using Equation A-12.

(iii) For multiple load flow RATAs, perform a bias test at each load level designated as normal under section 6.5.2.1 of appendix A to 40 CFR part 75.

(iv) Mercury concentration monitoring systems and sorbent trap monitoring systems shall not be biased low.

(v) For Hg concentration and sorbent trap monitoring systems, where the average Hg concentration during the RATA is $< 5.0 \mu\text{g}/\text{dscm}$, if the monitoring system meets the normal or the alternative relative accuracy specification in subparagraph (3)(d)(C)(iii) of this rule but fails the bias test, the owner or operator may either use the bias adjustment factor (BAF) calculated from Equation A-12 appendix A to 40 CFR part 75 and in accordance with sections 7.6.4 and 7.6.5 of appendix A to 40 CFR part 75, using the data from the relative accuracy test audits, or may use a default BAF of 1.250 for reporting purposes.

(vi) Use the bias-adjusted values in computing substitution values in the missing data procedure and in reporting the concentration of Hg during the quarter and calendar year. In addition, when using a Hg concentration or sorbent trap monitoring system and a flow monitor to calculate Hg mass emissions, use bias-adjusted values for Hg concentration and flow rate in the mass emission calculations and use bias-adjusted Hg concentrations to compute the appropriate substitution values for Hg concentration in the missing data routines.

(E) A cycle time test in accordance to section 6.4 of appendix A to 40 CFR part 75. For Hg monitors, the calibration gas used for this test may either be the elemental or oxidized form of Hg. As an alternative, the reading is considered stable if it changes by no more than $0.5 \mu\text{g}/\text{m}^3$ for two minutes.

(F) A 3-level system integrity check, using a NIST-traceable source of oxidized Hg, or other standards subject to the approval of the Department. This test is not required for an Hg monitor that does not have a converter. The system measurement error must not exceed 10.0 percent of the reference value at any of the three gas levels. To calibrate the measurement error at each level, take the absolute value of the difference between the reference value and mean CEM response, divide the result by the reference

value, and then multiply by 100. Alternatively, the results at any gas level are acceptable if the absolute value of the difference between the average monitor response and the average reference value, i.e., $|R - A|$ in equation A-4 of appendix A to 40 CFR part 75, does not exceed $0.8 \mu\text{g}/\text{m}^3$.

(4) Certification/recertification procedures for alternative monitoring systems. The owner or operator of each unit for which the owner or operator intends to use an alternative monitoring system approved by the Department must comply with the applicable notification and application procedures of 40 CFR 75.20(f).

Stat. Auth.: ORS 468.020 & 468A.310

Stats. Implemented: ORS 468A.025

Hist.: DEQ 15-2008, f. & cert. ef. 12-31-08; DEQ 8-2009, f. & cert. ef. 12-16-09

Monitoring Quality Assurance/Quality Control

340-228-0623

Quality Assurance and Quality Control Requirements

(1) For units that use continuous emission monitoring systems to account for Hg mass emissions, the owner or operator must meet the applicable quality assurance and quality control requirements in 40 CFR 75.21, appendix B to 40 CFR part 75, and as follows, for the flow monitoring systems, Hg concentration monitoring systems, moisture monitoring systems, and diluent monitors required under OAR 340-228-0613. Units using sorbent trap monitoring systems must meet the applicable quality assurance requirements in OAR 340-228-0617, 340-228-0627, and as follows.

(a) Calibration Error Test. Except as provided in section 2.1.1.2 of appendix B to 40 CFR part 75, perform the daily calibration error test of each Hg monitoring system according to the procedures in OAR 340-228-0621(3)(d)(A). For Hg monitors, the daily assessments may be made using either NIST-traceable elemental Hg standards, a NIST-traceable source of oxidized Hg, or other standards subject to the approval of the Department.

(b) Data Validation. For a Hg monitor, an out-of-control period occurs when the calibration error exceeds 5.0% of the span value. Notwithstanding, the Hg monitor shall not be considered out-of-control if $|R - A|$ in Equation A-6 of appendix A to 40 CFR part 75 does not exceed $1.0 \mu\text{g}/\text{m}^3$.

(c) Linearity Check. Unless a particular monitor (or monitoring range) is exempted under this subsection or under section 6.2 of appendix A to 40 CFR part 75, perform a linearity check, in accordance with the procedures in section 6.2 of appendix A to 40 CFR part 75, for each primary and redundant backup Hg at least once during each QA operating quarter, as defined in 40 CFR 72.2. For Hg monitors, perform the linearity checks using NIST-traceable elemental Hg standards, or other standards subject to the approval of the Department. Alternatively, the owner or operator may perform 3-level system integrity checks at the same three calibration gas levels (i.e., low, mid, and high), using a NIST-traceable source of oxidized Hg, or other standards subject to the approval of the Department. If choosing this option, the performance specification in paragraph (1)(i)(B) of this rule must be met at each gas level. For units using both a low and high span value, a linearity check is required only on the range(s) used to record and report emission data during the QA operating quarter. Conduct the linearity checks no less than 30 days apart, to the extent practicable.

(d) Standard RATA Frequencies. For each primary and redundant backup Hg concentration monitoring system and each sorbent trap monitoring system, RATAs must be performed annually, i.e., once every four successive QA operating quarters (as defined in 40 CFR 72.2).

(e) RATA Load (or Operating) Levels and Additional RATA Requirements. For Hg concentration monitoring systems and sorbent trap monitoring systems, the required semiannual or annual RATA tests must be done at the load level (or operating level) designated as normal under section 6.5.2.1(d) of

appendix A to 40 CFR part 75. If two load levels (or operating levels) are designated as normal, the required RATA(s) may be done at either load level (or operating level).

(f) Data Validation. Each time that a hands-off RATA of a Hg concentration monitoring system or a sorbent trap monitoring system is passed, perform a bias test in accordance with section 7.6.4 of appendix A to 40 CFR part 75. Apply the appropriate bias adjustment factor to the reported Hg data, in accordance with subsection (1)(g) of this rule.

(g) Bias Adjustment Factor. Except as otherwise specified in section 7.6.5 of appendix A to 40 CFR part 75, if an Hg concentration monitoring system or sorbent trap monitoring system fails the bias test, use the bias adjustment factor given in Equations A-11 and A-12 of appendix A to 40 CFR part 75, or a default bias adjustment factor of 1.250, to adjust the monitored data.

(h) Bias Adjusted Values. Use the bias adjusted values in computing substitution values in the missing data procedure and in reporting the concentration of Hg during the quarter and calendar year. In addition, when using a Hg concentration or sorbent trap monitoring system and a flow monitor to calculate Hg mass emissions, use bias adjusted values for Hg concentration and flow rate in the mass emission calculations and use bias adjusted Hg concentrations to compute the appropriate substitution values for Hg concentration in the missing data routines.

(i) System Integrity Checks for Hg Monitors. For each Hg concentration monitoring system (except for a Hg monitor that does not have a converter), perform a single-point system integrity check weekly, i.e., at least once every 168 unit or stack operating hours, using a NIST traceable source of oxidized Hg, or other standards subject to the approval of the Department. Perform this check as follows using a mid- or high-level gas concentration, as defined in section 5.2 of appendix A to 40 CFR part 75:

(A) The performance specification in paragraph (1)(i)(B) must be met, otherwise the monitoring system is considered out of control, from the hour of the failed check until a subsequent system integrity check is passed. If a required system integrity check is not performed and passed within 168 unit or stack operating hours of last successful check, the monitoring system shall also be considered out of control, beginning with the 169th unit of stack operating hour after the last successful check, and continuing until a subsequent system integrity check is passed. This weekly check is not required if the daily calibration assessments in subsection (1)(a) of this rule are performed using a NIST traceable source of oxidized Hg, or other standards subject to the approval of the Department.

(B) The measurement error for the linearity check must not exceed 10.0 percent of the reference value at any of the three gas levels. To calibrate the measurement error at each level, take the absolute value of the difference between the reference value and mean CEM response, divide the result by the reference value, and then multiply by 100. Alternatively, the results at any gas level are acceptable if the absolute value of the difference between the average monitor response and the average reference value, i.e., $|R - A|$ in equation A-4 of appendix A to 40 CFR part 75, does not exceed $0.8 \mu\text{g}/\text{m}^3$.

(2) Missing data procedures. Except as provided in OAR 340-228-0617(11) and 340-228-0631(2), the owner or operator must provide substitute data from monitoring systems required under OAR 340-228-0613 for each affected unit as follows:

(a) For an owner or operator using an Hg concentration monitoring system, substitute for missing data in accordance with the applicable missing data procedures in 40 CFR 75.31 through 75.37 and OAR 340-228-0631 and 0633 whenever the unit combusts fuel and:

(A) A valid, quality-assured hour of Hg concentration data (in $\mu\text{g}/\text{m}^3$) has not been measured and recorded, either by a certified Hg concentration monitoring system, by an appropriate reference method under OAR 340-228-0602(33) or 40 CFR 75.22, or by an approved alternative monitoring method under 40 CFR part 75 subpart E; or

~~(B) A valid, quality-assured hour of flow rate data (in scfh) has not been measured and recorded for a unit either by a certified flow monitor, by an appropriate EPA reference method under 40 CFR 75.22, or by an approved alternative monitoring system under 40 CFR part 75 subpart E; or~~
~~(C) A valid, quality-assured hour of moisture data (in percent H₂O) has not been measured or recorded for an affected unit, either by a certified moisture monitoring system, by an appropriate EPA reference method under 40 CFR 75.22, or an approved alternative monitoring method under 40 CFR part 75 subpart E. This requirement does not apply when a default percent moisture value, as provided in 40 CFR 75.11(b), is used to account for the hourly moisture content of the stack gas, or when correction of the Hg concentration for moisture is not necessary; or~~
~~(D) A valid, quality-assured hour of heat input rate data (in MMBtu/hr) has not been measured and recorded for a unit, either by certified flow rate and diluent (CO₂ or O₂) monitors, by appropriate EPA reference methods under 40 CFR 75.22, or by approved alternative monitoring systems under 40 CFR part 75 subpart E.~~
~~(b) For an owner or operator using a sorbent trap monitoring system to quantify Hg mass emissions, substitute for missing data in accordance with the missing data procedures in OAR 340-228-0633.~~
~~Stat. Auth.: ORS 468.020 & 468A.310~~
~~Stats. Implemented: ORS 468A.025~~
~~Hist.: DEQ 15-2008, f. & cert. ef. 12-31-08; DEQ 8-2009, f. & cert. ef. 12-16-09~~

CEMS Performance Specifications

340-228-0625

Specifications and Test Procedures for Total Vapor Phase Mercury CEMS

- ~~(1) Analyte. Mercury (Hg), CAS No. 7439-97-6.~~
~~(2) Applicability.~~
~~(a) This specification is for evaluating the acceptability of total vapor phase Hg CEMS installed on the exit gases from fossil fuel fired boilers at the time of or soon after installation and whenever specified in the regulations. The Hg CEMS must be capable of measuring the total concentration in µg/m³ (regardless of speciation) of vapor phase Hg, and recording that concentration on a wet or dry basis.~~
~~(b) Particle bound Hg is not included in the measurements.~~
~~(c) This specification is not designed to evaluate an installed CEMS's performance over an extended period of time nor does it identify specific calibration techniques and auxiliary procedures to assess the CEMS's performance. The source owner or operator, however, is responsible to calibrate, maintain, and operate the CEMS properly.~~
~~(d) The Department may require the operator to conduct CEMS performance evaluations at other times besides the initial test to evaluate the CEMS performance.~~
~~(e) The owner or operator must conduct the performance evaluation of the Hg CEMS according to OAR 340-228-0621(3)(d) and the following procedures:~~
~~(3) Summary of Performance Specification. Procedures for measuring CEMS relative accuracy, measurement error and drift are outlined. CEMS installation and measurement location specifications, and data reduction procedures are included. Conformance of the CEMS with the Performance Specification is determined.~~
~~(4) Definitions.~~
~~(a) "Continuous Emission Monitoring System (CEMS)" means the total equipment required for the determination of a pollutant concentration. The system consists of the following major subsystems:~~

(A) “Sample Interface” means that portion of the CEMS used for one or more of the following: sample acquisition, sample transport, sample conditioning, and protection of the monitor from the effects of the stack effluent.

(B) “Hg Analyzer” means that portion of the Hg CEMS that measures the total vapor phase Hg mass concentration and generates a proportional output.

(C) “Data Recorder” means that portion of the CEMS that provides a permanent electronic record of the analyzer output. The data recorder may provide automatic data reduction and CEMS control capabilities.

(b) “Span Value” means the upper limit of the intended Hg concentration measurement range. The span value is a value equal to two times the emission standard. Alternatively, the Hg span value(s) may be determined as follows:

(A) For each Hg monitor, determine a high span value, by rounding the maximum potential Hg concentration value from OAR 340-228-0602(25) upward to the next highest multiple of 10 µg/m³.

(B) For an affected unit equipped with an FGD system or a unit with add-on Hg emission controls, if the maximum expected Hg concentration value from OAR 340-228-0602(24) is less than 20 percent of the high span value from paragraph (4)(b)(A) of this rule, and if the high span value is 20 µg/m³ or greater, define a second, low span value of 10 µg/m³.

(C) If only a high span value is required, set the full-scale range of the Hg analyzer to be greater than or equal to the span value.

(D) If two span values are required, the owner or operator may either:

(i) Use two separate (high and low) measurement scales, setting the range of each scale to be greater than or equal to the high or low span value, as appropriate; or

(ii) Quality assure two segments of a single measurement scale.

(e) “Measurement Error (ME)” means the absolute value of the difference between the concentration indicated by the Hg analyzer and the known concentration generated by a reference gas, expressed as a percentage of the span value, when the entire CEMS, including the sampling interface, is challenged. An ME test procedure is performed to document the accuracy and linearity of the Hg CEMS at several points over the measurement range.

(d) “Upscale Drift (UD)” means the absolute value of the difference between the CEMS output response and an upscale Hg reference gas, expressed as a percentage of the span value, when the entire CEMS, including the sampling interface, is challenged after a stated period of operation during which no unscheduled maintenance, repair, or adjustment took place.

(e) “Zero Drift (ZD)” means the absolute value of the difference between the CEMS output response and a zero-level Hg reference gas, expressed as a percentage of the span value, when the entire CEMS, including the sampling interface, is challenged after a stated period of operation during which no unscheduled maintenance, repair, or adjustment took place.

(f) “Relative Accuracy (RA)” means the absolute mean difference between the pollutant concentration(s) determined by the CEMS and the value determined by the reference method (RM) plus the 2.5 percent error confidence coefficient of a series of tests divided by the mean of the RM tests. Alternatively, for low concentration sources, the RA may be expressed as the absolute value of the difference between the mean CEMS and RM values.

(5) Safety. The procedures required under this performance specification may involve hazardous materials, operations, and equipment. This performance specification may not address all of the safety problems associated with these procedures. It is the responsibility of the user to establish appropriate safety and health practices and determine the applicable regulatory limitations prior to performing these procedures. The CEMS user’s manual and materials recommended by the RM should be consulted for specific precautions to be taken.

~~(6) Equipment and Supplies.~~

~~(a) CEMS Equipment Specifications.~~

~~(A) Data Recorder Scale. The Hg CEMS data recorder output range must include zero and a high level value. The high level value must be approximately two times the Hg concentration corresponding to the emission standard level for the stack gas under the circumstances existing as the stack gas is sampled. A lower high level value may be used, provided that the measured values do not exceed 95 percent of the high level value. Alternatively, the owner or operator may set the full scale range(s) of the Hg analyzer according to subsection (4)(b) of this rule.~~

~~(B) The CEMS design should also provide for the determination of calibration drift at a zero value (zero to 20 percent of the span value) and at an upscale value (between 50 and 100 percent of the high level value).~~

~~(b) Reference Gas Delivery System. The reference gas delivery system must be designed so that the flowrate of reference gas introduced to the CEMS is the same at all three challenge levels specified in subsection (7)(a) of this rule and at all times exceeds the flow requirements of the CEMS.~~

~~(c) Other equipment and supplies, as needed by the applicable reference method used. See paragraph (8)(f)(B) of this rule.~~

~~(7) Reagents and Standards.~~

~~(a) Reference Gases. Reference gas standards are required for both elemental and oxidized Hg (Hg and mercuric chloride, HgCl₂). The use of National Institute of Standards and Technology (NIST) certified or NIST traceable standards and reagents is required. However, other standards approved by the Department may be used if NIST certified or traceable standards are not available. The following gas concentrations are required:~~

~~(A) Zero level. 0 to 20 percent of the span value.~~

~~(B) Mid level. 50 to 60 percent of the span value.~~

~~(C) High level. 80 to 100 percent of the span value.~~

~~(b) Reference gas standards may also be required for the reference methods. See paragraph (8)(f)(B) of this rule.~~

~~(8) Performance Specification (PS) Test Procedure.~~

~~(a) Installation and Measurement Location Specifications.~~

~~(A) CEMS Installation. Install the CEMS at an accessible location downstream of all pollution control equipment. Since the Hg CEMS sample system normally extracts gas from a single point in the stack, use a location that has been shown to be free of stratification for SO₂ and NO_X through concentration measurement traverses for those gases. If the cause of failure to meet the RA test requirement is determined to be the measurement location and a satisfactory correction technique cannot be established, the Administrator may require the CEMS to be relocated. Measurement locations and points or paths that are most likely to provide data that will meet the RA requirements are listed below:~~

~~(B) Measurement Location. The measurement location should be (1) at least two equivalent diameters downstream of the nearest control device, point of pollutant generation or other point at which a change of pollutant concentration may occur, and (2) at least half an equivalent diameter upstream from the effluent exhaust. The equivalent duct diameter is calculated as per appendix A to 40 CFR part 60, Method 1.~~

~~(C) Hg CEMS Sample Extraction Point. Use a sample extraction point (1) no less than 1.0 meter from the stack or duct wall, or (2) within the centroidal velocity traverse area of the stack or duct cross section.~~

~~(b) RM Measurement Location and Traverse Points. Refer to PS 2 of appendix B to 40 CFR part 60. The RM and CEMS locations need not be immediately adjacent.~~

~~(c) ME Test Procedure. The Hg CEMS must be constructed to permit the introduction of known concentrations of Hg and HgCl₂ separately into the sampling system of the CEMS immediately preceding the sample extraction filtration system such that the entire CEMS can be challenged. Sequentially inject each of the three reference gases (zero, mid-level, and high level) for each Hg species. Record the CEMS response and subtract the reference value from the CEMS value, and express the absolute value of the difference as a percentage of the span value. For each reference gas, the absolute value of the difference between the CEMS response and the reference value must not exceed 5 percent of the span value. If this specification is not met, identify and correct the problem before proceeding.~~

~~(d) UD Test Procedure.~~

~~(A) UD Test Period. While the affected facility is operating at more than 50 percent of normal load, or as specified in an applicable subpart, determine the magnitude of the UD once each day (at 24-hour intervals, to the extent practicable) for 7 consecutive unit operating days according to the procedure given in paragraphs (8)(d)(B) through (C) of this rule. The 7 consecutive unit operating days need not be 7 consecutive calendar days. Use either Hg₀ or HgCl₂ standards for this test.~~

~~(B) The purpose of the UD measurement is to verify the ability of the CEMS to conform to the established CEMS response used for determining emission concentrations or emission rates. Therefore, if periodic automatic or manual adjustments are made to the CEMS zero and response settings, conduct the UD test immediately before these adjustments, or conduct it in such a way that the UD can be determined.~~

~~(C) Conduct the UD test at either the mid-level or high-level point specified in subsection (7)(a) of this rule. Introduce the reference gas to the CEMS. Record the CEMS response and subtract the reference value from the CEMS value, and express the absolute value of the difference as a percentage of the span value. For the reference gas, the absolute value of the difference between the CEMS response and the reference value must not exceed 5 percent of the span value. If this specification is not met, identify and correct the problem before proceeding.~~

~~(e) ZD Test Procedure.~~

~~(A) ZD Test Period. While the affected facility is operating at more than 50 percent of normal load, or as specified in an applicable subpart, determine the magnitude of the ZD once each day (at 24-hour intervals, to the extent practicable) for 7 consecutive unit operating days according to the procedure given in paragraphs (8)(e)(B) through (C) of this rule. The 7 consecutive unit operating days need not be 7 consecutive calendar days. Use either nitrogen, air, Hg₀, or HgCl₂ standards for this test.~~

~~(B) The purpose of the ZD measurement is to verify the ability of the CEMS to conform to the established CEMS response used for determining emission concentrations or emission rates. Therefore, if periodic automatic or manual adjustments are made to the CEMS zero and response settings, conduct the ZD test immediately before these adjustments, or conduct it in such a way that the ZD can be determined.~~

~~(C) Conduct the ZD test at the zero level specified in subsection (7)(a) of this rule. Introduce the zero gas to the CEMS. Record the CEMS response and subtract the zero value from the CEMS value and express the absolute value of the difference as a percentage of the span value. For the zero gas, the absolute value of the difference between the CEMS response and the reference value must not exceed 5 percent of the span value. If this specification is not met, identify and correct the problem before proceeding.~~

~~(f) RA Test Procedure.~~

(A) RA Test Period. Conduct the RA test according to the procedure given in paragraphs (8)(f)(B) through (F) of this rule while the affected facility is operating at normal full load, or as specified in an applicable subpart. The RA test may be conducted during the ZD and UD test period.

(B) RM. Use one of the reference methods specified in OAR 340-228-0602(33). Do not include the filterable portion of the sample when making comparisons to the CEMS results. When Method 29 or ASTM D6784-02 is used, conduct the RM test runs with paired or duplicate sampling systems. When an approved instrumental method is used, paired sampling systems are not required. If the RM and CEMS measure on a different moisture basis, data derived with Method 4 in appendix A to 40 CFR part 60 must also be obtained during the RA test.

(C) Sampling Strategy for RM Tests. Conduct the RM tests in such a way that they will yield results representative of the emissions from the source and can be compared to the CEMS data. It is preferable to conduct moisture measurements (if needed) and Hg measurements simultaneously, although moisture measurements that are taken within an hour of the Hg measurements may be used to adjust the Hg concentrations to a consistent moisture basis. In order to correlate the CEMS and RM data properly, note the beginning and end of each RM test period for each paired RM run (including the exact time of day) on the CEMS chart recordings or other permanent record of output.

(D) Number and length of RM Tests. Conduct a minimum of nine RM test runs. When Method 29 or ASTM D6784-02 is used, only test runs for which the data from the paired RM trains meet the relative deviation (RD) criteria of this PS must be used in the RA calculations. In addition, for Method 29 and ASTM D 6784-02, use a minimum sample run time of 2 hours. Note: More than nine sets of RM tests may be performed. If this option is chosen, paired RM test results may be excluded so long as the total number of paired RM test results used to determine the CEMS RA is greater than or equal to nine. However, all data must be reported, including the excluded data.

(E) Correlation of RM and CEMS Data. Correlate the CEMS and the RM test data as to the time and duration by first determining from the CEMS final output (the one used for reporting) the integrated average pollutant concentration for each RM test period. Consider system response time, if important, and confirm that the results are on a consistent moisture basis with the RM test. Then, compare each integrated CEMS value against the corresponding RM value. When Method 29 or ASTM D6784-02 is used, compare each CEMS value against the corresponding average of the paired RM values.

(F) Paired RM Outliers.

(i) When Method 29 or ASTM D6784-02 is used, outliers are identified through the determination of relative deviation (RD) of the paired RM tests. Data that do not meet this criteria should be flagged as a data quality problem. The primary reason for performing paired RM sampling is to ensure the quality of the RM data. The percent RD of paired data is the parameter used to quantify data quality. Determine RD for two paired data points as follows:

$$RD = 100 \times |(Ca - Cb)| / (Ca + Cb)$$

where Ca and Cb are concentration values determined from each of the two samples respectively.

(ii) A minimum performance criteria for RM Hg data is that RD for any data pair must be ≤ 10 percent as long as the mean Hg concentration is greater than $1.0 \mu\text{g}/\text{m}^3$. If the mean Hg concentration is less than or equal to $1.0 \mu\text{g}/\text{m}^3$, the RD must be ≤ 20 percent. Pairs of RM data exceeding these RD criteria should be eliminated from the data set used to develop a Hg CEMS correlation or to assess CEMS RA.

(G) Calculate the mean difference between the RM and CEMS values in the units of micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), the standard deviation, the confidence coefficient, and the RA according to the procedures in section (10) of this rule.

(g) Reporting. At a minimum (check with the Department for additional requirements, if any), summarize in tabular form the results of the RD tests and the RA tests or alternative RA procedure, as

appropriate. Include all data sheets, calculations, charts (records of CEMS responses), reference gas concentration certifications, and any other information necessary to confirm that the performance of the CEMS meets the performance criteria.

(9) Analytical Procedure. Sample collection and analysis are concurrent for this PS (see section (8) of this rule). Refer to the RM employed for specific analytical procedures.

(10) Calculations and Data Analysis. Summarize the results on a data sheet similar to that shown in Figure 2-2 for PS-2.

(a) Consistent Basis. All data from the RM and CEMS must be compared in units of $\mu\text{g}/\text{m}^3$, on a consistent and identified moisture and volumetric basis (STP = 20°C, 760 millimeters (mm) Hg).

(b) Moisture Correction (as applicable). If the RM and CEMS measure Hg on a different moisture basis, using the following equation to make the appropriate corrections to the Hg concentrations:

$$\text{Concentration(dry)} = \text{Concentration(wet)} / (1 - Bws)$$

In the above equation, Bws is the moisture content of the flue gas from Method 4, expressed as a decimal fraction (e.g., for 8.0 percent H₂O, Bws = 0.08).

(c) Arithmetic Mean. Calculate the arithmetic mean of the difference, $\bar{d}$, of a data set using equation 2 to this division.

(d) Standard Deviation. Calculate the standard deviation, S_d , using equation 3 to this division.

(e) Confidence Coefficient (CC). Calculate the 2.5 percent error confidence coefficient (one-tailed), CC, using equation 4 to this division.

(f) RA. Calculate the RA of a set of data using equation 5 to this division.

(11) Performance Specifications.

(a) ME. ME is assessed at zero level, mid level and high level values as given below using standards for both Hg⁰ and HgCl₂. The mean difference between the indicated CEMS concentration and the reference concentration value for each standard must be no greater than 5 percent of the span value.

(b) UD. The UD must not exceed 5 percent of the span value on any of the 7 days of the UD test.

(c) ZD. The ZD must not exceed 5 percent of the span value on any of the 7 days of the ZD test.

(d) RA. The RA of the CEMS must be no greater than 20 percent of the mean value of the RM test data in terms of units of $\mu\text{g}/\text{m}^3$. Alternatively, if the mean RM is less than 5.0 $\mu\text{g}/\text{m}^3$, the results are acceptable if the absolute value of the difference between the mean RM and CEMS values does not exceed 1.0 $\mu\text{g}/\text{m}^3$.

(12) Bibliography.

(a) 40 CFR part 60, appendix B, “Performance Specification 2—Specifications and Test Procedures for SO₂ and NO_x Continuous Emission Monitoring Systems in Stationary Sources.”

(b) 40 CFR part 60, appendix A, “Method 29—Determination of Metals Emissions from Stationary Sources.”

(c) ASTM Method D6784-02, “Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method).”

(13) The following values are already corrected for $n - 1$ degrees of freedom. Use n equal to the number of individual values.

(a) For $n = 2$, $t_{0.975} = 12.706$.

(b) For $n = 3$, $t_{0.975} = 4.303$.

(c) For $n = 4$, $t_{0.975} = 3.182$.

(d) For $n = 5$, $t_{0.975} = 2.776$.

(e) For $n = 6$, $t_{0.975} = 2.571$.

(f) For $n = 7$, $t_{0.975} = 2.447$.

(g) For $n = 8$, $t_{0.975} = 2.365$.

- (h) For $n = 9$, $t_{0.975} = 2.306$.
- (i) For $n = 10$, $t_{0.975} = 2.262$.
- (j) For $n = 11$, $t_{0.975} = 2.228$.
- (k) For $n = 12$, $t_{0.975} = 2.201$.
- (l) For $n = 13$, $t_{0.975} = 2.179$.
- (m) For $n = 14$, $t_{0.975} = 2.160$.
- (n) For $n = 15$, $t_{0.975} = 2.145$.
- (o) For $n = 16$, $t_{0.975} = 2.131$.

Stat. Auth.: ORS 468.020 & 468A.310

Stats. Implemented: ORS 468A.025

Hist.: DEQ 15-2008, f. & cert. ef. 12-31-08; DEQ 8-2009, f. & cert. ef. 12-16-09

Sorbent Trap Sampling Procedures

340-228-0627

Quality Assurance and Operating Procedures for Sorbent Trap Monitoring Systems

(1) Scope and Application. This rule specifies sampling, and analytical, and quality assurance criteria and procedures for the performance-based monitoring of vapor-phase mercury (Hg) emissions in combustion flue gas streams, using a sorbent trap monitoring system (as defined in OAR 340-228-0602). The principle employed is continuous sampling using in-stack sorbent media coupled with analysis of the integrated samples. The performance-based approach of this rule allows for use of various suitable sampling and analytical technologies while maintaining a specified and documented level of data quality through performance criteria. Persons using this rule should have a thorough working knowledge of Methods 1, 2, 3, 4 and 5 in appendices A-1 through A-3 to 40 CFR part 60, as well as the determinative technique selected for analysis.

(a) Analytes. The analyte measured by these procedures and specifications is total vapor-phase Hg in the flue gas, which represents the sum of elemental Hg (Hg⁰, CAS Number 7439-97-6) and oxidized forms of Hg, in mass concentration units of micrograms per dry standard cubic meter ($\mu\text{g}/\text{dscm}$).

(b) Applicability. These performance criteria and procedures are applicable to monitoring of vapor-phase Hg emissions under relatively low dust conditions (i.e., sampling in the stack after all pollution control devices), from coal-fired electric utility steam generators. Individual sample collection times can range from 30 minutes to several days in duration, depending on the Hg concentration in the stack. The monitoring system must achieve the performance criteria specified in section (8) of this rule and the sorbent media capture ability must not be exceeded. The sampling rate must be maintained at a constant proportion to the total stack flowrate to ensure representativeness of the sample collected. Failure to achieve certain performance criteria will result in invalid Hg emissions monitoring data.

(2) Principle. Known volumes of flue gas are extracted from a stack or duct through paired, in-stack, pre-spiked sorbent media traps at an appropriate nominal flow rate. Collection of Hg on the sorbent media in the stack mitigates potential loss of Hg during transport through a probe/sample line. Paired train sampling is required to determine measurement precision and verify acceptability of the measured emissions data. The sorbent traps are recovered from the sampling system, prepared for analysis, as needed, and analyzed by any suitable determinative technique that can meet the performance criteria. A section of each sorbent trap is spiked with Hg⁰ prior to sampling. This section is analyzed separately and the recovery value is used to correct the individual Hg sample for measurement bias.

(3) Clean Handling and Contamination. To avoid Hg contamination of the samples, special attention should be paid to cleanliness during transport, field handling, sampling, recovery, and laboratory

analysis, as well as during preparation of the sorbent cartridges. Collection and analysis of blank samples (field, trip, lab) is useful in verifying the absence of contaminant Hg.

(4) Safety.

(a) Site hazards. Site hazards must be thoroughly considered in advance of applying these procedures/specifications in the field; advance coordination with the site is critical to understand the conditions and applicable safety policies. At a minimum, portions of the sampling system will be hot, requiring appropriate gloves, long sleeves, and caution in handling this equipment.

(b) Laboratory safety policies. Laboratory safety policies should be in place to minimize risk of chemical exposure and to properly handle waste disposal. Personnel must wear appropriate laboratory attire according to a Chemical Hygiene Plan established by the laboratory.

(c) Toxicity or carcinogenicity. The toxicity or carcinogenicity of any reagents used must be considered. Depending upon the sampling and analytical technologies selected, this measurement may involve hazardous materials, operations, and equipment and this rule does not address all of the safety problems associated with implementing this approach. It is the responsibility of the user to establish appropriate safety and health practices and determine the applicable regulatory limitations prior to performance. Any chemical should be regarded as a potential health hazard and exposure to these compounds should be minimized. Chemists should refer to the Material Safety Data Sheet (MSDS) for each chemical used.

(d) Wastes. Any wastes generated by this procedure must be disposed of according to a hazardous materials management plan that details and tracks various waste streams and disposal procedures.

(5) Equipment and Supplies. The following list is presented as an example of key equipment and supplies likely required to perform vapor-phase Hg monitoring using a sorbent trap monitoring system. It is recognized that additional equipment and supplies may be needed. Collection of paired samples is required. Also required are a certified stack gas volumetric flow monitor that meets the requirements of 40 CFR 75.10 and an acceptable means of correcting for the stack gas moisture content, i.e., either by using data from a certified continuous moisture monitoring system or by using an approved default moisture value (see 40 CFR 75.11(b)).

(a) Sorbent Trap Monitoring System. The monitoring system must include the following components:

(A) Sorbent Traps. The sorbent media used to collect Hg must be configured in a trap with three distinct and identical segments or sections, connected in series, that are amenable to separate analyses. Section 1 is designated for primary capture of gaseous Hg. Section 2 is designated as a backup section for determination of vapor-phase Hg breakthrough. Section 3 is designated for QA/QC purposes where this section must be spiked with a known amount of gaseous Hg₀ prior to sampling and later analyzed to determine recovery efficiency. The sorbent media may be any collection material (e.g., carbon, chemically treated filter, etc.) capable of quantitatively capturing and recovering for subsequent analysis, all gaseous forms of Hg for the intended application. Selection of the sorbent media must be based on the material's ability to achieve the performance criteria contained in section (8) of this rule as well as the sorbent's vapor-phase Hg capture efficiency for the emissions matrix and the expected sampling duration at the test site. The sorbent media must be obtained from a source that can demonstrate the quality assurance and control necessary to ensure consistent reliability. The paired sorbent traps are supported on a probe (or probes) and inserted directly into the flue gas stream.

(B) Sampling Probe Assembly. Each probe assembly must have a leak-free attachment to the sorbent trap(s). Each sorbent trap must be mounted at the entrance of or within the probe such that the gas sampled enters the trap directly. Each probe/sorbent trap assembly must be heated to a temperature sufficient to prevent liquid condensation in the sorbent trap(s). Auxiliary heating is required only where the stack temperature is too low to prevent condensation. Use a calibrated thermocouple to monitor the stack temperature. A single probe capable of operating the paired sorbent traps may be used.

Alternatively, individual probe/sorbent trap assemblies may be used, provided that the individual sorbent traps are co-located to ensure representative Hg monitoring and are sufficiently separated to prevent aerodynamic interference.

~~(C) Moisture Removal Device. A robust moisture removal device or system, suitable for continuous duty (such as a Peltier cooler), must be used to remove water vapor from the gas stream prior to entering the dry gas meter.~~

~~(D) Vacuum Pump. Use a leak-tight, vacuum pump capable of operating within the candidate system's flow range.~~

~~(E) Dry Gas Meter. A dry gas meter must be used to determine total sample volume. The meter must be sufficiently accurate to measure the total sample volume within 2 percent, must be calibrated at the selected flow rate and conditions actually encountered during sampling, and must be equipped with a temperature sensor capable of measuring typical meter temperatures accurately to within 3°C for correcting final sample volume.~~

~~(F) Sample Flow Rate Meter and Controller. Use a flow rate indicator and controller for maintaining necessary sampling flow rates.~~

~~(G) Temperature Sensor. Same as Section 6.1.1.7 of Method 5 in appendix A-3 to 40 CFR part 60.~~

~~(H) Barometer. Same as Section 6.1.2 of Method 5 in appendix A-3 to 40 CFR part 60.~~

~~(I) Data Logger (Optional). Device for recording associated and necessary ancillary information (e.g., temperatures, pressures, flow, time, etc.).~~

~~(b) Gaseous Hg⁰ Sorbent Trap Spiking System. A known mass of gaseous Hg⁰ must be spiked onto section 3 of each sorbent trap prior to sampling. Any approach capable of quantitatively delivering known masses of Hg⁰ onto sorbent traps is acceptable. Several technologies or devices are available to meet this objective. Their practicality is a function of Hg mass spike levels. For low levels, NIST-certified or NIST-traceable gas generators or tanks may be suitable, but will likely require long preparation times. A more practical, alternative system, capable of delivering almost any mass required, makes use of NIST-certified or NIST-traceable Hg salt solutions (e.g., Hg(NO₃)₂). With this system, an aliquot of known volume and concentration is added to a reaction vessel containing a reducing agent (e.g., stannous chloride); the Hg salt solution is reduced to Hg⁰ and purged onto section 3 of the sorbent trap using an impinger-sparging system.~~

~~(c) Sample Analysis Equipment. Any analytical system capable of quantitatively recovering and quantifying total gaseous Hg from sorbent media is acceptable provided that the analysis can meet the performance criteria in section (8) of this rule. Candidate recovery techniques include leaching, digestion, and thermal desorption. Candidate analytical techniques include ultraviolet atomic fluorescence (UV-AF); ultraviolet atomic absorption (UV-AA), with and without gold trapping; and in situ X-ray fluorescence (XRF) analysis.~~

~~(6) Reagents and Standards. Only NIST-certified or NIST-traceable calibration gas standards and reagents (or other standards approved by the Department, if NIST-certified or traceable standards are not available) must be used for the tests and procedures required under this rule.~~

~~(7) Sample Collection and Transport.~~

~~(a) Pre-Test Procedures.~~

~~(A) Selection of Sampling Site. Sampling site information should be obtained in accordance with Method 1 in appendix A-1 to 40 CFR part 60. Identify a monitoring location representative of source Hg emissions. Locations shown to be free of stratification through measurement traverses for gases such as SO₂ and NO_x may be one such approach. An estimation of the expected stack Hg concentration is required to establish a target sample flow rate, total gas sample volume, and the mass of Hg⁰ to be spiked onto section 3 of each sorbent trap.~~

(B) ~~Pre-Sampling Spiking of Sorbent Traps.~~ Based on the estimated Hg concentration in the stack, the target sample rate and the target sampling duration, calculate the expected mass loading for section 1 of each sorbent trap (for an example calculation, see subsection (12)(a) of this rule). The pre-sampling spike to be added to section 3 of each sorbent trap must be within ± 50 percent of the expected section 1 mass loading. Spike section 3 of each sorbent trap at this level, as described in subsection (5)(b) of this rule. For each sorbent trap, keep an official record of the mass of Hg0 added to section 3. This record must include, at a minimum, the ID number of the trap, the date and time of the spike, the name of the analyst performing the procedure, the mass of Hg0 added to section 3 of the trap (μg), and the supporting calculations. This record must be maintained in a format suitable for inspection and audit and must be made available to the regulatory agencies upon request.

(C) ~~Pre-test Leak Check.~~ Perform a leak check with the sorbent traps in place. Draw a vacuum in each sample train. Adjust the vacuum in the sample train to ± 15 " Hg. Using the dry gas meter, determine leak rate. The leakage rate must not exceed 4 percent of the target sampling rate. Once the leak check passes this criterion, carefully release the vacuum in the sample train then seal the sorbent trap inlet until the probe is ready for insertion into the stack or duct.

(D) ~~Determination of Flue Gas Characteristics.~~ Determine or measure the flue gas measurement environment characteristics (gas temperature, static pressure, gas velocity, stack moisture, etc.) in order to determine ancillary requirements such as probe heating requirements (if any), initial sample rate, proportional sampling conditions, moisture management, etc.

(b) ~~Sample Collection.~~

(A) Remove the plug from the end of each sorbent trap and store each plug in a clean sorbent trap storage container. Remove the stack or duct port cap and insert the probe(s). Secure the probe(s) and ensure that no leakage occurs between the duct and environment.

(B) Record initial data including the sorbent trap ID, start time, starting dry gas meter readings, initial temperatures, setpoints, and any other appropriate information.

(C) ~~Flow Rate Control.~~ Set the initial sample flow rate at the target value from paragraph (7)(a)(A) of this rule. Record the initial dry gas meter reading, stack temperature, meter temperatures, etc. Then, for every operating hour during the sampling period, record the date and time, the sample flow rate, the gas meter reading, the stack temperature, the flow meter temperatures, temperatures of heated equipment such as the vacuum lines and the probes (if heated), and the sampling system vacuum readings. Also record the stack gas flow rate, as measured by the certified flow monitor, and the ratio of the stack gas flow rate to the sample flow rate. Adjust the sampling flow rate to maintain proportional sampling, i.e., keep the ratio of the stack gas flow rate to sample flow rate constant, to within ± 25 percent of the reference ratio from the first hour of the data collection period (see section (11) of this rule). The sample flow rate through a sorbent trap monitoring system during any hour (or portion of an hour) in which the unit is not operating shall be zero.

(D) ~~Stack Gas Moisture Determination.~~ Determine stack gas moisture using a continuous moisture monitoring system, as described in 40 CFR 75.11(b). Alternatively, the owner or operator may use the appropriate fuel-specific moisture default value provided in 40 CFR 75.11, or a site specific moisture default value approved by petition under 40 CFR 75.66.

(E) ~~Essential Operating Data.~~ Obtain and record any essential operating data for the facility during the test period, e.g., the barometric pressure must be obtained for correcting sample volume to standard conditions. At the end of the data collection period, record the final dry gas meter reading and the final values of all other essential parameters.

(F) ~~Post Test Leak Check.~~ When sampling is completed, turn off the sample pump, remove the probe/sorbent trap from the port and carefully re-plug the end of each sorbent trap. Perform a leak check

with the sorbent traps in place, at the maximum vacuum reached during the sampling period. Use the same general approach described in paragraph (7)(a)(C) of this rule. Record the leakage rate and vacuum. The leakage rate must not exceed 4 percent of the average sampling rate for the data collection period. Following the leak check, carefully release the vacuum in the sample train.

(G) Sample Recovery. Recover each sampled sorbent trap by removing it from the probe, sealing both ends. Wipe any deposited material from the outside of the sorbent trap. Place the sorbent trap into an appropriate sample storage container and store/preserve in appropriate manner.

(H) Sample Preservation, Storage, and Transport. While the performance criteria of this approach provide for verification of appropriate sample handling, it is still important that the user consider, determine, and plan for suitable sample preservation, storage, transport, and holding times for these measurements. Therefore, procedures in ASTM D6911-03 “Standard Guide for Packaging and Shipping Environmental Samples for Laboratory Analysis” must be followed for all samples.

(I) Sample Custody. Proper procedures and documentation for sample chain-of-custody are critical to ensuring data integrity. The chain-of-custody procedures in ASTM D4840-99 (reapproved 2004) “Standard Guide for Sample Chain-of-Custody Procedures” must be followed for all samples (including field samples and blanks).

(8) Quality Assurance and Quality Control. The owner and operator using a sorbent trap monitoring system must develop and implement a quality assurance/quality control (QA/QC) program. At a minimum, include in each QA/QC program a written plan that describes in detail (or that refers to separate documents containing) complete, step-by-step procedures and operations. Upon request from the Department, the owner or operator must make all procedures, maintenance records, and ancillary supporting documentation from the manufacturer (e.g., software coefficients and troubleshooting diagrams) available for review during an audit. Electronic storage of the information in the QA/QC plan is permissible, provided that the information can be made available in hardcopy upon request during an audit. Table 2 to this division summarizes the QA/QC performance criteria that are used to validate the Hg emissions data from sorbent trap monitoring systems, including the relative accuracy test audit (RATA) requirement (see section 6.5.7 of appendix A to 40 CFR part 75 and section 2.3 of appendix B to 40 CFR part 75, except that for sorbent trap monitoring systems, RATAs must be performed annually, i.e., once every four successive QA operating quarters). The RATA must meet the requirements in OAR 340-228-0621(3)(d)(C)(iii). Except as provided in OAR 340-228-0617(8) and as otherwise indicated in Table 2 to this division, failure to achieve these performance criteria will result in invalidation of Hg emissions data.

(9) Quality Assurance and Quality Control Plan Content. In addition to section 1 of Appendix B to 40 CFR part 75, the QA/QC plan must contain the following:

(a) Sorbent Trap Identification and Tracking. Include procedures for inscribing or otherwise permanently marking a unique identification number on each sorbent trap, for tracking purposes. Keep records of the ID of the monitoring system in which each sorbent trap is used, and the dates and hours of each Hg collection period.

(b) Monitoring System Integrity and Data Quality. Explain the procedures used to perform the leak checks when a sorbent trap is placed in service and removed from service. Also explain the other QA procedures used to ensure system integrity and data quality, including, but not limited to, dry gas meter calibrations, verification of moisture removal, and ensuring air-tight pump operation. In addition, the QA plan must include the data acceptance and quality control criteria in section (8) of this rule.

(c) Hg Analysis. Explain the chain-of-custody employed in packing, transporting, and analyzing the sorbent traps (see paragraphs (7)(b)(H) and (I) of this rule). Keep records of all Hg analyses. The analyses must be performed in accordance with the procedures described in section (11) of this rule.

~~(d) Laboratory Certification. The QA Plan must include documentation that the laboratory performing the analyses on the carbon sorbent traps is certified by the International Organization for Standardization (ISO) to have a proficiency that meets the requirements of ISO 17025. Alternatively, if the laboratory performs the spike recovery study described in subsection (11)(c) of this rule and repeats that procedure annually, ISO certification is not required.~~

~~(10) Calibration and Standardization:~~

~~(a) Only NIST-certified and NIST-traceable calibration standards (i.e., calibration gases, solutions, etc.) (or other standards approved by the Department if NIST-certified or traceable standards are not available) must be used for the spiking and analytical procedures in this rule.~~

~~(b) Dry Gas Meter Calibration. Prior to its initial use, perform a full calibration of the metering system at three orifice settings to determine the average dry gas meter coefficient (Y), as described in section 10.3.1 of Method 5 in appendix A-3 to 40 CFR part 60. Thereafter, recalibrate the metering system quarterly at one intermediate orifice setting, as described in section 10.3.2 of Method 5 in appendix A-3 to 40 CFR part 60. If a quarterly recalibration shows that the value of Y has changed by more than 5 percent, repeat the full calibration of the metering system to determine a new value of Y.~~

~~(c) Thermocouples and Other Temperature Sensors. Use the procedures and criteria in section 10.3 of Method 2 in appendix A-1 to 40 CFR part 60 to calibrate in-stack temperature sensors and thermocouples. Dial thermometers must be calibrated against mercury-in-glass thermometers. Calibrations must be performed prior to initial use and at least quarterly thereafter. At each calibration point, the absolute temperature measured by the temperature sensor must agree to within ± 1.5 percent of the temperature measured with the reference sensor, otherwise the sensor may not continue to be used.~~

~~(d) Barometer. Calibrate against a mercury barometer. Calibration must be performed prior to initial use and at least quarterly thereafter. At each calibration point, the absolute pressure measured by the barometer must agree to within ± 10 mm Hg of the pressure measured by the mercury barometer, otherwise the barometer may not continue to be used.~~

~~(e) Other Sensors and Gauges. Calibrate all other sensors and gauges according to the procedures specified by the instrument manufacturer(s).~~

~~(f) Analytical System Calibration. See subsection (10)(a) of this rule.~~

~~(11) Analytical Procedures. The analysis of the Hg samples may be conducted using any instrument or technology capable of quantifying total Hg from the sorbent media and meeting the performance criteria in section (8) of this rule.~~

~~(a) Analyzer System Calibration. Perform a multipoint calibration of the analyzer at three or more upscale points over the desired quantitative range (multiple calibration ranges must be calibrated, if necessary). The field samples analyzed must fall within a calibrated, quantitative range and meet the necessary performance criteria. For samples that are suitable for aliquotting, a series of dilutions may be needed to ensure that the samples fall within a calibrated range. However, for sorbent media samples that are consumed during analysis (e.g., thermal desorption techniques), extra care must be taken to ensure that the analytical system is appropriately calibrated prior to sample analysis. The calibration curve range(s) should be determined based on the anticipated level of Hg mass on the sorbent media. Knowledge of estimated stack Hg concentrations and total sample volume may be required prior to analysis. The calibration curve for use with the various analytical techniques (e.g., UV-AA, UV-AF, and XRF) can be generated by directly introducing standard solutions into the analyzer or by spiking the standards onto the sorbent media and then introducing into the analyzer after preparing the sorbent/standard according to the particular analytical technique. For each calibration curve, the value of the square of the linear correlation coefficient, i.e., r^2 , must be ≥ 0.99 , and the analyzer response must be~~

within ± 10 percent of reference value at each upscale calibration point. Calibrations must be performed on the day of the analysis, before analyzing any of the samples. Following calibration, an independently prepared standard (not from same calibration stock solution) must be analyzed. The measured value of the independently prepared standard must be within ± 10 percent of the expected value.

(b) Sample Preparation. Carefully separate the three sections of each sorbent trap. Combine for analysis all materials associated with each section, i.e., any supporting substrate that the sample gas passes through prior to entering a media section (e.g., glass wool, polyurethane foam, etc.) must be analyzed with that segment.

(c) Spike Recovery Study. Before analyzing any field samples, the laboratory must demonstrate the ability to recover and quantify Hg from the sorbent media by performing the following spike recovery study for sorbent media traps spiked with elemental mercury. Using the procedures described in subsections (5)(b) and (11)(a) of this rule, spike the third section of nine sorbent traps with gaseous Hg₀, i.e., three traps at each of three different mass loadings, representing the range of masses anticipated in the field samples. This will yield a 3 x 3 sample matrix. Prepare and analyze the third section of each spiked trap, using the techniques that will be used to prepare and analyze the field samples. The average recovery for each spike concentration must be between 85 and 115 percent. If multiple types of sorbent media are to be analyzed, a separate spike recovery study is required for each sorbent material. If multiple ranges are calibrated, a separate spike recovery study is required for each range.

(d) Field Sample Analyses. Analyze the sorbent trap samples following the same procedures that were used for conducting the spike recovery study. The three sections of the sorbent trap must be analyzed separately (i.e., section 1, then section 2, then section 3). Quantify the mass of total Hg for each section based on analytical system response and the calibration curve from subsection (10)(a) of this rule. Determine the spike recovery from sorbent trap section 3. Pre-sampling spike recoveries must be between 75 and 125 percent. To report final Hg mass, normalize the data for sections 1 and 2 based on the sample-specific spike recovery, and add the normalized masses together.

(12) Calculations and Data Analysis:

(a) Calculation of Pre-Sampling Spiking Level. Determine sorbent trap section 3 spiking level using estimates of the stack Hg concentration, the target sample flow rate, and the expected sample duration. First, calculate the expected Hg mass that will be collected in section 1 of the trap. The presampling spike must be within ± 50 percent of this mass. Example calculation: For an estimated stack Hg concentration of 5 $\mu\text{g}/\text{m}^3$, a target sample rate of 0.30 L/min, and a sample duration of 5 days: $(0.30 \text{ L/min}) (1440 \text{ min/day}) (5 \text{ days}) (10^{-3} \text{ m}^3/\text{liter}) (5 \mu\text{g}/\text{m}^3) = 10.8 \mu\text{g}$

A pre-sampling spike of 10.8 $\mu\text{g} \pm 50$ percent is, therefore, appropriate.

(b) Calculations for Flow-Proportional Sampling. For the first hour of the data collection period, determine the reference ratio of the stack gas volumetric flow rate to the sample flow rate, as follows:
 $R_{\text{ref}} = K \times Q_{\text{ref}} / F_{\text{ref}}$

Where:

R_{ref} = Reference ratio of hourly stack gas flow rate to hourly sample flow rate

Q_{ref} = Average stack gas volumetric flow rate for first hour of collection period, adjusted for bias, if necessary according to section 7.6.5 of appendix A to 40 CFR part 75, (scfh)

F_{ref} = Average sample flow rate for first hour of the collection period, in appropriate units (e.g., liters/min, cc/min, dscm/min)

K = Power of ten multiplier, to keep the value of R_{ref} between 1 and 100. The appropriate K value will depend on the selected units of measure for the sample flow rate. Then, for each subsequent hour of the data collection period, calculate ratio of the stack gas flow rate to the sample flow rate using the following equation:

$$R_h = K \times Q_h / F_h$$

Where:

R_h = Ratio of hourly stack gas flow rate to hourly sample flow rate

Q_h = Average stack gas volumetric flow rate for the hour, adjusted for bias, if necessary, according to section 7.6.5 of appendix A to 40 CFR part 75, (scfh)

F_h = Average sample flow rate for the hour, in appropriate units (e.g., liters/min, cc/min, dscm/min)

K = Power of ten multiplier, to keep the value of R_h between 1 and 100. The appropriate K value will depend on the selected units of measure for the sample flow rate and the range of expected stack gas flow rates.

Maintain the value of R_h within ± 25 percent of R_{ref} throughout the data collection period.

(c) Calculation of Spike Recovery. Calculate the percent recovery of each section 3 spike, as follows:

$$\%R = (M_3/M_s) \times 100$$

Where:

$\%R$ = Percentage recovery of the presampling spike

M_3 = Mass of Hg recovered from section 3 of the sorbent trap, (μg)

M_s = Calculated Hg mass of the pre-sampling spike, from paragraph (7)(a)(B) of this rule, (μg)

(d) Calculation of Breakthrough. Calculate the percent breakthrough to the second section of the sorbent trap, as follows:

$$\%B = (M_2/M_1) \times 100$$

Where:

$\%B$ = Percent breakthrough

M_2 = Mass of Hg recovered from section 2 of the sorbent trap, (μg)

M_1 = Mass of Hg recovered from section 1 of the sorbent trap, (μg)

(e) Normalizing Measured Hg Mass for Section 3 Spike Recoveries. Based on the results of the spike recovery in subsection (12)(c) of this rule, normalize the Hg mass collected in sections 1 and 2 of the sorbent trap, as follows:

$$M^* = ((M_1 + M_2) \times M_s) / M_3$$

Where:

M^* = Normalized total mass of Hg recovered from sections 1 and 2 of the sorbent trap, (μg)

M_1 = Mass of Hg recovered from section 1 of the sorbent trap, unadjusted, (μg)

M_2 = Mass of Hg recovered from section 2 of the sorbent trap, unadjusted, (μg)

M_s = Calculated Hg mass of the pre-sampling spike, from paragraph (7)(a)(B) of this rule, (μg)

M_3 = Mass of Hg recovered from section 3 of the sorbent trap, (μg)

(f) Calculation of Hg Concentration. Calculate the Hg concentration for each sorbent trap, using the following equation:

$$C = M^* / V_t$$

Where:

C = Concentration of Hg for the collection period, ($\mu\text{g}/\text{dscm}$)

M^* = Normalized total mass of Hg recovered from sections 1 and 2 of the sorbent trap, (μg)

V_t = Total volume of dry gas metered during the collection period, (dscm). For the purposes of this rule, standard temperature and pressure are defined as 20°C and 760 mm Hg, respectively.

(g) Calculation of Paired Trap Agreement. Calculate the relative deviation (RD) between the Hg concentrations measured with the paired sorbent traps as follows:

$$RD = (|C_a - C_b| / (C_a + C_b)) \times 100$$

Where:

RD = Relative deviation between the Hg concentrations from traps “a” and “b” (percent)

~~Ca = Concentration of Hg for the collection period, for sorbent trap “a” (µg/dscm)~~

~~Cb = Concentration of Hg for the collection period, for sorbent trap “b” (µg/dscm)~~

~~(h) Calculation of Hg Mass Emissions. To calculate Hg mass emissions, follow the procedures in OAR 340-228-0619(1)(b). Use the average of the two Hg concentrations from the paired traps in the calculations, except as provided in OAR 340-228-0617(8) or in Table 2 to this division.~~

~~(13) Method Performance. These monitoring criteria and procedures have been applied to coal-fired utility boilers (including units with post-combustion emission controls), having vapor-phase Hg concentrations ranging from 0.03 µg/dscm to 100 µg/dscm.~~

~~Stat. Auth.: ORS 468.020 & 468A.310~~

~~Stats. Implemented: ORS 468A.025~~

~~Hist.: DEQ 15-2008, f. & cert. ef. 12-31-08; DEQ 8-2009, f. & cert. ef. 12-16-09~~

Out of Control Periods

340-228-0629

Out of Control Periods and Adjustment for System Bias

~~(1) Whenever any monitoring system fails to meet the quality assurance and quality control requirements or data validation requirements of OAR 340-228-0623, data must be substituted using the applicable missing data procedures.~~

~~(2) Audit decertification. Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any monitoring system should not have been certified or recertified because it did not meet a particular performance specification or other requirement under OAR 340-228-0621 or the applicable provisions of 40 CFR part 75, 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 monitoring system. For the purposes of this section, an audit must be either a field audit or an audit of any information submitted to the Department. By issuing the notice of disapproval, the Department revokes prospectively the certification status of the monitoring system. The data measured and recorded by the monitoring system must 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 owner or operator completes subsequently approved initial certification or recertification tests for the monitoring system. The owner or operator must follow the applicable initial certification or recertification procedures in 340-228-0621 for each disapproved monitoring system.~~

~~(3) When the bias test indicates that a flow monitor, a Hg concentration monitoring system or a sorbent trap monitoring system is biased low (i.e., the arithmetic mean of the differences between the reference method value and the monitor or monitoring system measurements in a relative accuracy test audit exceed the bias statistic), the owner or operator must adjust the monitor or continuous emission monitoring system to eliminate the cause of bias such that it passes the bias test or calculate and use the bias adjustment factor given in Equations A-11 and A-12 of appendix A to 40 CFR part 75, to adjust the monitored data.~~

~~Stat. Auth.: ORS 468.020 & 468A.310~~

~~Stats. Implemented: ORS 468A.025~~

~~Hist.: DEQ 15-2008, f. & cert. ef. 12-31-08~~

Missing Data Procedure

340-228-0631

Standard Missing Data Procedures for Hg CEMS

(1) Once 720 quality-assured monitor operating hours of Hg concentration data have been obtained following initial certification, the owner or operator must provide substitute data for Hg concentration in accordance with the procedures in 40 CFR 75.33(b)(1) through (b)(4), except that the term "Hg concentration" shall apply rather than "SO₂ concentration," the term "Hg concentration monitoring system" shall apply rather than "SO₂ pollutant concentration monitor," the term "maximum potential Hg concentration," as defined in 340-228-0602(25) shall apply, rather than "maximum potential SO₂ concentration", and the percent monitor data availability trigger conditions prescribed for Hg in Table 1 of this division shall apply rather than the trigger conditions prescribed for SO₂.

(2) For a unit equipped with add-on Hg emission controls (e.g., carbon injection), the standard missing data procedures in section (1) of this rule may only be used for hours in which the Hg emission controls are documented to be operating properly, as described in OAR 340-228-0635(6). For any hour(s) in the missing data period for which this documentation is unavailable, the owner or operator must report, as applicable, the maximum potential Hg concentration, as defined in OAR 340-228-0602(25). In addition, under 40 CFR 75.64(c), the owner or operator must submit as part of each quarterly report, a certification statement, verifying the proper operation of the Hg emission controls for each missing data period in which the procedures in section (1) of this rule are applied.

(3) For units with add-on Hg controls, when the percent monitor data availability is less than 80.0 percent and is greater than or equal to 70.0 percent, and a missing data period occurs, consistent with 40 CFR 75.34(a)(3), for each missing data hour in which the Hg emission controls are documented to be operating properly, the owner or operator may report the maximum controlled Hg concentration recorded in the previous 720 quality-assured monitor operating hours. In addition, when the percent monitor data availability is less than 70.0 percent and a missing data period occurs, consistent with 40 CFR 75.34(a)(5), for each missing data hour in which the Hg emission controls are documented to be operating properly, the owner or operator may report the greater of the maximum expected Hg concentration (MEC) or 1.25 times the maximum controlled Hg concentration recorded in the previous 720 quality-assured monitor operating hours. The MEC must be determined in accordance with OAR 340-228-0602(24).

Stat. Auth.: ORS 468.020 & 468A.310

Stats. Implemented: ORS 468A.025

Hist.: DEQ 15-2008, f. & cert. ef 12-31-08

340-228-0633

Missing Data Procedures for Sorbent Trap Monitoring Systems

(1) If a primary sorbent trap monitoring system has not been certified by the applicable compliance date specified under OAR 340-228-0609(2), and if the quality-assured Hg concentration data from a certified backup Hg monitoring system, reference method, or approved alternative monitoring system are unavailable, the owner or operator must report the maximum potential Hg concentration, as defined in OAR 340-228-0602(25), until the primary system is certified.

(2) For a certified sorbent trap system, a missing data period will occur in the following circumstances, unless quality-assured Hg concentration data from a certified backup Hg CEMS, sorbent trap system, reference method, or approved alternative monitoring system are available:

(a) A gas sample is not extracted from the stack during unit operation (e.g., during a monitoring system malfunction or when the system undergoes maintenance); or

(b) The results of the Hg analysis for the paired sorbent traps are missing or invalid (as determined using the quality assurance procedures in OAR 340-228-0627). The missing data period begins with the hour in which the paired sorbent traps for which the Hg analysis is missing or invalid were put into service.

The missing data period ends at the first hour in which valid Hg concentration data are obtained with another pair of sorbent traps (i.e., the hour at which this pair of traps was placed in service), or with a certified backup Hg CEMS, reference method, or approved alternative monitoring system.

(3) Initial missing data procedures. Use the following missing data procedures until 720 hours of quality-assured Hg concentration data have been collected with the sorbent trap monitoring system(s), following initial certification. For each hour of the missing data period, the substitute data value for Hg concentration shall be the average Hg concentration from all valid sorbent trap analyses to date, including data from the initial certification test runs.

(4) Standard missing data procedures. Once 720 quality-assured hours of data have been obtained with the sorbent trap system(s), begin reporting the percent monitor data availability in accordance with 40 CFR 75.32 and switch from the initial missing data procedures in section (3) of this rule to the standard missing data procedures in OAR 340-228-0631.

(5) Notwithstanding the requirements of sections (3) and (4) of this rule, if the unit has add-on Hg emission controls, the owner or operator must report the maximum potential Hg concentration, as defined in 340-228-0602(25), for any hour(s) in the missing data period for which proper operation of the Hg emission controls is not documented according to OAR 340-228-0635(6).

(6) In cases where the owner or operator elects to use a primary Hg CEMS and a certified redundant (or non-redundant) backup sorbent trap monitoring system (or vice versa), when both the primary and backup monitoring systems are out of service and quality-assured Hg concentration data from a temporary like-kind replacement analyzer, reference method, or approved alternative monitoring system are unavailable, the previous 720 quality-assured monitor operating hours reported in the quarterly report under OAR 340-228-0637(4) must be used for the required missing data lookback, irrespective of whether these data were recorded by the Hg CEMS, the sorbent trap system, a temporary like-kind replacement analyzer, a reference method, or an approved alternative monitoring system.

Stat. Auth.: ORS 468.020 & 468A.310

Stats. Implemented: ORS 468A.025

Hist.: DEQ 15-2008, f. & cert. ef 12-31-08

Recordkeeping and Reporting

340-228-0635

Recordkeeping

(1) ~~General recordkeeping provisions.~~ The owner or operator of any coal-fired electric [utility steam](#) generating unit must maintain ~~for each coal-fired electric generating unit and each non-affected unit under OAR 340-228-0615(2)(b)(B)~~ a file of all measurements, data, reports, and other ~~required~~ information [required in OAR 340-228-0606, 0609, 0637 and 0639 and 40 CFR part 63 subpart UUUUU](#) at the source in a form suitable for inspection for at least 5 years from the date of each record.

~~Except for the certification data required in 40 CFR 75.57(a)(4) and the initial submission of the monitoring plan required in 40 CFR 75.57(a)(5), the data must be collected beginning with the earlier of the date of provisional certification or the compliance deadline in OAR 340-228-0609(2). The certification data required in 40 CFR 75.57(a)(4) must be collected beginning with the date of the first certification test performed. The file must contain the following information:~~

~~(a) The information required in 40 CFR 75.57(a)(2), (a)(4), (a)(5), (a)(6), (b), (c)(2), (g) (if applicable), (h), and sections (4) or (5) of this rule (as applicable).~~

~~(b) For coal-fired electric generating units using Hg CEMS or sorbent trap monitoring systems, for each hour when the unit is operating, record the Hg mass emissions, calculated in accordance with OAR 340-228-0619.~~

- (c) Heat input and Hg methodologies for the hour.
- (d) Formulas from monitoring plan for total Hg mass emissions and heat input rate (if applicable); and
- (e) Laboratory calibrations of the source sampling equipment. For sorbent trap monitoring systems, the laboratory analyses of all sorbent traps, and information documenting the results of all leak checks and other applicable quality control procedures.
- (f) Unless otherwise provided, the owners and operators of the coal-fired electric generating unit must keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Department.
- (A) All emissions monitoring information, in accordance with OAR 340-228-0609 through 0637.
- (B) Copies of all reports, compliance certifications, and other submissions.
- (2) Certification, quality assurance, and quality control record provisions. The owner or operator of a coal-fired electric generating unit must maintain the information required in 40 CFR 75.59, including the following:
 - (a) For each Hg monitor, the owner or operator must record the information in 40 CFR 75.59(a)(1)(i) through (xi) for all daily and 7-day calibration error tests, all daily system integrity checks (Hg monitors, only), and all off-line calibration demonstrations, including any follow-up tests after corrective action.
 - (b) For each Hg concentration monitor, the owner or operator must record the information in 40 CFR 75.59(a)(3)(i) through (x) for the initial and all subsequent linearity check(s) and 3-level system integrity checks (Hg monitors with converters, only), including any follow-up tests after corrective action.
 - (c) For each Hg concentration monitoring system or sorbent trap monitoring system, the owner or operator must record the information in 40 CFR 75.59(a)(5)(i) and (iii) through (vii) for the initial and all subsequent relative accuracy test audits. The owner or operator must also record individual test run data from the relative accuracy test audit for the Hg concentration monitoring system or sorbent trap monitoring system, including the information in 40 CFR 75.59(a)(5)(ii)(A) through (M).
 - (d) For each Hg pollutant concentration monitor, the owner or operator must record the information in 40 CFR 75.59(a)(6)(i) through (xi) for the cycle time test.
 - (e) For each relative accuracy test audit run using the Ontario Hydro Method to determine Hg concentration:
 - (A) Percent CO₂ and O₂ in the stack gas, dry basis;
 - (B) Moisture content of the stack gas (percent H₂O);
 - (C) Average stack temperature (°F);
 - (D) Dry gas volume metered (dscm);
 - (E) Percent isokinetic;
 - (F) Particle-bound Hg collected by the filter, blank, and probe rinse (µg);
 - (G) Oxidized Hg collected by the KCl impingers (µg);
 - (H) Elemental Hg collected in the HNO₃/H₂O₂ impinger and in the KMnO₄/H₂SO₄ impingers (µg);
 - (I) Total Hg, including particle-bound Hg (µg); and
 - (J) Total Hg, excluding particle-bound Hg (µg).
 - (f) For each RATA run using Method 29 to determine Hg concentration:
 - (A) Percent CO₂ and O₂ in the stack gas, dry basis;
 - (B) Moisture content of the stack gas (percent H₂O);
 - (C) Average stack gas temperature (°F);
 - (D) Dry gas volume metered (dscm);
 - (E) Percent isokinetic;

~~(F) Particulate Hg collected in the front half of the sampling train, corrected for the front half blank value (μg); and~~

~~(G) Total vapor phase Hg collected in the back half of the sampling train, corrected for the back half blank value (μg).~~

~~(g) When hardcopy relative accuracy test reports, certification reports, recertification reports, or semiannual or annual reports for Hg CEMS or sorbent trap monitoring systems are required or requested under 40 CFR 75.60(b)(6) or 75.63, the reports must include, at a minimum, the elements in 40 CFR 75.59(a)(9)(i) through (ix) (as applicable to the type(s) of test(s) performed). For sorbent trap monitoring systems, the report must include laboratory analyses of all sorbent traps, and information documenting the results of all leak checks and other applicable quality control procedures.~~

~~(h) Except as otherwise provided in subsection (6)(a) of this rule, for units with add-on Hg emission controls, the owner or operator must keep the records in 40 CFR 75.59(c)(1) through (2) on-site in the quality assurance/quality control plan.~~

~~(3) Monitoring plan recordkeeping provisions.~~

~~(a) General provisions. The owner or operator of a coal-fired electric generating unit must prepare and maintain a monitoring plan for each affected unit or group of units monitored at a common stack and each non-coal-fired electric generating unit under OAR 340-228-0615(2)(b)(B). The monitoring plan must contain sufficient information on the continuous monitoring systems and the use of data derived from these systems to demonstrate that all the unit's Hg emissions are monitored and reported.~~

~~(b) Updates. Whenever the owner or operator makes a replacement, modification, or change in a certified continuous monitoring system or alternative monitoring system under 40 CFR part 75 subpart E, 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 a serial number for a component of a monitoring system), then the owner or operator must update the monitoring plan.~~

~~(c) Contents of the monitoring plan. Each monitoring plan must contain the information in 40 CFR 75.53(g)(1) in electronic format and the information in 40 CFR 75.53(g)(2) in hardcopy format.~~

~~(4) Hg emission record provisions (CEMS). The owner or operator must record for each hour the information required by this section for each affected unit using Hg CEMS in combination with flow rate, and (in certain cases) moisture, and diluent gas monitors, to determine Hg mass emissions and (if applicable) unit heat input.~~

~~(a) For Hg concentration during unit operation, as measured and reported from each certified primary monitor, certified back-up monitor, or other approved method of emissions determination:~~

~~(A) Component system identification code, as provided in 40 CFR 75.53;~~

~~(B) Date and hour;~~

~~(C) Hourly Hg concentration ($\mu\text{g}/\text{m}^3$, rounded to the nearest tenth). For a particular pair of sorbent traps, this will be the flow-proportional average concentration for the data collection period;~~

~~(D) The bias-adjusted hourly average Hg concentration ($\mu\text{g}/\text{m}^3$, rounded to the nearest tenth) if a bias adjustment factor is required, as provided in OAR 340-228-0629(3);~~

~~(E) Method of determination for hourly Hg concentration using Codes 1–55 in Table 3 to this division; and~~

~~(F) The percent monitor data availability (to the nearest tenth of a percent), calculated pursuant to 40 CFR 75.32.~~

~~(b) For flue gas moisture content during unit operation (if required), as measured and reported from each certified primary monitor, certified back-up monitor, or other approved method of emissions determination (except where a default moisture value is used in accordance with 40 CFR 75.11(b) or approved under 40 CFR 75.66):~~

~~(A) Component system identification code, as provided in 40 CFR 75.53;~~
~~(B) Date and hour;~~
~~(C) Hourly average moisture content of flue gas (percent, rounded to the nearest tenth). If the continuous moisture monitoring system consists of wet and dry basis oxygen analyzers, also record both the wet and dry basis oxygen hourly averages (in percent O₂, rounded to the nearest tenth);~~
~~(D) Percent monitor data availability (recorded to the nearest tenth of a percent) for the moisture monitoring system, calculated pursuant to 40 CFR 75.32; and~~
~~(E) Method of determination for hourly average moisture percentage, using Codes 1–55 in Table 3 to this division.~~
 (c) For diluent gas (O₂ or CO₂) concentration during unit operation (if required), as measured and reported from each certified primary monitor, certified back-up monitor, or other approved method of emissions determination:
~~(A) Component system identification code, as provided in 40 CFR 75.53;~~
~~(B) Date and hour;~~
~~(C) Hourly average diluent gas (O₂ or CO₂) concentration (in percent, rounded to the nearest tenth);~~
~~(D) Method of determination code for diluent gas (O₂ or CO₂) concentration data using Codes 1–55, in Table 3 to this division; and~~
~~(E) The percent monitor data availability (to the nearest tenth of a percent) for the O₂ or CO₂ monitoring system (if a separate O₂ or CO₂ monitoring system is used for heat input determination), calculated pursuant to 40 CFR 75.32.~~
 (d) For stack gas volumetric flow rate during unit operation, as measured and reported from each certified primary monitor, certified back-up monitor, or other approved method of emissions determination, record the information required under paragraphs 40 CFR 75.57(c)(2)(i) through (c)(2)(vi).
 (e) For Hg mass emissions during unit operation, as measured and reported from the certified primary monitoring system(s), certified redundant or nonredundant back-up monitoring system(s), or other approved method(s) of emissions determination:
~~(A) Date and hour;~~
~~(B) Hourly Hg mass emissions (pounds, rounded to three decimal places);~~
~~(C) Hourly Hg mass emissions (pounds, rounded to three decimal places), adjusted for bias if a bias adjustment factor is required, as provided in OAR 340-228-0629(3); and~~
~~(D) Identification code for emissions formula used to derive hourly Hg mass emissions from Hg concentration, flow rate and moisture data, as provided in 40 CFR 75.53.~~
~~(5) Hg emission record provisions (sorvent trap systems). For the sorvent traps used in sorvent trap monitoring systems to quantify Hg concentration (including sorvent traps used for relative accuracy testing), the owner or operator must record for each hour the information required by this section.~~
 (a) For Hg concentration during unit operation, as measured and reported from each certified primary monitor, certified back-up monitor, or other approved method of emissions determination:
~~(A) Component system identification code, as provided in 40 CFR 75.53;~~
~~(B) The ID number of the monitoring system in which each sorvent trap was used to collect Hg;~~
~~(C) The unique identification number of each sorvent trap;~~
~~(D) The beginning and ending dates and hours of the data collection period for each sorvent trap;~~
~~(E) Hourly Hg concentration (µg/dscm, rounded to the nearest tenth). For a particular pair of sorvent traps, this will be the flow-proportional average concentration for the data collection period;~~
~~(F) The bias-adjusted hourly average Hg concentration (µg/dscm, rounded to the nearest tenth) if a bias adjustment factor is required, as provided in OAR 340-228-0629(3);~~

~~(G) Method of determination for hourly average Hg concentration using Codes 1-55 in Table 3 to this division; and~~

~~(H) Percent monitor data availability (recorded to the nearest tenth of a percent), calculated pursuant to 40 CFR 75.32.~~

~~(b) For flue gas moisture content during unit operation, as measured and reported from each certified primary monitor, certified back-up monitor, or other approved method of emissions determination (except where a default moisture value is used in accordance with 40 CFR 75.11(b) or approved under 40 CFR 75.66), record the information required under paragraphs (4)(b)(A) through (E) of this rule.~~

~~(c) For diluent gas (O₂ or CO₂) concentration during unit operation (if required for heat input determination), record the information required under paragraphs (4)(c)(A) through (E) of this rule.~~

~~(d) For stack gas volumetric flow rate during unit operation, as measured and reported from each certified primary monitor, certified back-up monitor, or other approved method of emissions determination, record the information required under 40 CFR 75.57(c)(2)(i) through (c)(2)(vi).~~

~~(e) For Hg mass emissions during unit operation, as measured and reported from the certified primary monitoring system(s), certified redundant or nonredundant back-up monitoring system(s), or other approved method(s) of emissions determination, record the information required under subsection (4)(e) of this rule.~~

~~(f) Record the average flow rate of stack gas through each sorbent trap (in appropriate units, e.g., liters/min, cc/min, dscm/min).~~

~~(g) Record the dry gas meter reading (in dscm, rounded to the nearest hundredth), at the beginning and end of the collection period and at least once in each unit operating hour during the collection period.~~

~~(h) Calculate and record the ratio of the bias-adjusted stack gas flow rate to the sample flow rate, as described in OAR 340-228-0627(11)(b).~~

~~(i) Information documenting the results of the required leak checks;~~

~~(j) The analysis of the Hg collected by each sorbent trap; and~~

~~(k) Information documenting the results of the other applicable quality control procedures in OAR 340-228-0617, 0623, and 0627.~~

~~(6) General recordkeeping provisions for specific situations. Except as otherwise provided in 40 CFR 75.34(d), the owner or operator must record:~~

~~(a) Parametric data which demonstrate, for each hour of missing Hg emission data, the proper operation of the add-on emission controls, as described in the quality assurance/quality control program for the unit. The parametric data must be maintained on site and must be submitted, upon request, to the Department.~~

~~(b) A flag indicating, for each hour of missing Hg emission data, either that the add-on emission controls are operating properly, as evidenced by all parameters being within the ranges specified in the quality assurance/quality control program, or that the add-on emission controls are not operating properly.~~

Stat. Auth.: ORS 468.020 & 468A.310
 Stats. Implemented: ORS 468A.025
 Hist.: DEQ 15-2008, f. & cert. ef 12-31-08

340-228-0637

Reporting

(1) General reporting provisions.

~~(a)~~ The owner or operator of an affected unit must comply with all reporting requirements in this [rule](#) and 40 CFR part 63 subpart UUUUU ~~section~~.

(b) The owner or operator of an affected unit must submit the following for each affected unit or group of units monitored at a common stack and each non-affected unit under OAR 340-228-0615(2)(b)(B):

- (A) Initial certification and recertification applications in accordance with OAR 340-228-0621;
- (B) Monitoring plans in accordance with section (2) of this rule; and
- (C) Quarterly reports in accordance with section (4) of this rule.

(c) Quality assurance RATA reports. If requested by the Department, the owner or operator of an affected unit must submit the quality assurance RATA report for each affected unit or group of units monitored at a common stack and each non-affected unit under OAR 340-228-0615(2)(b)(B) by the later of 45 days after completing a quality assurance RATA or 15 days of receiving the request. The owner or operator must report the hardcopy information required by 40 CFR 75.59(a)(9) and OAR 340-228-0635(2)(f) to the Department.

(d) Notifications. The owner or operator of an affected unit must submit written notice to the Department according to the provisions in 40 CFR 75.61 for each affected unit or group of units monitored at a common stack and each non-affected unit under OAR 340-228-0615(2)(b)(B).

(2) Monitoring plans. The owner or operator of a coal-fired electric utility steam generating unit must prepare, and submit if requested, a monitoring plan ~~comply with the applicable requirements of subsections (2)(a) and (b) of this rule and in accordance with~~ 40 CFR ~~part 63.7521(b)~~ subpart UUUUU.

(a) The owner or operator of an affected unit must submit to the Department a complete, up-to-date monitoring plan file for each affected unit or group of units monitored at a common stack and each non-affected unit under OAR 340-228-0615(2)(b)(B), as follows: No later than 21 days prior to the commencement of initial certification testing; at the time of a certification or recertification application submission; and whenever an update of the monitoring plan is required, under 40 CFR 75.53. In addition the information in 40 CFR 75.53(e)(1), the plan must include the type(s) of emission controls for Hg installed or to be installed, including specifications of whether such controls are pre-combustion, post-combustion, or integral to the combustion process; control equipment code, installation date, and optimization date; control equipment retirement date (if applicable); primary/secondary controls indicator; and an indicator for whether the controls are an original installation.

(b) The owner or operator of an affected unit must submit all of the information required under 40 CFR 75.53, for each affected unit or group of units monitored at a common stack and each non-affected unit under OAR 340-228-0615(2)(b)(B), to the Department prior to initial certification. Thereafter, the owner or operator must submit information only if that portion of the monitoring plan is revised. The owner or operator must submit the required information as follows: no later than 21 days prior to the commencement of initial certification testing; with any certification or recertification application, if a monitoring plan change is associated with the recertification event; and within 30 days of any other event with which a monitoring plan change is associated, pursuant to 40 CFR 75.53(b).

(3) Certification applications. The owner or operator must submit an application to the Department within 45 days after completing all initial certification or recertification tests required under OAR 340-228-0621, including the information required under 40 CFR 75.63.

(34) Semiannual~~Quarterly~~ compliance reports. The owner or operator must submit semiannual~~quarterly~~compliance reports in accordance to 40 CFR part 63.10031(a) through (e)~~subpart UUUUU~~ and, as follows:

(a) Submission. ~~S~~ The first semiannual ~~Quarterly~~ reports must be submitted; beginning with the calendar ~~half~~quarter containing the compliance date in OAR 340-228-0609(2). The owner or operator must also report the ~~data and information required in 40 CFR part 63 subpart UUUUU~~ this subsection and the applicable compliance certification information in subsection (4)(b) of this rule to the Department quarterly. Each report must be submitted to the Department within 30 days following the end of each

calendar quarter. Each report must include the date of report generation and the following information for each affected unit or group of units monitored at a common stack:

- (A) The facility information in 40 CFR 75.64(a)(3); and
- (B) The information and hourly data required in OAR 340-228-0635(1) and (2), except for:
 - (i) Descriptions of adjustments, corrective action, and maintenance;
 - (ii) Other information such as field data sheets, lab analyses, quality control plan;
 - (iii) For units with add-on Hg emission controls, the parametric information in OAR 340-228-0635(6);
 - (iv) Information required by 40 CFR 75.57(h) concerning the causes of any missing data periods and the actions taken to cure such causes;
 - (v) Hardcopy monitoring plan information required by 40 CFR 75.53, OAR 340-228-0637(2), and hardcopy test data and results required by 40 CFR 75.59 and OAR 340-228-0635(2);
 - (vi) Records of flow polynomial equations and numerical values required by 40 CFR 75.59(a)(5)(vi);
 - (vii) Stratification test results required as part of RATAs;
 - (viii) Data and results of RATAs that are aborted or invalidated due to problems with the reference method or operational problems with the unit and data and results of linearity checks that are aborted or invalidated due to operational problems with the unit;
 - (ix) Supplementary RATA information required under 40 CFR 75.59(a)(7) and OAR 340-228-0635(2)(e), except that:
 - (I) The applicable data elements under 40 CFR 75.59(a)(7)(ii)(A) through (T) and under 40 CFR 75.59(a)(7)(iii)(A) through (M) must be reported for flow RATAs at circular or rectangular stacks (or ducts) in which angular compensation for pitch and/or yaw angles is used (i.e. Method 2F and 2G in appendices A-1 and A-2 to 40 CFR part 60), with or without wall effects adjustments;
 - (II) The applicable data elements under 40 CFR 75.59(a)(7)(ii)(A) through (T) and under 40 CFR 75.59(a)(7)(iii)(A) through (M) must be reported for any flow RATA run at a circular stack in which Method 2 in appendices A-1 and A-2 to 40 CFR part 60 is used and a wall effects adjustment factor is determined by direct measurement;
 - (III) The data under 40 CFR 75.59(a)(7)(ii)(T) must be reported for all flow RATAs at circular stacks in which Method 2 in appendices A-1 and A-2 to 40 CFR part 60 is used and a default wall effects adjustment factor is applied; and
 - (IV) The data under 40 CFR 75.59(a)(7)(ix)(A) through (F) must be reported for all flow RATAs at rectangular stacks or ducts in which Method 2 in appendices A-1 and A-2 to 40 CFR part 60 is used and a wall effects adjustment factor is applied.
 - (x) For units using sorbent trap monitoring systems, the hourly dry gas meter readings taken between the initial and final meter readings for the data collection period;
- (C) Pounds of Hg emitted and heat input (if applicable) during the calendar half quarter and cumulative pounds of Hg emitted in the year-to-date (rounded to the nearest thousandth);. Each report must be submitted to the Department within 30 days following the end of each calendar half.
- (E) Unit or stack operating hours for quarter, cumulative unit or stack operating hours for year-to-date; and
- (F) Reporting period heat input (if applicable) and cumulative, year-to-date heat input.
- (b) Compliance certification.
 - (A) The owner or operator must certify that the monitoring plan information in each quarterly report (i.e., component and system identification codes, formulas, etc.) represent current operating conditions for the affected unit(s)
 - (B) The owner or operator must submit and sign a compliance certification in support of each quarterly emissions monitoring report based on reasonable inquiry of those persons with primary responsibility

~~for ensuring that all of the unit's emissions are correctly and fully monitored. The certification must state that:~~

- ~~(i) The monitoring data submitted were recorded in accordance with the applicable requirements of OAR 340-228-0609 through 0637 and 40 CFR part 75, including the quality assurance procedures and specifications; and~~
- ~~(ii) With regard to a unit with add-on Hg emission controls, that for all hours where data are substituted in accordance with OAR 340-228-0631(2), the add-on emission controls were operating within the range of parameters listed in the quality assurance plan for the unit, and that the substitute values do not systematically underestimate Hg emissions.~~
- ~~(5) Reporting data prior to initial certification. If, by the applicable compliance date under OAR 340-228-0609(2), the owner or operator of a coal-fired electric generating unit has not successfully completed all required certification tests for any monitoring system(s), he or she must determine, record and report hourly data prior to initial certification using one of the following procedures, for the monitoring system(s) that are uncertified:~~
 - ~~(a) For Hg concentration and flow monitoring systems, report the maximum potential Hg concentration of Hg as defined in OAR 340-228-0602(25) and the maximum potential flow rate, as defined in section 2.1.4.1 of appendix A to 40 CFR part 75; or~~
 - ~~(b) For any unit, report data from the reference methods in OAR 340-228-0602(33) or in 40 CFR 75.22; or~~
 - ~~(c) For any unit that is required to report heat input, report (as applicable) the maximum potential flow rate, as defined in section 2.1.4.1 of appendix A to 40 CFR part 75, the maximum potential CO₂ concentration, as defined in section 2.1.3.1 of appendix A to 40 CFR part 75, the minimum potential O₂ concentration, as defined in section 2.1.3.2 of appendix A to 40 CFR part 75, and the minimum potential percent moisture, as defined in section 2.1.5 of appendix A to 40 CFR part 75.~~

Stat. Auth.: ORS 468.020 & 468A.310

Stats. Implemented: ORS 468A.025

Hist.: DEQ 15-2008, f. & cert. ef 12-31-08

DIVISION 232

EMISSION STANDARDS FOR VOC POINT SOURCES

340-232-0085

Gasoline Delivery Vessel(s)

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

- (a) Each delivery vessel uses submerged fill when receiving gasoline; and
- (b) The displaced vapors from filling each tank are prevented from being released to the atmosphere through use of a vapor tight vapor balance system, or equivalent system as approved in writing by ~~the Department~~[DEQ](#). All equipment associated with the vapor balance system shall be maintained to be vapor tight and in good working order.

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

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

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

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

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

(46) Compliance with subsection (1)(b) ~~and (2)(b)~~ of this rule shall be determined by verification of use of equipment approved by ~~the Department~~ [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 ~~the~~ [Department](#) [DEQ](#).

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

[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.025

Stats. Implemented: ORS 468A.025

Hist.: DEQ 20-1998, f. & cert. ef. 10-12-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0125

DIVISION 238

NEW SOURCE PERFORMANCE STANDARDS

340-238-0040

Definitions

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

(1) "Administrator" means the Administrator of the EPA or authorized representative.

(2) "Affected facility" means, with reference to a stationary source, any apparatus to which a standard is applicable.

(3) "Capital expenditures" means an expenditure for a physical or operational change to an existing facility that exceeds the product of the applicable "annual asset guideline repair allowance percentage" specified in **Internal Revenue Service (IRS) Publication 534** and the existing facility's basis, as defined by section 1012 of the Internal Revenue Code. However, the total expenditure for a physical or operational change to an existing facility must not be reduced by any "excluded additions" as defined in IRS Publication 534, as would be done for tax purposes.

(4) "CFR" means Code of Federal Regulations and, unless otherwise expressly identified, refers to the July 1, 2012²⁰ edition.

- (5) "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.
- (6) "Commenced", with respect to the definition of "new source" in section 111(a)(2) of the federal Clean Air Act, means that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.
- (7) "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.
- (8) "Existing facility", with reference to a stationary source, means any apparatus of the type for which a standard is promulgated in 40 CFR Part 60, and the construction or modification of which commenced before the date of proposal by EPA of that standard; or any apparatus that could be altered in such a way as to be of that type.
- (9) "Fixed capital cost" means the capital needed to provide all the depreciable components.
- (10) "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.
- (11) "Modification:"
- (a) except as provided in subsection (b) of this section, means any physical change in, or change in the method of operation of, an existing facility that increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or that results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted;
- (b) As used in OAR 340-238-0100 means an action that results in an increase in the design capacity of a landfill.
- (12) "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).
- (13) "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.
- (14) "Reconstruction" means the replacement of components of an existing facility to such an extent that:
- (a) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility; and
- (b) It is technologically and economically feasible to meet the applicable standards set forth in 40 CFR Part 60.
- (15) "Reference method" means any method of sampling and analyzing for an air pollutant as specified in 40 CFR Part 60.
- (16) "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.
- (17) "Standard" means a standard of performance proposed or promulgated under 40 CFR Part 60.

(18) "State Plan" means a plan developed for the control of a designated pollutant provided under 40 CFR Part 60.

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 22-1982, f. & ef. 10-21-82; DEQ 17-1983, f. & ef. 10-19-83; DEQ 16-1984, f. & ef. 8-21-84; DEQ 15-1985, f. & ef. 10-21-85; DEQ 19-1986, f. & ef. 11-7-86; DEQ 17-1987, f. & ef. 8-24-87; DEQ 24-1989, f. & cert. ef. 10-26-89; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 17-1993, f. & cert. ef. 11-4-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 27-1996, f. & cert. ef. 12-11-96; 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 340-025-0510; DEQ 22-2000, f. & cert. ef. 12-18-00; DEQ 4-2003, f. & cert. ef. 2-06-03; DEQ 2-2005, f. & cert. ef. 2-10-05; DEQ 2-2006, f. & cert. ef. 3-14-06; DEQ 13-2006, f. & cert. ef. 12-22-06; 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

340-238-0060

Federal Regulations Adopted by Reference

(1) Except as provided in section (2) of this rule, **40 CFR Part 60 Subparts A, D through XX, BBB through AAAA, CCCC, EEEE, LLLL, and KKKK** are by this reference adopted and incorporated herein, and 40 CFR Part 60 Subpart OOO is by this reference adopted and incorporated herein for major sources only.

(2) Where "Administrator" or "EPA" appears in 40 CFR Part 60, "~~Department~~DEQ" is substituted, except in any section of 40 CFR Part 60 for which a federal rule or delegation specifically indicates that authority must not be delegated to the state.

(3) 40 CFR Part 60 Subparts adopted by this rule are titled as follows:

(a) Subpart A — General Provisions;

(b) Subpart D — Fossil-fuel-fired steam generators for which construction is commenced after August 17, 1971;

(c) Subpart Da — Electric utility steam generating units for which construction is commenced after September 18, 1978;

(d) Subpart Db — Industrial-commercial-institutional steam generating units;

(e) Subpart Dc — Small industrial-commercial-institutional steam generating units;

(f) Subpart E — Incinerators;

(g) Subpart Ea — Municipal waste combustors for which construction is commenced after December 20, 1989 and on or before September 20, 1994;

(h) Subpart Eb — Municipal waste combustors for which construction is commenced after September 20, 1994;

(i) Subpart Ec — Hospital/Medical/Infectious waste incinerators that commenced construction after June 20, 1996, or for which modification is commenced after March 16, 1998;

(j) Subpart F — Portland cement plants;

(k) Subpart G — Nitric acid plants;

(l) Subpart H — Sulfuric acid plants;

(m) Subpart I — Hot mix asphalt facilities;

(n) Subpart J — Petroleum refineries;

(o) Subpart K — Storage vessels for petroleum liquids for which construction, reconstruction, or modification commenced after June 11, 1973, and before May 19, 1978;

- (p) Subpart Ka — Storage vessels for petroleum liquids for which construction, reconstruction, or modification commenced after May 18, 1978, and before July 23, 1984;
- (q) Subpart Kb — Volatile organic liquid storage vessels (including petroleum liquid storage vessels) for which construction, reconstruction, or modification commenced after July 23, 1984;
- (r) Subpart L — Secondary lead smelters;
- (s) Subpart M — Secondary brass and bronze production plants;
- (t) Subpart N — Primary emissions from basic oxygen process furnaces for which construction is commenced after June 11, 1973;
- (u) Subpart Na — Secondary emissions from basic oxygen process steelmaking facilities for which construction is commenced after January 20, 1983;
- (v) Subpart O — Sewage treatment plants;
- (w) Subpart P — Primary copper smelters;
- (x) Subpart Q — Primary Zinc smelters;
- (y) Subpart R — Primary lead smelters;
- (z) Subpart S — Primary aluminum reduction plants;
- (aa) Subpart T — Phosphate fertilizer industry: wet-process phosphoric acid plants;
- (bb) Subpart U — Phosphate fertilizer industry: superphosphoric acid plants;
- (cc) Subpart V — Phosphate fertilizer industry: diammonium phosphate plants;
- (dd) Subpart W — Phosphate fertilizer industry: triple superphosphate plants;
- (ee) Subpart X — Phosphate fertilizer industry: granular triple superphosphate storage facilities;
- (ff) Subpart Y — Coal preparation plants;
- (gg) Subpart Z — Ferroalloy production facilities;
- (hh) Subpart AA — Steel plants: electric arc furnaces constructed after October 21, 1974 and on or before August 17, 1983;
- (ii) Subpart AAa — Steel plants: electric arc furnaces and argon-oxygen decarburization vessels constructed after August 7, 1983;
- (jj) Subpart BB — Kraft pulp mills;
- (kk) Subpart CC — Glass manufacturing plants;
- (ll) Subpart DD — Grain elevators.
- (mm) Subpart EE — Surface coating of metal furniture;
- (nn) Subpart GG — Stationary gas turbines;
- (oo) Subpart HH — Lime manufacturing plants;
- (pp) Subpart KK — Lead-acid battery manufacturing plants;
- (qq) Subpart LL — Metallic mineral processing plants;
- (rr) Subpart MM — Automobile and light-duty truck surface coating operations;
- (ss) Subpart NN — Phosphate rock plants;
- (tt) Subpart PP — Ammonium sulfate manufacture;
- (uu) Subpart QQ — Graphic arts industry: publication rotogravure printing;
- (vv) Subpart RR — pressure sensitive tape and label surface coating operations;
- (ww) Subpart SS — Industrial surface coating: large appliances;
- (xx) Subpart TT — Metal coil surface coating;
- (yy) Subpart UU — Asphalt processing and asphalt roofing manufacture;
- (zz) Subpart VV — Equipment leaks of VOC in the synthetic organic chemicals manufacturing industry;
- (aaa) Subpart VVa — Equipment leaks of VOC in the synthetic organic chemicals manufacturing industry;
- (bbb) Subpart WW — Beverage can surface coating industry;

(ccc) Subpart XX — Bulk gasoline terminals;
 (ddd) Subpart BBB — Rubber tire manufacturing industry;
 (eee) Subpart DDD — Volatile organic compound (VOC) emissions for the polymer manufacture industry;
 (fff) Subpart FFF — Flexible vinyl and urethane coating and printing;
 (ggg) Subpart GGG — Equipment leaks of VOC in petroleum refineries;
 (hhh) Subpart GGGa — Equipment leaks of VOC in petroleum refineries;
 (iii) Subpart HHH — Synthetic fiber production facilities;
 (jjj) Subpart III — Volatile organic compound (VOC) emissions from the synthetic organic chemical manufacturing industry (SOCMI) air oxidation unit processes;
 (kkk) Subpart JJJ — Petroleum dry cleaners;
 (lll) Subpart KKK — Equipment leaks of VOC from onshore natural gas processing plants;
 (mmm) Subpart LLL — Onshore natural gas processing; SO₂ emissions;
 (nnn) Subpart NNN — Volatile organic compound (VOC) emissions from synthetic organic chemical manufacturing industry (SOCMI) distillation operations;
 (ooo) Subpart OOO — Nonmetallic mineral processing plants (adopted by reference for major sources only);
 (ppp) Subpart PPP — Wool fiberglass insulation manufacturing plants;
 (qqq) Subpart QQQ — VOC emissions from petroleum refinery wastewater systems;
 (rrr) Subpart RRR — Volatile organic compound emissions from synthetic organic chemical manufacturing industry (SOCMI) reactor processes;
 (sss) Subpart SSS — Magnetic tape coating facilities;
 (ttt) Subpart TTT — Industrial surface coating: surface coating of plastic parts for business machines;
 (uuu) Subpart UUU — Calciners and dryers in mineral industries;
 (vvv) Subpart VVV — Polymeric coating of supporting substrates facilities;
 (www) Subpart WWW — Municipal solid waste landfills, as clarified by OAR 340-238-0100;
 (xxx) Subpart AAAA — Small municipal waste combustion units;
 (yyy) Subpart CCCC — Commercial and industrial solid waste incineration units;
 (zzz) Subpart EEEE — Other solid waste incineration units;
[\(aaaa\) Subpart LLLL — Sewage sludge incineration units;](#)
 (bbbbaaaa) Subpart KKKK — Stationary combustion turbines.

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 16-1981, f. & ef. 5-6-81; sections (1) thru (12) of this rule renumbered to 340-025-0550 thru 340-025-0605; DEQ 22-1982, f. & ef. 10-21-82; DEQ 17-1983, f. & ef. 10-19-83; DEQ 16-1984, f. & ef. 8-21-84; DEQ 15-1985, f. & ef. 10-21-85; DEQ 19-1986, f. & ef. 11-7-86; DEQ 17-1987, f. & ef. 8-24-87; DEQ 24-1989, f. & cert. ef. 10-26-89; DEQ 17-1993, f. & cert. ef. 11-4-93; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 27-1996, f. & cert. ef. 12-11-96; 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 340-025-0535; DEQ 22-2000, f. & cert. ef. 12-18-00; DEQ 4-2003, f. & cert. ef. 2-06-03; DEQ 2-2005, f. & cert. ef. 2-10-05; DEQ 2-2006, f. & cert. ef. 3-14-06; DEQ 13-2006, f. & cert. ef. 12-22-06; DEQ 15-2008, f. & cert. ef. 12-31-08; DEQ 1-2011, f. & cert. ef. 2-24-11

DIVISION 244

OREGON FEDERAL HAZARDOUS AIR POLLUTANT PROGRAM

General Provisions for Stationary Sources

340-244-0030

Definitions

The definitions in OAR 340-200-0020, 340-218-0030 and this rule apply to this division. If the same term is defined in this rule and OAR 340-200-0020 or 340-218-0030, the definition in this rule applies to this division.

~~(1) "Accidental Release" means an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source.~~

~~(1) "Affected source" is as defined in 40 CFR 63.2.~~

(2) "Annual throughput" means the amount of gasoline transferred into a gasoline dispensing facility during 12 consecutive months.

(3) "Area Source" means any stationary source which has the potential to emit hazardous air pollutants but is not a major source of hazardous air pollutants.

(4) "CFR" means Code of Federal Regulations and, unless otherwise expressly identified, refers to the July 1, 201~~2~~⁰ edition.

(5) "Construct a major source" means to fabricate, erect, or install at any greenfield site a stationary source or group of stationary sources which is located within a contiguous area and under common control and which emits or has the potential to emit 10 tons per year of any HAPs or 25 tons per year of any combination of HAP, or to fabricate, erect, or install at any developed site a new process or production unit which in and of itself emits or has the potential to emit 10 tons per year of any HAP or 25 tons per year of any combination of HAP, unless the process or production unit satisfies criteria in paragraphs (a) through (f) of this definition:

(a) All HAP emitted by the process or production unit that would otherwise be controlled under the requirements of 40 CFR Part 63, Subpart B will be controlled by emission control equipment which was previously installed at the same site as the process or production unit;

(b) ~~The Department~~DEQ has determined within a period of 5 years prior to the fabrication, erection, or installation of the process or production unit that the existing emission control equipment represented the best available control technology (BACT), lowest achievable emission rate (LAER) under 40 CFR part 51 or 52, toxics-best available control technology (T-BACT), or MACT based on State air toxic rules for the category of pollutants which includes those HAP to be emitted by the process or production unit; or ~~the Department~~DEQ determines that the control of HAP emissions provided by the existing equipment will be equivalent to that level of control currently achieved by other well-controlled similar sources (i.e., equivalent to the level of control that would be provided by a current BACT, LAER, T-BACT, or State air toxic rule MACT determination).

(c) ~~The Department~~DEQ determines that the percent control efficiency for emission of HAP from all sources to be controlled by the existing control equipment will be equivalent to the percent control efficiency provided by the control equipment prior to the inclusion of the new process or production unit;

(d) ~~The Department~~DEQ has provided notice and an opportunity for public comment concerning its determination that criteria in paragraphs (a), (b), and (c) of this definition apply and concerning the continued adequacy of any prior LAER, BACT, T-BACT, or State air toxic rule MACT determination;

(e) If any commenter has asserted that a prior LAER, BACT, T-BACT, or State air toxic rule MACT determination is no longer adequate, ~~the Department~~DEQ has determined that the level of control required by that prior determination remains adequate; and

- (f) Any emission limitations, work practice requirements, or other terms and conditions upon which the above determinations by ~~the Department~~ [DEQ](#) are predicated will be construed by ~~the Department~~ [DEQ](#) as applicable requirements under section 504(a) and either have been incorporated into any existing Title V permit for the affected facility or will be incorporated into such permit upon issuance.
- (6) "Dual-point vapor balance system" means a type of vapor balance system in which the storage tank is equipped with an entry port for a gasoline fill pipe and a separate exit port for a vapor connection.
- (7) "Emissions Limitation" and "Emissions Standard" mean a requirement adopted by ~~the Department~~ [DEQ](#) or Regional Agency, or proposed or promulgated by the Administrator of the EPA, which limits the quantity, rate, or concentration of emissions of 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.
- (8) "Equipment leaks" means leaks from pumps, compressors, pressure relief devices, sampling connection systems, open ended valves or lines, valves, connectors, agitators, accumulator vessels, and instrumentation systems in hazardous air pollutant service.
- (9) "Existing Source" means any source, the construction of which commenced prior to proposal of an applicable standard under sections 112 or 129 of the FCAA.
- (10) "Facility" means all or part of any public or private building, structure, installation, equipment, or vehicle or vessel, including but not limited to ships.
- (11) ~~"Gasoline"~~ means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals (4.0 psi) or greater, which is used as a fuel for internal combustion engines.
- (12) ~~"Gasoline cargo tank"~~ means a delivery tank truck or railcar which is loading or unloading gasoline, or which has loaded or unloaded gasoline on the immediately previous load.
- (13) ~~"Gasoline dispensing facility (GDF)"~~ means any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine, including a nonroad vehicle or nonroad engine used solely for competition. These facilities include, but are not limited to, facilities that dispense gasoline into on- and off-road, street, or highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment, generators, pumps, and other gasoline fueled engines and equipment. In Clackamas, Multnomah and Washington Counties, the Medford-Ashland Air Quality Maintenance Area, and the Salem-Keizer Area Transportation Study area, "gasoline dispensing facility" ~~includes~~ means any stationary facility which dispenses gasoline into the fuel tank of ~~an motor vehicle, boat, or~~ airplane.
- (14) "Hazardous Air Pollutant" (HAP) means an air pollutant listed by the EPA pursuant to section 112(b) of the FCAA or determined by the Commission to cause, or reasonably be anticipated to cause, adverse effects to human health or the environment.
- (15) "Major Source" means 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 considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants. The EPA may establish a lesser quantity, or in the case of radionuclides different criteria, for a major source on the basis of the potency of the air pollutant, persistence, potential for bioaccumulation, other characteristics of the air pollutant, or other relevant factors.
- (16) "Maximum Achievable Control Technology (MACT)" means an emission standard applicable to major sources of hazardous air pollutants that requires the maximum degree of reduction in emissions deemed achievable for either new or existing sources.

(17) ~~"Monthly throughput"~~ means the total volume of gasoline that is loaded into, or dispensed from, all gasoline storage tanks at each GDF during a month. Monthly throughput is calculated by summing the volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the current day, plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the previous 364 days, and then dividing that sum by 12.

(18) "Motor vehicle" means any self-propelled vehicle designed for transporting persons or property on a street or highway.

(19) "Nonroad engine" means an internal combustion engine (including the fuel system) that is not used in a motor vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under section 7411 of this title or section 7521 of this title.

(20) "Nonroad vehicle" means a vehicle that is powered by a nonroad engine, and that is not a motor vehicle or a vehicle used solely for competition.

~~(21)~~ (18) "New Source" means a stationary source, the construction of which is commenced after proposal of a federal MACT or January 3, 1993 of this Division, whichever is earlier.

~~(22)~~ (19) "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, shall be treated as part of its design if the limitation is enforceable by the EPA. This section does not alter or affect the use of this section for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder. Secondary emissions shall not be considered in determining the potential to emit of a source.

~~(23)~~ (20) "Reconstruct a Major Source" means the replacement of components at an existing process or production unit that in and of itself emits or has the potential to emit 10 tons per year of any HAP or 25 tons per year of any combination of HAP, whenever: the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable process or production unit; and; it is technically and economically feasible for the reconstructed major source to meet the applicable maximum achievable control technology emission limitation for new sources established under 40 CFR Part 63 Subpart B.

~~(24)~~ (21) "Regulated Air Pollutant" as used in this Division means:

(a) Any pollutant listed under OAR 340-244-00400-00400 or ~~340-244-0230~~; or

(b) Any pollutant that is subject to a standard promulgated pursuant to Section 129 of the Act.

~~(25)~~ (22) "Section 112(n)" means that subsection of the FCAA that includes requirements for the EPA to conduct studies on the hazards to public health prior to developing emissions standards for specified categories of hazardous air pollutant emission sources.

~~(26)~~ (23) "Section 112(r)" means that subsection of the FCAA that includes requirements for the EPA promulgate regulations for the prevention, detection and correction of accidental releases.

~~(27)~~ (24) "Solid Waste Incineration Unit" as used in this Division shall have the same meaning as given in Section 129(g) of the FCAA.

~~(28)~~ (25) "Stationary Source" ~~means:~~

~~(a) As used in OAR 340 division 244, means any building, structure, facility, or installation which emits or may emit any regulated air pollutant;~~

~~(b) As used in OAR 340-244-0230 means any buildings, structures, equipment, installations, or substance emitting stationary activities:~~

~~(A) That belong to the same industrial group;~~

~~(B) That are located on one or more contiguous properties;~~

~~(C) That are under the control of the same person (or persons under common control); and~~
~~(D) From which an accidental release may occur.~~

(296) ~~"Submerged filling"~~ means, ~~for the purposes of this subpart,~~ 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.

(3027) ~~"Topping off"~~ means, in the absence of equipment malfunction, continuing to fill a gasoline tank after the nozzle has clicked off.

(3128) ~~"Vapor balance system"~~ means a combination of pipes and hoses that create a closed system between the vapor spaces of an unloading gasoline cargo tank and a receiving storage tank such that vapors displaced from the storage tank are transferred to the gasoline cargo tank being unloaded.

(3229) ~~"Vapor-tight"~~ means equipment that allows no loss of vapors. Compliance with vapor-tight requirements can be determined by checking to ensure that the concentration at a potential leak source is not equal to or greater than 100 percent of the Lower Explosive Limit when measured with a combustible gas detector, calibrated with propane, at a distance of 1 inch from the source.

(339) ~~"Vapor-tight gasoline cargo tank"~~ means a gasoline cargo tank which has demonstrated within the 12 preceding months that it meets the annual certification test requirements in 40 CFR 63.11092(f). [Publications: Publications referenced are available from ~~the agency~~ [DEQ](#).]

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

Stats. Implemented: ORS 468A.040

Hist.: DEQ 13-1993, f. & cert. ef. 9-24-93; DEQ 18-1993, 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 20-1997, f. & cert. ef. 9-25-97; DEQ 18-1998, f. & cert. ef. 10-5-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-032-0120; DEQ 2-2005, f. & cert. ef. 2-10-05; DEQ 2-2006, f. & cert. ef. 3-14-06; DEQ 13-2006, f. & cert. ef. 12-22-06; 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

Emission Standards

340-244-0210

Emissions Limitation for Existing Sources

(1) Federal MACT. Existing major and area sources must comply with the applicable emissions standards for existing sources promulgated by the EPA pursuant to section 112(d), section 112(n), or section 129 of the FCAA and adopted by rule within this Division.

(2) State MACT. If the EPA fails to meet its schedule for promulgating a MACT standard for a source category or subcategory, ~~the Department~~ [DEQ](#) must approve HAP emissions limitations for existing major sources within that category or subcategory according to 40 CFR Part 63, Subpart B.

(a) The owner or operator of each existing major source within that category will file permit applications in accordance with OAR 340-218-0040 and 40 CFR Part 63, Subpart B.

(b) If, after a permit has been issued, the EPA promulgates a MACT standard applicable to a source that is more stringent than the one established pursuant to this section, ~~the Department~~ [DEQ](#) ~~may~~ [must](#) revise the permit upon the next renewal to reflect the standard promulgated by the EPA. The source will be given a reasonable time to comply, but no longer than 8 years after the standard is promulgated;

(c) ~~The Department~~ [DEQ](#) will not establish a case-by-case State MACT:

(A) For existing solid waste incineration units where an emissions standard will be established for these units by the EPA pursuant to section 111 of the FCAA. These sources are subject to applicable emissions standards under OAR chapter 340, division 230; or

(B) For existing major HAP sources where an emissions standard or alternative control strategy will be established by the EPA pursuant to section 112(n) of the FCAA.

(3) Compliance schedule:

(a) The owner or operator of the source must comply with the emission limitation:

(A) Within the time frame established in the applicable Federal MACT standard, but in no case later than three years from the date of federal promulgation of the applicable MACT requirements; or

(B) Within the time frame established by ~~the Department~~ DEQ where a state-determined MACT has been established or a case-by-case determination has been made.

(b) Notwithstanding the requirements of this section, no existing source that has installed Best Available Control Technology or has been required to meet Lowest Achievable Emission Rate before the promulgation of a federal MACT applicable to that emissions unit is ~~be~~ required to comply with such MACT standard until 5 years after the date on which such installation or reduction has been achieved, as determined by ~~the Department~~ DEQ.

Stat. Auth.: ORS 468 & 468A

Stats. Implemented: ORS 468A.310

Hist.: DEQ 13-1993, f. & cert. ef. 9-24-93; DEQ 7-1998, f. & cert. ef. 5-5-98; DEQ 18-1998, f. & cert. ef. 10-5-98, Renumbered from 340-032-2500; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-032-0505; DEQ 4-2003, f. & cert. ef. 2-06-03; DEQ 2-2005, f. & cert. ef. 2-10-05; DEQ 15-2008, f. & cert. ef. 12-31-08

340-244-0220

Federal Regulations Adopted by Reference

(1) Except as provided in sections (2) and (3) of this rule, **40 CFR Part 61, Subparts A, C through F, J, L, N through P, V, and Y through FF and 40 CFR Part 63, Subparts A, F through J, L through O, Q through Y, AA through EE, GG through MM, OO through YY, CCC through EEE, GGG through JJJ, LLL through RRR, TTT through VVV, XXX, AAAA, CCCC through KKKK, MMMM through YYYY, AAAAA through CCCCC, EEEEE through NNNNN, PPPPP through UUUUU, WWWWW, YYYYY, ZZZZZ, BBBBBB, DDDDDD through HHHHHH, LLLLLL through TTTTTT, and VVVVVV through ~~DDDDDD~~ EEEEEEE, and HHHHHHH** are adopted by reference and incorporated herein.

(2) Where "Administrator" or "EPA" appears in 40 CFR Part 61 or 63, "~~DEQ~~Department" is substituted, except in any section of 40 CFR Part 61 or 63, for which a federal rule or delegation specifically indicates that authority will not be delegated to the state.

(3) 40 CFR Part 63 Subpart M -- Dry Cleaning Facilities using Perchloroethylene: The exemptions in 40 CFR 63.320(d) and (e) do not apply.

(4) 40 CFR Part 61 Subparts adopted by this rule are titled as follows:

(a) Subpart A -- General Provisions;

(b) Subpart C -- Beryllium;

(c) Subpart D -- Beryllium Rocket Motor Firing;

(d) Subpart E -- Mercury;

(e) Subpart F -- Vinyl Chloride;

(f) Subpart J -- Equipment Leaks (Fugitive Emission Sources) of Benzene;

(g) Subpart L -- Benzene Emissions from Coke By-Product Recovery Plants;

- (h) Subpart N -- Inorganic Arsenic Emissions from Glass Manufacturing Plants;
 - (i) Subpart O -- Inorganic Arsenic Emissions from Primary Copper Smelters;
 - (j) Subpart P -- Inorganic Arsenic Emissions from Arsenic Trioxide and Metal Arsenic Facilities;
 - (k) Subpart V -- Equipment Leaks (Fugitive Emission Sources);
 - (l) Subpart Y -- Benzene Emissions from Benzene Storage Vessels;
 - (m) Subpart BB -- Benzene Emissions from Benzene Transfer Operations; and
 - (n) Subpart FF -- Benzene Waste Operations.
- (5) 40 CFR Part 63 Subparts adopted by this rule are titled as follows:
- (a) Subpart A -- General Provisions;
 - (b) Subpart F -- SOCMi;
 - (c) Subpart G -- SOCMi -- Process Vents, Storage Vessels, Transfer Operations, and Wastewater;
 - (d) Subpart H -- SOCMi -- Equipment Leaks;
 - (e) Subpart I -- Certain Processes Subject to the Negotiated Regulation for Equipment Leaks;
 - (f) Subpart J -- Polyvinyl Chloride and Copolymers Production;
 - (g) Subpart L -- Coke Oven Batteries;
 - (h) Subpart M -- Perchloroethylene Air Emission Standards for Dry Cleaning Facilities;
 - (i) Subpart N -- Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks;
 - (j) Subpart O -- Ethylene Oxide Emissions Standards for Sterilization Facilities;
 - (k) Subpart Q -- Industrial Process Cooling Towers;
 - (l) Subpart R -- Gasoline Distribution (Bulk Gasoline Terminals and Pipeline Breakout Stations);
 - (m) Subpart S -- Pulp and Paper Industry;
 - (n) Subpart T -- Halogenated Solvent Cleaning;
 - (o) Subpart U -- Group I Polymers and Resins;
 - (p) Subpart W -- Epoxy Resins and Non-Nylon Polyamides Production;
 - (q) Subpart X -- Secondary Lead Smelting;
 - (r) Subpart Y -- Marine Tank Vessel Loading Operations;
 - (s) Subpart AA -- Phosphoric Acid Manufacturing Plants;
 - (t) Subpart BB -- Phosphate Fertilizer Production Plants;
 - (u) Subpart CC -- Petroleum Refineries;
 - (v) Subpart DD -- Off-Site Waste and Recovery Operations;
 - (w) Subpart EE -- Magnetic Tape Manufacturing Operations;
 - (x) Subpart GG -- Aerospace Manufacturing and Rework Facilities;
 - (y) Subpart HH -- Oil and Natural Gas Production Facilities;
 - (z) Subpart II -- Shipbuilding and Ship Repair (Surface Coating);
 - (aa) Subpart JJ -- Wood Furniture Manufacturing Operations;
 - (bb) Subpart KK -- Printing and Publishing Industry;
 - (cc) Subpart LL -- Primary Aluminum Reduction Plants;
 - (dd) Subpart MM -- Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semi-Chemical Pulp Mills;
 - (ee) Subpart OO -- Tanks -- Level 1;
 - (ff) Subpart PP -- Containers;
 - (gg) Subpart QQ -- Surface Impoundments;
 - (hh) Subpart RR -- Individual Drain Systems;
 - (ii) Subpart SS -- Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process;

(jj) Subpart TT -- Equipment Leaks -- Control Level 1;
 (kk) Subpart UU -- Equipment Leaks -- Control Level 2;
 (ll) Subpart VV -- Oil-Water Separators and Organic-Water Separators;
 (mm) Subpart WW -- Storage Vessels (Tanks) -- Control Level 2;
 (nn) Subpart XX -- Ethylene Manufacturing Process Units: Heat Exchange Systems and Waste Operations;
 (oo) Subpart YY -- Generic Maximum Achievable Control Technology Standards;
 (pp) Subpart CCC -- Steel Pickling -- HCl Process Facilities and Hydrochloric Acid Regeneration Plants;
 (qq) Subpart DDD -- Mineral Wool Production;
 (rr) Subpart EEE -- Hazardous Waste Combustors;
 (ss) Subpart GGG -- Pharmaceuticals Production;
 (tt) Subpart HHH -- Natural Gas Transmission and Storage Facilities;
 (uu) Subpart III -- Flexible Polyurethane Foam Production;
 (vv) Subpart JJJ -- Group IV Polymers and Resins;
 (ww) Subpart LLL -- Portland Cement Manufacturing Industry;
 (xx) Subpart MMM -- Pesticide Active Ingredient Production;
 (yy) Subpart NNN -- Wool Fiberglass Manufacturing;
 (zz) Subpart OOO -- Manufacture of Amino/Phenolic Resins;
 (aaa) Subpart PPP -- Polyether Polyols Production;
 (bbb) Subpart QQQ -- Primary Copper Smelting;
 (ccc) Subpart RRR -- Secondary Aluminum Production;
 (ddd) Subpart TTT -- Primary Lead Smelting;
 (eee) Subpart UUU -- Petroleum Refineries -- Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units;
 (fff) Subpart VVV -- Publicly Owned Treatment Works;
 (ggg) Subpart XXX -- Ferroalloys Production: Ferromanganese and Silicomanganese;
 (hhh) Subpart AAAA -- Municipal Solid Waste Landfills;
 (iii) Subpart CCCC -- Manufacturing of Nutritional Yeast;
 (jjj) Subpart DDDD -- Plywood and Composite Wood Products;
 (kkk) Subpart EEEE -- Organic Liquids Distribution (non-gasoline);
 (lll) Subpart FFFF -- Miscellaneous Organic Chemical Manufacturing;
 (mmm) Subpart GGGG -- Solvent Extraction for Vegetable Oil Production;
 (nnn) Subpart HHHH -- Wet Formed Fiberglass Mat Production;
 (ooo) Subpart IIII -- Surface Coating of Automobiles and Light-Duty Trucks;
 (ppp) Subpart JJJJ -- Paper and Other Web Coating;
 (qqq) Subpart KKKK -- Surface Coating of Metal Cans;
 (rrr) Subpart MMMM -- Surface Coating of Miscellaneous Metal Parts and Products;
 (sss) Subpart NNNN -- Surface Coating of Large Appliances;
 (ttt) Subpart OOOO -- Printing, Coating, and Dyeing of Fabrics and Other Textiles;
 (uuu) Subpart PPPP -- Surface Coating of Plastic Parts and Products;
 (vvv) Subpart QQQQ -- Surface Coating of Wood Building Products;
 (www) Subpart RRRR -- Surface Coating of Metal Furniture;
 (xxx) Subpart SSSS -- Surface Coating of Metal Coil;
 (yyy) Subpart TTTT -- Leather Finishing Operations;
 (zzz) Subpart UUUU -- Cellulose Production Manufacturing;

(aaaa) Subpart VVVV -- Boat Manufacturing;
 (bbbb) Subpart WWWW -- Reinforced Plastics Composites Production;
 (cccc) Subpart XXXX -- Rubber Tire Manufacturing;
 (dddd) Subpart YYYY -- Stationary Combustion Turbines;
 (eeee) Subpart AAAAA -- Lime Manufacturing;
 (ffff) Subpart BBBB -- Semiconductor Manufacturing;
 (gggg) Subpart CCCCC -- Coke Ovens: Pushing, Quenching & Battery Stacks;
 (hhhh) Subpart EEEEE -- Iron and Steel Foundries;
 (iiii) Subpart FFFFF -- Integrated Iron and Steel Manufacturing Facilities;
 (jjjj) Subpart GGGG -- Site Remediation;
 (kkkk) Subpart HHHH -- Misc. Coating Manufacturing;
 (llll) Subpart IIII -- Mercury Cell Chlor-Alkali Plants;
 (mmmm) Subpart JJJJ -- Brick and Structural Clay Products Manufacturing;
 (nnnn) Subpart KKKK -- Clay Ceramics Manufacturing;
 (oooo) Subpart LLLL -- Asphalt Processing & Asphalt Roofing Manufacturing;
 (pppp) Subpart MMMM -- Flexible Polyurethane Foam Fabrication Operations;
 (qqqq) Subpart NNNN -- Hydrochloric Acid Production;
 (rrrr) Subpart PPPP -- Engine Tests Cells/Stands;
 (ssss) Subpart QQQQ -- Friction Materials Manufacturing Facilities;
 (tttt) Subpart RRRR -- Taconite Iron Ore Processing;
 (uuuu) Subpart SSSS -- Refractory Products Manufacturing;
 (vvvv) Subpart TTTT -- Primary Magnesium Refining;
 ([www](#)) Subpart UUUU -- Coal- and Oil-Fired Electric Utility Steam Generating Units;
 (~~xxxx~~~~www~~) Subpart WWWW -- Area Sources: Hospital Ethylene Oxide Sterilization;
 (~~yyyy~~~~xxxx~~) Subpart YYYY -- Area Sources: Electric Arc Furnace Steelmaking Facilities;
 (~~zzzz~~~~yyyy~~) Subpart ZZZZ -- Area Sources: Iron and Steel Foundries;
 (~~aaaa~~~~zzzz~~) Subpart BBBB -- Area Sources: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities;
 (~~bbbb~~~~aaaa~~) Subpart DDDDD -- Area Sources: Polyvinyl Chloride and Copolymers Production;
 (~~cccc~~~~bbbb~~) Subpart EEEEE -- Area Sources: Primary Copper Smelting;
 (~~dddd~~~~eeee~~) Subpart FFFFF -- Area Sources: Secondary Copper Smelting;
 (~~eeee~~~~dddd~~) Subpart GGGGG -- Area Sources: Primary Nonferrous Metals -- Zinc, Cadmium, and Beryllium;
 (~~ffff~~~~eeee~~) Subpart HHHHH -- Area Sources: Paint Stripping and Miscellaneous Surface Coating Operations;
 (~~gggg~~~~ffff~~) Subpart LLLLL -- Area Sources: Acrylic and Modacrylic Fibers Production;
 (~~hhhh~~~~gggg~~) Subpart MMMM -- Area Sources: Carbon Black Production;
 (~~iiii~~~~hhhh~~) Subpart NNNN -- Area Sources: Chemical Manufacturing: Chromium Compounds;
 (~~jjjj~~~~iiii~~) Subpart OOOO -- Area Sources: Flexible Polyurethane Foam Production;
 (~~kkkk~~~~jjjj~~) Subpart PPPP -- Area Sources: Lead Acid Battery Manufacturing;
 (~~llll~~~~kkkk~~) Subpart QQQQ -- Area Sources: Wood Preserving;
 (~~mmmm~~~~llll~~) Subpart RRRR -- Area Sources: Clay Ceramics Manufacturing;
 (~~nnnn~~~~mmmm~~) Subpart SSSS -- Area Sources: Glass Manufacturing;
 (~~oooo~~~~nnnn~~) Subpart TTTT -- Area Sources: Secondary Nonferrous Metals Processing;
 (~~pppp~~~~oooo~~) Subpart VVVV -- Area Sources: Chemical Manufacturing;
 (~~qqqq~~~~pppp~~) Subpart WWWW -- Area Source: Plating and Polishing Operations;

(~~rrrrrrrrrrrr~~) Subpart XXXXXX -- Area Source: Nine Metal Fabrication and Finishing Source Categories;
 (~~sssssrrrrr~~) Subpart YYYYYY -- Area Sources: Ferroalloys Production Facilities;
 (~~ttttsssss~~) Subpart ZZZZZZ -- Area Sources: Aluminum, Copper, and Other Nonferrous Foundries;
 (~~uuuuuhttt~~) Subpart AAAAAAA -- Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing;
 (~~vvvvvuuuuu~~) Subpart BBBBBBBB -- Area Sources: Chemical Preparations Industry;
 (~~wwwwwvvvvv~~) Subpart CCCCCC -- Area Sources: Paints and Allied Products Manufacturing;
 (~~xxxxxwwwww~~) Subpart DDDDDDD -- Area Sources: Prepared Feeds Manufacturing;
 (~~yyyyy~~) Subpart EEEEEEE -- Area Sources: Gold Mine Ore Processing and Production;
 (~~zzzzz~~) Subpart HHHHHHH -- Polyvinyl Chloride and Copolymers Production.

Stat. Auth.: ORS 468.020

Stats. Implemented: ORS 468A.025

Hist.: [DEQ 16-1995, f. & cert. ef. 6-21-95; DEQ 28-1996, f. & cert. ef. 12-19-96; DEQ 18-1998, f. & cert. ef. 10-5-98]; [DEQ 18-1993, f. & cert. ef. 11-4-93; DEQ 32-1994, f. & cert. ef. 12-22-94]; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-032-0510, 340-032-5520; DEQ 11-2000, f. & cert. ef. 7-27-00; DEQ 15-2001, f. & cert. ef. 12-26-01; DEQ 4-2003, f. & cert. ef. 2-06-03; DEQ 2-2005, f. & cert. ef. 2-10-05; DEQ 2-2006, f. & cert. ef. 3-14-06; 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

340-244-0230

Accidental Release Prevention

- (1) List. For purposes of this rule, the Commission adopts by reference the list of regulated substances and thresholds for accidental release prevention codified at **40 CFR Part 68.130** which includes the Department of Transportation Division 1.1 Explosive Standards List (**49 CFR 172.101**). (**Table 3**).
- (2) Risk Management Plan. The owner or operator of a stationary source at which a substance listed in Table 3 is present in greater than the threshold quantity must prepare and implement a written risk management plan to detect and prevent or minimize accidental releases, and to provide a prompt emergency response to any such releases in order to protect human health and the environment.
- (3) Compliance. The owner or operator of a stationary source required to prepare and implement a risk management plan under section (2) of this rule must:
- (a) Register the risk management plan with the EPA;
 - (b) Submit copies of the risk management plan to the U.S. Chemical Safety and Hazard Identification Board, the Department, and the Oregon Office of Emergency Management; and
 - (c) Submit as part of the compliance certification required under OAR 340-218-0080, annual certification to the Department that the risk management plan is being properly implemented.
- (4) Compliance schedule:
- (a) The owner or operator of a stationary source must prepare and implement a risk management plan under section (2) of this rule according to the schedule promulgated by the EPA;
 - (b) The owner or operator of a stationary source that adds a listed substance or exceeds the threshold must prepare and implement a risk management plan according to the schedule promulgated by the EPA.

[ED. NOTE: Tables referenced are available from the agency.]

Stat. Auth.: ORS 468.020 & 468A.310

Stats. Implemented: ORS 468A.025

Hist.: DEQ 13-1993, f. & cert. ef. 9-24-93; DEQ 18-1993, f. & cert. ef. 11-4-93; DEQ 24-1994, f. &

~~cert. ef. 10-28-94; DEQ 18-1998, f. & cert. ef. 10-5-98; DEQ 14-1999, f. & cert. ef. 10-14-99; Renumbered from 340-032-5400; DEQ 11-2000, f. & cert. ef. 7-27-00; DEQ 15-2001, f. & cert. ef. 12-26-01; DEQ 4-2003, f. & cert. ef. 2-06-03; DEQ 2-2005, f. & cert. ef. 2-10-05~~

Emission Standards for Gasoline Dispensing Facilities

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 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 exceeds 480,000 gallons of gasoline or more;
 - (B) Whose average monthly throughput exceeds 100,000 gallons of gasoline or more; or
 - (C) In Clackamas, Multnomah, or Washington County whose annual throughput 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 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 ~~the Department~~ [DEQ](#), demonstrate their annual or ~~average~~ 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 a Title V Operating Permit. However, the owner or operator [of an affected source](#) must still apply for and obtain a 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 0252, except in the Portland AQMA, Medford AQMA, Salem SKATS, and Clackamas, Multnomah, and Washington Counties. In these geographic areas, aviation gasoline is subject to OAR 340-244-0236 through 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 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 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 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 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 0242, as applicable, no later than January 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 December 13, 2009 or upon startup, whichever is later.

(c) The owner or operator of a GDF subject to Table [24 of OAR 340-244-0242](#) ~~of this division~~ must comply no later than September 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 0242, as applicable, by no later than January 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 0242 no later than December 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 0242 no later than December 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 ~~January 10, 2011 or within 23~~ years after the affected source becomes subject to the control requirements in OAR 340-244-0242, ~~whichever is later~~.

(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 December 15, 2009 at a GDF whose average monthly throughput ~~is exceeds~~ 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 December 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 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 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 January 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 December 15, 2009, but before January 24, 2011, the owner or operator of the GDF must comply no later than January 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 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 1-2011, f. & cert. ef. 2-24-11

Emission 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 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(3) and 340-244-0250(2).

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

Stats. Implemented: ORS 468A.025

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, ~~T~~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), ~~or~~ (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 November 9, 2006, must be no more than 12 inches from the bottom of the storage tank.

(b) Submerged fill pipes installed after November 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 during the course of a site visit.

(4) Gasoline storage tanks with a capacity of less than 250 gallons are not ~~required to comply with~~ 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 ~~the Department~~ DEQ 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 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

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 ~~24 of this division~~ 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 ~~24~~ of this ~~rule~~ division.

(2) Gasoline storage tanks equipped with floating roofs or the equivalent are not ~~required to comply with~~ subject to the control requirements in section (1) of this rule.

(3) ~~The owner or operator of a~~ Cargo tanks unloading at a GDF must comply with the requirements of OAR 340-244-0240(1) and management practices in Table ~~35 of this division~~.

(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 OAR 340-244-0246.
- (c) The applicable recordkeeping and reporting requirements as specified in OAR 340-244-0248 and 0250.
- (d) The owner or operator [of a GDF](#) must have records available within 24 hours of a request by ~~the Department~~ [DEQ](#) 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 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

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

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 [24 of OAR 340-244-0242](#) ~~of this division~~, 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 October 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 [24 of OAR 340-244-0242](#) ~~of this division~~, 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), ~~or (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 November 30, 1983, and amended December 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 [24 of OAR 340-244-0242](#) ~~of this division~~, must demonstrate to ~~the Department~~ [DEQ](#) the equivalency of their vapor balance system to that described in Table [24 of OAR 340-244-0242](#) ~~of this division~~ 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 February 1, 2001, and October 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 [24 of OAR 340-244-0242](#) ~~of this division~~ and for the static pressure performance requirement in item 1(h) of Table [24 of OAR 340-244-0242](#) ~~of this division~~.

(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 ~~the Department~~ [DEQ](#) 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, the owner or operator [of a GDF](#) must make available to ~~the Department~~ [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 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

340-244-0246

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 April 24, 2013.](#) The Initial Notification must contain the information specified in paragraphs (1)(a)(A) through (C) of this rule. The notification must be submitted to EPA's Region 10 Office and ~~the Department~~ [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.](#)

~~(C)~~ (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 ~~the Department~~ DEQ, as specified in 40 CFR 63.13, within 60 days of the applicable ~~by the~~ 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, ~~and~~ must indicate whether the source has complied with the requirements of OAR 340-244-0232 through 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 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 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 ~~the Department~~ 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 ~~the Department~~ DEQ, as specified in 40 CFR 63.13, in accordance with the schedule specified in 40 CFR 63.9(h) ~~by the compliance date specified in OAR 340-244-0238~~. The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, ~~and~~ must indicate whether the source has complied with the requirements of OAR 340-244-0232 through 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) if~~ 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 (Bii) of this rule.

~~(Ai)~~ Achieves emissions reduction of at least 90 percent.

~~(Bii)~~ Operates using management practices at least as stringent as those in Table 24 of OAR 340-244-0242 of this division.

(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 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

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 ~~the Department~~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 ~~the Department~~DEQ during the course of a site visit.

(3) Each owner or operator of a gasoline cargo tank subject to the management practices in Table 35 of OAR 340-244-0242 of this division 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 ~~the Department~~DEQ 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 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

340-244-0250

Reporting Requirements

(1) Each owner or operator of a GDF subject to the management practices in OAR 340-244-0242 must report to ~~the Department~~ DEQ 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~~30 days of the completion of the performance testing.

(2) Annual report. Each owner or operator of a GDF 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.

(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 under OAR 340-200-0040.

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

Stats. Implemented: ORS 468A.025

Hist.: DEQ 15-2008, f. & cert. ef 12-31-08

TABLE 3 (OAR 340-244-0230)

LIST OF REGULATED TOXIC AND FLAMMABLE SUBSTANCES FOR PURPOSES OF ACCIDENTAL RELEASE PREVENTION

Part A—Regulated Toxic Substances

CAS Number	Chemical Name	Threshold Quantity (lbs.)
107-02-8	Acrolein [2-Propenal]	5,000
107-13-1	Acrylonitrile [2-Propenenitrile]	20,000
814-68-6	Acrylyl chloride [2-Propenoyl chloride]	5,000
107-18-6	Allyl alcohol [2-Propen-1-ol]	15,000
107-11-9	Allylamine [2-Propen-1-amine]	10,000
7664-41-7	Ammonia (anhydrous)	10,000
7664-41-7	Ammonia (concentration 20% or greater)	20,000
7784-34-1	Arsenous trichloride	15,000
7784-42-1	Arsine	1,000
10294-34-5	Boron trichloride [Borane, trichloro-]	5,000
7637-07-2	Boron trifluoride [Borane, trifluoro-]	5,000
353-42-4	Boron trifluoride compound with methyl ether (1:1) [Boron, trifluoro[oxybis[metane]]], T-4	15,000
7726-95-6	Bromine	10,000
75-15-0	Carbon disulfide	20,000
7782-50-5	Chlorine	2,500
10049-04-4	Chlorine dioxide [Chlorine oxide (ClO₂)]	1,000
67-66-3	Chloroform [Methane, trichloro-]	20,000
542-88-1	Chloromethyl ether [Methane, oxybis[chloro-]]	1,000
107-30-2	Chloromethyl methyl ether [Methane, chloromethoxy-]	5,000
4170-30-3	Crotonaldehyde [2-Butenal]	20,000

123-73-9	Crotonaldehyde, (E) [2-Butenal, (E)]	20,000
506-77-4	Cyanogen-chloride	10,000
108-91-8	Cyclohexylamine [Cyclohexanamine]	15,000
19287-45-7	Diborane	2,500
75-78-5	Dimethyldichlorosilane [Silane, dichlorodimethyl]	5,000
57-14-7	1,1-Dimethylhydrazine [Hydrazine, 1,1-dimethyl]	15,000
106-89-8	Epichlorohydrin [Oxirane, (chloromethyl)]	20,000
107-15-3	Ethylenediamine [1,2-Ethanediamine]	20,000
151-56-4	Ethyleneimine [Aziridine]	10,000
75-21-8	Ethylene-oxide [Oxirane]	10,000
7782-41-4	Fluorine	1,000
50-00-0	Formaldehyde (solution)	15,000
110-00-9	Furan	5,000
302-01-2	Hydrazine	15,000
7647-01-0	Hydrochloric acid (concentration 37% or greater)	15,000
74-90-8	Hydrocyanic acid	2,500
7647-01-0	Hydrogen-chloride (anhydrous) [Hydrochloric acid]	5,000
7664-39-3	Hydrogen-fluoride/Hydrofluoric acid (concentration 50% or greater) [Hydrofluoric acid]	1,000
7783-07-5	Hydrogen-selenide	500
7783-06-4	Hydrogen-sulfide	10,000

13463-40-6	Iron, pentacarbonyl [Iron carbonyl (Fe(CO)₅), (TB-5-11)-]	2,500
78-82-0	Isobutyronitrile [Propanenitrile, 2-methyl-]	20,000
108-23-6	Isopropyl chloroformate [Carbonochloridic acid, 1-methylethyl ester]	15,000
126-98-7	Methacrylonitrile [2-Propenenitrile, 2-methyl-]	10,000
74-87-3	Methyl chloride [Methane, chloro-]	10,000
79-22-1	Methyl chloroformate [Carbonochloridic acid, methylester]	5,000
60-34-4	Methyl hydrazine [Hydrazine, methyl-]	15,000
624-83-9	Methyl isocyanate [Methane, isocyanato-]	10,000
74-93-1	Methyl mercaptan [Methanethiol]	10,000
556-64-9	Methyl thiocyanate [Thiocyanic acid, methyl ester]	20,000
75-79-6	Methyltrichlorosilane [Silane, trichloromethyl-]	5,000
13463-39-3	Nickel carbonyl	1,000
7697-37-2	Nitric acid (concentration 80% or greater)	15,000
10102-43-9	Nitric oxide [Nitrogen oxide (NO)]	10,000
8014-95-7	Oleum (Fuming Sulfuric acid) [Sulfuric acid, mixture with sulfur trioxide] ¹	10,000
79-21-0	Peracetic acid [Ethaneperoxoic acid]	10,000
594-42-3	Perchloromethylmercaptan [Methanesulfenyl chloride, trichloro-]	10,000

75-44-5	Phosgene [Carbonic dichloride]	500
7803-51-2	Phosphine	5,000
10025-87-3	Phosphorus oxychloride [Phosphoryl chloride]	5,000
7719-12-2	Phosphorus trichloride [Phosphorus trichloride]	15,000
110-89-4	Piperidine	15,000
107-12-0	Propionitrile [Propanenitrile]	10,000
109-61-5	Propyl chloroformate [Carbonochloridic acid, propylester]	15,000
75-55-8	Propyleneimine [Aziridine, 2-methyl-]	10,000
75-56-9	Propylene oxide [Oxirane, methyl-]	10,000
7446-09-5	Sulfur dioxide (anhydrous)	5,000
7783-60-0	Sulfur tetrafluoride [Sulfur fluoride (SF4), (T-4)-]	2,500
7446-11-9	Sulfur trioxide	10,000
75-74-1	Tetramethyllead [Plumbane, tetramethyl-]	10,000
509-14-8	Tetranitromethane [Methane, tetranitro-]	10,000
7550-45-0	Titanium tetrachloride [Titanium chloride (TiCl4), (T-4)-]	2,500
584-84-9	Toluene 2,4-diisocyanate [Benzene, 2,4-diisocyanato-1-methyl-] [†]	10,000
91-08-7	Toluene 2,6-diisocyanate [Benzene, 1,3-diisocyanato-2-methyl-] [†]	10,000
26471-62-5	Toluene diisocyanate (unspecified isomer) [Benzene, 1,3-diisocyanatomethyl-] [†]	10,000

75-77-4	Trimethylchlorosilane [Silane, chlorotrimethyl-]	10,000
108-05-4	Vinyl acetate monomer [Acetic acid ethenyl ester]	15,000

¹ The mixture exemption in 40 CFR Part 68.115(b)(1) does not apply to the substance.

TABLE 3 (OAR 340-244-0230) LIST OF REGULATED TOXIC AND FLAMMABLE SUBSTANCES FOR PURPOSES OF ACCIDENTAL RELEASE PREVENTION		
Part B – Regulated Flammable Substances¹		
CAS Number	Chemical Name	Threshold Quantity (lbs.)
75-07-0	Acetaldehyde	10,000
74-86-2	Acetylene [Ethyne]	10,000
598-73-2	Bromotrifluorethylene [Ethene, bromotrifluoro-]	10,000
106-99-0	1,3-Butadiene	10,000
106-97-8	Butane	10,000
106-98-9	1-Butene	10,000
107-01-7	2-Butene	10,000
25167-67-3	Butene	10,000
590-18-1	2-Butene-cis	10,000
624-64-6	2-Butene-trans [2-Butene, (E)]	10,000
463-58-1	Carbon oxysulfide [Carbon oxide sulfide (COS)]	10,000
7791-21-1	Chlorine monoxide [Chlorine oxide]	10,000

557-98-2	2-Chloropropylene [1-Propene, 2-chloro-]	10,000
590-21-6	1-Chloropropylene [1-Propene, 1-chloro-]	10,000
460-19-5	Cyanogen [Ethanedinitrile]	10,000
75-19-4	Cyclopropane	10,000
4109-96-0	Dichlorosilane [Silane, dichloro-]	10,000
75-37-6	Difluoroethane [Ethane, 1,1-difluoro-]	10,000
124-40-3	Dimethylamine [Methanamine, N-methyl-]	10,000
463-82-1	2,2-Dimethylpropane [Propane, 2,2-dimethyl-]	10,000
74-84-0	Ethane	10,000
107-00-6	Ethyl acetylene [1-Butyne]	10,000
75-04-7	Ethylamine [Ethanamine]	10,000
75-00-3	Ethyl chloride [Ethane, chloro-]	10,000
74-85-1	Ethylene [Ethene]	10,000
60-29-7	Ethyl ether [Ethane, 1,1'-oxybis-]	10,000
75-08-1	Ethyl mercaptan [Ethanethiol]	10,000
109-95-5	Ethyl nitrite [Nitrous acid, ethyl ester]	10,000
1333-74-0	Hydrogen	10,000
75-28-5	Isobutane [Propane, 2-methyl]	10,000
78-78-4	Isopentane [Butane, 2-methyl-]	10,000
78-79-5	Isoprene [1,3-Butadiene, 2-methyl-]	10,000
75-31-0	Isopropylamine [2-Propanamine]	10,000
75-29-6	Isopropyl chloride [Propane, 2-chloro-]	10,000
74-82-8	Methane	10,000

74-89-5	Methylamine [Methanamine]	10,000
563-45-1	3-Methyl-1-butene	10,000
563-46-2	2-Methyl-1-butene	10,000
115-10-6	Methyl ether [Methane, oxybis-]	10,000
107-31-3	Methyl formate [Formic acid, methyl ester]	10,000
115-11-7	2-Methylpropene [1-Propene, 2-methyl-]	10,000
504-60-9	1,3-Pentadiene	10,000
109-66-0	Pentane	10,000
109-67-1	1-Pentene	10,000
646-04-8	2-Pentene, (E)-	10,000
627-20-3	2-Pentene, (Z)-	10,000
463-49-0	Propadiene [1,2-Propadiene]	10,000
74-98-6	Propane	10,000
115-07-1	Propylene [1-Propene]	10,000
74-99-7	Propyne [1-Propyne]	10,000
7803-62-5	Silane	10,000
116-14-3	Tetrafluoroethylene [Ethene, tetrafluoro-]	10,000
75-76-3	Tetramethylsilane [Silane, tetramethyl-]	10,000
10025-78-2	Trichlorosilane [Silane, trichloro-]	10,000
79-38-9	Trifluorochloroethylene [Ethene, chlorotrifluoro-]	10,000
75-50-3	Trimethylamine [Methanamine, N,N-dimethyl-]	10,000
689-97-4	Vinyl acetate [1-Buten-3-yne]	10,000

75-01-4	Vinyl chloride [Ethene, chloro-]	10,000
109-92-2	Vinyl ethyl ether [Ethene, ethoxy-]	10,000
75-02-5	Vinyl fluoride [Ethene, fluoro-]	10,000
75-35-4	Vinylidene chloride [Ethene, 1,1-dichloro-]	10,000
75-38-7	Vinylidene fluoride [Ethene, 1,1-difluoro-]	10,000
107-25-5	Vinyl methyl ether [Ethene, methoxy-]	10,000

~~*1 A flammable substance when used as a fuel or held for sale as a fuel at a retail facility is excluded from all provisions of 40 CFR part 68~~

~~Stat. Auth.: ORS 468.020 & 468A.310~~

~~Stat. Implemented: ORS 468A.025~~

~~Hist.: DEQ 13-1993, f. & cert. ef. 9-24-93; DEQ 18-1993, f. & cert. ef. 11-4-93; DEQ 24-1994, f. & ef. 10-28-94; DEQ 2-2005, f. & cert. ef. 2-10-05~~

TABLE 24 (OAR 340-244-0242) MANAGEMENT PRACTICES FOR GASOLINE DISPENSING FACILITIES SUBJECT TO STAGE I VAPOR CONTROLS	
If owning or operating	The owner or operator must
1. An existing GDF	The permittee must install and operate a vapor balance system on gasoline storage tanks that meets the design criteria in paragraphs (a) through (h). (a) All vapor connections and lines on the storage tank must be equipped with closures that seal upon disconnect. (b) The vapor line from the gasoline storage tank to the gasoline cargo tank must be vapor-tight, as defined in OAR 340-244-0030. (c) The vapor balance system must be

	designed such that the pressure in the tank truck does not exceed 18 inches water pressure or 5.9 inches water vacuum during product transfer. (d) The vapor recovery and product adaptors, and the method of connection with the delivery elbow, must be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations. (e) If a gauge well separate from the fill tube is used, it must be provided with a submerged drop tube that extends the same distance from the bottom of the storage tank as specified in OAR 340-244-0240(2). (f) Liquid fill connections for all systems must be equipped with vapor-tight caps. (g) Pressure/vacuum (PV) vent valves must be installed on the storage tank vent pipes. The pressure specifications for PV vent valves must be: a positive pressure setting of 2.5 to 6.0 inches of water and a negative pressure setting of 6.0 to 10.0 inches of water. The total leak rate of all PV vent valves at an affected facility, including connections, must not exceed 0.17 cubic foot per hour at a pressure of 2.0 inches of water and 0.63 cubic foot per hour at a vacuum of 4 inches of water. (h) The vapor balance system must be capable of meeting the static pressure performance requirement of the following equation: $P_f = 2e^{-500.887/v}$ Where: P_f = Minimum allowable final pressure, inches of water. v = Total ullage affected by the test,
--	--

	gallons. e = Dimensionless constant equal to approximately 2.718. 2 = The initial pressure, inches water.
2. For a new or reconstructed GDF with monthly throughput of 100,000 gallons of gasoline or more, or a new storage tank(s) at an existing GDF with monthly throughput of 100,000 gallons of gasoline or more	The permittee must install and operate a dual-point vapor balance system, as defined in OAR 340-244-0030, on each affected gasoline storage tank and comply with the design criteria in item 1 of this Table.

TABLE 35 (OAR 340-244-0242) MANAGEMENT PRACTICES FOR GASOLINE CARGO TANKS UNLOADING AT GASOLINE DISPENSING FACILITIES EQUIPPED WITH STAGE I VAPOR CONTROLS	
If owning or operating	The owner or operator must
A gasoline cargo tank	Not unload gasoline into a storage tank at a GDF with stage I vapor controls unless the following conditions are met: (i) All hoses in the vapor balance system are properly connected, (ii) The adapters or couplers that attach to the vapor line on the storage tank have closures that seal upon disconnect, (iii) All vapor return hoses, couplers, and adapters used in the gasoline delivery are vapor-tight, (iv) All tank truck vapor return equipment is compatible in size and forms a vapor-tight connection with the vapor balance equipment on the GDF storage tank, and (v) All hatches on the tank truck are closed

	and securely fastened. (vi) The filling of storage tanks at GDF must be limited to unloading by vapor-tight gasoline cargo tanks. Documentation that the cargo tank has met the specifications of EPA Method 27 must be carried on the cargo tank.
--	--