

Attachment A: Adopted Rules – Edits Incorporated

Landfill, Crematory and Non-Technical Update Rulemaking

Table Of Contents

Division 200 - GENERAL AIR POLLUTION PROCEDURES AND DEFINITIONS	2
Division 209 PUBLIC PARTICIPATION	49
Division 210 STATIONARY SOURCE NOTIFICATION REQUIREMENTS	51
Division 212 STATIONARY SOURCE TESTING AND MONITORING	57
Division 216 AIR CONTAMINANT DISCHARGE PERMITS	59
Division 226 GENERAL EMISSION STANDARDS	74
Division 230 INCINERATOR REGULATIONS	76
Division 232 EMISSION STANDARDS FOR VOC POINT SOURCES	77
Division 236 EMISSION STANDARDS FOR SPECIFIC INDUSTRIES	81
Division 239 - LANDFILL GAS EMISSIONS	90
Division 244 - OREGON FEDERAL HAZARDOUS AIR POLLUTANT PROGRAM	138
Table 1 Activities and Sources	148

Division 200 - GENERAL AIR POLLUTION PROCEDURES AND DEFINITIONS

340-200-0020

General Air Quality Definitions

As used in OAR chapter 340, divisions 200 through 268, unless specifically defined otherwise:

- (1) "Act" or "FCAA" means the Federal Clean Air Act, 42 U.S.C.A. § 7401 to 7671q.
- (2) "Activity" means any process, operation, action, or reaction (e.g., chemical) at a source that emits a regulated pollutant.
- (3) "Actual emissions" means the mass emissions of a regulated pollutant from an emissions source during a specified time period as set forth in OAR chapter 340, divisions 214, 220 and 222.
- (4) "Adjacent", as used in the definitions of major source and source and in OAR 340-216-0070, 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 pollutant from one or more designated activities at a source that are less than or equal to the lowest applicable level specified in this section. The total emissions from each designated activity and the aggregate emissions from all designated activities must be less than or equal to the lowest applicable level specified:
 - (a) One ton for total reduced sulfur, hydrogen sulfide, sulfuric acid mist, any Class I or II substance subject to a standard promulgated under or established by Title VI of the FCAA, and each criteria pollutant, except lead;
 - (b) 120 pounds for lead;
 - (c) 600 pounds for fluorides;
 - (d) 500 pounds for PM₁₀ in a PM₁₀ nonattainment area;

(e) 500 pounds for direct PM_{2.5} in a PM_{2.5} nonattainment area;

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

(g) An aggregate of 5,000 pounds for all 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, particulate matter, regulated pollutant, or any combination thereof, exclusive of uncombined water.

(9) "Air Contaminant Discharge Permit" or "ACDP" means written authorization issued, renewed, amended, or revised by DEQ, under OAR chapter 340, division 216.

(10) "Air pollution control device" or "control device" means equipment, other than inherent process equipment that is used to destroy or remove a regulated pollutant prior to discharge to the atmosphere.

(a) 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 (e.g., carbon beds, condensers); scrubbers (e.g., wet collection and gas absorption devices); selective catalytic or non-catalytic reduction systems; flue gas recirculation systems; spray dryers; spray towers; mist eliminators at acid plants and sulfur recovery plants; injection systems (e.g., 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).

(b)(A) For purposes of OAR 340-212-0200 through 340-212-0280, a control device does not include passive control measures that act to prevent regulated pollutants from forming, such as the use of seals, lids, or roofs to prevent the release of regulated pollutants, use of low-polluting fuel or feedstocks, or the use of combustion or other process design features or characteristics.

(B) If an applicable requirement establishes that particular equipment which otherwise meets this definition of a control device does not constitute a control device as applied to a particular regulated pollutant-specific emissions unit, then that definition will be binding for purposes of OAR 340-212-0200 through 340-212-0280.

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

federal requirement for which a reference method is specified must be approved by EPA unless EPA has delegated authority for the approval to DEQ.

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

(13) "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 FCAA that implements the relevant requirements of the FCAA, 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 chapter 340, division 216, including any term or condition of any preconstruction permits issued under OAR chapter 340, division 224, New Source Review, until or unless DEQ revokes or modifies the term or condition by a permit modification;

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

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

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

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

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

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

(j) Any requirements established under section 504(b) or section 114(a)(3) of the FCAA;

- (k) Any standard or other requirement under section 126(a)(1) and(c) of the FCAA;
- (l) Any standard or other requirement governing solid waste incineration, under section 129 of the FCAA;
- (m) Any standard or other requirement for consumer and commercial products, under section 183(e) of the FCAA;
- (n) Any standard or other requirement for tank vessels, under section 183(f) of the FCAA;
- (o) Any standard or other requirement of the program to control air pollution from outer continental shelf sources, under section 328 of the FCAA;
- (p) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the FCAA, unless the Administrator has determined that such requirements need not be contained in an Oregon Title V Operating Permit; and
- (q) Any national ambient air quality standard or increment or visibility requirement under part C of Title I of the FCAA, but only as it would apply to temporary sources permitted under section 504(e) of the FCAA.
- (14) "Attainment area" or "unclassified area" means an area that has not otherwise been designated by EPA as nonattainment with ambient air quality standards for a particular regulated pollutant. Attainment areas or unclassified areas may also be referred to as sustainment or maintenance areas as designated in OAR chapter 340, division 204. Any particular location may be part of an attainment area or unclassified area for one regulated pollutant while also being in a different type of designated area for another regulated pollutant.
- (15) "Attainment pollutant" means a pollutant for which an area is designated an attainment or unclassified area.
- (16) "Baseline emission rate" means the actual emission rate during a baseline period as determined under OAR chapter 340, division 222.
- (17) "Baseline period" means the period used to determine the baseline emission rate for each regulated pollutant under OAR chapter 340, division 222.
- (18) "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 FCAA which would be emitted from any proposed major source or major modification which, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for

control of such air contaminant. In no event may the application of BACT result in emissions of any air contaminant that would exceed the emissions allowed by any applicable new source performance standard or any standard for hazardous air pollutant. If an emission limitation is not feasible, a design, equipment, work practice, or operational standard, or combination thereof, may be required. Such standard must, to the degree possible, set forth the emission reduction achievable and provide for compliance by prescribing appropriate permit conditions.

(19) "Biomass" means non-fossilized and biodegradable organic material originating from plants, animals, and microorganisms, 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.

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

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

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

(23) "Carbon dioxide equivalent" or "CO₂e" means an amount of a greenhouse gas or gases expressed as the equivalent amount of carbon dioxide, and is 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.

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

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

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

(c) Distillate oil, kerosene, gasoline, natural gas or propane burning equipment, provided the aggregate expected actual emissions of the equipment identified as

categorically insignificant do not exceed the de minimis level for any regulated pollutant, based on the expected maximum annual operation of the equipment. If a source's expected emissions from all such equipment exceed the de minimis levels, then the source may identify a subgroup of such equipment as categorically insignificant with the remainder not categorically insignificant. The following equipment may never be included as categorically insignificant:

(A) Any individual distillate oil, kerosene or gasoline burning equipment with a rating greater than 0.4 million Btu/hour;

(B) Any individual natural gas or propane burning equipment with a rating greater than 2.0 million Btu/hour.

(d) Distillate oil, kerosene, gasoline, natural gas or propane burning equipment used on site for six months or less for maintenance, construction or similar purposes, such as but not limited to generators, pumps, hot water pressure washers and space heaters, provided that any such equipment that performs the same function as the permanent equipment, must be operated within the source's existing PSEL. The six-month period begins on the first date the equipment is used;

(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) Stormwater settling basins;

(qq) Fire suppression and training;

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

(ss) Hazardous air pollutant emissions in 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, provided that the aggregate horsepower rating of all stationary emergency generator and pump engines is not more than 3,000 horsepower. If the aggregate horsepower rating of all stationary emergency generator and pump engines is more than 3,000 horsepower, then no emergency generators and pumps at the source may be considered categorically insignificant;

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

(ww) Non-contact steam condensate flash tanks;

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

(yy) Boiler blowdown tanks;

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

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

(bbb) Uncontrolled oil/water separators in effluent treatment systems, excluding systems with a throughput of more than 400,000 gallons per year of effluent located at the following sources:

(A) Petroleum refineries;

(B) Sources that perform 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; or

(C) Bulk gasoline plants, bulk gasoline terminals, and pipeline facilities;

(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.

(25) "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.

(26) "Class I area" or "PSD Class I area" means any Federal, State or Indian reservation land which is classified or reclassified as a Class I area under OAR 340-204-0050 and 340-204-0060.

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

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

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

(a) Begun, or caused to begin, a continuous program of actual on-site construction of the source to be completed in a reasonable time; or

(b) Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of construction of the source to be completed in a reasonable time.

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

(31) "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.

(32) "Construction":

(a) Except as provided in subsection (b) means any physical change including, but not limited to, fabrication, erection, installation, demolition, replacement, or modification of a source or part of a source;

(b) As used in OAR chapter 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.

(33) "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.

(34) "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 as specified in the DEQ Continuous Monitoring Manual, found in OAR 340-200-0035, and includes continuous emission monitoring systems, continuous opacity monitoring system (COMS) and continuous parameter monitoring systems.

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

(36) "Criteria pollutant" means any of the following regulated pollutants: nitrogen oxides, volatile organic compounds, particulate matter, PM₁₀, PM_{2.5}, sulfur dioxide, carbon monoxide, and lead.

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

(38) "Day" means a 24-hour period beginning at 12:00 a.m. midnight or a 24-hour period as specified in a permit.

(39) "De minimis emission level" means the level for the regulated pollutants listed below:

(a) Greenhouse Gases (CO₂e) = 2,756 tons per year.

(b) CO = 1 ton per year.

(c) NO_x = 1 ton per year.

- (d) SO₂ = 1 ton per year.
- (e) VOC = 1 ton per year.
- (f) PM = 1 ton per year.
- (g) PM₁₀ (except Medford AQMA) = 1 ton per year.
- (h) PM₁₀ (Medford AQMA) = 0.5 ton per year and 5.0 pounds/day.
- (i) Direct PM_{2.5} = 1 ton per year.
- (j) Lead = 0.1 ton per year.
- (k) Fluorides = 0.3 ton per year.
- (l) Sulfuric Acid Mist = 0.7 ton per year.
- (m) Hydrogen Sulfide = 1 ton per year.
- (n) Total Reduced Sulfur (including hydrogen sulfide) = 1 ton per year.
- (o) Reduced Sulfur = 1 ton per year.
- (p) Municipal waste combustor organics (dioxin and furans) = 0.0000005 ton per year.
- (q) Municipal waste combustor metals = 1 ton per year.
- (r) Municipal waste combustor acid gases = 1 ton per year.
- (s) Municipal solid waste landfill gases (measured as nonmethane organic compounds) = 1 ton per year
- (t) Single HAP = 1 ton per year
- (u) Combined HAP (aggregate) = 1 ton per year
- (40) "Department" or "DEQ":
 - (a) Means Department of Environmental Quality; except
 - (b) As used in OAR chapter 340, divisions 218 and 220 means Department of Environmental Quality, or in the case of Lane County, LRAPA.
- (41) "DEQ method [#]" means the sampling method and protocols for measuring a regulated pollutant as described in the DEQ Source Sampling Manual, found in OAR 340-200-0035.
- (42) "Designated area" means an area that has been designated as an attainment,

unclassified, sustainment, nonattainment, reattainment, or maintenance area under OAR chapter 340, division 204 or applicable provisions of the FCAA.

(43) "Destruction efficiency" means removal efficiency.

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

(45) "Direct PM_{2.5}" has the meaning provided in the definition of PM_{2.5}.

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

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

(48) "Dry standard cubic foot" means the amount of gas that would occupy a volume of one cubic foot, if the gas were free of uncombined water at standard conditions.

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

(50) "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 may cause 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.

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

(52) "Emission estimate adjustment factor" or "EEAF" means an adjustment applied to an emission factor to account for the relative inaccuracy of the emission factor.

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

(54) "Emission(s) limitation," "emission(s) limit," "emission(s) standard or "emission(s) limitation or standard" means:

(a) Except as provided in subsection (b), a requirement established by a state, local government, or EPA rule; a permit condition or order, which limits the quantity, rate, or

concentration of emissions of regulated 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, any applicable requirement that constitutes an emission(s) limit, emission(s) limitation, emission(s) standard, standard of performance or means of emission(s) limitation as defined under the FCAA. 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, operate and maintain sources using good air pollution control practices, develop and maintain a malfunction abatement plan, keep records, submit reports, or conduct monitoring.

(55) "Emission reduction credit banking" means to presently reserve, subject to requirements of OAR chapter 340, division 268, Emission Reduction Credits, emission reductions for use by the reserver or assignee for future compliance with air pollution reduction requirements.

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

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

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

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

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

(b) Emissions units may be defined on a regulated pollutant by regulated pollutant

basis where applicable.

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

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

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

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

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

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

(62) "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.

(63) "Excess emissions" means emissions in excess of an emission limit, or a risk limit under OAR chapter 340, division 245, contained in an applicable requirement, a permit or permit attachment limit; or emissions in violation of any applicable air quality rule.

(64) "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.

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

(66) "Federal Major Source" means any source listed in subsections (a) or (d) below:

(a) A source with potential to emit:

(A) 100 tons per year or more of any individual regulated pollutant, excluding

greenhouse gases and hazardous air pollutants listed in OAR chapter 340, division 244 if in a source category listed in subsection (c), or

(B) 250 tons per year or more of any individual regulated pollutant, excluding greenhouse gases and hazardous air pollutants listed in OAR chapter 340, division 244, if not in a source category listed in subsection (c).

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

(A) Fugitive emissions and insignificant activity emissions; and

(B) Increases or decreases due to a new or modified source.

(c) Source categories:

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

(B) Coal cleaning plants with thermal dryer (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, excluding ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140;

(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.

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

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

(B) For ozone transport regions established under section 184 of the FCAA, sources with the potential to emit 50 tons per year or more of VOCs;

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

(D) For PM₁₀ nonattainment areas classified as "serious," sources with the potential to emit 70 tons per year or more of PM₁₀.

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

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

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

(70) "Fugitive emissions":

(a) Except as used in subsection (b), 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.

(71) "General permit":

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

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

(72)(a) "Greenhouse gases" or "GHGs" means the aggregate group of carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and other fluorinated greenhouse gases or fluorinated GHG as defined in 40 CFR part 98.

(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.

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

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

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

(76) "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.

(77) "Indian governing body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United

States as possessing power of self-government.

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

(79) "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.

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

(81) "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 pollutants not regulated by the source's permit.

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

(83) "Late payment" means a fee payment which is received after the due date.

(84) "Liquefied petroleum gas" has the meaning given by the American Society for Testing and Materials in ASTM D1835-82, "Standard Specification for Liquid Petroleum Gases."

(85) "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.

(86) "Maintenance area" means any area that was formerly nonattainment for a criteria

pollutant but has since met the ambient air quality standard, and EPA has approved a maintenance plan to comply with the standards under 40 CFR 51.110. Maintenance areas are designated by the EQC according to division 204.

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

(88) "Major Modification" means any physical change or change in the method of operation of a source that results in satisfying the requirements of OAR 340-224-0025.

(89) "Major New Source Review" or "Major NSR" means the new source review process and requirements under OAR 340-224-0010 through 340-224-0070 and 340-224-0500 through 340-224-0540 based on the location and regulated pollutants emitted.

(90) "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 chapter 340, division 210, Stationary Source Notification Requirements; Compliance Assurance Monitoring, OAR 340-212-0200 through 340-212-0280; OAR 340-216-0066, Standard ACDPs; OAR chapter 340, division 218, Oregon Title V Operating Permits; OAR chapter 340, division 220, Oregon Title V Operating Permit Fees; 340-216-0066, Standard ACDPs, and OAR chapter 340, division 236, Emission Standards for Specific Industries; means any stationary source or any group of stationary sources that are located on one or more contiguous or adjacent properties and are under common control of the same person or persons under common control belonging to a single major industrial grouping or supporting the major industrial group and that is described in paragraphs (A), (B), or (C). For the purposes of this subsection, a stationary source or group of stationary sources is considered part of a single industrial grouping if all of the regulated pollutant emitting activities at such source or group of sources on contiguous or adjacent properties belong to the same 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 hazardous air pollutants other than radionuclides, any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, in the aggregate, 10 tons per year or more of any hazardous air pollutants that has been listed under OAR 340-244-0040; 25 tons per year or more of any combination of such hazardous air pollutants, or such

lesser quantity as the Administrator may establish by rule. Emissions from any oil or gas exploration or production well, along with its associated equipment, and emissions from any pipeline compressor or pump station will not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources; or

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

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

- (i) Coal cleaning plants (with thermal dryers);
- (ii) Kraft pulp mills;
- (iii) Portland cement plants;
- (iv) Primary zinc smelters;
- (v) Iron and steel mills;
- (vi) Primary aluminum ore reduction plants;
- (vii) Primary copper smelters;
- (viii) Municipal incinerators capable of charging more than 50 tons of refuse per day;
- (ix) Hydrofluoric, sulfuric, or nitric acid plants;
- (x) Petroleum refineries;
- (xi) Lime plants;
- (xii) Phosphate rock processing plants;
- (xiii) Coke oven batteries;
- (xiv) Sulfur recovery plants;
- (xv) Carbon black plants (furnace process);
- (xvi) Primary lead smelters;

- (xvii) Fuel conversion plants;
- (xviii) Sintering plants;
- (xix) Secondary metal production plants;
- (xx) Chemical process plants, excluding ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140;
- (xxi) Fossil-fuel boilers, or combination thereof, totaling more than 250 million British thermal units per hour heat input;
- (xxii) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- (xxiii) Taconite ore processing plants;
- (xxiv) Glass fiber processing plants;
- (xxv) Charcoal production plants;
- (xxvi) Fossil-fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input; or
- (xxvii) Any other stationary source category, that as of August 7, 1980 is being regulated under section 111 or 112 of the FCAA.

(C) From July 1, 2011 through November 6, 2014, a major stationary source of regulated pollutants, as defined by Section 302 of the FCAA, that directly emits or has the potential to emit 100 tons per year or more of greenhouse gases and directly emits or has the potential to emit 100,000 tons per year or more CO₂e, including fugitive emissions.

(91) "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.

(92) "Modification," except as used in the terms "major modification" "permit modification" and "Title I modification," means any physical change to, or change in the method of operation of, a source or part of a source that results in an increase in the source or part of the source's potential to emit any regulated 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 source or part of a source was physically capable of accommodating during

the baseline period; and

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

(93) "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.

(94) "Natural gas" means a naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal component is methane.

(95) "Netting basis" means an emission rate determined as specified in OAR 340-222-0046.

(96) "Nitrogen oxides" or "NO_x" means all oxides of nitrogen except nitrous oxide.

(97) "Nonattainment area" means a geographical area of the state, as designated by the EQC or the EPA, that exceeds any state or federal primary or secondary ambient air quality standard. Nonattainment areas are designated by the EQC according to division 204.

(98) "Nonattainment pollutant" means a regulated pollutant for which an area is designated a nonattainment area. Nonattainment areas are designated by the EQC according to division 204.

(99) "Normal source operation" means operation that does not include such conditions as forced fuel substitution, equipment malfunction, or highly abnormal market conditions.

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

(101) "Offset" means an equivalent or greater emission reduction that is required before allowing an emission increase from a source that is subject to Major NSR or State NSR.

(102) "Opacity" means the degree to which emissions, excluding uncombined water, reduce the transmission of light and obscure the view of an object in the background as measured by EPA Method 9 or other method, as specified in each applicable rule.

(103) "Oregon Title V Operating Permit" or "Title V permit" means written authorization issued, renewed, amended, or revised under OAR chapter 340, division 218.

(104) "Oregon Title V Operating Permit program" or "Title V program" means the Oregon program described in OAR chapter 340, division 218 and approved by the Administrator under 40 CFR part 70.

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

(106) "Ozone precursor" means nitrogen oxides and volatile organic compounds.

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

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

(109) "Particulate matter":

(a) Except as provided in subsection (b) of this section, means all finely divided solid and liquid material, other than uncombined water, that is emitted to the ambient air as measured by the test method specified in each applicable rule, or where not specified

by rule, in the permit.

(b) As used in OAR chapter 340, division 208, Visible Emissions and Nuisance Requirements, means all finely divided solid material, including dust, and all finely divided liquid material, other than uncombined water, that is emitted to the ambient air.

(110) "Permit" means an Air Contaminant Discharge Permit or an Oregon Title V Operating Permit, permit attachment and any amendments or modifications thereof.

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

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

(113) "Permitted emissions" as used in OAR chapter 340, division 220 means each regulated pollutant portion of the PSEL, as identified in an ACDP, Oregon Title V Operating Permit, review report, or by DEQ under OAR 340-220-0090.

(114) "Permittee" means the owner or operator of a source, authorized to emit regulated pollutants under an ACDP or Oregon Title V Operating Permit.

(115) "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.

(116) "Plant Site Emission Limit" or "PSEL" means the total mass emissions per unit time of an individual regulated pollutant specified in a permit for a source. The PSEL for a major source may consist of more than one permitted emission for purposes of Oregon Title V Operating Permit Fees in OAR chapter 340, division 220.

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

(118) "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 the test method specified in each applicable rule or, where not specified by rule, in each individual permit;

(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 under 40 CFR part 50, Appendix J or an equivalent

method designated under 40 CFR part 53.

(119) "PM2.5":

(a) When used in the context of direct PM2.5 emissions, means finely divided solid or liquid material, including condensable particulate, other than uncombined water, with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers, emitted to the ambient air as measured by the test method specified in each applicable rule or, where not specified by rule, in each individual permit.

(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 the test method specified in each applicable rule or, where not specified by rule, in each individual permit.

(c) 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 2.5 micrometers as measured under 40 CFR part 50, Appendix L, or an equivalent method designated under 40 CFR part 53.

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

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

(122) "Portable" means designed and capable of being carried or moved from one location to another. Indicia of portability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

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

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

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

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

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

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

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

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

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

(129) "Reattainment area" means an area that is designated as nonattainment and has three consecutive years of monitoring data that shows the area is meeting the ambient air quality standard for the regulated pollutant for which the area was designated a nonattainment area, but a formal redesignation by EPA has not yet been approved. Reattainment areas are designated by the EQC according to division 204.

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

(131) "Reference method" means any method of sampling and analyzing for a regulated pollutant as specified in 40 CFR part 52, 60, 61 or 63.

(132) "Regional agency" means Lane Regional Air Protection Agency.

(133) "Regulated air pollutant" or "Regulated pollutant":

(a) Except as provided in subsections (b), (c) and (d), means:

(A) Nitrogen oxides or any VOCs;

(B) Any pollutant for which an 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 FCAA;

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

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

(F) Greenhouse gases; and

(G) Toxic Air Contaminants.

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

(c) As used in OAR chapter 340, division 222, Plant Site Emission Limits and division 224, New Source Review, regulated pollutant does not include any pollutant listed in OAR chapter 340, divisions 246 or 247.

(d) As used in OAR chapter 340, division 202, Ambient Air Quality Standards And PSD Increments through division 208, Visible Emissions and Nuisance Requirements; division 215, Greenhouse Reporting Requirements; division 222, Stationary Source Plant Site Emission Limits through division 244, Oregon Federal Hazardous Air Pollutant Program; and division 248, Asbestos Requirements through division 268, Emission Reduction Credits; regulated pollutant means only the air contaminants listed under paragraphs (a)(A) through (F).

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

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

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

(a) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

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

(B) The delegation of authority to such representative is approved in advance by DEQ or LRAPA.

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

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

(e.g., a Regional Administrator of the EPA); or

(d) For affected sources:

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

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

(137) "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.

(138) "Section 111" means section 111 of the FCAA, 42 U.S.C. § 7411, which includes Standards of Performance for New Stationary Sources (NSPS).

(139) "Section 111(d)" means subsection 111(d) of the FCAA, 42 U.S.C. § 7411(d), which requires states to submit to the EPA plans that establish standards of performance for existing sources and provides for implementing and enforcing such standards.

(140) "Section 112" means section 112 of the FCAA, 42 U.S.C. § 7412, which contains regulations for Hazardous Air Pollutants.

(141) "Section 112(b)" means subsection 112(b) of the FCAA, 42 U.S.C. § 7412(b), which includes the list of hazardous air pollutants to be regulated.

(142) "Section 112(d)" means subsection 112(d) of the FCAA, 42 U.S.C. § 7412(d), which directs the EPA to establish emission standards for sources of hazardous air pollutants. This section also defines the criteria to be used by the EPA when establishing the emission standards.

(143) "Section 112(e)" means subsection 112(e) of the FCAA, 42 U.S.C. § 7412(e), which directs the EPA to establish and promulgate emissions standards for categories and subcategories of sources that emit hazardous air pollutants.

(144) "Section 112(r)(7)" means subsection 112(r)(7) of the FCAA, 42 U.S.C. § 7412(r)(7), which requires the EPA to promulgate regulations for the prevention of

accidental releases and requires owners or operators to prepare risk management plans.

(145) "Section 114(a)(3)" means subsection 114(a)(3) of the FCAA, 42 U.S.C. § 7414(a)(3), which requires enhanced monitoring and submission of compliance certifications for major sources.

(146) "Section 129" means section 129 of the FCAA, 42 U.S.C. § 7429, which requires the EPA to establish emission standards and other requirements for solid waste incineration units.

(147) "Section 129(e)" means subsection 129(e) of the FCAA, 42 U.S.C. § 7429(e), which requires solid waste incineration units to obtain Oregon Title V Operating Permits.

(148) "Section 182(f)" means subsection 182(f) of the FCAA, 42 U.S.C. § 7511a(f), which requires states to include plan provisions in the SIP for NO_x in ozone nonattainment areas.

(149) "Section 182(f)(1)" means subsection 182(f)(1) of the FCAA, 42 U.S.C. § 7511a(f)(1), which requires states to apply those plan provisions developed for major VOC sources and major NO_x sources in ozone nonattainment areas.

(150) "Section 183(e)" means subsection 183(e) of the FCAA, 42 U.S.C. § 7511b(e), which requires the EPA to study and develop regulations for the control of certain VOC sources under federal ozone measures.

(151) "Section 183(f)" means subsection 183(f) of the FCAA, 42 U.S.C. § 7511b(f), which requires the EPA to develop regulations pertaining to tank vessels under federal ozone measures.

(152) "Section 184" means section 184 of the FCAA, 42 U.S.C. § 7511c, which contains regulations for the control of interstate ozone air pollution.

(153) "Section 302" means section 302 of the FCAA, 42 U.S.C. § 7602, which contains definitions for general and administrative purposes in the FCAA.

(154) "Section 302(j)" means subsection 302(j) of the FCAA, 42 U.S.C. § 7602(j), which contains definitions of "major stationary source" and "major emitting facility."

(155) "Section 328" means section 328 of the FCAA, 42 U.S.C. § 7627, which contains regulations for air pollution from outer continental shelf activities.

(156) "Section 408(a)" means subsection 408(a) of the FCAA, 42 U.S.C. § 7651g(a), which contains regulations for the Title IV permit program.

(157) "Section 502(b)(10) change" means a change which contravenes an express permit term but is not a change that:

(a) Would violate applicable requirements;

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

(c) Is a FCAA Title I modification.

(158) "Section 504(b)" means subsection 504(b) of the FCAA, 42 U.S.C. § 7661c(b), which states that the EPA can prescribe by rule procedures and methods for determining compliance and for monitoring.

(159) "Section 504(e)" means subsection 504(e) of the FCAA, 42 U.S.C. § 761c(e), which contains regulations for permit requirements for temporary sources.

(160) "Significant emission rate" or "SER," except as provided in subsections (v) and (w), means an emission rate equal to the rates specified for the regulated pollutants below:

(a) Greenhouse gases (CO₂e) = 75,000 tons per year

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

(c) Nitrogen oxides (NO_x) = 40 tons per year.

(d) Particulate matter = 25 tons per year.

(e) PM₁₀ = 15 tons per year.

(f) Direct PM_{2.5} = 10 tons per year.

(g) PM_{2.5} precursors (SO₂ or NO_x) = 40 tons per year.

(h) Sulfur dioxide (SO₂) = 40 tons per year.

(i) Ozone precursors (VOC or NO_x) = 40 tons per year except:

(A) In a serious or severe ozone nonattainment area = 25 tons per year.

(B) In an extreme ozone nonattainment area = any emissions increase.

(j) Lead = 0.6 tons per year.

(k) Inorganic fluoride compounds (as measured by EPA method 13A or 13B), excluding hydrogen fluoride = 3 tons per year.

(l) Sulfuric acid mist = 7 tons per year.

(m) Hydrogen sulfide = 10 tons per year.

(n) Total reduced sulfur (including hydrogen sulfide) = 10 tons per year.

(o) Reduced sulfur compounds (including hydrogen sulfide) = 10 tons per year.

(p) Municipal waste combustor organics (measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans) = 0.0000035 tons per year.

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

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

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

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

(u) For the Medford-Ashland Air Quality Maintenance Area, the SER for PM₁₀ is defined as 5.0 tons per year on an annual basis and 50.0 pounds per day on a daily basis.

(v) For regulated pollutants not listed in subsections (a) through (u), the SER is zero.

(w) Any new source or modification with an emissions increase less than the rates specified above and that is located 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 SER. This subsection does not apply to greenhouse gas emissions.

(161) "Significant impact" means an additional ambient air quality concentration equal to or greater than the significant impact level. For sources of VOC or NO_x, a source has a significant impact if it is located within the ozone impact distance defined in OAR 340 division 224.

(162) "Significant impact level" or "SIL" means the ambient air quality concentrations listed below. The threshold concentrations listed below are used for comparison against the ambient air quality standards and PSD increments established under OAR chapter 340, division 202, but do not apply for protecting air quality related values, including visibility.

(a) For Class I areas:

(A) PM_{2.5}:

(i) Annual = 0.03 µg/m³.

(ii) 24-hour = 0.07 µg/m³.

(B) PM₁₀: 24-hour = 0.30 µg/m³.

(C) Sulfur dioxide:

(i) Annual = 0.10 µg/m³.

(ii) 24-hour = 0.20 µg/m³.

(iii) 3-hour = 1.0 µg/m³.

(D) Nitrogen dioxide: annual = 0.10 µg/m³.

(b) For Class II areas:

(A) PM_{2.5}:

(i) Annual = 0.13 µg/m³.

(ii) 24-hour = 1.2 µg/m³.

(B) PM₁₀: 24-hour = 1.0 µg/m³.

(C) Sulfur dioxide:

(i) Annual = 1.0 µg/m³.

(ii) 24-hour = 5.0 µg/m³.

(iii) 3-hour = 25.0 µg/m³.

(iv) 1-hour = 8.0 µg/m³.

(D) Nitrogen dioxide:

(i) Annual = 1.0 µg/m³.

(ii) 1-hour = 8.0 µg/m³.

(E) Carbon monoxide:

(i) 8-hour = 0.5 mg/m³.

(ii) 1-hour = 2.0 mg/m³.

(c) For Class III areas:

(A) PM_{2.5}:

(i) Annual = 0.13 µg/m³.

(ii) 24-hour = 1.2 $\mu\text{g}/\text{m}^3$.

(B) PM₁₀: 24-hour = 1.0 $\mu\text{g}/\text{m}^3$.

(C) Sulfur dioxide:

(i) Annual = 1.0 $\mu\text{g}/\text{m}^3$.

(ii) 24-hour = 5.0 $\mu\text{g}/\text{m}^3$.

(iii) 3-hour = 25.0 $\mu\text{g}/\text{m}^3$.

(D) Nitrogen dioxide: annual = 1.0 $\mu\text{g}/\text{m}^3$

(E) Carbon monoxide:

(i) 8-hour = 0.5 mg/m^3 .

(ii) 1-hour = 2.0 mg/m^3 .

(163) "Significant impairment" occurs when DEQ determines that visibility impairment interferes with the management, protection, preservation, or enjoyment of the visual experience within a Class I area. DEQ will make this determination on a case-by-case basis after considering the recommendations of the Federal Land Manager and the geographic extent, intensity, duration, frequency, and time of visibility impairment. These factors will be considered along with visitor use of the Class I areas, and the frequency and occurrence of natural conditions that reduce visibility.

(164) "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), 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) that conserves energy or produces energy by generation or by processing or collection of a renewable resource.

(165) "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 air contaminant emitting activities that belong to a single major industrial group, i.e., that have the same two-digit code, as described in the Standard Industrial Classification Manual, U.S. Office of Management and Budget, 1987, or that support the major industrial group.

(166) "Source category":

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

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

(167) "Source test" means the average of at least three test runs conducted under the DEQ Source Sampling Manual found in 340-200-0035.

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

(169) "Startup" and "shutdown" means that time during which a source or control device is brought into normal operation or normal operation is terminated, respectively.

(170) "State Implementation Plan" or "SIP" means the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-200-0040 and approved by EPA.

(171) "State New Source Review" or "State NSR" means the new source review

process and requirements under OAR 340-224-0010 through 340-224-0038, 340-224-0245 through 340-224-0270 and 340-224-0500 through 340-224-0540 based on the location and regulated pollutants emitted.

(172) "Stationary source" means any building, structure, facility, or installation at a source that emits or may emit any regulated pollutant. Stationary source includes portable sources that are required to have permits under OAR chapter 340, division 216.

(173) "Substantial underpayment" means the lesser of 10 percent of the total interim emission fee for the major source or five hundred dollars.

(174) "Sustainment area" means a geographical area of the state for which DEQ has ambient air quality monitoring data that shows an attainment or unclassified area could become a nonattainment area but a formal redesignation by EPA has not yet been approved. The presumptive geographic boundary of a sustainment area is the applicable urban growth boundary in effect on the date this rule was last approved by the EQC, unless superseded by rule. Sustainment areas are designated by the EQC according to division 204.

(175) "Sustainment pollutant" means a regulated pollutant for which an area is designated a sustainment area.

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

(177) "Title I modification" means one of the following modifications under Title I of the FCAA:

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

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

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

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

(e) A modification under Section 112 of the FCAA.

(178) "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).

(179) "Toxic air contaminant" means an air pollutant that has been determined by the EQC to cause, or reasonably be anticipated to cause, adverse effects to human health and is listed in OAR 340-247-8010 Table 1.

(180) "Type A State NSR" means State NSR as specified in OAR 340-224-0010(2)(a).

(181) "Type B State NSR" means State NSR that is not Type A State NSR.

(182) "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 under OAR 340-226-0130.

(183) "Unassigned emissions" means the amount of emissions that are in excess of the PSEL but less than the netting basis.

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

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

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

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

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

(189) "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.

(190) "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) VOC includes any such organic compound other than the following, which have

been determined to have negligible photochemical reactivity:

- (A) Methane;
- (B) Ethane;
- (C) Methylene chloride (dichloromethane);
- (D) 1,1,1-trichloroethane (methyl chloroform);
- (E) 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113);
- (F) Trichlorofluoromethane (CFC-11);
- (G) Dichlorodifluoromethane (CFC-12);
- (H) Chlorodifluoromethane (HCFC-22);
- (I) Trifluoromethane (HFC-23);
- (J) 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114);
- (K) Chloropentafluoroethane (CFC-115);
- (L) 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123);
- (M) 1,1,1,2-tetrafluoroethane (HFC-134a);
- (N) 1,1-dichloro 1-fluoroethane (HCFC-141b);
- (O) 1-chloro 1,1-difluoroethane (HCFC-142b);
- (P) 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124);
- (Q) Pentafluoroethane (HFC-125);
- (R) 1,1,2,2-tetrafluoroethane (HFC-134);
- (S) 1,1,1-trifluoroethane (HFC-143a);
- (T) 1,1-difluoroethane (HFC-152a);
- (U) Parachlorobenzotrifluoride (PCBTF);
- (V) Cyclic, branched, or linear completely methylated siloxanes;
- (W) Acetone;
- (X) Perchloroethylene (tetrachloroethylene);

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

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

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

(BB) Difluoromethane (HFC-32);

(CC) Ethylfluoride (HFC-161);

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

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

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

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

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

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

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

(KK) chlorofluoromethane (HCFC-31);

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

(MM) 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a);

(NN) 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane (C4 F9 OCH3 or HFE-7100);

(OO) 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF3)2 CFCF2 OCH3);

(PP) 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C4 F9 OC2 H5 or HFE-7200);

(QQ) 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF3)2 CFCF2 OC2 H5);

(RR) Methyl acetate;

(SS) 1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (n-C3F7OCH3, HFE-7000);

(TT) 3-ethoxy- 1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane (HFE-7500);

(UU) 1,1,1,2,3,3,3-heptafluoropropane (HFC 227ea);

(VV) Methyl formate (HCOOCH₃);

(WW) 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300);

(XX) Propylene carbonate;

(YY) Dimethyl carbonate;

(ZZ) Trans -1,3,3,3-tetrafluoropropene (also known as HFO-1234ze);

(AAA) HCF₂ OCF₂ H (HFE-134);

(BBB) HCF₂ OCF₂ OCF₂ H (HFE-236cal2);

(CCC) HCF₂ OCF₂ CF₂ OCF₂ H (HFE-338pcc13);

(DDD) HCF₂ OCF₂ OCF₂ CF₂ OCF₂ H (H-Galden 1040x or H-Galden ZT 130 (or 150 or 180));

(EEE) Trans 1-chloro-3,3,3-trifluoroprop-1-ene (also known as SolsticeTM 1233zd(E));

(FFF) 2,3,3,3-tetrafluoropropene (also known as HFO-1234yf);

(GGG) 2-amino-2-methyl-1-propanol;

(HHH) perfluorocarbon compounds which fall into these classes:

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

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

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

(iv) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine;

(III) cis-1,1,1,4,4,4-hexafluorobut-2-ene (also known as HFO-1336mzz-Z);

(JJJ) t-butyl acetate; and

(KKK) 1,1,2,2- Tetrafluoro -1-(2,2,2-trifluoroethoxy) ethane (also known as HFE-347pcf2).

(b) For purposes of determining compliance with emissions limits, VOC will be measured by an applicable test method in the DEQ Source Sampling Manual referenced in OAR 340-200-0035. Where such a method also measures compounds with negligible photochemical reactivity, these negligibly-reactive compounds may be excluded as VOC if the amount of such compounds is accurately quantified, and DEQ

approves the exclusion.

(c) When considering a requested exclusion of negligibly-reactive compounds under subsection (b), DEQ may require an owner or operator to provide monitoring or testing methods and results that demonstrate, to DEQ's satisfaction, the amount of negligibly-reactive compounds in the source's emissions.

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

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

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

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-200-0040 with the exception of all references to toxic air contaminants and OAR chapter 340, division 245.

NOTE: Referenced publications not linked to below are available from the agency.

NOTE: View a PDF of referenced tables and EPA Methods by clicking on "Tables" link below.

[\[ED. NOTE: To view attachments referenced in rule text, click here to view rule.\]](#)

Statutory/Other Authority: ORS 468.020 & 468A

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

History:

[DEQ 27-2025, amend filed 08/18/2025, effective 08/18/2025](#)

[DEQ 19-2022, amend filed 11/18/2022, effective 03/01/2023](#)

[DEQ 18-2021, amend filed 11/17/2021, effective 11/17/2021](#)

[DEQ 13-2019, amend filed 05/16/2019, effective 05/16/2019](#)

[DEQ 197-2018, amend filed 11/16/2018, effective 11/16/2018](#)

DEQ 7-2015, f. & cert. ef. 4-16-15

DEQ 12-2014(Temp), f. & cert. ef. 11-12-14 thru 5-10-15

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

DEQ 4-2013, f. & cert. ef. 3-27-13

DEQ 1-2012, f. & cert. ef. 5-17-12

DEQ 7-2011(Temp), f. & cert. ef. 6-24-11 thru 12-19-11
DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11
DEQ 10-2010(Temp), f. 8-31-10, cert. ef. 9-1-10 thru 2-28-11
DEQ 5-2010, f. & cert. ef. 5-21-10
DEQ 10-2008, f. & cert. ef. 8-25-08
DEQ 8-2007, f. & cert. ef. 11-8-07
DEQ 6-2007(Temp), f. & cert. ef. 8-17-07 thru 2-12-08
DEQ 2-2006, f. & cert. ef. 3-14-06
DEQ 2-2005, f. & cert. ef. 2-10-05
DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01
DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-020-0205, 340-028-0110
DEQ 6-1999, f. & cert. ef. 5-21-99
DEQ 1-1999, f. & cert. ef. 1-25-99
DEQ 21-1998, f. & cert. ef. 10-14-98
DEQ 16-1998, f. & cert. ef. 9-23-98
DEQ 14-1998, f. & cert. ef. 9-14-98
DEQ 9-1997, f. & cert. ef. 5-9-97
DEQ 22-1996, f. & cert. ef. 10-22-96
DEQ 19-1996, f. & cert. ef. 9-24-96
DEQ 22-1995, f. & cert. ef. 10-6-95
DEQ 12-1995, f. & cert. ef. 5-23-95
DEQ 10-1995, f. & cert. ef. 5-1-95
DEQ 24-1994, f. & cert. ef. 10-28-94
DEQ 21-1994, f. & cert. ef. 10-14-94
DEQ 13-1994, f. & cert. ef. 5-19-94
DEQ 20-1993(Temp), f. & cert. ef. 11-4-93
DEQ 19-1993, f. & cert. ef. 11-4-93
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 4-1993, f. & cert. ef. 3-10-93
DEQ 27-1992, f. & cert. ef. 11-12-92
DEQ 7-1992, f. & cert. ef. 3-30-92
DEQ 2-1992, f. & cert. ef. 1-30-92
DEQ 42-1990, f. 12-13-90, cert. ef. 1-2-91
DEQ 14-1989, f. & cert. ef. 6-26-89
DEQ 8-1988, f. & cert. ef. 5-19-88
DEQ 18-1984, f. & cert. ef. 10-16-84
DEQ 5-1983, f. & cert, ef. 4-18-83
DEQ 25-1981, f. & cert. ef. 9-8-81
DEQ 15-1978, f. & cert. ef. 10-13-78
DEQ 107, f. & cert. ef. 1-6-76, Renumbered from 340-020-0033 DEQ 63, f. 12-20-73, cert. ef. 1-11-74
DEQ 47, f. 8-31-72, cert. ef. 9-15-72

340-200-0040

State of Oregon Clean Air Act Implementation Plan

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

(2) Except as provided in section (3), revisions to the SIP will be made under the EQC's rulemaking procedures in OAR chapter 340, division 11 of this chapter and any other requirements contained in the SIP and will be submitted to the EPA for approval. The SIP was last modified on October 12, 2026.

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

(a) Submit to the EPA any permit condition implementing a rule that is part of the federally-approved SIP as a source-specific SIP revision after DEQ has complied with the public hearings provisions of 40 C.F.R. 51.102; and

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

(4) Revisions to the State of Oregon Clean Air Act Implementation Plan become federally enforceable upon approval by the EPA. If any provision of the federally approved State Implementation Plan conflicts with any provision adopted by the EQC, DEQ must enforce the more stringent provision.

Statutory/Other Authority: ORS 468A & ORS 468.020

Statutes/Other Implemented: ORS 468A.035 & 468A.135

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DEQ 27-2025, amend filed 08/18/2025, effective 08/18/2025

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DEQ 7-2024, amend filed 05/24/2024, effective 05/25/2024

DEQ 6-2024, amend filed 05/24/2024, effective 05/24/2024

DEQ 4-2024, amend filed 03/25/2024, effective 03/25/2024

DEQ 19-2023, amend filed 11/17/2023, effective 11/17/2023

DEQ 19-2022, amend filed 11/18/2022, effective 03/01/2023

DEQ 2-2022, amend filed 02/03/2022, effective 02/03/2022

DEQ 22-2021, amend filed 11/18/2021, effective 11/18/2021

DEQ 21-2021, amend filed 11/18/2021, effective 11/18/2021

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DEQ 11-2021, amend filed 07/23/2021, effective 07/23/2021

DEQ 1-2021, amend filed 01/21/2021, effective 01/21/2021

DEQ 21-2020, amend filed 11/19/2020, effective 11/19/2020

DEQ 17-2020, amend filed 09/21/2020, effective 09/21/2020

DEQ 18-2019, amend filed 07/19/2019, effective 07/19/2019

DEQ 14-2019, amend filed 05/17/2019, effective 05/17/2019

DEQ 4-2019, amend filed 01/24/2019, effective 01/24/2019

[DEQ 197-2018, amend filed 11/16/2018, effective 11/16/2018](#)
[DEQ 192-2018, amend filed 09/14/2018, effective 09/14/2018](#)
[DEQ 190-2018, amend filed 07/13/2018, effective 07/13/2018](#)
[DEQ 11-2018, amend filed 03/23/2018, effective 03/23/2018](#)
[DEQ 7-2017, f. & cert. ef. 7-13-17](#)
[DEQ 2-2017, f. & cert. ef. 1-19-17](#)
[DEQ 14-2015, f. & cert. ef. 12-10-15](#)
[DEQ 10-2015, f. & cert. ef. 10-16-15](#)
[DEQ 7-2015, f. & cert. ef. 4-16-15](#)
[DEQ 6-2015, f. & cert. ef. 4-16-15](#)
[DEQ 7-2014, f. & cert. ef. 6-26-14](#)
[DEQ 6-2014, f. & cert. ef. 3-31-14](#)
[DEQ 5-2014, f. & cert. ef. 3-31-14](#)
[DEQ 4-2014, f. & cert. ef. 3-31-14](#)
[DEQ 1-2014, f. & cert. ef. 1-6-14](#)
[DEQ 12-2013, f. & cert. ef. 12-19-13](#)
[DEQ 11-2013, f. & cert. ef. 11-7-13](#)
[DEQ 4-2013, f. & cert. ef. 3-27-13](#)
[DEQ 10-2012, f. & cert. ef. 12-11-12](#)
[DEQ 7-2012, f. & cert. ef. 12-10-12](#)
[DEQ 1-2012, f. & cert. ef. 5-17-12](#)
[DEQ 18-2011, f. & cert. ef. 12-21-11](#)
[DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11](#)
[DEQ 2-2011, f. 3-10-11, cert. ef. 3-15-11](#)
[DEQ 1-2011, f. & cert. ef. 2-24-11](#)
[DEQ 14-2010, f. & cert. ef. 12-10-10](#)
[DEQ 5-2010, f. & cert. ef. 5-21-10](#)
[DEQ 2-2010, f. & cert. ef. 3-5-10](#)
[DEQ 8-2009, f. & cert. ef. 12-16-09](#)
[DEQ 3-2009, f. & cert. ef. 6-30-09](#)
[DEQ 15-2008, f. & cert. ef. 12-31-08](#)
[DEQ 14-2008, f. & cert. ef. 11-10-08](#)
[DEQ 12-2008, f. & cert. ef. 9-17-08](#)
[DEQ 11-2008, f. & cert. ef. 8-29-08](#)
[DEQ 5-2008, f. & cert. ef. 3-20-08](#)
[DEQ 8-2007, f. & cert. ef. 11-8-07](#)
[DEQ 4-2007, f. & cert. ef. 6-28-07](#)
[DEQ 3-2007, f. & cert. ef. 4-12-07](#)
[DEQ 4-2006, f. 3-29-06, cert. ef. 3-31-06](#)
[DEQ 2-2006, f. & cert. ef. 3-14-06](#)
[DEQ 9-2005, f. & cert. ef. 9-9-05](#)
[DEQ 7-2005, f. & cert. ef. 7-12-05](#)
[DEQ 4-2005, f. 5-13-05, cert. ef. 6-1-05](#)
[DEQ 2-2005, f. & cert. ef. 2-10-05](#)
[DEQ 1-2005, f. & cert. ef. 1-4-05](#)
[DEQ 10-2004, f. & cert. ef. 12-15-04](#)

[DEQ 1-2004, f. & cert. ef. 4-14-04](#)
[DEQ 19-2003, f. & cert. ef. 12-12-03](#)
[DEQ 14-2003, f. & cert. ef. 10-24-03](#)
[DEQ 5-2003, f. & cert. ef. 2-6-03](#)
[DEQ 11-2002, f. & cert. ef. 10-8-02](#)
[DEQ 5-2002, f. & cert. ef. 5-3-02](#)
[DEQ 4-2002, f. & cert. ef. 3-14-02](#)
[DEQ 17-2001, f. & cert. ef. 12-28-01](#)
[DEQ 16-2001, f. & cert. ef. 12-26-01](#)
[DEQ 15-2001, f. & cert. ef. 12-26-01](#)
[DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01](#)
[DEQ 4-2001, f. & cert. ef. 3-27-01](#)
[DEQ 2-2001, f. & cert. ef. 2-5-01](#)
[DEQ 21-2000, f. & cert. ef. 12-15-00](#)
[DEQ 20-2000 f. & cert. ef. 12-15-00](#)
[DEQ 17-2000, f. & cert. ef. 10-25-00](#)
[DEQ 16-2000, f. & cert. ef. 10-25-00](#)
[DEQ 13-2000, f. & cert. ef. 7-28-00](#)
[DEQ 8-2000, f. & cert. ef. 6-6-00](#)
[DEQ 6-2000, f. & cert. ef. 5-22-00](#)
[DEQ 2-2000, f. 2-17-00, cert. ef. 6-1-01](#)
[DEQ 15-1999, f. & cert. ef. 10-22-99](#)
[DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-020-0047](#)
[DEQ 10-1999, f. & cert. ef. 7-1-99](#)
[DEQ 6-1999, f. & cert. ef. 5-21-99](#)
[DEQ 5-1999, f. & cert. ef. 3-25-99](#)
[DEQ 1-1999, f. & cert. ef. 1-25-99](#)
[DEQ 21-1998, f. & cert. ef. 10-12-98](#)
[DEQ 20-1998, f. & cert. ef. 10-12-98](#)
[DEQ 17-1998, f. & cert. ef. 9-23-98](#)
[DEQ 16-1998, f. & cert. ef. 9-23-98](#)
[DEQ 15-1998, f. & cert. ef. 9-23-98](#)
[DEQ 10-1998, f. & cert. ef. 6-22-98](#)
[DEQ 24-1996, f. & cert. ef. 11-26-96](#)
[DEQ 23-1996, f. & cert. ef. 11-4-96](#)
[DEQ 22-1996, f. & cert. ef. 10-22-96](#)
[DEQ 19-1996, f. & cert. ef. 9-24-96](#)
[DEQ 15-1996, f. & cert. ef. 8-14-96](#)
[DEQ 8-1996\(Temp\), f. & cert. ef. 6-3-96](#)
[DEQ 20-1995 \(Temp\), f. & cert. ef. 9-14-95](#)
[DEQ 19-1995, f. & cert. ef. 9-1-95](#)
[DEQ 17-1995, f. & cert. ef. 7-12-95](#)
[DEQ 14-1995, f. & cert. ef. 5-25-95](#)
[DEQ 10-1995, f. & cert. ef. 5-1-95](#)
[DEQ 9-1995, f. & cert. ef. 5-1-95](#)
[DEQ 25-1994, f. & cert. ef. 11-2-94](#)

[DEQ 15-1994, f. 6-8-94, cert. ef. 7-1-94](#)
[DEQ 14-1994, f. & cert. ef. 5-31-94](#)
[DEQ 5-1994, f. & cert. ef. 3-21-94](#)
[DEQ 1-1994, f. & cert. ef. 1-3-94](#)
[DEQ 19-1993, f. & cert. ef. 11-4-93](#)
[DEQ 17-1993, f. & cert. ef. 11-4-93](#)
[DEQ 16-1993, f. & cert. ef. 11-4-93](#)
[DEQ 15-1993, f. & cert. ef. 11-4-93](#)
[DEQ 12-1993, f. & cert. ef. 9-24-93](#)
[DEQ 8-1993, f. & cert. ef. 5-11-93](#)
[DEQ 4-1993, f. & cert. ef. 3-10-93](#)
[DEQ 27-1992, f. & cert. ef. 11-12-92](#)
[DEQ 26-1992, f. & cert. ef. 11-2-92](#)
[DEQ 25-1992, f. 10-30-92, cert. ef. 11-1-92](#)
[DEQ 20-1992, f. & cert. ef. 8-11-92](#)
[DEQ 19-1992, f. & cert. ef. 8-11-92](#)
[DEQ 7-1992, f. & cert. ef. 3-30-92](#)
[DEQ 3-1992, f. & cert. ef. 2-4-92](#)
[DEQ 1-1992, f. & cert. ef. 2-4-92](#)
[DEQ 25-1991, f. & cert. ef. 11-13-91](#)
[DEQ 24-1991, f. & cert. ef. 11-13-91](#)
[DEQ 23-1991, f. & cert. ef. 11-13-91](#)
[DEQ 22-1991, f. & cert. ef. 11-13-91](#)
[DEQ 21-1991, f. & cert. ef. 11-13-91](#)
[DEQ 20-1991, f. & cert. ef. 11-13-91](#)
[DEQ 19-1991, f. & cert. ef. 11-13-91](#)
[DEQ 2-1991, f. & cert. ef. 2-14-91](#)
[DEQ 31-1988, f. 12-20-88, cert. ef. 12-23-88](#)
[DEQ 21-1987, f. & cert. ef. 12-16-87](#)
[DEQ 8-1987, f. & cert. ef. 4-23-87](#)
[DEQ 5-1987, f. & cert. ef. 3-2-87](#)
[DEQ 4-1987, f. & cert. ef. 3-2-87](#)
[DEQ 21-1986, f. & cert. ef. 11-7-86](#)
[DEQ 20-1986, f. & cert. ef. 11-7-86](#)
[DEQ 10-1986, f. & cert. ef. 5-9-86](#)
[DEQ 5-1986, f. & cert. ef. 2-21-86](#)
[DEQ 12-1985, f. & cert. ef. 9-30-85](#)
[DEQ 3-1985, f. & cert. ef. 2-1-85](#)
[DEQ 25-1984, f. & cert. ef. 11-27-84](#)
[DEQ 18-1984, f. & cert. ef. 10-16-84](#)
[DEQ 6-1983, f. & cert. ef. 4-18-83](#)
[DEQ 1-1983, f. & cert. ef. 1-21-83](#)
[DEQ 21-1982, f. & cert. ef. 10-27-82](#)
[DEQ 14-1982, f. & cert. ef. 7-21-82](#)
[DEQ 11-1981, f. & cert. ef. 3-26-81](#)
[DEQ 22-1980, f. & cert. ef. 9-26-80](#)

DEQ 21-1979, f. & cert. ef. 7-2-79
DEQ 19-1979, f. & cert. ef. 6-25-79
DEQ 54, f. 6-21-73, cert. ef. 7-1-73
DEQ 35, f. 2-3-72, cert. ef. 2-15-72

340-200-0050

Compliance Schedules

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

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

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

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

(2) If a negotiated schedule of compliance cannot be established, DEQ may commence enforcement proceedings as provided by ORS 468.090 or take such other authorized action as may be warranted.

Statutory/Other Authority: ORS 468.020 & 468A

Statutes/Other Implemented: ORS 468 & 468A

History:

DEQ 7-2017, f. & cert. ef. 7-13-17

DEQ 7-2015, f. & cert. ef. 4-16-15

DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-0700

DEQ 19-1993, f. & cert. ef. 11-4-93

DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0032

DEQ 4-1993, f. & cert. ef. 3-10-93

DEQ 37, f. 2-15-72, ef. 3-1-72

Division 208

VISIBLE EMISSIONS AND NUISANCE REQUIREMENTS

340-208-0110

Visible Air Contaminant Limitations

(1) The emissions standards in this rule do not apply to:

(a) Fugitive emissions from a source or part of a source; or

(b) Recovery furnaces and veneer dryers regulated under OAR chapter 340, division 234.

(2) The visible emissions standards in this rule are based on the average of 24 consecutive observations recorded at 15-second intervals, or more frequently as allowed under subsection (b), which comprise a six-minute block. Six-minute blocks need not be consecutive in time and in no case may two blocks overlap. For each set of 24 observations, the six-minute block average is calculated by summing the opacity of the 24 observations and dividing the sum by 24. Six-minute block averages are measured by:

(a) EPA Method 9;

(b) A continuous opacity monitoring system (COMS) installed and operated in accordance with the DEQ Continuous Monitoring Manual or 40 CFR part 60 [NOTE: DEQ manual is published with OAR 340-200-0035]; or

(c) An alternative monitoring method approved by DEQ that is equivalent to EPA Method 9.

(3)(a) For all emissions units, no person may emit or allow to be emitted any visible emissions that equal or exceed an average of 20 percent opacity, except as allowed under subsection (b) or (c).

(b) For wood-fired boilers installed, constructed or last modified on or after June 1, 1970 but before April 16, 2015, visible emissions may equal or exceed an average of 20 percent opacity for up to two independent six-minute blocks in any hour, as long as the average opacity during each of these two six-minute blocks is less than 40 percent;

(c) For wood-fired boilers installed, constructed or last modified prior to June 1, 1970:

(A) Visible emissions may equal or exceed an average of 20 percent opacity but may not equal or exceed 40 percent opacity, as the average of all six-minute blocks during grate cleaning operations provided the grate cleaning is performed in accordance with a grate cleaning plan approved by DEQ; or

(B) DEQ may approve, at the owner's or operator's request, a boiler specific limit greater than an average of 20 percent opacity, but not to equal or exceed an average of 40 percent opacity, based on the opacity measured during a source test that demonstrates compliance with OAR 340-228-0210(2)(d) and:

- (i) Opacity must be measured for at least 60 minutes during each compliance source test run using any method included in section (2);
- (ii) The boiler specific limit will be the average of at least 30 six-minute block averages obtained during the compliance source test;
- (iii) The boiler-specific limit will include a higher limit for one six-minute period during any hour based on the maximum six-minute block average measured during the compliance source test;
- (iv) Specific opacity limits will be included in the permit for each affected source as a minor permit modification (simple fee) for sources with an Oregon Title V Operating Permit or a Basic Technical Modification for sources with an Air Contaminant Discharge Permit; and
- (v) If an alternative limit is established in accordance with this paragraph, the exception provided in paragraph (A) does not apply.

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

NOTE: View a PDF of referenced EPA Method by clicking on "Tables" link below.

[\[ED. NOTE: To view attachments referenced in rule text, click here to view rule.\]](#)

Statutory/Other Authority: ORS 468.020 & 468A

Statutes/Other Implemented: ORS 468A.025 & 468A.035

History:

[DEQ 19-2022, amend filed 11/18/2022, effective 03/01/2023](#)

[DEQ 13-2019, amend filed 05/16/2019, effective 05/16/2019](#)

[DEQ 121-2018, minor correction filed 04/11/2018, effective 04/11/2018](#)

DEQ 7-2015, f. & cert. ef. 4-16-15

DEQ 8-2007, f. & cert. ef. 11-8-07

DEQ 2-2001, f. & cert. ef. 2-5-01

DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0015

DEQ 3-1996, f. & cert. ef. 1-29-96

DEQ 4-1993, f. & cert. ef. 3-10-93

DEQ 16, f. 6-12-70, ef. 7-11-70

Division 209 PUBLIC PARTICIPATION

340-209-0080

Issuance or Denial of a Permit

- (1) Following the public comment period and public hearing, if one is held, DEQ will take

action upon the matter as expeditiously as possible. Before taking such action, DEQ will prepare a written response to address each relevant, distinct issue raised during the comment period and raised during the hearing on the record.

(2) DEQ will make a record of the public comments, including the names and affiliation of persons who commented, and the issues raised during the public participation process. The public comment records may be in summary form rather than a verbatim transcript. The public comment records are available to the public at the DEQ office processing the permit.

(3) The applicant may submit a written request to provide their own response to public comments. A request to provide a response to public comments must be received by DEQ no later than 10 calendar days after the close of the public comment period. When a timely request is received by DEQ, the applicant may submit a written response to any comments submitted by the public within 10 working days after DEQ provides the applicant with a copy of the written comments received by DEQ. DEQ will consider the applicant's response in making a final decision.

(4) After considering the comments, DEQ may adopt or modify the provisions requested in the permit application.

(5) Issuance of permit: DEQ will promptly notify the applicant in writing of the final action as provided in OAR 340-011-0525 and will include a copy of the issued permit. If the permit conditions are different from those contained in the proposed permit, the notification will identify the affected conditions and include the reasons for the changes. The permit is effective on the date that it is signed unless the applicant requests a hearing to contest the permit within 20 days of the date of the notification of issuance of the permit.

(6) Denial of a permit application: If DEQ proposes to deny a permit application, DEQ will promptly notify the applicant in writing of the proposed final action as provided in OAR 340-011-0525. The notification will include the reasons for the denial. The denial of a permit application is effective 60 days from the date of notification of the proposed denial unless within that time, the applicant requests a hearing as provided in section (7).

(7) A request for a hearing to challenge a DEQ decision under section (5) or (6) must be in writing and state the grounds for the request. The hearing will be conducted as a contested case hearing in accordance with ORS 183.413 through 183.470 and OAR chapter 340, division 11.

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

Statutory/Other Authority: ORS 468.020, 468.065 & 468A.310

Statutes/Other Implemented: ORS 183.413, 183.415, 468.065, 468A.035, 468A.040 & 468A.310

History:

[DEQ 19-2022, amend filed 11/18/2022, effective 03/01/2023](#)

DEQ 7-2015, f. & cert. ef. 4-16-15

DEQ 42, f. 4-5-72, ef. 4-15-72;

DEQ 13-1988, f. & cert. ef. 6-17-88;

DEQ 4-1993, f. & cert. ef. 3-10-93;

DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01, Renumbered from 340-014-0025 & 340-014-0035;

DEQ 8-2007, f. & cert. ef. 11-8-07

Division 210

STATIONARY SOURCE NOTIFICATION REQUIREMENTS

[340-210-0225](#)

Notice of Construction and Approval of Plans: Types of Construction/Modification Changes

For the purpose of OAR 340-210-0205 through 340-210-0250, emission calculations for determining the type of change at a source must use the regulated air pollutant emission capacity, except for Type 1 changes under subsection (1)(b) and Type 4 changes. The notices of construction changes are divided into the following types:

(1) Type 1 changes include construction or modification for which the owner or operator is not required to obtain a permit or permit modification under OAR chapter 340, division 216, and where the changes meet the criteria in either subsection (a) or (b):

(a) The construction or modification would:

(A) Have emissions from any new, modified, or replaced device or activity, or any combination of devices or activities, of less than or equal to the de minimis levels defined in OAR 340-200-0020;

(B) Not result in an increase of emissions from the source above any PSEL;

(C) Not result in an increase of emissions from the source above the netting basis by more than or equal to the SER;

(D) Not be used to establish a federally enforceable limit on the potential to emit; and

(E) Not require a TACT determination under OAR 340-226-0130 or a MACT determination under OAR 340-244-0200; or

(b) The construction or modification is one of the following:

(A) Equipment, devices or processes that are explicitly allowed, covered, and regulated by a General ACDP or General ACDP attachment that the owner or operator has been assigned to;

(B) Stationary internal combustion engines having a rated capacity <60 horsepower

output;

(C) Emergency stationary internal combustion Tier 4 certified engines having a rated capacity <670 horsepower (500 kilowatts) output;

(D) Hand-held sanding equipment;

(E) Portable vacuum blasting equipment using steel shot and vented to a fabric filter;

(F) Shot peening operations, provided that no surface material is removed;

(G) Replacement of equipment that is used to control processes, such as temperature, air pressure, water pressure, electrical current, flow rate, etc.;

(H) Equipment and instrumentation used for quality control/assurance or inspection purposes;

(I) Vacuum pumps;

(J) Equipment used for extrusion, compression molding, and injection molding of plastics, provided that the VOC content of all mold release products or lubricants is <1% by weight;

(K) Injection or blow-molding equipment for rubber or plastics, provided that no blowing agent other than compressed air, water, or carbon dioxide is used;

(L) Presses or molds used for curing, post-curing, or forming composite products and plastic products, provided that the blowing agent contains no VOC or chlorinated compounds;

(M) Equipment used exclusively for the mixing and blending of materials at ambient temperature to make water-based adhesives;

(N) Dredging wet spoils handling and placement;

(O) Graphic label and/or box labeling operations where the inks are applied by hand stamping or hand rolling;

(P) Ultraviolet disinfection processes;

(Q) The cleaning and/or deburring of metal products where all tumblers are used without abrasive blasting;

(R) Ozone generators and ozonation equipment;

(S) Emissions from the storage and application of road salt (calcium chloride or sodium chloride);

(T) Process emissions from sources which are located at private, public, or vocational

education institutions, where the emissions are primarily the result of teaching and training exercises, and the institution is not engaged in the manufacture of products for commercial sale;

(U) Degreasing units which exclusively use caustics (e.g., potassium hydroxide and sodium hydroxide);

(V) Equipment used for hydraulic or hydrostatic testing with water-based hydraulic fluids;

(W) Storage tanks, reservoirs, pumping and handling equipment, and control equipment used to exclusively vent such equipment of any size, limited to soaps, lubricants, hydraulic fluid, vegetable oil, grease, animal fat, aqueous salt solutions or other materials and processes using appropriate lids and covers where there is no generation of objectionable odor or airborne particulate matter or toxic air pollutants listed in OAR chapter 340, division 247;

(X) Operation, loading and unloading storage of butane, propane, or liquefied petroleum gas with a vessel capacity less than 40,000 gallons where annual emissions are less than or equal to the de minimis levels;

(Y) Tanks, vessels and pumping equipment, with lids or other appropriate closure for storage or dispensing of aqueous solutions of inorganic salts, bases and acids;

(Z) Ultraviolet curing processes, to the extent that toxic air contaminants as defined in OAR chapter 340, division 247 are not emitted;

(AA) Contaminant detectors, sampling devices and recorders;

(BB) Environmental chambers and humidity chambers using only gases that are not toxic air contaminants listed in OAR chapter 340, division 247;

(CC) Lithographic printing equipment which uses laser printing;

(DD) Equipment used exclusively for conveying and storage of plastic pellets that don't break down or degrade and are only used for indoor manufacturing;

(EE) Gas cabinets using only gasses that are not regulated air pollutants;

(FF) Salt baths using nonvolatile salts and not used in operations which result in air emissions;

(GG) Paper shredding and carpet and paper shearing, fabric brushing and sueding as well as associated conveying systems, baling equipment, and control equipment venting such equipment. This exemption does not include carpet and fabric recycling operations;

(HH) Hammermills used exclusively to process aluminum and/or tin cans, and control equipment exclusively venting such equipment;

(II) Drop hammers or hydraulic presses for forging or metal working; or

(JJ) Concrete application, and installation.

(2) Type 2 changes include construction or modification for which the owner or operator is not required to obtain a permit or permit modification under OAR chapter 340, division 216, and where the construction or modification would:

(a) Have emissions from any new, modified, or replaced device or activity, or any combination of devices or activities, of less than the SER defined in OAR 340-200-0020;

(b) Not result in an increase of emissions from the source above any PSEL;

(c) Not result in an increase of emissions from the source above the netting basis by more than or equal to the SER;

(d) Not be used to establish a federally enforceable limit on the potential to emit;

(e) Be used to establish a state-only enforceable limit on the potential to emit;

(f) Not require a TACT determination under OAR 340-226-0130 or a MACT determination under OAR 340-244-0200; and

(g) Not cause or contribute to a new exceedance of a National Ambient Air Quality Standard adopted under OAR chapter 340, division 202 for a new or replaced device or activity.

(3) Type 3 changes include construction or modification where the construction or modification would:

(a) Have emissions from any new, modified, or replaced device or activity, or any combination of devices or activities, of more than or equal to the SER defined in OAR 340-200-0020;

(b) Result in an increase of emissions from the source above any PSEL before applying unassigned emissions or emissions reduction credits available to the source but less than the SER after applying unassigned emissions or emissions reduction credits available to the source;

(c) Be used to establish a federally enforceable limit on the potential to emit;

(d) Require a TACT determination under OAR 340-226-0130 or a MACT determination under 340-244-0200; or

(e) Not cause or contribute to a new exceedance of a National Ambient Air Quality Standard adopted under OAR chapter 340, division 202 for a new or replaced device or activity.

(4) Type 4 changes include construction or modification subject to New Source Review

under OAR chapter 340, division 224.

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-200-0040 except for OAR 340-210-0225(2)(e).

Statutory/Other Authority: ORS 468.020, 468A.025, 468A.040, 468A.050, ORS 468A.055, 468A.070 & 468A.310

Statutes/Other Implemented: ORS 468A.025, 468A.035, 468A.040, 468A.050, 468A.055, 468A.070 & 468A.310

History:

[DEQ 19-2022, amend filed 11/18/2022, effective 03/01/2023](#)

DEQ 7-2015, f. & cert. ef. 4-16-15

DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01, Renumbered from 340-210-0220

DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-0820

DEQ 19-1993, f. & cert. ef. 11-4-93

DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0030

DEQ 4-1993, f. & cert. ef. 3-10-93

DEQ 5-1989, f. 4-24-89, cert. ef. 5-1-89

DEQ 15, f. 6-12-70, ef. 9-1-70

340-210-0240

Notice of Construction and Approval of Plans: Construction Approval

(1) Approval to Construct:

(a) For Type 1 changes:

(A) Under OAR 340-210-0225(1)(b), the owner or operator of a source may proceed with the construction or modification immediately after notifying DEQ.

(B) Under OAR 340-210-0225(1)(a), the owner or operator of a source may proceed with the construction or modification immediately after notifying DEQ unless they request confirmation that the proposed construction or modification qualifies as a Type 1 change. DEQ has 30 calendar days from receipt of the written request, with a complete notice application, to provide written approval of the proposed construction or modification, or notify the owner or operator in writing that the proposed construction or modification does not qualify as a Type 1 change.

(b) For Type 2 changes, the owner or operator of a source may proceed with the construction or modification 60 calendar days after DEQ receives the complete notice application and fees required in OAR 340-210-0230 or on the date that DEQ approves the proposed construction or modification in writing, whichever is sooner, unless DEQ notifies the owner or operator in writing that the proposed construction or modification does not qualify as a Type 2 change.

(c) For Type 3 changes, the owner or operator of a source must obtain either:

(A) A new or modified Basic ACDP, Construction ACDP, a new or modified Simple

ACDP, or a new or modified Standard ACDP, whichever is appropriate, in accordance with OAR chapter 340, division 216 before proceeding with the construction or modification; or

(B) A new Simple or Standard ACDP, whichever is appropriate, in accordance with OAR chapter 340, division 216 before proceeding with the construction or modification if the source no longer qualifies for its assigned General ACDP(s).

(d) For Type 4 changes, the owner or operator of a source must obtain either a Construction ACDP or a new or modified Standard ACDP in accordance with OAR chapter 340, division 216 before proceeding with the construction or modification.

(2) Upon DEQ approval, the owner or operator of a source must construct or modify and operate the source in accordance with the approved plans and specifications, including any corrections or revisions approved by DEQ, previously submitted in the application required under OAR 340-210-0230.

(3) Approval to construct or modify does not relieve the owner or operator of a source of the obligation of complying with applicable requirements.

(4) The owner or operator of a source that receives approval to construct or modify must commence construction within 18 months of approval, or other date approved in writing by DEQ.

(a) Construction or modification approval terminates and is invalid for the following reasons:

(A) Construction or modification is not commenced within 18 months after DEQ issues such approval, by an alternative deadline established by DEQ under this section, or by the deadline approved by DEQ in an extension under subsection (b);

(B) Construction or modification is discontinued for a period of 18 months or more; or

(C) Construction or modification is not completed within 18 months of the anticipated date of construction completion included in the application.

(b) The owner or operator may submit a request to extend the construction or modification commencement deadline by submitting a written, detailed explanation of why the source could not commence construction or modification within the initial 18-month period. DEQ may grant, for good cause, one 18-month construction or modification approval extension.

(5) Notice of Completion. Unless otherwise specified in the Construction ACDP or approval, the owner or operator of a source must notify DEQ in writing that the construction or modification has been completed using a form furnished by DEQ. Unless otherwise specified, the notice is due 30 days after completing the construction or modification. The notice of completion must include the following:

- (a) The date of completion of construction or modification;
- (b) Whether the construction or modification was completed in accordance with approved plans, specifications and any corrections or revisions thereto under OAR 340-210-0230, such as but not limited to:
- (A) Make, model, and identification name or number of the constructed device or activity, or any combination of devices or activities;
- (B) Location of the constructed device or activity, or any combination of devices or activities;
- (C) Exhaust parameters (e.g., stack height, diameter, temperature, flowrate, volume or area source dimensions); and
- (c) The date the stationary source, device, activity, or air pollution control device was or will be put in operation.
- (6) Order Prohibiting Construction or Modification. If at any time, DEQ determines that the proposed construction is not in accordance with applicable statutes, rules, regulations, and orders, DEQ will issue an order prohibiting the construction or modification. The order prohibiting construction or modification will be forwarded to the owner or operator of the source by certified mail.
- (7) Hearing. An owner or operator of a source against whom an order prohibiting construction or modification is directed may request a contested case hearing within 20 days from the date of mailing the order. The request must be in writing, state the grounds for hearing, and be mailed to the Director of DEQ. The hearing will be conducted pursuant to the applicable provisions of ORS chapter 183 and OAR chapter 340, division 11.

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

Statutory/Other Authority: ORS 468.020, 468A.025, 468A.040, 468A.050, 468A.055, 468A.070 & 468A.310

Statutes/Other Implemented: ORS 468A. 025, 468A.035, 468A.040, 468A.050, 468A.055, 468A.070 & 468A.310

History:

[DEQ 19-2022, amend filed 11/18/2022, effective 03/01/2023](#)

[DEQ 17-2020, amend filed 09/21/2020, effective 09/21/2020](#)

DEQ 7-2015, f. & cert. ef. 4-16-15

DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

Division 212

STATIONARY SOURCE TESTING AND MONITORING

[340-212-0230](#)

Compliance Assurance Monitoring: Deadlines for Submittals

(1) Large regulated pollutant-specific emissions units. For all regulated pollutant-specific emissions units with the potential to emit the applicable regulated pollutant in an amount equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source, the owner or operator must submit the information required under OAR 340-212-0220 at the following times:

(a) The owner or operator must submit information as part of an application for an initial Oregon Title V Operating Permit if, by that date, the application either:

(A) Has not been filed; or

(B) Has not yet been determined to be complete by DEQ.

(b) The owner or operator must submit information as part of an application for a significant permit revision under OAR 340-218-0180, but only with respect to those regulated pollutant-specific emissions units for which the proposed permit revision applies;

(c) The owner or operator must submit any information not submitted under the deadlines set forth in subsections (1)(a) and (b) as part of the application for the renewal of an Oregon Title V Operating Permit.

(2) Other regulated pollutant-specific emissions units. For all other regulated pollutant-specific emissions units subject to OAR 340-212-0220 through 340-212-0280 and not subject to section (1), the owner or operator must submit the information required under 340-212-0220 as part of an application for a renewal of an Oregon Title V Operating Permit.

(3) A permit reopening to require the submittal of information under this rule is not required by OAR 340-218-0200(1)(a)(A). If, however, an Oregon Title V Operating Permit is reopened for cause by EPA or DEQ pursuant to OAR 340-218-0200(1)(a)(C), (D), or (E), the applicable agency may require the submittal of information under this rule for those regulated pollutant-specific emissions units that are subject to OAR 340-212-0200 through 340-212-0280 and that are affected by the permit reopening.

(4) Until DEQ approves monitoring plans that satisfy the requirements of OAR 340-212-0200 through 340-212-0280, the owner or operator is subject to the requirements of OAR 340-218-0050(3)(a)(C).

Statutory/Other Authority: ORS 468.020 & 468A.310

Statutes/Other Implemented: ORS 468A.310

History:

DEQ 7-2015, f. & cert. ef. 4-16-15

DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1230

DEQ 21-1998, f. & cert. ef. 10-14-98

Division 216 AIR CONTAMINANT DISCHARGE PERMITS

340-216-0040

Application Requirements

(1) New Permits.

(a) Except for Short Term Activity ACDPs, any person required to obtain a new ACDP must provide a complete application with the following general information, as applicable, in addition to any other information required for a specific permit type. Complete applications must be submitted using electronic forms provided by DEQ, unless otherwise approved in writing by DEQ:

(A) Identifying information, including the name of the company, the mailing address, the facility address, and the nature of business, Standard Industrial Classification (SIC) code;

(B) The name and phone number of a local person responsible for compliance with the permit;

(C) The name of a person authorized to receive requests for data and information;

(D) A description of the production processes and related flow chart;

(E) A plot plan showing the location and height of all emissions units, devices and activities that emit to the atmosphere, including any air pollution control devices, and the nearest residential and commercial properties;

(F) Make, model, and identification name or number of each device, activity, and air pollution control device, if known;

(G) Exhaust parameters (e.g., stack height, diameter, temperature, flowrate, volume or area source dimensions) of each emissions unit, device, and air pollution control device that emits to the atmosphere;

(H) The type and quantity of fuels used;

(I) An estimate of the amount and type of each air contaminant emitted by the source in terms of hourly, daily, or monthly and yearly rates, showing calculation procedures;

(J) Any information on pollution prevention measures and cross-media impacts the applicant wants DEQ to consider in determining applicable control requirements and evaluating compliance methods;

(K) Estimated efficiency of air pollution control devices under present or anticipated operating conditions;

(L) Where the operation or maintenance of air pollution control devices and emission reduction processes can be adjusted or varied from the highest reasonable efficiency and effectiveness, information necessary for DEQ to establish operational and maintenance requirements in OAR 340-226-0120(1) and (2);

(M) Land Use Compatibility Statement(s), when required by OAR chapter 340, division 018:

(i) Signed by the applicable local planning jurisdiction(s), determining that construction or modification of the source is compatible with applicable local jurisdiction's acknowledged comprehensive plan. If DEQ receives a LUCS which states that the proposed action is incompatible with the acknowledged comprehensive plan, DEQ shall notify the applicant that the application cannot be processed;

(ii) If the local planning jurisdiction declines to provide a LUCS determination in response to a request for a LUCS, the owner or operator must provide DEQ with its own analysis to demonstrate that the proposed action complies with all applicable statewide planning goals;

(N) The most recent information reported through EPA's Toxics Release Inventory program at the time of application submittal, if the source is subject to the program;

(O) An air quality analysis, conducted in accordance with the procedures in OAR chapter 340, division 225, demonstrating that the emissions, including reductions due to air pollution control devices or permitted limits on production capacity, will not cause or contribute to a new exceedance of a National Ambient Air Quality Standard adopted under OAR chapter 340, division 202;

(P) Any information required by OAR chapter 340, divisions 222, 224, 225, and 245, including but not limited to control technology and analysis and air quality analysis, conducted in accordance with the procedures in OAR chapter 340, division 225; and information related to offsets and net air quality benefit, if applicable;

(Q) Anticipated date of the commencement of construction (i.e., breaking ground); and

(R) Anticipated date of construction completion; and

(S) Any other information requested by DEQ.

(b) Owners or operators must submit complete applications for new permits in accordance with the timelines provided in subsection (2)(b), as well as OAR 340-245-0030, Cleaner Air Oregon submittal and payment deadlines, and OAR 340-224-0030, permit applications subject to New Source Review, to allow DEQ adequate time to process the application and issue a permit before it is needed.

(2) Permit Renewals. Any person who wants to renew an existing permit must submit a complete application using forms provided by DEQ, unless otherwise allowed in writing by DEQ.

(a) The renewal application must include:

(A) All information identified in subsection (1)(a) that has changed since the last permit renewal or issuance;

(B) A complete list of all devices and activities, or any combination of devices and activities, including all air pollution control devices, and all categorically insignificant activities;

(C) An estimate of the amount and type of each air contaminant emitted by the source in terms of hourly, daily, or monthly and yearly rates, showing calculation procedures;

(D) All changes to the source since the last permit issuance and all requirements applicable to those changes; and

(E) When required by DEQ, an air quality analysis, conducted in accordance with the procedures in OAR chapter 340, division 225, demonstrating that the source's emissions, including reductions due to air pollution control devices or permitted limits on production capacity, will not cause or contribute to a new exceedance of a National Ambient Air Quality Standard adopted under OAR chapter 340, division 202.

(b) The owner or operator must submit an application for renewal of the existing permit by no later than:

(A) 30 days prior to the expiration date of a Basic ACDP;

(B) 120 days prior to the expiration date of a Simple ACDP; or

(C) 180 days prior to the expiration date of a Standard ACDP.

(c) DEQ must receive an application for reassignment to General ACDPs and General ACDP attachments within 30 days prior to expiration of the General ACDPs or General ACDP attachments.

(3) Permit Modifications.

(a) An owner or operator applying for a modification of a Basic, Simple or Standard ACDP must provide the information in subsection (1)(a) relevant to the requested changes to the permit and a list of any requirements applicable to those changes.

(b) DEQ recommends that applicants for permit modifications consider the timelines provided in subsection (2)(b), as well as OAR 340-245-0030, Cleaner Air Oregon submittal and payment deadlines, and OAR 340-224-0030, permit applications subject to New Source Review, to allow DEQ adequate time to process the application and issue a permit before it is needed.

(c) When required by DEQ, the owner or operator must submit an air quality analysis demonstrating that the emissions, including reductions due to air pollution control

devices or permitted limits on production capacity, will not cause or contribute to a new exceedance of a National Ambient Air Quality Standard adopted under OAR chapter 340, division 202.

(4) Any person who fails to submit any relevant facts or who has submitted incorrect information in a permit application must, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

(5) Permit applications must be completed in full and signed by the applicant or the applicant's legally authorized representative.

(6) When a permit application is subject to Major NSR under OAR chapter 340, division 224, a copy of the permit application, including all supplemental and supporting information, must also be submitted directly to the EPA.

(7) The name of the applicant on a permit application must be the person (individual, corporation, association, firm, partnership, joint stock company, public corporation, municipal corporation, political subdivision, state, state agency, federal government, or federal government agency), as defined in ORS 468.005 that is the legal name of the facility's owner, the owner's agent or the lessee responsible for the operation and maintenance of the facility. The legal name must be registered with the Oregon Secretary of State Corporations Division, unless the applicant meets the criteria in subsection (a) or (b) below:

(a) The applicant is an individual person that is operating the facility or applying for the permit, and is not doing so under an assumed business name. The applicant's legal name (First, Middle Initial, Last) will be used; or

(b) The applicant is an entity that is not required to be registered with the Oregon Secretary of State Corporations Division, such as a government entity like a municipality or state or federal agency.

(8) All permit applications must include the appropriate fees as specified in OAR 340-216-8020 and OAR 340-216-8030.

(9) Permit applications that are obviously incomplete, unsigned, improperly signed, or lacking the required exhibits or fees will be rejected by DEQ and returned to the applicant for completion.

(10) Within 15 days after receiving the application, DEQ will preliminarily review the application to determine the adequacy of the information submitted, and:

(a) If DEQ determines that additional information is needed, DEQ will promptly ask the applicant for the needed information and provide the applicant with a written request to provide such information by a date, not to exceed a 60-day period;

(b) An applicant may request an extension of time from a deadline established in subsection (a) by providing DEQ with a written request 15 days prior to the submittal

deadline. DEQ may grant an extension based on the following criteria:

- (A) The applicant has demonstrated progress in completing the submittal; and
 - (B) A delay is necessary, for good cause shown by the applicant, related to obtaining more accurate or new data, performing additional analyses, or addressing changes in operations or other key parameters, any of which are likely to have a substantive impact on the outcomes of the submittal;
 - (c) If DEQ determines it is not able to approve the applicant's submittal, or if the applicant does not timely provide additional information or corrections requested by DEQ under subsection (a), then in addition to any other remedies available, DEQ may issue a proposed denial of the application under OAR 340-209-0080(6);
 - (d) If DEQ has determined that additional information or corrections are necessary under subsection (a), and except as provided in subsection (c), DEQ will not consider the application to be complete for processing until DEQ has received the requested information; and
 - (e) When DEQ has determined that the information in an application is adequate for processing, DEQ will so notify the applicant in writing.
- (11) If at any time while processing the permit application, DEQ determines that additional information is needed, DEQ will follow the procedures in section (10) to request such information.
- (12) If, upon review of an application, DEQ determines that a permit is not required, DEQ will so notify the applicant in writing. Such notification is a final action by DEQ on the application.

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-200-0040 with the exception of all references to toxic air contaminants or OAR chapter 340, division 245.

NOTE: Tables referenced are in OAR 340-216-8010 and 340-216-8020.

Statutory/Other Authority: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.310 & 468A.315

Statutes/Other Implemented: ORS 468 & 468A

History:

[DEQ 15-2023, minor correction filed 11/07/2023, effective 11/07/2023](#)

[DEQ 19-2022, amend filed 11/18/2022, effective 03/01/2023](#)

[DEQ 197-2018, amend filed 11/16/2018, effective 11/16/2018](#)

DEQ 7-2015, f. & cert. ef. 4-16-15

DEQ 9-2014, f. & cert. ef. 6-26-14

DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01, Renumbered from 340-014-0020 & 340-014-0030

DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1770
DEQ 19-1993, f. & cert. ef. 11-4-93
DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0175
DEQ 4-1993, f. & cert. ef. 3-10-93
DEQ 13-1988, f. & cert. ef. 6-17-88
DEQ 20-1979, f. & cert. ef. 6-29-79
DEQ 107, f. & cert. ef. 1-6-76, Renumbered from 340-020-0033
DEQ 63, f. 12-20-73, cert. ef. 1-11-74
DEQ 47, f. 8-31-72, cert. ef. 9-15-72
DEQ 42, f. 4-5-72, cert. ef. 4-15-72

340-216-0060

General Air Contaminant Discharge Permits

(1) Applicability.

(a) DEQ may issue a General ACDP under the following circumstances:

(A) There are multiple sources that involve the same or substantially similar types of operations;

(B) All requirements applicable to the covered operations can be contained in a General ACDP;

(C) The emission limitations, monitoring, recordkeeping, reporting and other enforceable conditions are the same for all operations covered by the General ACDP; and

(D) The regulated pollutants emitted are of the same type for all covered operations.

(E) DEQ may determine that a source is ineligible for a General ACDP based upon the considerations in OAR 340-216-0025(7).

(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) PSELs set at the potential to emit for the largest emitting source in the source category in the state for all regulated pollutants emitted at more than the de minimis emission level according to OAR chapter 340, division 222;

(C) Testing, monitoring, recordkeeping, and reporting requirements necessary to ensure compliance with the PSEL and other applicable emissions limits and standards; and

(D) A permit expiration date not to exceed 10 years from the date of issuance.

(c) Permit issuance public notice procedures: A new General ACDP requires public notice as a Category III permit action according to OAR chapter 340, division 209. A

reissued General ACDP or a modification to a General ACDP requires public notice as a Category II permit action according to OAR chapter 340, division 209.

(d) DEQ will retain all General ACDPs on file and make them available for public review at DEQ's headquarters.

(2) Petition for General ACDP Categories. Any person may file a petition with DEQ to add a category for a General ACDP. DEQ may use its discretion to determine whether to issue any such new General ACDP. The petition must include at least the following information:

(a) Justification for why a new General ACDP category should be developed;

(b) The approximate number of businesses that would be eligible for the General ACDP;

(c) Criteria for qualification to the General ACDP; and

(d) A list of the requirements applicable to the activities or sources that would be eligible for the new General ACDP.

(3) Source assignment:

(a) Application requirements. Any person requesting that a source be assigned to a General ACDP must submit a written application according to OAR 340-216-0040 that includes the information in 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 in OAR 340-216-8020. The fee class for each General ACDP is Fee Class One unless otherwise specified as follows:

(A) Halogenated solvent degreasers — batch cold, batch vapor, and in-line — Fee Class Two;

(B) Perchloroethylene dry cleaners — Fee Class Six;

(C) Asphalt plants — Fee Class Three;

(D) Rock crushers — Fee Class Two;

(E) Ready-mix concrete — Fee Class One;

(F) Sawmills, planing mills, millwork, plywood manufacturing and veneer drying — Fee Class Three;

(G) Boilers — Fee Class Two;

(H) Crematories — Fee Class One;

(I) Grain elevators — Fee Class One;

- (J) Prepared feeds, flour, and cereal — Fee Class One;
- (K) Seed cleaning — Fee Class One;
- (L) Coffee roasters — Fee Class One;
- (M) Bulk gasoline plants — Fee Class One;
- (N) Electric power generators — Fee Class Two;
- (O) Clay ceramics — Fee Class One;
- (P) Hospital sterilizers — Fee Class Four;
- (Q) Gasoline dispensing facilities — Fee Class Four;
- (R) 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);
- (S) Metal fabrication and finishing — with only one of the operations listed in subparagraphs (3)(b)(R)(i) through (iii) — Fee Class One;
- (T) Metal fabrication and finishing — with none of the operations listed in subparagraphs (3)(b)(R)(i) through (iii) — Fee Class Four;
- (U) Plating and polishing — Fee Class One;
- (V) Surface coating operations — Fee Class One;(V)
- (W) Emergency generators and firewater pumps, if a permit is required – Fee Class Five.
- (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 according to OAR chapter 340, division 209.
 - (B) A person is not a permittee under the General ACDP until DEQ assigns the General

ACDP to the person.

(C) Assignments to General ACDPs and attachments 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 applicable requirements, 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 according to OAR 340-216-0062, otherwise the owner or operator of the source must obtain a Simple or Standard ACDP.

(E) An owner or operator of a source requesting to be assigned to a General ACDP Attachment, according to OAR 340-216-0062, for a source category in a higher annual fee class than the General ACDP to which the source is currently assigned, must be reassigned to the General ACDP for the source category in the higher annual fee class.

(4) DEQ Initiated Modification. If DEQ determines that the conditions have changed such that a General ACDP for a category needs to be modified, DEQ may issue a modified General ACDP for that category and assign all existing General ACDP permit holders to the modified General ACDP.

(5) Rescission. DEQ may rescind a permittee's assignment to a General ACDP if the permittee's source no longer meets the requirements or qualification conditions of the permit. In such case, the permittee must submit an application within 60 days for a Simple or Standard ACDP upon notification by DEQ of DEQ's intent to rescind the General ACDP. Upon issuance of the Simple or Standard ACDP, or if the permittee fails to submit an application for a Simple or Standard ACDP, DEQ will rescind the permittee's assignment to the General ACDP.

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.

NOTE: All tables are found in OAR 340-216-8010, -8020, -8030.

Statutory/Other Authority: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.310 & 468A.315

Statutes/Other Implemented: ORS 468 & 468A

History:

[DEQ 4-2024, amend filed 03/25/2024, effective 03/25/2024](#)

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[DEQ 128-2018, minor correction filed 04/11/2018, effective 04/11/2018](#)

DEQ 7-2015, f. & cert. ef. 4-16-15

DEQ 9-2014, f. & cert. ef. 6-26-14

DEQ 4-2013, f. & cert. ef. 3-27-13

DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

DEQ 1-2011, f. & cert. ef. 2-24-11

DEQ 8-2009, f. & cert. ef. 12-16-09
DEQ 15-2008, f. & cert. ef. 12-31-08
DEQ 8-2007, f. & cert. ef. 11-8-07
DEQ 2-2006, f. & cert. ef. 3-14-06
DEQ 4-2002, f. & cert. ef. 3-14-02
DEQ 10-2001, f. & cert. ef. 8-30-01
DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01
DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1725
DEQ 14-1998, f. & cert. ef. 9-14-98

340-216-0064
Simple ACDP

- (1) Application Requirements. Any person requesting a new, modified, or renewed Simple ACDP must submit an application according to OAR 340-216-0040.
- (2) DEQ may determine that a source is ineligible for a Simple ACDP based upon the considerations in OAR 340-216-0025(7).
- (3) Fees. Applicants for a new or modified Simple ACDP must pay the fees in OAR 340-216-8020. Applicants for a new Simple ACDP must initially pay the High Annual Fee. Once the initial permit is issued, 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 permitted under only one of the following categories from OAR 340-216-8010 Table 1 Part B, and no additional categories apply:
 - (i) Category 7. Asphalt felt and coatings;
 - (ii) Category 13. Boilers and other fuel burning equipment (can be combined with category 27. Electric power generation);
 - (iii) Category 27. Electric power generation;
 - (iv) Category 33. Galvanizing & pipe coating;
 - (v) 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);
 - (vi) Category 40. Gypsum products;
 - (vii) Category 45. Liquid storage tanks subject to OAR chapter 340, division 232;
 - (viii) Category 56. Non-ferrous metal foundries 100 or more tons/year of metal charged;

- (ix) Category 57. Organic or inorganic industrial chemical manufacturing;
- (x) Category 62. Perchloroethylene dry cleaning;
- (xi) Category 73. Secondary smelting and/or refining of ferrous and non-ferrous metals;
or
- (xii) Category 85. All other sources not listed in OAR 340-216-8010 (can be combined with category 27. Electric Power Generation); and

(B) The actual emissions from the calendar year immediately preceding the invoice date are less than five tons/year of PM₁₀ in a PM₁₀ nonattainment or maintenance area or PM_{2.5} in a PM_{2.5} nonattainment or maintenance area, and less than 10 tons/year for each criteria pollutant; and

(C) The source is not creating a nuisance under OAR 340-208-0310 or 340-208-0450.

(b) High Fee — Any source required to have a Simple ACDP (OAR 340-216-8010 Part B) that does not qualify for the low fee under subsection (3)(a) will be assessed the high fee.

(c) If 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 OAR 340-216-8020 Part 5. In the case of late fees, DEQ will issue a new invoice specifying applicable fees.

(4) Permit Content. Each Simple ACDP must include the following:

(a) All relevant applicable requirements for source operation, including general ACDP conditions for incorporating generally applicable requirements, but excluding any federal requirements not adopted by the EQC;

(b) PSEs at less than the SER for all regulated pollutants emitted at more than the de minimis emission level under OAR chapter 340, division 222;

(c) To ensure the source's emission will not cause or contribute to a new exceedance of a National Ambient Air Quality Standard adopted under OAR chapter 340, division 202:

(A) Any physical or operational limitation, including any combination of the use of control devices, restrictions on hours of operation, or restrictions on the type or amount of materials combusted, stored, or processed, will be included as permit conditions to limit short term emissions for all devices and activities that require controls or limitations; or

(B) A requirement to conduct ambient monitoring to confirm a new exceedance of a National Ambient Air Quality Standard. Ambient monitoring and meteorological monitoring must be conducted in accordance with a DEQ approved monitoring plan for a period of not less than 12 months. There must be at least 12 months of valid data with greater than 75 percent data completeness per quarter.

(d) Testing, monitoring, recordkeeping, and reporting requirements sufficient to determine compliance with the PSEL and other emission limits and standards, as necessary; and

(e) A permit duration not to exceed 10 years.

(5) Permit issuance public notice procedures:

(a) Issuance of a new or renewed Simple ACDP requires public notice as a Category III permit according to OAR chapter 340, division 209.

(b) Issuance of a modification to a Simple ACDP requires one of the following procedures, as applicable:

(A) Public notice as a Category I permit action for non-technical and basic and simple technical modifications according to OAR chapter 340, division 209; or

(B) Public notice as a Category III permit action for moderate and complex technical modifications according to OAR chapter 340, division 209.

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.

Statutory/Other Authority: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.310 & 468A.315

Statutes/Other Implemented: ORS 468 & 468A

History:

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Reverted to DEQ 4-2013, f. & cert. ef. 3-27-13

DEQ 9-2013(Temp), f. & cert. ef. 10-24-13 thru 4-22-14

DEQ 4-2013, f. & cert. ef. 3-27-13

DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

DEQ 1-2011, f. & cert. ef. 2-24-11

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

DEQ 4-2002, f. & cert. ef. 3-14-02

DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-216-0082

Expiration, Termination, Reinstatement or Revocation of an ACDP

(1) Expiration.

(a) A source may not be operated after the expiration date of a permit, unless any of the following occur prior to the expiration date of the permit:

(A) A timely and complete application for renewal or reassignment has been submitted;

or

(B) Another type of permit, ACDP or Oregon Title V Operating Permit, has been applied for or issued authorizing operation of the source.

(b) If a timely and complete renewal or reassignment application has been submitted, the existing permit will remain in effect until final action has been taken on the renewal application to issue or deny a permit.

(c) For a source operating under an ACDP or Oregon Title V Operating Permit, a requirement established in an earlier ACDP remains in effect notwithstanding expiration of the ACDP, unless the provision expires by its terms or unless the provision is modified or terminated according to the procedures used to establish the requirement initially.

(2) Termination. Except as provided in section (3), a source may not be operated after the termination of a permit. A permit terminates upon:

(a) Issuance of a renewal, reassigned ACDP or a new ACDP for the same activity or operation;

(b) Written request by the permittee to DEQ requesting termination. If DEQ determines that a permit is no longer needed, DEQ will confirm termination in writing to the permittee;

(c) Failure to submit a timely and complete application for permit renewal or reassignment as required in OAR 340-216-0040. Termination is effective on the permit expiration date;

(d) Failure to pay annual fees within 90 days of the invoice due date as issued by DEQ, unless prior arrangements for a payment plan have been approved in writing by DEQ.

(3) Termination of construction approval.

(a) Construction approval issued by DEQ under this division terminates and is invalid for the following reasons:

(A) Construction is not commenced within 18 months after DEQ issues such approval, by an alternative deadline established by DEQ under this section, or by the deadline approved by DEQ in an extension under subsection (b);

(B) Construction is discontinued for a period of 18 months or more; or

(C) Construction is not completed within 18 months of the anticipated date of construction completion included in the application.

(b) The owner or operator of a source for which construction approval has been terminated under subsection (a) may submit a request to extend the construction

commencement deadline by submitting a written, detailed explanation of why the source could not commence construction within the initial 18-month period. DEQ may grant for good cause one 18-month construction approval extension.

(4) Reinstatement of Terminated Permit.

(a) A permit subject to termination under subsection (2)(c) may only be reinstated if, not later than 30 days after the permit expiration date, the permittee submits a complete renewal application and pays a late application fee equivalent to the initial new permitting application fee that would apply if the source was a new source, in which case the existing, expired permit will be reinstated effective as of the permit expiration date and will remain in effect until final action has been taken on the renewal application to issue or deny a permit;

(b) A permit terminated under subsection (2)(d) may only be reinstated if, not later than 90 days after termination, the permittee pays all unpaid annual fees and applicable late fees in which case the existing permit will be reinstated effective on the date of termination; and

(c) A terminated permit may only be reinstated as provided in subsections (a) and (b). If neither subsection (a) or (b) apply, the former permittee of a terminated permit who wishes to obtain an ACDP must submit a complete application for a new permit, including paying applicable new source permit application fees and any unpaid annual fees and late fees that were due under the terminated permit. Until DEQ issues or reassigns a new permit, the source may not operate.

(5) Revocation:

(a) If DEQ determines that a permittee is in noncompliance with the terms of the permit, submitted false information in the application or other required documentation, or is in violation of any applicable rule or statute, DEQ may revoke the permit. DEQ will provide notice of the intent to revoke the permit to the permittee under OAR 340-011-0525. The notice will include the reasons why the permit will be revoked, and include an opportunity for the permittee to request a contested case hearing prior to the revocation. A permittee's written request for hearing must be received by DEQ within 60 days from service of the notice on the permittee, and must state the grounds of the request. The hearing will be conducted as a contested case hearing under ORS 183.413 through 183.470 and OAR chapter 340, division 011. The permit will continue in effect until the 60th day after service of the notice on the permittee, if the permittee does not timely request a hearing, or until a final order is issued if the permittee timely requests a hearing.

(b) If DEQ finds there is a serious danger to the public health, safety or the environment caused by a permittee's activities, DEQ may immediately revoke or refuse to renew the permit without prior notice or opportunity for a hearing. If no advance notice is provided, notification will be provided to the permittee as soon as possible under OAR 340-011-0525. The notification will set forth the specific reasons for the revocation or refusal to

renew and will provide an opportunity for the permittee to request a contested case hearing for review of the revocation or refusal to renew. A permittee's written request for hearing must be received by DEQ within 90 days of service of the notice on the permittee and must state the grounds for the request. The hearing will be conducted as a contested case hearing under ORS 183.413 through 183.470 and OAR chapter 340, division 011. The revocation or refusal to renew becomes final without further action by DEQ if a request for a hearing is not received within the 90 days. If a request for a hearing is timely received, the revocation or refusal to renew will remain in place until issuance of a final order.

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

Statutory/Other Authority: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.310 & 468A.315

Statutes/Other Implemented: ORS 468 & 468A

History:

[DEQ 19-2022, amend filed 11/18/2022, effective 03/01/2023](#)

DEQ 7-2015, f. & cert. ef. 4-16-15

DEQ 8-2007, f. & cert. ef. 11-8-07

DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01, Renumbered from 340-014-0015 & 340-014-0045

DEQ 4-1993, f. & cert. ef. 3-10-93

DEQ 21-1990, f. & cert. ef. 7-6-90

DEQ 125, f. & cert. ef. 12-16-76

DEQ 42, f. 4-5-72, cert. ef. 4-15-72

[340-216-8010](#)

Table 1 — Activities and Sources

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

NOTE: For the history of these tables prior to 2014 see the history under OAR 340-216-0020

[\[ED. NOTE: To view attachments referenced in rule text, click here to view rule.\]](#)

Statutory/Other Authority: ORS 468.020, 468A.025, 468A.040 & 468A.310

Statutes/Other Implemented: ORS 468A

History:

[DEQ 18-2024, amend filed 11/22/2024, effective 11/22/2024](#)

[DEQ 17-2023, amend filed 11/16/2023, effective 11/16/2023](#)

[DEQ 19-2022, amend filed 11/18/2022, effective 03/01/2023](#)

[DEQ 16-2021, amend filed 10/04/2021, effective 10/04/2021](#)

[DEQ 17-2020, amend filed 09/21/2020, effective 09/21/2020](#)

[DEQ 59-2017, minor correction filed 12/20/2017, effective 12/20/2017](#)

DEQ 7-2015, f. & cert. ef. 4-16-15
DEQ 12-2014(Temp), f. & cert. ef. 11-12-14 thru 5-10-15
DEQ 9-2014, f. & cert. ef. 6-26-14

340-216-8020

Table 2 — Air Contaminant Discharge Permits

(1) Sources referred to in Table 1 of OAR 340-216-8010 are subject to air contaminant discharge permit fees in Table 2. Title V sources may be subject to the Cleaner Air Oregon annual fees and the specific activity permit fees in Table 2, if applicable.

(2) Requests for waiver of fees must be made in writing to the Director, on a case-by-case basis, and be based upon financial hardship. Applicants for waivers must describe the reason for the request and certify financial hardship. The Director may waive part or all of a fee.

NOTE: For the history of these tables prior to 2014 see the history under OAR 340-216-0020.

[\[ED. NOTE: To view attachments referenced in rule text, click here to view rule.\]](#)

Statutory/Other Authority: ORS 468.020, 468A.025, 468A.040 & 468A.310

Statutes/Other Implemented: ORS 468A

History:

[DEQ 16-2025, temporary amend filed 07/14/2025, effective 07/14/2025 through 01/09/2026](#) [DEQ 15-2025, amend filed 07/07/2025, effective 07/07/2025](#)

[DEQ 14-2024, amend filed 09/10/2024, effective 09/10/2024](#)

[DEQ 17-2023, amend filed 11/16/2023, effective 11/16/2023](#)

[DEQ 19-2022, amend filed 11/18/2022, effective 03/01/2023](#)

[DEQ 17-2020, amend filed 09/21/2020, effective 09/21/2020](#)

[DEQ 15-2019, amend filed 06/25/2019, effective 06/25/2019](#)

[DEQ 13-2019, amend filed 05/16/2019, effective 05/16/2019](#)

[DEQ 197-2018, amend filed 11/16/2018, effective 11/16/2018](#)

[DEQ 60-2017, minor correction filed 12/20/2017, effective 12/20/2017](#)

DEQ 7-2015, f. & cert. ef. 4-16-15

DEQ 9-2014, f. & cert. ef. 6-26-14

Division 226 GENERAL EMISSION STANDARDS

340-226-0130

Highest and Best Practicable Treatment and Control: Typically Achievable Control Technology (TACT)

TACT determinations will be based on information known to DEQ while considering pollution prevention, impacts on other environmental media, energy impacts, capital and operating costs, cost effectiveness, and the age and remaining economic life of existing

emission control devices. DEQ may consider emission control technologies typically applied to other types of emissions units where such technologies could be readily applied to the emissions unit. If an emission limitation is not feasible, a design, equipment, work practice, operational standard, or combination thereof, may be required.

(1) Existing Sources. For existing sources, the emission limit established will be typical of the emission level achieved by emissions units similar in type and size. An existing emissions unit must meet TACT for existing sources if:

(a) The emissions unit is not already subject to emission standards for the regulated pollutant under OAR chapter 340, divisions 224, 230, 234, 236 or 238, OAR 340-232-0010 through 340-232-0230, OAR 340-240-0110 through 340-240-0180, or OAR 340-240-0320 through 340-240-0430;

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

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

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

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

(a) The new or modified emissions unit is not subject to a control technology requirement for the regulated pollutant emitted based on Major NSR in OAR chapter 340, division 224, a Type A State NSR action under OAR chapter 340, division 224, an applicable Standard of Performance for New Stationary Sources in OAR chapter 340, division 238, OAR 340-240-0110 through 340-240-0180, OAR 340-240-320 through 340-240-0430, or any other standard applicable only to new or modified sources in OAR chapter 340, divisions 230, 234, 236, or 238;

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

(c) The emissions unit:

(A) If new, would have emissions of any criteria pollutant equal to or greater than 1 ton per year in any area, or of PM₁₀ equal to or greater than 500 pounds per year in a PM₁₀ nonattainment area; or

(B) If modified, would have an increase in emissions from the permitted level for the

emissions unit of any criteria pollutant equal to or greater than 1 ton per year in any area, or of PM₁₀ equal to or greater than 500 pounds per year in a PM₁₀ nonattainment area; and

(d) DEQ determines that the proposed air pollution control devices and emission reduction processes do not represent TACT.

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

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

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

Statutory/Other Authority: ORS 468 & 468A

Statutes/Other Implemented: ORS 468.020 & 468A.025

History:

[DEQ 19-2022, amend filed 11/18/2022, effective 03/01/2023](#)

DEQ 7-2015, f. & cert. ef. 4-16-15

DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-0630

DEQ 22-1996, f. & cert. ef. 10-22-96

DEQ 19-1993, f. 11-4-93 & cert. ef. 1-1-94

Division 230 INCINERATOR REGULATIONS

[340-230-0210](#)

Crematory Incinerators: Design and Operation

(1) Temperature and Residence Time: For a crematory incinerator, the temperature at the final combustion chamber must be at least 1600° F with a residence time of at least 0.5 seconds. The temperature in the final chamber must be equal to or greater than 1200° F prior to igniting the primary burner.

(2) Operator Training and Certification. Each crematory incinerator shall be operated at all times under the direction of individuals who have received training necessary for proper operation. The following shall be available on-site at all times for Department inspection:

(a) A description of a Department-approved training program; and

(b) A written statement signed by each operator stating that the operator has undergone

and understood the training program.

(3) As defined in OAR 340-230-0030(5), crematory incinerators may only be used for incineration of human and animal bodies, and appropriate containers. No waste, including infectious waste as defined in OAR 340-230-0030, may be incinerated unless specifically authorized in the Department's Air Contaminant Discharge Permit.

Statutory/Other Authority: ORS 468.020 & ORS 468A.865

Statutes/Other Implemented: ORS 468A.025, ORS 468A.865

History:

DEQ 8-2007, f. & cert. ef. 11-8-07

DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0895

DEQ 19-1996, f. & cert. ef. 9-24-96

DEQ 4-1993, f. & cert. ef. 3-10-93

DEQ 15-1992, f. & cert. ef. 8-3-92, Sec. (3) Renumbered from 340-025-0890(3)

DEQ 9-1990, f. & cert. ef. 3-13-90

340-230-0220

Crematory Incinerators: Monitoring and Reporting

(1) All crematory incinerators shall operate and maintain continuous monitoring for final combustion chamber exit temperature. The monitoring device shall be installed and operated in accordance with the manufacturer's instructions, and shall be located in an area of the secondary combustion chamber that will allow evaluation of compliance with OAR 340-230-0210.

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

Statutory/Other Authority: ORS 468.020

Statutes/Other Implemented: ORS 468A.025

History:

DEQ 8-2007, f. & cert. ef. 11-8-07

DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0900

DEQ 19-1996, f. & cert. ef. 9-24-96

DEQ 4-1993, f. & cert. ef. 3-10-93

DEQ 9-1990, f. & cert. ef. 3-13-90

**Division 232
EMISSION STANDARDS FOR VOC POINT SOURCES**

340-232-0150

VOC Liquid Storage

(1) Owners or operators which have tanks storing methanol or other VOC liquids with a

true vapor pressure, as stored, greater than 10.5 kPa (kilopascals) (1.52 psia), at actual monthly average storage temperatures, and having a capacity greater than 150,000 liters (approximately 39,000 gallons) must comply with one of the following:

(a) Meet the equipment specifications and maintenance requirements of the federal standards of performance for new stationary sources — Storage Vessels for Petroleum Liquids, 40 CFR part 60 subpart K and Ka; or

(b) Be retrofitted with a floating roof or internal floating cover using at least a nonmetallic resilient seal as the primary seal meeting the equipment specifications in the federal standards referred to in subsection (a) or its equivalent.

(2) All seals used in subsection (1)(b) are to be maintained in good operating condition and the seal fabric may not contain visible holes, tears or other openings.

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

(4) Secondary Seals:

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

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

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

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

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

(D) Contain a VOC liquid with a true vapor pressure less than 27.6 kPa (4.0 psia); that

(i) Are of welded construction; and

(ii) Presently possess a metallic-type shoe seal, a liquid-mounted foam seal, a liquid-mounted liquid filled type seal, or other closure device of demonstrated equivalence approved by DEQ; or

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

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

(A) The vessel has been fitted with:

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

(ii) A closure or other device which controls VOC emissions with an effectiveness equal to or greater than a seal required under subparagraph (A)(i) as approved in writing by DEQ.

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

(i) There are no visible holes, tears, or other openings in the seals or seal fabric;

(ii) The seals are intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall; and

(iii) For vapor mounted seals, the accumulated area of gaps exceeding 0.32 cm (1/8 inch) in width between the secondary seal and the tank wall are determined by the method in subsection (d) and must not exceed 21.2 cm² per meter of tank diameter (1.0 in² per foot of tank diameter).

(C) All openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves, are:

(i) Equipped with covers, seals, or lids in the closed position except when the openings are in actual use; and

(ii) Equipped with projections into the tank which remain below the liquid surface at all times.

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

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

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

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

(i) Perform routine inspections semi-annually in order to ensure compliance with paragraphs (A) through (F) and the inspections must include a visual inspection of the secondary seal gap;

(ii) Measure the secondary seal gap annually in accordance with subsection (d) when the floating roof is equipped with a vapor-mounted primary seal; and

(iii) Maintain records of the types of VOC liquids stored, the maximum true vapor pressure of the liquid as stored, and the results of the inspections performed in subparagraphs (G)(i) and (ii).

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

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

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

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

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

(d) Secondary Seal Compliance Determination:

(A) The owner or operator of any VOC source required to comply with section (4) must demonstrate compliance by the methods of this section or an alternative method;

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

(C) Compliance with subparagraph (4)(c)(B)(iii) is determined by:

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

(ii) Summing the area of the individual gaps.

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

Statutory/Other Authority: ORS 468.020, 468A.025, 468A.050 & 468A.070

Statutes/Other Implemented: ORS 468A.025, 468A.050 & 468A.070 **History:**

[DEQ 140-2018, minor correction filed 04/11/2018, effective 04/11/2018](#)

DEQ 7-2015, f. & cert. ef. 4-16-15

DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0160

DEQ 4-1993, f. & cert. ef. 3-10-93

DEQ 8-1991, f. & cert. ef. 5-16-91

DEQ 3-1986, f. & ef. 2-12-86

DEQ 23-1980, f. & ef. 9-26-80

DEQ 17-1979, f. & ef. 6-22-79

DEQ 21-1978, f. & ef. 12-28-78

Division 236

EMISSION STANDARDS FOR SPECIFIC INDUSTRIES

340-236-0500

Solid Waste Landfills: Emission Standards for Municipal Solid Waste Landfills

(1) Designated facilities.

(a) The designated facility to which this rule applies is each existing municipal solid waste landfill for which construction, reconstruction, or modification was commenced on or before July 17, 2014. An owner or operator may choose to meet the requirements of 40 CFR part 63 subpart AAAA rather than the requirements of this rule. Once an owner or operator begins to comply with the provisions of 40 CFR part 63 subpart AAAA, the owner or operator must continue to operate the collection and control device according to subpart AAAA and cannot return to complying with this rule.

(b) Physical or operational changes made to an existing municipal solid waste landfill solely to comply with this rule are not considered a modification or reconstruction and would not subject an existing municipal solid waste landfill to the requirements of a standard of performance for new municipal solid waste landfills.

(2) Compliance times. Planning, awarding of contracts, installing, and starting up municipal solid waste landfill air emission collection and control equipment that is capable of meeting the emission standards in section (7) of this rule must be completed within 30 months after the date a non-methane organic compound emission rate report shows non-methane organic compound emissions equal or exceed 34 megagrams per year (50 megagrams per year for the closed landfill subcategory); or within 30 months after the date of the most recent non-methane organic compound emission rate report that shows non-methane organic compound emissions equal or exceed 34 megagrams per year (50 megagrams per year for the closed landfill subcategory), if Tier 4 surface emissions monitoring shows a surface emission concentration of 500 parts per million methane or greater. Sources currently subject to 40 CFR part 60 subpart WWW that are subject to these rules must continue to comply with the requirements of subpart WWW until they become subject to the more stringent requirements of this rule.

(3) Startup, shutdown and malfunction. The provisions of this rule apply at all times, including periods of startup, shutdown, or malfunction. During periods of startup, shutdown, and malfunction, the owner or operator must operate the gas collection system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR 60.33f(c). In the event the collection or control system is not operating, the gas mover system must be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere must be closed within 1 hour of the collection or control system not operating.

(4) Design capacity. The owner or operator of a municipal solid waste landfill having a design capacity less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume must submit an initial design capacity report to DEQ as provided in 40 CFR 60.38f(a). The landfill may calculate design capacity in either megagrams or cubic meters for comparison with the exemption values. Any density conversions must be documented and submitted with the report. Submittal of the initial design capacity report fulfills the requirements of this rule except as follows:

(a) The owner or operator must submit an amended design capacity report providing notification of an increase in the design capacity of the landfill, within 90 days of an increase in the maximum design capacity of the landfill to meet or exceed 2.5 million megagrams and 2.5 million cubic meters. This increase in design capacity may result from an increase in the permitted volume of the landfill or an increase in the density. If the design capacity increase is the result of a modification, as defined in 40 CFR 60.41f, which was commenced after July 17, 2014, then the landfill becomes subject to 40 CFR part 60 subpart XXX instead of this rule. If the design capacity increase is the result of a change in operating practices, density, or some other change that is not a modification as defined in 40 CFR 60.41f, then the landfill remains subject to this rule.

(b) When an increase in the maximum design capacity of a landfill with an initial design capacity less than 2.5 million megagrams or 2.5 million cubic meters results in a revised maximum design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, the owner or operator must comply with section (5) of this rule.

(5) Emissions. The owner or operator of a municipal solid waste landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters must either install a collection and control system as provided in section (7) of this rule or calculate an initial NMOC emission rate for the landfill using the procedures specified in 40 CFR 60.35f(a). The NMOC emission rate must be recalculated annually, except as provided in 40 CFR 60.38f(c)(3).

(a) If the calculated NMOC emission rate is less than 34 megagrams per year, the owner or operator must:

(A) Submit an annual NMOC emission rate report according to 40 CFR 60.38f(c), except as provided in 40 CFR 60.38f(c)(3); and

(B) Recalculate the NMOC emission rate annually using the procedures specified in 40

CFR 60.35f(a) until such time as the calculated NMOC emission rate is equal to or greater than 34 megagrams per year, or the landfill is closed.

(i) If the calculated NMOC emission rate, upon initial calculation or annual recalculation required in paragraph (5)(a)(B) of this rule, is equal to or greater than 34 megagrams per year, the owner or operator must either comply with section (7) of this rule; calculate NMOC emissions using the next higher tier in 40 CFR 60.35f; or conduct a surface emission monitoring demonstration using the procedures specified in 40 CFR 60.35f(a)(6).

(ii) If the landfill is permanently closed, a closure report must be submitted to DEQ as provided in 40 CFR 60.38f(f), except for the exemption allowed under section (14) of this rule.

(iii) For the closed landfill subcategory, if the most recently calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the owner or operator must either: submit a gas collection and control system design plan as specified in 40 CFR 60.38f(d), except for exemptions allowed under subsection (13)(c) of this rule, and install a collection and control system as provided in section (7) of this rule; calculate NMOC emissions using the next higher tier in 40 CFR 60.35f; or conduct a surface emission monitoring demonstration using the procedures specified in 40 CFR 60.35f(a)(6).

(b) If the calculated NMOC emission rate is equal to or greater than 34 megagrams per year using Tier 1, 2, or 3 procedures, the owner or operator must either: submit a collection and control system design plan prepared by a professional engineer to DEQ within 1 year, of the first NMOC emission rate report in which the NMOC emission rate equals or exceeds 34 megagrams per year, as specified in 40 CFR 60.38f(d), except for exemptions allowed in 40 CFR 60.31f(e); calculate NMOC emissions using a higher tier in 40 CFR 60.35f; or conduct a surface emission monitoring demonstration using the procedures specified in 40 CFR 60.35f(a)(6).

(c) For the closed landfill subcategory, if the calculated NMOC emission rate is equal to or greater than 50 megagrams per year using Tier 1, 2, or 3 procedures, the owner or operator must either: submit a collection and control system design plan as specified in 40 CFR 60.38f(d), except for exemptions allowed in 40 CFR 60.31f(e); calculate NMOC emissions using a higher tier in 40 CFR 60.35f; or conduct a surface emission monitoring demonstration using the procedures specified in 40 CFR 60.35f(a)(6).

(6) Removal criteria. The collection and control system may be capped, removed, or decommissioned if the following criteria are met:

(a) The landfill is a closed landfill (as defined in 40 CFR 60.41f). A closure report must be submitted to DEQ as provided in 40 CFR 60.38f(f).

(b) The collection and control system has been in operation a minimum of 15 years or the landfill owner or operator demonstrates that the GCCS will be unable to operate for 15 years due to declining gas flow.

(c) Following the procedures specified in 40 CFR 60.35f(b), the calculated NMOC emission rate at the landfill is less than 34 megagrams per year on three successive test dates. The test dates must be no less than 90 days apart, and no more than 180 days apart.

(d) For the closed landfill subcategory (as defined in 40 CFR 60.41f), following the procedures specified in 40 CFR 60.35f(b), the calculated NMOC emission rate at the landfill is less than 50 megagrams per year on three successive test dates. The test dates must be no less than 90 days apart, and no more than 180 days apart. For the closed landfill subcategory (as defined in 40 CFR 60.41f), the landfill may comply with this subsection in place of subsection (6)(c) in this rule but must still comply with subsections (6)(a) and (b) in this rule.

(7) Emission standards. Landfills having a design capacity greater than or equal to 2.5 million megagrams by mass and 2.5 million cubic meters by volume must comply with the requirements in 40 CFR 60.33f(b) (collection system requirement) and 60.33f(c) (control system requirement) if meeting the following conditions:

(a) The landfill has accepted waste at any time since November 8, 1987, or has additional design capacity available for future waste deposition.

(b) The landfill commenced construction, reconstruction, or modification on or before July 17, 2014.

(c) The landfill has an NMOC emission rate greater than or equal to 34 megagrams per year or Tier 4 surface emissions monitoring shows a surface emission concentration of 500 parts per million methane or greater.

(d) The landfill is in the closed landfill subcategory and has an NMOC emission rate greater than or equal to 50 megagrams per year or Tier 4 surface emissions monitoring shows a surface emission concentration of 500 parts per million methane or greater.

(8) Operational standards for collection and control systems. The owner or operator of a municipal solid waste landfill with a gas collection and control system used to comply with the provisions of section (7) of this rule must comply with the operational standards in 40 CFR 60.34f(a) through (f). If monitoring demonstrates that the operational requirements in 40 CFR 60.34f(b), (c) or (d) are not met, corrective action must be taken as specified in 40 CFR 60.36f(a)(3) and (5) or (c). If corrective actions are taken as specified in 40 CFR 60.36f, the monitored exceedance is not a violation of the operational requirements.

(9) Specifications for active collection systems. The owner or operator of a municipal solid waste landfill seeking to comply with the collection system requirements of 40 CFR 60.33f(b) must meet the following:

(a) The active collection well, horizontal collector, surface collector, or other extraction device siting requirements in 40 CFR 60.40f(a), unless alternative procedures have been approved by the Administrator.

(b) The gas collection device equipment and procedure requirements in 40 CFR 60.40f(b).

(c) The landfill gas collection header pipe(s) and control system requirements in 40 CFR 60.40f(c).

(10) Test methods and procedures. The owner or operator of a municipal solid waste landfill subject to this rule must calculate the landfill non-methane emission rate or conduct a surface emission monitoring demonstration in accordance with 40 CFR 60.35f.

(11) Compliance provisions. The owner or operator of a municipal solid waste landfill subject to this rule must meet the compliance provisions of 40 CFR 60.36f, as applicable.

(12) Monitoring of operations. The owner or operator of a municipal solid waste landfill subject to this rule must meet the monitoring requirements of 40 CFR 60.37f, except as provided in 60.38f(d)(2).

(13) Permitting requirements.

(a) For purposes of obtaining an operating permit under OAR 340 division 218, the owner or operator of a municipal solid waste landfill subject to this rule with a design capacity less than 2.5 million megagrams or 2.5 million cubic meters is not subject to the requirement to obtain an operating permit for the landfill under OAR 340 division 218, unless the landfill is otherwise subject to OAR 340 division 218.

(b) For purposes of submitting a timely application for an operating permit under OAR 340-218-0040(1)(a), the owner or operator of a municipal solid waste landfill subject to this rule with a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters on the effective date of EPA approval of this rule, and not otherwise subject to OAR 340 division 218, becomes subject to OAR 340 division 218 90 days after the effective date of EPA approval of this rule, even if the design capacity report is submitted earlier.

(c) When a municipal solid waste landfill subject to this rule is closed, the owner or operator is no longer subject to the requirement to maintain an operating permit under OAR 340 division 218 for the landfill if the landfill is not otherwise subject to the requirements of OAR 340 division 218 and if either of the following conditions are met:

(A) The landfill was never subject to the requirement to install and operate a gas collection and control system under 40 CFR 60.33f; or

(B) The landfill meets the conditions for control system removal specified in section (6) of this rule.

(14) When a municipal solid waste landfill is in the closed landfill subcategory, the owner or operator is not subject to the following reports, provided the owner or operator

submitted these reports under 40 CFR part 60 subpart WWW on or before July 17, 2014:

- (a) Initial design capacity report specified in 40 CFR 60.38f(a).
 - (b) Initial or subsequent non-methane organic compound emission rate report specified in 40 CFR 60.38f(c), provided that the most recent non-methane organic compound emission rate report indicated the non-methane organic compound emissions were below 50 Mg/yr.
 - (c) Collection and control system design plan specified in 40 CFR 60.38f(d).
 - (d) Closure report specified in 40 CFR 60.38f(f).
 - (e) Equipment removal report specified in 40 CFR 60.38f(g).
 - (f) Initial annual report specified in 40 CFR 60.38f(h).
 - (g) Initial performance test specified in 40 CFR 60.38f(i).
- (15) Reporting requirements. The owner or operator of a municipal solid waste landfill subject to this rule must meet the reporting requirements of 40 CFR 60.38f, as applicable.
- (16) Recordkeeping guidelines. The owner or operator of a municipal solid waste landfill subject to this rule must meet the recordkeeping requirements of 40 CFR 60.39f, as applicable.
- (17) Definitions. Terms used in this rule are as defined in 40 CFR 60.41f.

Statutory/Other Authority: ORS 468.020, 468A.025, 468A.040 & 468A.050

Statutes/Other Implemented: ORS 468A.025, 468A.040 & 468A.050

History:

[DEQ 18-2019, amend filed 07/19/2019, effective 07/19/2019](#)

[DEQ 146-2018, minor correction filed 04/11/2018, effective 04/11/2018](#)

DEQ 7-2015, f. & cert. ef. 4-16-15

DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-025-0745

DEQ 22-1998, f. & cert. ef. 10-21-98

DEQ 8-1997, f. & cert. ef. 5-6-97

[340-236-8010](#)

Hot Mix Asphalt Plants: Table-Process Weight Table

This rule contains the Process Weight Table.

[\[ED. NOTE: To view attachments referenced in rule text, click here to view rule.\]](#)

Statutory/Other Authority: ORS 468.020, 468A.025 & 468A.070

Statutes/Other Implemented: ORS 468A.025 & 468A.070

History:

[DEQ 19-2022, amend filed 11/18/2022, effective 03/01/2023](#)

[DEQ 13-2019, amend filed 05/16/2019, effective 05/16/2019](#)

[DEQ 4-2018, minor correction filed 01/17/2018, effective 01/17/2018](#)

[DEQ 3-2018, minor correction filed 01/16/2018, effective 01/16/2018](#)

DEQ 7-2015, f. & cert. ef. 4-16-15

OAR 340-236-8010

Process Weight Table

Process Wt/hr (lbs)	Maximum Weight Discharge/hr (lbs)	Process Wt/hr (lbs)	Maximum Weight Discharge/hr (lbs)
50	0.24	3,400	5.44
100	0.46	3,500	5.52
150	0.66	3,600	5.61
200	0.85	3,700	5.69
250	1.03	3,800	5.77
300	1.20	3,900	5.85
350	1.35	4,000	5.93
400	1.50	4,100	6.01
450	1.63	4,200	6.08
500	1.77	4,300	6.15
550	1.89	4,400	6.22
600	2.01	4,500	6.30
650	2.12	4,600	6.37
700	2.24	4,700	6.45
750	2.34	4,800	6.52
800	2.43	4,900	6.60
850	2.53	5,000	6.67
900	2.62	5,500	7.03
950	2.72	6,000	7.37

Process Wt/hr (lbs)	Maximum Weight Discharge/hr (lbs)	Process Wt/hr (lbs)	Maximum Weight Discharge/hr (lbs)
1,000	2.80	6,500	7.71
1,100	2.97	7,000	8.05
1,200	3.12	7,500	8.39
1,300	3.26	8,000	8.71
1,400	3.40	8,500	9.03
1,500	3.54	9,000	9.36
1,600	3.66	9,500	9.67
1,700	3.79	10,000	10.00
1,800	3.91	11,000	10.63
1,900	4.03	12,000	11.28
2,000	4.14	13,000	11.89
2,100	4.24	14,000	12.50
2,200	4.34	15,000	13.13
2,300	4.44	16,000	13.74
2,400	4.55	17,000	14.36
2,500	4.64	18,000	14.97
2,600	4.74	19,000	15.58
2,700	4.84	20,000	16.19
2,800	4.92	30,000	22.22
2,900	5.02	40,000	28.30
3,000	5.10	50,000	34.30
3,100	5.18	60,000	40.00
3,200	5.27	Or	

Process Wt/hr (lbs)	Maximum Weight Discharge/hr (lbs)	Process Wt/hr (lbs)	Maximum Weight Discharge/hr (lbs)
3,300	5.36	More	

Division 239 LANDFILL GAS EMISSIONS

340-239-0010

Applicability

(1) This division applies in all areas of the state and to all new landfills and all landfills that have received solid waste after November 8, 1987, excluding those sources located on either tribal or federal lands that are not subject to regulation by DEQ and except as provided in OAR 340-239-0010(2).

(2) Subject to the requirements in this division and OAR 340-200-0010(3), LRAPA is designated by the EQC to implement the rules in this division within its area of jurisdiction.

(3) Exemptions. This division does not apply to owners or operators of landfills meeting the requirements in subsection (3)(a), (b) or (c), except as provided in section (4). Landfills claiming exemption under subsection (b) or (c), below, must maintain records showing how the exemption is met and provide the records to DEQ upon request, not later than a reasonable date established by DEQ.

(a) Landfills that are regulated under the Resource Conservation and Recovery Act (RCRA) Subtitle C or the Comprehensive Environmental Response, Compensation and Liability Act 42, U.S.C, Chapter 103 (Promulgated 12/11/80; Amended 10/17/86).

(b) Landfills that receive only nondecomposable wastes.

(c) Landfills with less than 200,000 tons of waste-in-place except that they must comply with section (4).

(4) Landfills with less than 200,000 tons of waste-in-place must maintain the landfill cover in all areas of the landfill so as to minimize landfill gas emissions.

Statutory/Other Authority: ORS 468.020, ORS 468A.025 & ORS 468A.135

Statutes/Other Implemented: ORS 468A.025 & ORS 468A.135

History:

[DEQ 16-2021, adopt filed 10/04/2021, effective 10/04/2021](#)

340-239-0015

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 340-200-0020 or 340-218-0030, the definition in this rule applies to this division.

(1) “Active landfill” means a landfill in which solid waste is being placed or a landfill that is planned to accept waste in the future.

(2) “Advanced methane detection technology” means an advanced methane detection monitoring program that uses satellite monitoring, airlight monitoring, drones, or remote direct monitoring technology that meets either (a) or (b):

(a) A surface emission monitoring method and protocol that is substantially equivalent to EPA OTM-51 (ALT-150) or EPA Method 21 and is approved by DEQ in writing; or

(b) A monitoring system that complies with EPA Other Test Method-51 – ‘UAS Application of Method 21 for Surface Emission Monitoring of Landfills’, as approved by EPA on December 15, 2022 (OTM-51) and all criteria in OAR 340-239-0610(1).

(3) “Beneficial Use” means landfill gas used to generate electricity, produce heat for industrial processes and buildings, converted into renewable natural gas for use in pipelines, and other similar uses.

(4) “Bioreactor” means a landfill or portion of a landfill where any liquid other than leachate (leachate includes landfill gas condensate) is added in a controlled fashion into the waste mass (often in combination with recirculating leachate) to reach a minimum average moisture content of at least 40 percent by weight to accelerate or enhance the anaerobic (without oxygen) biodegradation of the waste.

(5) “Component” means any equipment that is part of the gas collection and control system and that contains landfill gas including, but not limited to, wells, pipes, flanges, fittings, valves, flame arrestors, knock-out drums, sampling ports, blowers, compressors, or connectors.

(6) “Component leak” means a concentration of methane measured one half of an inch or less from a component source that meets or exceeds 500 parts per million by volume (ppmv), other than nonrepeatable, momentary readings. Measurements from any vault must be taken within three inches above the surface of the vault exposed to the atmosphere.

(7) “Closed landfill” means that a landfill is no longer accepting solid waste for disposal and has documentation that the closure was conducted in accordance with the applicable statutes, regulations, and local ordinances in effect at the time of closure.

(8) “Continuous operation” means that the gas collection and control system is operated continuously, the existing gas collection wells are operating under vacuum while maintaining landfill gas flow, and the collected landfill gas is processed by a gas control system 24 hours per day.

(9) “Controlled landfill” means any landfill at which collection and control systems are required under this division. The landfill is considered controlled at the time a Collection and Control System Design Plan is required to comply with OAR 340-239-100(6) or OAR 340-239-100(7).

(10) “Corrective action analysis” means a description of all reasonable interim and long-term measures, if any, that are available, and an explanation of why the selected corrective action(s) is/are the best alternative(s), including, but not limited to, considerations of cost effectiveness, technical feasibility, safety, and secondary impacts.

(11) “Decomposable solid waste” means any solid waste that is not nondecomposable solid waste.

(12) “Destruction efficiency” means a measure of the ability of a gas control device to combust, transform, or otherwise prevent emissions of methane from entering the atmosphere.

(13) “Enclosed combustor” means an enclosed firebox which maintains a relatively constant limited peak temperature generally using a limited supply of combustion air, such as an enclosed flare, steam generating boiler, internal combustion engine, or gas turbine.

(14) “Energy recovery device” means any combustion device that uses landfill gas to recover energy in the form of steam or electricity, including, but not limited to, gas turbines, internal combustion engines, boilers, and boiler-to-steam turbine systems.

(15) “Gas control device” means any device used to dispose of or treat collected landfill gas, including, but not limited to, enclosed flares, internal combustion engines, boilers and boiler-to-steam turbine systems, fuel cells, and gas turbines.

(16) “Gas collection system” means any system that employs various gas collection wells and connected piping, gas mover equipment, or any system that is a passive collection system.

(17) “Gas control system” means any system that disposes of or treats collected landfill gas by one or more of the following means: combustion, gas treatment for subsequent sale, or sale for processing offsite, including for transportation fuel and injection into the natural gas pipeline.

(18) “Gas mover equipment” means the equipment (i.e., fan, blower, compressor) used to transport landfill gas through the header system.

- (19) “Gas mover system” includes all of the gas mover equipment,
- (20) “Gas collection and control system” means any system consisting of a Gas Collection System and a Gas Control System.
- (21) “Inactive area” means a separate area of a landfill in which solid waste is no longer being placed. The area must be separated from other areas of the landfill to ensure that the landfill gas does not migrate between active and inactive areas.
- (22) “Inactive landfill” means a landfill that is no longer accepting solid waste for disposal, or can document that the landfill is no longer receiving solid waste.
- (23) “Integrated Surface Monitoring” means a method for assessing the overall methane emission levels across each 50,000 square foot grid of the landfill by aggregating methane readings from multiple points within a defined grid or area and determining an average methane concentration for the specific grid or area.
- (24) “Instantaneous Surface Monitoring” means a method for determining the concentration of methane at a single point on the landfill surface at a specific time.
- (25) “Landfill” means an area of land or an excavation in which wastes are placed for permanent disposal, and that is not a land application unit, surface impoundment, injection well, or waste pile as those terms are defined under 40 CFR § 257.2.
- (26) “Landfill gas” means any untreated, raw gas derived through a natural process from the decomposition of organic waste deposited in a landfill, from the evolution of volatile species in the waste, or from chemical reactions of substances in the waste.
- (27) “Landfill surface” means the area of the landfill under which decomposable solid waste has been placed, excluding the working face.
- (28) “Leachate recirculation” means the practice of taking the leachate collected from the landfill and reapplying it to the landfill by any of one of a variety of methods, including pre-wetting of the waste, direct discharge into the working face, spraying, infiltration ponds, vertical injection wells, horizontal gravity distribution systems, and pressure distribution systems.
- (29) “Nondecomposable solid waste” means solid waste that is biologically and chemically inactive and does not form landfill gas. Examples include, but are not limited to, earth, rock, concrete asphalt paving fragments, uncontaminated concrete (including fiberglass or steel reinforcing rods embedded in the concrete), brick, glass, ceramics, clay products, inert slag, asbestos waste, waste tire chips, and demolition materials containing minor amounts (less than 10 percent by volume) of wood and metals.
- (30) “Nonrepeatable, Momentary Readings” means indications of the presence of methane, which persist for less than five seconds and do not recur when the sampling probe of a portable gas detector is placed in the same location.

(31) “Open Flare” means an open combustor without enclosure.

(32) “Operator” means any person that:

(a) Operates the landfill or controls the operations of the landfill;

(b) Is responsible for complying with any federal, state, or local requirements relating to methane emissions from real property used for landfill purposes and subject to this division;

(c) Operates any stationary equipment for the collection of landfill gas;

(d) Purchases or contracts to receive landfill gas from an owner or operator of a landfill and operates any stationary equipment for the treatment of landfill gas; or

(e) Purchases or contracts to receive untreated landfill gas from an owner or operator of a landfill and operates any stationary equipment for the combustion of landfill gas.

(33) “Owner” means any person that:

(a) Holds title to the real property on which the landfill is located, including but not limited to title held by joint tenancy, tenancy in common, community property, life estate, estate for years, lease, sublease, or assignment, except title held solely as security for a debt such as mortgage;

(b) Is responsible for complying with any federal, state, or local requirements relating to methane emissions from real property used for landfill purposes and subject to this rule;

(c) Owns any stationary equipment for the collection of landfill gas;

(d) Purchases or contracts to receive the landfill gas from an owner or operator of a landfill and owns any stationary equipment for the treatment of landfill gas; or

(e) Purchases or contracts to receive untreated landfill gas from an owner or operator of a landfill and owns any stationary equipment for the combustion of landfill gas.

(34) “Passive collection system” means a gas collection system that solely uses positive pressure within the landfill to move the gas rather than using gas mover equipment.

(35) “Ppmv” means parts per million by volume

(36) “Professional engineer” means an individual who is registered in Oregon and holds a valid certificate to practice engineering in Oregon as provided under ORS 672.002 to 672.325.

(37) “Remedial Action” means the definition provided under ORS 465.200.

(38) “Root cause analysis” means an assessment conducted through a process of investigation to determine the primary cause, and any other contributing causes, of

positive pressure at a wellhead, temperature exceedances, and similar issues.

(39) “Scfm” means standard cubic feet per minute

(40) “SEM” means Surface Emission Monitoring

(41) “Solid waste” means all decomposable and nondecomposable solid, semisolid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial waste, manure, vegetable or animal solid and semisolid wastes, sludge, and other discarded solid and semisolid wastes. Solid waste also includes any material meeting the definition of solid waste in 40 CFR § 60.751.

(42) “Treatment system” means a system that filters, de-waters, and compresses landfill gas.

(43) “Waste-in-Place” means the total amount of solid waste placed in the landfill in tons. The solid waste density is assumed to be 1,300 pounds per cubic yard and the decomposable fraction is assumed to be 70 percent by weight unless DEQ approves alternative values.

(44) “Well raising” means a landfill activity where an existing gas collection well is temporarily disconnected from a vacuum source, and the nonperforated pipe attached to the well is extended vertically to allow the addition of a new layer of solid waste or the final cover; or is extended horizontally to allow the horizontal extension of an existing layer of solid waste or cover material. The extended pipe (well extension) is then reconnected in order to continue collecting gas from that well.

(45) “Working face” means the open area where solid waste is deposited daily and compacted by landfill equipment.

Statutory/Other Authority: ORS 468.020 & ORS 468A.025

Statutes/Other Implemented: ORS 468A.025, ORS 468A.885

History:

[DEQ 16-2021, adopt filed 10/04/2021, effective 10/04/2021](#)

340-239-0100

Landfills with Greater Than or Equal to 200,000 Tons of Waste-in-Place

(1) By October 1, 2022 the owner or operator of a landfill listed in Table 1 Part B or C of OAR 340-216-8010, having greater than 200,000 tons (181,000 metric tons) of waste-in-place, must submit to DEQ an administratively complete permit application, pursuant to OAR chapter 340, division 216, an initial Waste-in-Place Report, pursuant to OAR 340-239-0700(3)(e), and a Methane Generation Rate Report, pursuant to OAR 340-239-0700(3)(f). If the landfill owner or operator has submitted a Closure Notification pursuant to this Division and the Methane Generation Rate was below 664 metric tons (732 tons) per year as of the closure date, no permit application is required.

(2) The owner or operator of an existing landfill that does not yet have 200,000 tons of

waste-in-place must not accept solid waste in excess of 200,000 tons of waste-in-place without a permit issued pursuant to OAR 340-216, and submission of an initial Waste-in-Place Report, pursuant to OAR 340-239-0700(3)(e) and a Methane Generation Rate Report, pursuant to OAR 340-239-0700(3)(f). Once the landfill reaches a size greater than or equal to 200,000 tons of waste-in-place, the owner or operator is subject to OAR 340-239-0100.

(3) The owner or operator of a proposed new landfill that is designed to receive greater than or equal to 200,000 tons of waste in the first year must submit an administratively complete permit application, pursuant to OAR chapter 340, division 216, prior to receiving any waste. The owner or operator of a new landfill also must submit to DEQ, no later than January 30 after the first calendar year in which the landfill initially accepted waste, an initial Waste-in-Place Report, pursuant to OAR 340-239-0700(3)(e), and a Methane Generation Rate Report, pursuant to OAR 340-239-0700(3)(f).

(4) The owner or operator of a landfill having greater than or equal to 200,000 tons of waste-in-place must submit an annual Waste-in-Place Report to DEQ pursuant to OAR 340-239-0700(3)(e) and an annual Methane Generation Rate Report, pursuant to OAR 340-239-0700(3)(f), until the owner or operator submits a Closure Notification pursuant to OAR 340-239-0700(3)(a). The initial Waste-in-Place Report and Methane Generation Rate Report submitted by a landfill pursuant to sections (1), (2) or (3) will satisfy this requirement for the initial year that an owner or operator is subject to this requirement.

(5) If the calculated methane generation rate reported by the owner or operator of a landfill according to section (1), (2) (3), or (4) of this rule is less than 664 metric tons (732 tons) per year, the owner or operator must:

(a) If the landfill is active:

(A) Recalculate the methane generation rate annually using the procedures specified in OAR 340-239-0800(2);

(B) Submit an annual Methane Generation Rate Report to DEQ pursuant to OAR 340-239-0700(3)(f) until either of the following conditions is met:

(i) The calculated methane generation rate is greater than or equal to 664 metric tons (732 tons) per year, or

(ii) The owner or operator submits a Closure Notification pursuant to OAR 340-239-0700(3)(a).

(C) Maintain the cover in any areas of the landfill not exempt per OAR 340-239-0300 so as to minimize landfill gas emissions and visually inspect the landfill surface annually for signs of methane releases including distressed vegetation, cracks or seeps.

(b) If the landfill is closed or inactive, submit to DEQ a Methane Generation Rate Report pursuant to OAR 340-239-0700(3)(f) and all required Closure Notifications pursuant to OAR 340-239-0700(3)(a).

(6) If the methane generation rate reported by the owner or operator according to section (1), (2), (3), or (4) of this rule is greater than or equal to 664 metric tons (732 tons) per year but less than 7,755 metric tons (8,548 tons) per year, then the owner or operator must either:

(a) Comply with the requirements of OAR 340-239-0110 through 340-239-0800. The owner or operator is subject to OAR 340-239-0110 through 340-239-0800 at the time they are required to submit the Methane Generation Rate Report that shows methane generation above 664 metric tons per year; or

(b) Demonstrate that there is no measured concentration of methane of 200 parts per million by volume (ppmv) or greater using the instantaneous surface monitoring procedures specified in OAR 340-239-0800(3). The owner or operator of the landfill must begin quarterly monitoring within the next calendar quarter after a Methane Generation Rate Report is required to be submitted under section (1) or (2) of this rule and submit Instantaneous Surface Monitoring Reports according to OAR 340-239-0700(3)(I). Based on the monitoring results, the owner or operator must do one of the following:

(A) Except as provided in OAR 340-239-0600(1)(a), if there is any measured concentration of methane of 200 ppmv or greater, other than non-repeatable, momentary readings, from the surface of an active, inactive, or closed landfill, the owner or operator must comply with OAR 340-239-0110 through OAR 340-239-0800. The owner or operator is subject to OAR 340-239-0110 through OAR 340-239-0800 at the time they are required to submit the Instantaneous Surface Monitoring Report that shows surface emissions of methane above 200 ppmv;

(B) If there is no measured concentration of methane of 200 ppmv or greater from the surface of an active landfill, recalculate the methane generation rate annually using the procedures specified in OAR 340-239-0800(2) and submit a Methane Generation Rate Report annually to DEQ pursuant to OAR 340-239-0700(3)(f), and:

(i) If the landfill is active, the owner or operator must continue quarterly surface emission monitoring using the methods specified in OAR 340-239-0800 and prepare and submit an annual Instantaneous Surface Monitoring Report according to OAR 340-239-0700(3)(I); or

(ii) If the landfill is closed, the owner or operator must conduct annual surface emission monitoring using the methods specified in OAR 340-239-0800 and prepare and submit an annual Instantaneous Surface Monitoring Report according to OAR 340-239-0700(3)(I).

(C) If there is no measured concentration of methane of 200 ppmv or greater from the surface of a closed or inactive landfill, the requirements of OAR 340-239-0110 through 340-239-0800 no longer apply provided that the owner or operator has completed all of the following:

(i) Satisfied all applicable requirements of OAR 340-239-0400;

(ii) Submitted to DEQ a Waste-in-Place Report, pursuant to section (1), (2), or (3) of this rule; and

(iii) Submitted to DEQ all required Instantaneous Surface Monitoring Reports, pursuant to subsection (5)(b) of this rule.

(7) If the methane generation rate reported according to section (1), (2), or (3) of this rule is greater than or equal to 7,755 metric tons (8,548 tons) per year, then the owner or operator must comply with the requirements of OAR 340-239-0110 through 340-239-0800.

(8) If owner or operator of a landfill with more than 200,000 tons of waste-in-place adds any liquid other than leachate in a controlled fashion to the waste mass to reach a minimum average moisture content of at least 40 percent by weight to accelerate or enhance the anaerobic biodegradation of the waste, the owner or operator must install and operate a gas collection and control system that meets the criteria in OAR 340-239-0110 according to the following:

(a) Install the gas collection and control system for the bioreactor before initiating liquids addition. Extend the collection and control system into each new cell or area of the bioreactor prior to initiating liquids addition in that area; and

(b) Begin operating the gas collection and control system within 180 days after initiating liquids addition or within 180 days after achieving a moisture content of 40 percent by weight, whichever is later. Bioreactor moisture content must be calculated in accordance with OAR 340-239-0800(9).

Statutory/Other Authority: ORS 468.020, ORS 468A.025, ORS 468A.040 & ORS 468A.050

Statutes/Other Implemented: ORS 468A.025, ORS 468A.040 & ORS 468A.050

History:

[DEQ 16-2021, adopt filed 10/04/2021, effective 10/04/2021](#)

340-239-0105

Title V Operating Permit Requirement

(1) The owner or operator of a municipal solid waste landfill that has a design capacity equal to or greater than 2.5 million megagrams or 2.5 million cubic meters, must obtain an operating permit for the landfill under OAR 340 division 218.

(2) When a municipal solid waste landfill subject to this rule is closed, the owner or operator is no longer subject to the requirement to maintain an operating permit under OAR 340 division 218 for the landfill if the landfill is not otherwise subject to the requirements of OAR 340 division 218 and if either of the following conditions are met:

(a) The landfill was never subject to the requirement to install and operate a gas collection and control system under OAR 340-239-0100; or

(b) The landfill meets the conditions for control system removal specified in OAR 340-239-0400(1).

Statutory/Other Authority: ORS 468.020, ORS 468A.025, ORS 468A.040 & ORS 468A.050

Statutes/Other Implemented: ORS 468A.025, ORS 468A.040 & ORS 468A.050

History:

[DEQ 16-2021, adopt filed 10/04/2021, effective 10/04/2021](#)

340-239-0110

Gas Collection and Control System Requirements

When required pursuant to OAR 340-239-0100 or 340-239-0400, the owner or operator of a landfill must comply with the gas collection and control system requirements, system operational standards, and well head sampling requirements in this rule.

(1) Design Plan and Installation

(a) If a gas collection and control system which meets the requirements of section (2) of this rule has not been installed, the owner or operator of a landfill must submit a Design Plan to DEQ within one year of becoming subject to this rule. The Design Plan must satisfy the requirements described in subsection (c).

(b) If an owner or operator of a landfill is modifying an existing gas collection and control system to meet the requirements of this division, the owner or operator must submit an amended Design Plan to DEQ that includes any necessary updates or addenda, in accordance with OAR 340-239-0700(3)(j). The amended Design Plan must satisfy the requirements described in subsection (c).

(c) At a minimum, the Design Plan must meet all of the following requirements:

(A) The Design Plan must be prepared and certified by a professional engineer. The following issues must be addressed in the design: Depths of solid waste, solid waste gas generation rates and flow characteristics, cover properties, gas system expandability, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, resistance to the solid waste decomposition heat, and ability to isolate individual components or sections for repair or troubleshooting without shutting down entire collection system.

(B) The Design Plan must provide for the control of the collected gas through the use of a gas collection and control system meeting the requirements of OAR 340-239-0110(2) or an alternative method approved pursuant to OAR 340-239-0500.

(C) The Design Plan must demonstrate that the gas collection and control system is designed to handle the maximum expected gas generation flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control system equipment. The maximum expected gas generation flow rate must be calculated

using the method in OAR 340-239-0800(5) or an alternative method approved pursuant to OAR 340-239-0500.

(D) The Design Plan must include any proposed alternatives to the requirements, justification for the need for any proposed alternatives, test methods, procedures, compliance measures, monitoring, and recordkeeping or reporting requirements pursuant to OAR 340-239-0500.

(E) The Design Plan must include a description of potential mitigation measures to be used to prevent the release of methane or other pollutants into the atmosphere during the installation or preparation of wells, piping, or other equipment; during repairs or the temporary shutdown of gas collection system components; or, when solid waste is to be excavated and moved.

(F) For active landfills, the Design Plan must identify areas of the landfill that are closed or inactive.

(G) The gas collection and control system must be designed to collect gas at an extraction rate to comply with the surface methane emission limits in OAR 340-239-0200, component leak standard in OAR 340-239-0600(2)(c), and be sufficient to meet all operational and performance standards in this division. The expected gas generation flow rate from the landfill must be calculated pursuant to OAR 340-239-0800(5).

(H) The gas collection and control system must be designed to maintain a negative pressure at all wellheads in the collection system without causing air infiltration, including any wellheads connected to the system as a result of expansion or excess surface emissions.

(I) Any areas of the landfill that contain only asbestos-containing waste, or nondecomposable solid waste may be excluded from collection provided that the owner or operator submits documentation to DEQ containing the nature of the waste, date of deposition, location and amount of asbestos or non-decomposable solid waste deposited in the area. This documentation may be included as part of the Design Plan.

(J) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices necessary to achieve compliance with section (2) of this rule.

(d) The owner or operator must install and operate a gas collection and control system not later than 30 months after the date that the landfill is required to comply with this rule.

(e) The owner or operator of a controlled landfill must place each well or design component as specified in the approved Design Plan.

(f) The owner or operator of a landfill subject to this rule must operate, maintain and expand the gas collection system in accordance with the procedures and schedules in the approved Design Plan.

(2) Gas Collection and Control System Operational Standards

(a) The owner or operator of a landfill subject to this rule must satisfy all of the following requirements when operating a gas collection and control system:

(A) Route all collected gas to a gas control device or devices, and operate the gas collection and control system continuously except as provided in sections (4) and (5) of this rule.

(B) Operate the gas collection and control system to comply with paragraph (1)(c)(G) of this rule.

(C) Design and operate the gas collection system to draw all the gas toward the gas control device or devices.

(D) Design and operate the gas collection system to minimize off-site and on-site migration of subsurface gas in compliance with OAR chapter 340, divisions 093, 094, and 095.

(E) In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within one hour of the collection or control system not operating.

(F) Efforts to repair the collection or control system must be initiated and completed in a manner such that downtime is kept to a minimum, and the collection and control system must be returned to operation.

(G) Landfills with a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m³) must install all passive collection systems with liners on the bottom and all sides in all areas in which gas is to be collected. The liners must be installed as required under 40 CFR § 258.40.

(H) Any area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than one percent (1%) of the total amount of methane emissions from the landfill. The amount, location, and age of the material must be documented and provided to DEQ. If data on actual amounts and age is not available, the landfill owner or operator must estimate based on known information and provide all documentation used to make the estimates. A separate methane emissions estimate must be made for each section proposed for exclusion, and the sum of all such sections must be compared to the methane emissions estimate for the entire landfill, and all calculations, data and documentation used to perform the calculations must be submitted to DEQ. The methane emissions from each section proposed for exclusion must be computed using the methods provided in OAR 340-239-0800(5).

(I) The landfill gas extraction components must be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other

nonporous corrosion resistant material of suitable dimensions to: Convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system must extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors must be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations must be situated with regard to the need to prevent excessive air infiltration.

(J) Vertical wells must be placed so as not to endanger underlying liners and must address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors must be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices must be designed so as not to allow indirect short circuiting of air into the cover, into the solid waste, into the collection system, or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations.

(K) Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly must include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices must be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.

(L) Landfill gas must be conveyed to a control system in compliance with section (2) of this rule through the collection header pipe(s). The gas mover equipment must be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures:

(i) For existing collection systems, the flow data must be used to project the maximum flow rate. If no flow data exists, the procedures in subparagraph (2)(a)(L)(ii) of this rule must be used;

(ii) For new collection systems, the maximum flow rate must be determined in accordance with OAR 340-239-0800(5).

(b) Requirements for Enclosed Flares. An owner or operator subject to this rule who operates an enclosed flare must route the collected gas to an enclosed flare that meets all of the following requirements:

(A) Achieves a methane destruction efficiency of at least 99 percent by weight.

(B) Is equipped with automatic dampers, an automatic shutdown device, a flame arrester, and continuous recording temperature sensors.

(C) During restart or startup there must be a sufficient flow of propane, commercial natural gas, or other approved fuel source, to the pilot light to prevent unburned collected methane from being emitted to the atmosphere.

(D) The gas control device must be operated within the parameter ranges established in the landfill's Air Contaminant Discharge Permit or Oregon Title V Operating Permit. Prior to permit issuance, the gas control device must be operated within the parameter ranges established in the most recent source test. When source test parameter ranges are not yet available, the manufacturer's specifications must be used.

(c) Requirements for open flares: An owner or operator subject to this rule who operates an open flare must route the collected gas to an open flare that meets the requirements of 40 CFR § 60.18. The owner or operator of an open flare must comply with all of the following requirements:

(A) Install, calibrate, maintain, and operate the following equipment according to the manufacturer's specifications:

(i) A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame; and

(ii) A device that records flow to the flare and bypass of the flare (if applicable). The owner or operator must:

(I) Install, calibrate, and maintain a gas flow rate measuring device that records the flow to the control device at least every 15 minutes; and

(II) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism must be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

(B) An open flare installed and operating prior to August 1, 2021, may operate until January 1, 2024, but is thereafter prohibited except as provided in paragraph (2)(c)(C) of this rule.

(C) Operation of an open flare on or after January 1, 2024, is only allowed with DEQ's written approval, which DEQ will determine based on whether the owner or operator demonstrates to the satisfaction of DEQ that one of the following conditions apply:

(i) The methane generation rate is less than 664 metric tons per year pursuant to OAR 340-239-800(2) and is insufficient to support the continuous operation of an enclosed flare or other gas control device;

(ii) The owner or operator is seeking to temporarily operate an open flare during the repair or maintenance of the gas control system, or while awaiting the installation of an enclosed flare, or to address offsite gas migration issues. An owner seeking to temporarily operate an open flare under this subparagraph must submit a written request to DEQ pursuant to OAR 340-239-0500;

(iii) The owner or operator has landfill gas emissions that are unable to be controlled using enclosed flare gas control devices in the gas control system. These emissions

being controlled using an open flare may not exceed 664 metric tons (732 tons) per year of methane. An owner or operator seeking to operate an open flare under this subparagraph must submit a written request to DEQ pursuant to OAR 340-239-0500. The request must include an analysis verifying that there is no feasible alternative control device configuration that would use the landfill gas emissions without use of an open flare; or

(iv) The owner or operator otherwise has received written approval from DEQ to operate an open flare pursuant to OAR 340-239-0500.

(d) Requirements for Gas Control Devices other than Flares. An owner or operator subject to this rule may operate a gas control device other than a flare only if the owner or operator complies with one of the following requirements:

(A) The device is a boiler or process heater provided that the landfill gas stream is introduced into the flame zone. The performance test is not required for boilers and process heaters with either having design heat input capacities equal to or greater than 44 megawatts per hour (150 million British thermal units per hour) that burn landfill gas for compliance with this division;

(B) Route the collected gas to an enclosed combustor energy recovery device, or series of devices, that meet all the following requirements:

(i) Achieves a methane destruction efficiency of at least 99 percent by weight pursuant to OAR 340-239-0800(6). In lieu of this 99% destruction efficiency, enclosed combustors may instead reduce the outlet methane concentration to less than 3,000 ppmv, dry basis, corrected to 15 percent oxygen;

(ii) For new gas control devices, the destruction efficiency or parts per million by volume required according to OAR 340-239-0110(2)(d)(B)(i) must be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in OAR 340-239-0800(6) and the DEQ Source Test Manual;

(iii) Existing gas control devices must demonstrate compliance with this rule not later than 180 days from the effective date of this rule using the performance test methods specified in OAR 340-239-0800(6) and the DEQ Source Test Manual; and

(iv) Operate the gas control device within the parameter ranges established during the initial or most recent performance test that demonstrates compliance with the standard in OAR 340-239-0110(2)(d)(A)(i). Until a performance test is performed, operate the gas control device within engineering or manufacturer's established parameter ranges.

(C) Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. Venting of treated landfill gas to the ambient air is not allowed. If the treated landfill gas cannot be routed for subsequent sale or beneficial use, then the treated landfill gas must be controlled according to either subsection (2)(b), (2)(c) or (2)(d) of this rule. All emissions vented to the atmosphere from the gas treatment

system are subject to the requirements of subsection (2)(b) or (2)(c) of this rule. The owner or operator must prepare a site-specific treatment monitoring plan to include all of the following:

(i) Monitoring records of parameters that are identified in the treatment system monitoring plan and that ensure the treatment system is operating properly for each intended end use of the treated landfill gas. At a minimum, records must include records of filtration, de-watering, and compression parameters.

(ii) Monitoring methods, frequencies, and operating ranges for each monitored operating parameter based on manufacturer's recommendations or engineering analysis for each intended end use of the treated landfill gas.

(iii) Documentation of the monitoring methods and ranges, along with justification for their use.

(iv) List of responsible staff (by name and job title) for data collection.

(v) Processes and methods used to collect the necessary data.

(vi) Description of the procedures and methods that are used for quality assurance, maintenance, and repair of all continuous monitoring systems (CMS).

(e) An owner or operator complying with section (2)(d) of this rule by using a landfill gas treatment system must calibrate, maintain, and operate according to the manufacturer's specifications a device that records flow to the treatment system and bypass of the treatment system (if applicable). The owner or operator must maintain and operate all monitoring systems associated with the treatment system in accordance with the site-specific treatment system monitoring plan required by paragraph (2)(d)(C) of this rule. The owner or operator must:

(A) Install, calibrate, and maintain a gas flow rate measuring device that records the flow to the treatment system at least every 15 minutes;

(B) Install liners or equivalent non-permeable materials on the bottom and all sides in all areas in which gas is to be collected. The liners must be installed as required under 40 CFR 258.40; and

(C) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism must be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

(f) Performance Test Requirements. The owner or operator must conduct annual performance tests for any gas control device(s) subject to the requirements of section (2) of this rule using the test methods identified in OAR 340-239-0800(6). Following an initial performance test, the owner or operator must conduct a complete annual performance test each calendar year, no later than 45 days after the anniversary date of

the initial performance test. Performance tests must be conducted in compliance with all of the following requirements:

(A) An initial performance test must be conducted within 180 days of start up of the gas collection and control system.

(B) Existing gas control devices must demonstrate compliance with this rule not later than 180 days from the effective date of this rule using the test methods specified in OAR 340-239-0800(6) and the DEQ Source Test Manual.

(C) If a gas control device remains in compliance with standards in section (2) of this rule after three consecutive performance tests, the owner or operator may conduct performance tests once every three years, but no later than 45 days after each third anniversary date of the third consecutive compliant performance test. If a subsequent performance test shows the gas collection and control system does not demonstrate compliance with the standard(s) in section (2) of this rule, the performance testing frequency must return to annual.

(D) The performance tests must be conducted under such conditions as DEQ specifies to the owner or operator based on representative performance of the affected source for the period being tested. Representative conditions exclude periods of startup and shutdown unless specified by DEQ. The owner or operator must not conduct performance tests during periods of malfunction. The owner or operator must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the owner or operator must make available to DEQ such records as may be necessary to determine the conditions of performance tests.

(3) Wellhead sampling. A landfill owner or operator required to comply with section (2) of this rule for an active gas collection system must install a sampling port and measuring devices, or an access port for measuring devices, at each wellhead and comply with the following, using measuring devices that meet the requirements of OAR 340-239-0800(7):

(a) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in OAR 340-239-0600(3);

(b) Monitor temperature of the landfill gas on a monthly basis as provided in OAR 340-239-0600(3); and

(c) Measure the gauge pressure in the gas collection header on a monthly basis as provided in OAR 340-239-0600(2)(d).

(4) Well Raising. The requirements of paragraph (2)(a)(A), paragraph (2)(a)(B), and section (3) of this rule do not apply to individual wells involved in well raising provided the following conditions are met:

(a) New fill is being added or compacted in the immediate vicinity around the well; and

(b) Once installed, a gas collection well extension is sealed or capped until the raised well is reconnected to a vacuum source.

(5) Repairs and Temporary Shutdown of Gas Collection System Components: The requirements of paragraphs (2)(a)(A) and (2)(a)(B) do not apply to individual landfill gas collection system components that must be temporarily shut down in order to repair the components due to emergencies, catastrophic events such as earthquakes, to extinguish landfill fires, to prevent landfill fires, to connect new landfill gas collection system components to the existing system, to perform construction activities pursuant to OAR 340-239-0300, or to conduct performance testing, provided the following requirements are met:

(a) Any new gas collection system components required to maintain compliance with this division must be included in the most recent Design Plan pursuant to section (1) of this rule. The owner or operator must comply with applicable provisions of the Notice of Construction requirements in OAR chapter 340, division 210 and permit modification requirements of OAR chapter 340, division 216 or 218 prior to the construction, installation and operation of new landfill gas collection system components;

(b) Methane emissions are minimized during shutdown pursuant to paragraph (2)(a)(E) of this rule; and

(c) The owner or operator must submit a notification to DEQ after any temporary shutdown due to an emergency, catastrophic event or landfill fires in accordance with OAR 340-239-0700(3)(n).

Statutory/Other Authority: ORS 468.020, ORS 468A.025, ORS 468A.040 & ORS 468A.050

Statutes/Other Implemented: ORS 468A.025, ORS 468A.040 & ORS 468A.050

History:

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340-239-0200

Compliance Standards

When required as provided in OAR 340-239-0100 through 340-239-0800, the owner or operator of a landfill must comply with this rule.

(1) Surface Emission Methane Concentration Limits. Except as provided in OAR 340-239-0110(4), 340-239-0110(5), 340-239-0300, and 340-239-0600(1), beginning August 1, 2022, or upon commencing operation of a newly installed gas collection and control system or modification of an existing gas collection and control system pursuant to OAR 340-239-0110(1), whichever is later, no location on the landfill surface may exceed either of the following methane concentration limits:

(a) 499 ppmv, other than nonrepeatable, momentary readings, as determined by instantaneous surface emissions monitoring conducted in accordance with OAR 340-

239-0800(3)(b); and

(b) An average methane concentration limit of 25 ppmv as determined by integrated surface emissions monitoring conducted in accordance with OAR 340-239-0800(3)(c).

(2) Wellhead Gauge Pressure Requirement: Each landfill gas collection and control system wellhead must be operated under a negative pressure without causing air infiltration, except as provided in OAR 340-239-0110(4) and 340-239-110(5), or under any of the following conditions:

(a) Use of a geomembrane or synthetic cover. The owner or operator must develop acceptable pressure limits for the wellheads and include them in the Design Plan;

(b) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows; or

(c) A fire or increased well temperature. The owner or operator must record instances when positive pressure occurs in efforts to avoid a fire. These records must be submitted with the semi-annual reports as provided in OAR 340-239-700(3)(c).

(3) Wellhead Temperature Requirement:

(a) Each landfill gas collection and control system interior wellhead in the collection system must be operated with a landfill gas temperature less than 62.8 degrees Celsius (145 degrees Fahrenheit).

(b) The landfill owner or operator may request a higher operating temperature value at a particular well. A higher operating value demonstration must be submitted to DEQ for approval and must include supporting data demonstrating that the elevated parameter neither causes fires nor significantly inhibits anaerobic decomposition by killing methanogens. The demonstration must satisfy both criteria in order to be approved (i.e., it is only acceptable if it neither causes fires nor kills methanogens).

Statutory/Other Authority: ORS 468.020, ORS 468A.025, ORS 468A.040 & ORS 468A.050

Statutes/Other Implemented: ORS 468A.025, ORS 468A.040 & ORS 468A.050

History:

[DEQ 16-2021, adopt filed 10/04/2021, effective 10/04/2021](#)

340-239-0400

Permanent Shutdown and Removal of the Gas Collection and Control System

When an owner or operator has installed a gas collection and control system pursuant to OAR 340-239-0110, the owner or operator may permanently shutdown and remove the system only as provided in this rule.

(1) The gas collection and control system at a closed landfill, or at a closed area of a landfill, may be capped or removed provided all the following requirements are met:

(a) The gas collection and control system was in operation for at least 15-years, unless the owner or operator can demonstrate to the satisfaction of DEQ that due to declining methane rates the owner or operator of the landfill will be unable to operate the gas collection and control system for a 15-year period.

(b) The calculated or measured methane generation rate at the landfill is less than 664 metric tons (732 tons) per year on three successive test dates. For measured methane generation rates, the test dates must be no less than 90 days apart and no more than 180 days apart. The calculated methane generation rate must be calculated pursuant to OAR 340-239-0800(2).

(c) Surface methane concentration measurements of methane do not exceed 200 ppmv.

(d) The owner or operator submits an Equipment Removal Report to DEQ pursuant to OAR 340-239-0700(3)(b).

(e) The concentration of methane gas at the landfill does not exceed 25 percent of the lower explosive limit for methane concentration in facility structures (excluding gas collection and control system components) or the lower explosive limit for methane concentration at the property boundary.

(2) The owner or operator of the landfill that has capped or removed a gas collection and control system under section (1) of this rule must conduct surface methane concentration measurements over the portion of the landfill with the capped or removed gas collection and control system pursuant to OAR 340-239-0800(3) for at least eight consecutive calendar quarters after the gas collection and control system is capped or removed. The measurements must comply with the following requirements:

(a) The walking grid in OAR 340-239-0800(3)(a)(B) may be reduced to 100-foot spacing so long as the walking grid is offset by 25-feet each quarter so that by the end of one year of monitoring, the entire surface area has been monitored every 25 feet;

(b) If there is no measured concentration of methane of 200 ppmv or greater from the surface of the closed landfill in any of these measurement events, the owner or operator must submit a final gas collection and control system Closure Notification to DEQ pursuant to OAR 340-239-0700(3)(a); and

(c) If there is any measured concentration of methane of 200 ppmv or greater in any of these measurement events, other than nonrepeatable, momentary readings, as determined by instantaneous surface emissions monitoring, from the surface of the closed landfill, the owner or operator must comply with OAR 340-239-0110 through 340-239-0800.

Statutory/Other Authority: ORS 468.020, ORS 468A.025, ORS 468A.040 & ORS 468A.050

Statutes/Other Implemented: ORS 468A.025, ORS 468A.040 & ORS 468A.050

History:

340-239-0600
Monitoring Requirements

When required as provided in OAR 340-239-0100 through 340-239-0800, the owner or operator of a landfill must comply with the monitoring requirements in this rule.

(1) Surface Emissions Monitoring Requirements. The owner or operator of a landfill with a gas collection and control system must conduct quarterly instantaneous and integrated surface monitoring of the landfill surface using the procedures specified in OAR 340-239-0800(3). All the following requirements apply to such monitoring:

(a) Instantaneous Surface Monitoring. Any reading exceeding a limit specified in OAR 340-239-0100(6)(b), 340-239-0200(1)(a), or 340-239-0400(2)(c) must be recorded as an exceedance and all the following actions must be taken:

(A) The owner or operator must record the name of the individual that conducted SEM, date, location, and value of each exceedance, along with retest dates and results. The location of each exceedance must be clearly marked and identified on a topographic map of the landfill, drawn to scale with the location of both the grids and the gas collection system clearly identified. The documentation required under this subsection must be retained in the owner or operator's files and reported to DEQ as provided in OAR 340-239-0700.

(B) The owner or operator must take corrective action such as, but not limited to, cover maintenance or repair, or well vacuum adjustments.

(C) The owner or operator must remonitor the location of the exceedance, and the location must be remonitored within ten days of a measured exceedance. The owner or operator must comply with all of the following requirements:

(i) If the remonitoring of the location shows a second exceedance, the owner or operator must take additional corrective action and the location must be re-monitored again no later than 10 days after the second exceedance.

(ii) If the remonitoring shows a third exceedance, the owner or operator must:

(I) Install a new or replacement collection device and must demonstrate compliance no later than 120 days after detecting the initial exceedance for owners and operators with a gas collection and control system. The new or replacement collection device must be installed at a location where the radius of influence includes the location where the leak was detected; or

(II) For owners and operators without a gas collection and control system, the owner or operator is subject to installing a gas collection and control system under OAR 340-239-0110.

(iii) Any location that initially showed an exceedance but has a methane concentration at the 10-day remonitoring of less than 500 ppmv methane, or 200 ppmv methane if this is to determine compliance with OAR 340-239-0100(6)(b), must be re-monitored one month from the initial exceedance. If the one-month re-monitoring shows a concentration less than 500 ppmv methane, or 200 ppmv methane if this is to determine compliance with OAR 340-239-0100(6)(b), no further monitoring of that location is required until the next quarterly monitoring period. If the one-month re-monitoring shows an exceedance, the owner or operator must install a new or replacement well to achieve compliance no later than 120 days after detecting the initial exceedance. The new or replacement well must be installed at a location where the radius of influence includes the location where the leak was detected.

(iv) For any location where monitored methane concentration equals or exceeds 500 ppmv, or 200 ppmv methane if this is to determine compliance with OAR 340-239-0100(6)(b), three times within a quarterly period, a new well or other collection device must be installed within 120 days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to DEQ for approval pursuant to OAR 340-239-0500.

(D) The owner or operator of a closed or inactive landfill, or of any closed or inactive areas on an active landfill that has no monitored exceedances of the limits specified in OAR 340-239-0200(1)(a) after four consecutive quarterly instantaneous surface monitoring periods, may shift to annual instantaneous surface monitoring.

(E) An owner or operator that has shifted to annual instantaneous surface monitoring under paragraph (1)(a)(D) of this rule must return to quarterly instantaneous surface monitoring upon any exceedances of the limits specified in OAR 340-239-0200(1)(a) that cannot be remediated within 10 days or upon any exceedances detected during a DEQ inspection.

(b) Integrated Surface Monitoring. Any reading exceeding the limit specified in OAR 340-239-0200(1)(b) must be recorded as an exceedance and all of the following actions must be taken:

(A) The owner or operator must record the average surface concentration measured as methane for each grid along with retest dates and results. The location of the grids and the gas collection system must be clearly marked and identified on a topographic map of the landfill drawn to scale. The documentation required under this subsection must be retained in the landfill's files and reported to DEQ as provided in OAR 340-239-0700.

(B) Within 10 days of a measured exceedance, corrective action must be taken by the owner or operator such as, but not limited to; cover maintenance or repair, or well vacuum adjustments and the grid must be remonitored. The owner or operator must comply with all the following requirements:

(i) If the remonitoring of the grid shows a second exceedance, additional corrective

action must be taken and the location must be re-monitored again no later than 10 days after the second exceedance.

(ii) If the remonitoring in subparagraph (1)(b)(B)(i) of this rule shows a third exceedance, the owner or operator must install a new or replacement well to achieve compliance no later than 120 days after detecting the initial exceedance. The new or replacement well must be installed in the same grid where the exceedance was detected, or an adjacent grid where the area of influence of the new or replaced well will address the exceedance.

(C) The owner or operator of a closed or inactive landfill, or of any closed or inactive areas on an active landfill that has no monitored exceedances of the limits specified in OAR 340-239-0200(1)(b) after four consecutive quarterly integrated surface monitoring periods, may shift to annual integrated surface monitoring.

(D) An owner or operator that has shifted to annual integrated surface monitoring under paragraph (1)(b)(C) of this rule must return to quarterly integrated surface monitoring upon the occurrence of any exceedances of the limits specified in OAR 340-239-0200(1)(b) during annual monitoring or detected during any DEQ inspection.

(2) Gas Control System Equipment Monitoring. The landfill owner or operator must monitor the gas control system using the following procedures:

(a) For enclosed flares all of the following equipment must be installed, calibrated, maintained, and operated according to the manufacturer's specifications:

(A) A temperature monitoring device equipped with a continuous recorder that has an accuracy of plus or minus ($\pm$) one percent of the temperature being measured expressed in degrees Celsius or Fahrenheit. A temperature monitoring device is not required for any boiler or process heater with either having a design heat input capacity equal to or greater than 44 megawatts per hour (150 million British thermal units per hour).

(B) A device that records gas flow to the control device and bypass of the control device (if applicable). The owner or operator must:

(i) Install, calibrate, and maintain a gas flow rate measuring device that records the flow to the control device at least every 15 minutes; and

(ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism must be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

(b) For a gas control device other than an enclosed flare, the owner or operator must provide information describing the operation of the gas control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The owner or operator must maintain, operate, and monitor the device

according to the written manufacturer instructions and specifications. Alternative compliance requests must be submitted to DEQ as specified in OAR 340-239-0500. DEQ may specify additional monitoring procedures.

(c) Components containing landfill gas and under positive pressure must be monitored quarterly for leaks. Any component leak equal to or over 500 ppmv methane must be tagged and repaired within 10 days. Any component leak over 250 ppmv must be recorded pursuant to OAR 340-239-0700(2)(a)(S). Quarterly component leak testing at landfills having landfill gas-to-energy facilities may be conducted prior to scheduled maintenance or planned outage periods.

(d) The owner or operator must measure gauge pressure in the gas collection header applied to each individual well on a monthly basis. If a positive pressure exists, other than as provided in OAR 340-239-0200(2), action must be initiated to correct the exceedance within five days. Any attempted corrective measure must not cause exceedances of other operational or performance standards.

(3) Wellhead Monitoring. On a monthly basis for each individual wellhead, the landfill owner or operator must determine and record gauge pressure, temperature, and nitrogen or oxygen content of gas emissions. Such monitoring must comply with all of the following requirements:

(a) If there is any positive pressure reading other than as provided in OAR 340-239-0110(4) or (5), the owner or operator must take the following actions. Any attempted corrective measure must not cause exceedances of other operational or performance standards:

(A) Initiate corrective action within five days of the positive pressure measurement;

(B) If negative pressure cannot be achieved without excess air infiltration within 15 days of the date the positive pressure was first measured, the owner or operator must conduct a root cause analysis and correct the exceedance as soon as practicable, but no later than 60 days after positive pressure was first measured. The owner or operator must submit a Corrective Action Report to DEQ pursuant to OAR 340-239-0700(3)(k);

(C) If corrective actions cannot be fully implemented within 60 days following the positive pressure measurement for which the root cause analysis was required, the owner or operator must also conduct a corrective action analysis and develop an implementation schedule to complete the corrective action(s) as soon as practicable, but no more than 120 days following the positive pressure measurement; and

(D) If corrective action is expected to take longer than 120 days to complete after the initial exceedance, the owner or operator must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to DEQ.

(b) If a well exceeds the operating parameter for temperature, action must be initiated to correct the exceedance within five days. Any attempted corrective measure must not cause exceedances of other operational or performance standards, and the owner or

operator must comply with all of the following requirements:

(A) If a landfill gas temperature less than 62.8 degrees Celsius (145 degrees Fahrenheit), or as established in OAR 340-239-200(3), cannot be achieved within 15 days of the first measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit), the owner or operator must conduct a root cause analysis and correct the exceedance as soon as practicable, but no later than 60 days after a landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit) was first measured. The owner or operator must keep records according to OAR 340-239-0700(2).

(B) If corrective actions cannot be fully implemented within 60 days following the temperature measurement for which the root cause analysis was required, the owner or operator must also conduct a corrective action analysis and develop an implementation schedule to complete the corrective action(s) as soon as practicable, but no more than 120 days following the measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit). The owner or operator must submit the items listed in OAR 340-239-0700(3)(c)(A) as part of the next semi-annual report. The owner or operator must keep records according to OAR 340-239-0700(2).

(C) If corrective action is expected to take longer than 120 days to complete after the initial exceedance, the owner or operator must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to DEQ, according to OAR 340-239-0700(3)(c)(A) and OAR 340-239-600(3)(a)(C). The owner or operator must keep records according to OAR 340-239-0700(2).

(D) If a landfill gas temperature measured at either the wellhead or at any point in the well is greater than or equal to 76.7 degrees Celsius (170 degrees Fahrenheit) and the carbon monoxide concentration measured, according to the procedures in OAR 340-239-0800(7), is greater than or equal to 1,000 ppmv the corrective action(s) for the wellhead temperature standard (62.8 degrees Celsius or 145 degrees Fahrenheit) must be completed within 15 days.

(E) If a higher operating temperature has not been approved by DEQ, the enhanced monitoring specified in OAR 340-239-0800(8) is required at each well with a measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit).

(4) Cover integrity. The landfill owner or operator must implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis. The cover must conform with requirements in OAR chapter 340, divisions 094 and 095.

(5) The monitoring requirements of this division apply at all times, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system

failures that are caused in part by poor maintenance or careless operation are not malfunctions. Monitoring system repairs completed in response to monitoring system malfunctions to return the monitoring system to operation must be completed as expeditiously as practicable.

Statutory/Other Authority: ORS 468.020, ORS 468A.025, ORS 468A.040 & ORS 468A.050

Statutes/Other Implemented: ORS 468A.025, ORS 468A.040 & ORS 468A.050

History:

[DEQ 16-2021, adopt filed 10/04/2021, effective 10/04/2021](#)

340-239-0610

Advanced Methane Detection Monitoring

(1) Advanced Methane Detection Technology. OTM-51 Use. Owners or operators using drones or unmanned aerial systems as the advanced methane detection technology, as defined in OAR 340-239-0015(2)(b), must also comply with the following:

(a) Surface sampling patterns must meet the minimum spacing and intervals specified in OAR 340-239-0800(3)(a)(B);

(b) Monitoring must not be performed when onsite average wind speed exceeds four miles per hour or two meters per second, or gusts exceed ten miles per hour unless a wind barrier similar to a funnel is used. Average on-site wind speed must be determined in an open area at five-minute intervals using an on-site anemometer with a continuous recorder and data logged for the entire duration of the monitoring event. Surface emissions monitoring cannot be conducted if the average wind speed exceeds 25 miles per hour;

(c) The ground level sampling system must be designed to maximize the time the distal end of the nozzle is within five centimeters of the ground level during flight;

(d) The speed of the sampling traverse may not exceed seven miles per hour, or at a speed such that the instrument-only response time multiplied by the forward flight speed does not exceed four meters, whichever is slower;

(e) Except for the working face according to OAR 340-239-0610(3), an increased meter reading means a single or series of meter readings detected by the drone at or above 100 ppmv of methane and must be verified via a ground-based survey according to Section 8.3.1.1 of OTM-51. The ground-based survey must be conducted within 24 hours of the drone monitoring. When conducting the ground-based survey:

(A) Surface areas of the landfill that meet or exceed a methane concentration of 250 ppmv must be monitored in a five-foot grid around the location to determine the extent

of the methane leak;

(B) An exceedance of the standard in OAR 340-239-0200(1)(a) occurs when the ground-based survey confirms a reading of 500 ppmv or greater; and

(f) Compliance with the 25 ppmv standard in OAR 340-239-0200(1)(b) is determined by averaging all the readings taken by the drone above each grid area and does not require a ground-based survey.

(2) Applicability.

(a) The owner or operator of a municipal solid waste landfill, as defined in 40 CFR 257.2 as of January 1, 2025, located in Benton County must perform quarterly advanced methane detection monitoring according to this rule beginning January 1, 2027.

(b) Any owner or operator subject to the requirements in OAR 340-239-0110 through -0800 may use advanced methane detection monitoring in accordance with this rule after receiving written approval from DEQ pursuant to OAR 340-239-0500 and 340-239-0800(10). Once the owner or operator begins using advanced methane detection monitoring in accordance with this rule, the owner or operator must receive approval to discontinue using advanced methane detection monitoring.

(c) Before an owner or operator uses advanced methane detection monitoring according to this rule the owner or operator must apply for, and be issued, a permit modification that incorporates the requirements of this rule.

(d) Owners or operators using advanced methane detection technology according to this rule must comply with the remonitoring and corrective action requirements of OAR 340-239-0600(1).

(e) Advanced methane detection monitoring may not be used for Tier 4 surface emissions monitoring provisions of 40 CFR 60.764(a)(6) (part 60 subpart XXX), 40 CFR 60.35f(a)(6) (part 60 subpart Cf and OAR 340-236-0500) or 40 CFR 62.16718(a)(6) (part 62 subpart OOO).

(3) All Areas Monitored for landfills located in Benton County.

(a) Owners and operators performing advanced methane detection monitoring under section (2)(a) of this rule must perform quarterly surface emissions monitoring above all areas of the surface of the landfill, including the working face of the landfill.

(b) When monitoring records a methane concentration greater than or equal to 500 ppmv above any location on the working face of the landfill and the exceedance cannot

be corrected due to it being on the working face of the landfill:

(A) The owner or operator must submit a mitigation plan to DEQ for approval within 90 days of the first exceedance detected by advanced methane detection monitoring;

(B) The mitigation plan must include measures to minimize methane emissions from the working face, including measures to minimize the size of the working face, monitoring requirements, and recordkeeping requirements;

(C) Once approved by DEQ, the owner or operator must implement the mitigation plan to reduce methane emissions from the working face;

(D) The owner or operator must report to DEQ on the implementation of the mitigation plan each year in its annual report submitted according to OAR 340-239-0700(3)(d). The report must include an evaluation of the monitoring data above the working face, or faces, and the effectiveness of the mitigation measures to reduce exceedances at the working face; and

(E) The owner or operator must revise and resubmit a mitigation plan upon request by DEQ.

(4) Reporting. In addition to the reporting required in OAR 340-239-0600(1)(a)(A) and (1)(b)(A) and OAR 340-239-0700(3)(c)(A), owners and operators using advanced methane detection monitoring must report the following information to DEQ in the semi-annual report required under OAR 340-239-0700(3)(c), unless otherwise specified:

(a) The following spatial geographic information system maps, submitted to DEQ in a format that can be uploaded into Your DEQ Online:

(A) A map showing all monitoring paths, distinguishable by type of monitoring, taken along the surface of the landfill that is drawn to scale and includes a clear identification of each 50,000 square foot grid. The map must denote the working face of the landfill as defined in OAR 340-239-0015;

(B) For instantaneous surface monitoring, a map that is drawn to scale and includes:

(i) All locations of measurements of greater than or equal to 100 ppmv;

(ii) All locations of verified ground-based measurements of greater than or equal to 500 ppmv. The measurements of 500 ppmv or greater must be distinguishable on the map; and

(iii) The latitude and longitude coordinates of each measurement of greater than or

equal to 500 ppmv carried to the fifth decimal place; and

(C) For integrated surface monitoring, a map that is drawn to scale and includes a clear identification of each grid and the average surface concentration value for each grid. The grids above 25 ppm integrated must be distinguishable on the map;

(b) Meteorological data collected during monitoring activities;

(c) Anemometer readings taken at five-minute intervals and the longitude and latitude coordinates, carried to the fifth decimal place, of where the anemometer readings were taken;

(d) Equipment calibration records;

(e) Owners and operators performing advanced methane detection monitoring using OTM-51 must include a copy of EPA's Alternative Test Letter 150 with each quarterly report presenting SEM results that used advanced methane detection monitoring; and

(f) Owners and operators performing advanced methane detection monitoring according to a DEQ approved alternative method under OAR 340-239-0015(2)(a) must include a copy of DEQ's written approval with each quarterly report presenting SEM results that used advanced methane detection monitoring.

(5) Recordkeeping. Owners and operators using advanced methane detection monitoring must retain the following records for no less than five years:

(a) All data identified in section (4);

(b) For monitoring using OTM-51, records must include all data required under OTM-51;

(c) For monitoring conducted using an Oregon DEQ approved alternative method under OAR 340-239-0015(2)(a), records must include all data required by the approval and a copy of DEQ's written letter approving the method.

Statutory/Other Authority: ORS 468.020, ORS 468A.025, ORS 468A.040, ORS 468A.050 & ORS 468A.885

Statutes/Other Implemented: ORS 468A.025, ORS 468A.040, ORS 468A.050 & ORS 468A.885

History:

340-239-0700

Recordkeeping and Reporting Requirements

When required as provided in OAR 340-239-0100 through 340-239-0800, the owner or

operator of a landfill must comply with the recordkeeping and reporting requirements in this rule.

(1) The electronic reporting requirements of 40 CFR §§ 60.38f(j), 60.767(i), and 63.1981(i) are incorporated by reference herein. Owners or operators of landfills that meet the applicability or designated facility requirements in 40 CFR §§ 60.31f, 60.760, or 63.1935 must comply with the electronic reporting requirements of 40 CFR §§ 60.38f(j), 60.767(i), or 63.1981(i), respectively and as applicable.

(2) Recordkeeping Requirements.

(a) An owner or operator must maintain the following records for at least five years:

(A) All gas collection system downtime exceeding five days, including dates of the downtime, individual well shutdown and disconnection times, the reason for the downtime, and any corrective actions conducted in response to the downtime;

(B) All gas control system downtime in excess of one consecutive hour, the reason for the downtime, the length of time the gas control system was shutdown, and any corrective actions conducted in response to the downtime;

(C) The walking pattern for each surface emissions monitoring event. All instantaneous surface readings, including all results of 100 ppmv methane or greater. All exceedances of the limits in OAR 340-239-0100(6)(b) and 340-239-0200, including the location of the leak (or affected grid), leak concentration in ppmv methane, date and time of measurement, the action taken to repair the leak, date of repair, any required remonitoring and the remonitored concentration in ppmv methane, wind speed during surface sampling, and the installation date and location of each well installed as part of a gas collection system expansion;

(D) Any positive wellhead gauge pressure measurements, the name of the individual that conducted the actions, the date and time of the measurements, the well identification number, and the corrective action taken;

(E) Each wellhead temperature monitoring value of 62.8 degrees Celsius (145 degrees Fahrenheit) or above, unless a different temperature has been approved by DEQ in writing, each wellhead nitrogen level at or above 20 percent, and each wellhead oxygen level at or above five percent;

(F) Monthly solid waste acceptance rate, for active landfills or landfills that have accepted waste within the last five years;

(G) The current amount of waste-in-place including waste composition;

(H) The nature, location, amount, and date of deposition of nondecomposable waste for any landfill areas excluded from the collection system;

(I) Results of any performance tests conducted pursuant to OAR 340-239-0110(2)(f);

(J) Descriptions of mitigation measures taken to prevent the release of methane or other emissions into the atmosphere:

(i) When solid waste was brought to the surface during the installation or preparation of wells, piping, or other equipment;

(ii) During repairs or the temporary shutdown of gas collection system components;

(iii) When solid waste was excavated and moved; and

(iv) Records demonstrating that the owner or operator is implementing a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

(K) Any construction activities pursuant to OAR 340-239-0300. Records must contain the following information:

(i) A description of the actions being taken, the areas of the landfill that will be affected by these actions, the reason the actions are required, and any landfill gas collection system components that will be affected by these actions;

(ii) Construction start and finish dates, projected equipment installation dates, and projected shut down times for individual gas collection system components; and

(iii) A description of the mitigation measures taken to minimize methane emissions and other potential air quality impacts;

(L) For any root cause analysis for which corrective actions are required, records of the root cause analysis conducted, the corrective action analysis, the date for corrective action(s) already completed following the positive pressure reading or high temperature reading, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates, and a copy of any comments or final approval on the corrective action analysis or schedule from DEQ;

(M) The equipment operating parameters specified to be monitored under OAR 340-239-0600(2) as well as records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. The records must include the following information:

(i) For enclosed flares, all 3-hour periods of operation during which the average temperature difference was more than 28 degrees Celsius (or 82 degrees Fahrenheit) below the average combustion temperature during the most recent performance test at which compliance with OAR 340-239-0110(2)(b) and OAR 340-239-0110(2)(c) was determined;

(ii) For any owner or operator who uses a boiler or process heater with either having a design heat input capacity of 44 megawatts per hour (150 million British thermal units per hour) or greater to comply with OAR 340-239-0110(2)(c), all periods of operation of

the boiler or process heater (e.g., steam use, fuel use, or monitoring data collected pursuant to other federal, State, local, or tribal regulatory requirements), readily accessible continuous records of the equipment operating parameters specified to be monitored in OAR 340-239-0600(2) and up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded;

(iii) For open flares, continuous records of the flame or flare pilot flame monitoring, and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent; and

(iv) The indication of flow to the control system and the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines;

(N) All collection and control system exceedances of the operational standards and component leak standards; the reading in the subsequent month, whether or not the second reading is an exceedance; and the location of each exceedance;

(O) Owners or operators who convert waste-in-place from volume to mass, must keep readily accessible, records of the annual recalculation of site-specific density, design capacity, and the supporting documentation;

(P) Landfill owners or operators demonstrating that site-specific surface methane emissions are below 200 ppmv by conducting surface emission monitoring under OAR 340-239-0100(6)(b) must keep for at least five years up-to-date, readily accessible records of all surface emissions monitoring and information related to monitoring instrument calibrations conducted according to sections 8 and 10 of Method 21 of appendix A of 40 CFR part 60, including all of the following items:

(i) Calibration records, including:

(I) Date of calibration and initials of operator performing the calibration;

(II) Calibration gas cylinder identification, certification date, and certified concentration;

(III) Instrument scale(s) used;

(IV) A description of any corrective action taken if the meter readout could not be adjusted to correspond to the calibration gas value; and

(V) If an owner or operator makes their own calibration gas, a description of the procedure(s) used;

(ii) Digital photographs of the instrument setup, including the wind barrier. The photographs must be accurately time and date-stamped and taken at the first sampling location prior to sampling and at the last sampling location after sampling at the end of each sampling day;

(iii) Timestamp of each surface scan reading which must be detailed to the nearest second, based on when the sample collection begins and log for the length of time each sample was taken using a stopwatch (e.g., the time the probe was held over the area);

(iv) The walking pattern and location of each surface scan reading. The owner or operator must determine the coordinates using an instrument with an accuracy of at least four meters. Coordinates must be in decimal degrees with at least five decimal places;

(v) Monitored methane concentration (ppmv) of each reading;

(vi) Background methane concentration (ppmv) after each instrument calibration test;

(vii) For readings taken at each surface penetration, the unique identification location label matching the label specified in subparagraph OAR 340-239-0700(2)(a)(P) (iv); and

(viii) Records of the operating hours of the gas collection system for each destruction device;

(Q) For each owner or operator reporting leachate or other liquids addition under OAR 340-239-0700(3)(g), keep records of any engineering calculations or company records used to estimate the quantities of leachate or liquids added, the surface areas for which the leachate or liquids were applied, and the estimates of annual waste acceptance or total waste in place in the areas where leachate or liquids were applied;

(R) The date of initial placement of waste in newly constructed landfill cells;

(S) Documentation of any component leaks above 250 ppmv methane detected pursuant to OAR 340-239-0600(2)(c) and all repairs performed in response to any component leaks at or above 500 ppmv; and

(T) The maximum design capacity of the landfill.

(b) The owner or operator must maintain the following records for the life of the control system equipment, as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring must be maintained for a minimum of five years. Records of the control device vendor specifications must be maintained until removal:

(A) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in OAR 340-239-0110(1)(a);

(B) The expected gas generation flow rate as calculated pursuant to OAR 340-239-0800(5);

(C) The percent reduction of methane achieved by the control device determined pursuant to OAR 340-239-0800(6);

(D) For a boiler or process heater, the description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period of the performance test;

(E) When an owner or operator subject to the provisions of this division is demonstrating compliance with OAR 340-239-0110(2) through use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts per hour (150 million British thermal units per hour):

(i) The average temperature measured at least every 15 minutes and averaged over the same time period of the performance test; and

(ii) The percent reduction of methane determined as specified in OAR 340-239-0800(6) achieved by the control device;

(F) For an open flare, the flare type (i.e., steam-assisted, air-assisted, or non-assisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR § 60.18, which is incorporated by reference herein; and records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame or the flare flame is absent;

(G) An up to date map showing each existing and planned gas collector in the system;

(H) Where an owner or operator subject to the provisions of this division is demonstrating compliance with OAR 340-239-0110(2) through use of a landfill gas treatment system:

(i) Bypass records. Records of the flow of landfill gas to, and bypass of, the treatment system; and

(ii) Site-specific treatment monitoring plan meeting the requirements of OAR 340-239-0110(2)(d)(C). An up-to-date, readily accessible plot map showing each existing and planned collectors in the system and providing a unique identification location label for each collector.

(c) Bioreactor moisture content calculations: Any landfill owner or operator conducting calculations to determine the moisture content of a bioreactor must document the calculations and the basis of any assumptions. made to make such calculations. The records of the calculations must be kept for at least five years and until liquids addition ceases.

(d) Record Retention: The owner or operator must maintain copies of the records and reports required by this division and provide them to DEQ within five business days upon request.

(3) Reporting Requirements.

(a) Closure Notification. Any owner or operator of a landfill that has ceased accepting waste must submit a Closure Notification to DEQ within 30 days of waste acceptance cessation, and:

(A) The Closure Notification must include the last day solid waste was accepted, the anticipated closure date of the landfill, and the estimated waste-in-place; and

(B) DEQ may request additional information as necessary to verify that permanent closure has taken place in accordance with the requirements of any applicable regulations, requirements, or ordinances in effect at the time of closure.

(b) Equipment Removal Report. The landfill owner or operator must submit a gas collection and control system Equipment Removal Report to DEQ 30 days prior to well capping, removal or cessation of operation of the gas collection, treatment, or control system equipment. The report must contain the following information:

(A) A copy of the Closure Notification submitted pursuant to OAR 340-239-0700(3)(a);

(B) A copy of the Initial Performance Test Report or other documentation demonstrating that the gas collection and control system has been installed and operated for a minimum of 15 years, unless the owner or operator can demonstrate to the satisfaction of DEQ that due to declining methane rates the landfill is unable to operate the gas collection and control system for a 15-year period; and

(C) Surface emissions monitoring results needed to verify that landfill surface methane concentration measurements do not exceed the limits specified in OAR 340-239-0200.

(c) Semi-Annual Report. An owner or operator subject to this rule, must prepare semi-annual reports for the periods of January 1 through June 30 of each year, unless otherwise approved in writing by DEQ. The Semi-Annual Report will be due on July 30, unless otherwise approved in writing by DEQ. The Semi-Annual Report must contain the following information:

(A) All instantaneous surface readings of 100 ppmv or greater. All exceedances of the limits in OAR 340-239-0100(6)(b), 340-239-0200 and 340-239-0600(2)(c) including the location of the leak (or affected grid), leak concentration in ppmv, date and time of measurement, a topographical map drawn to scale of the walking pattern, a topographical map drawn to scale of each instantaneous surface emissions monitoring exceedance, a topographical map drawn to scale of each grid that shows all integrated surface emissions monitoring exceedances, the action taken to repair the leak, date of repair, any required remonitoring and the remonitored concentration in ppmv, wind speed during surface sampling, the concentration recorded at each location for which an exceedance was recorded in the previous month, and the installation date and location of each well installed as part of a gas collection system expansion;

(B) For any corrective action analysis for which corrective actions are required in OAR 340-239-0600(3)(a) and 340-239-0600(3)(b) and that take more than 60 days to correct the exceedance, the root cause analysis conducted, including a description of the

recommended corrective action(s), the date for corrective action(s) already completed following the positive pressure or elevated temperature reading, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates;

(C) All known, prevented, or suspected subsurface landfill fire(s) along with potential causes and any efforts conducted to avoid or put out the fire(s). Any positive pressure readings that may have contributed to the known, prevented, or suspected fire;

(D) The number of times that applicable parameters monitored under OAR 340-239-0110(2) or 340-239-0200, were exceeded and when the gas collection and control system was not operating in compliance with OAR 340-0110(2)(a) including periods of startup, shutdown, and malfunction. For each instance, report the date, time, and duration of each exceedance. Where an owner or operator subject to the requirements of this division is demonstrating compliance with the operational standard for temperature OAR 340-239-0600(3)(b), the owner or operator must provide a statement of the wellhead operational standard for temperature and oxygen the landfill is complying with for the period covered by the report. The report must indicate:

(i) The number of times each of those parameters monitored under OAR 340-239-0600(3)(b), were exceeded. For each instance, report the date, time, and duration of each exceedance; and

(ii) The number of times the parameters for the site-specific treatment system in OAR 340-239-0110(2)(d)(C) were exceeded;

(E) Description and duration of all periods when the gas stream was diverted from the control device or treatment system through a bypass line or the indication of bypass flow as specified OAR 340-239-0110(2)(c);

(F) Description and duration of all periods when the control device or treatment system was not operating and length of time the control device or treatment system was not operating;

(G) All periods when the collection system was not operating;

(H) The date of installation and the location, identified on a topographical map drawn to scale, of each well or collection system expansion;

(I) Each owner or operator required to conduct enhanced monitoring in accordance with OAR 340-239-0800(8) for temperatures exceeding 62.8 degrees Celsius (145 degrees Fahrenheit) must include the results of all monitoring activities conducted during the period;

(J) For enclosed combustors except for boilers and process heaters with either having design heat input capacity of 44 megawatts per hour (150 million British thermal units per hour) or greater, all three-hour periods of operation during which the average temperature was more than 28 degrees Celsius (82 degrees Fahrenheit) below the

average combustion temperature during the most recent performance test; and

(K) For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone.

(d) Annual Report. An owner or operator subject to the requirements of this rule must prepare an Annual Report for the period of January 1 through December 31 of each year. Each Annual Report must be submitted to DEQ by February 15 of the following year, unless otherwise specified by DEQ in the owner or operator's issued ACDP or TV operating permit. The Annual Report must consist of the semi-annual and the following annual reporting requirements:

(A) Landfill name, owner and operator, address, and permit number as issued according to division 216 or 218;

(B) Total volume of landfill gas collected (reported in standard cubic feet);

(C) Average composition of the landfill gas collected over the reporting period (reported in percent methane and percent carbon dioxide by volume);

(D) Gas control device type, year of installation, rating, fuel type, and total amount of landfill gas combusted in each control device;

(E) The date that the gas collection and control system was installed and in full operation;

(F) The percent methane destruction efficiency of each gas control device(s);

(G) Type and amount of supplemental fuels burned with the landfill gas in each device, if applicable;

(H) Total volume of landfill gas shipped off-site (MMscf), the composition of the landfill gas collected (reported in percent methane and percent carbon dioxide by volume), and the recipient of the gas;

(I) Most recent topographic map of the site showing the areas with final cover and a geomembrane and the areas with final cover without a geomembrane with corresponding percentages over the landfill surface;

(J) The information required paragraphs (2)(a)(A) through (2)(a)(E), (2)(a)(G), (2)(a)(J) through (2)(a)(L) of this rule; and

(K) Instrument specifications for all instruments used for monitoring compliance with this division.

(e) Waste-in-Place Report. An owner or operator subject to the requirements of OAR 340-239-0100(1), 340-239-0100(2), 340-239-0100(3), or 340-239-0100(4) must prepare an initial Waste-in-Place Report and annual Waste-in-Place reports each following year

until the owner or operator submits a Closure Notification pursuant to OAR 340-239-0700(3)(a). The initial Waste-in-Place Report must be submitted by October 1, 2022. Each annual Waste-in-Place Report must be prepared for the period of January 1 through December 31 of each year and be submitted to DEQ by no later than March 15 of the following year. DEQ may extend this deadline in the form of a permit condition. The report also must include:

(A) Landfill name, owner and operator, address, and the permit number as issued according to division 216 or 218;

(B) The landfill's status (active, closed, or inactive) and the estimated waste-in-place, as of December 31 of the prior year, in tons;

(C) A description of the known and assumed waste composition in the landfill;

(D) The most recent topographic map of the site showing the areas with final cover and a geomembrane and the areas with final cover without a geomembrane with a calculation of the corresponding percentage geomembrane coverage over the landfill surface.

(f) Methane Generation Rate Report. An owner or operator subject to the requirements of OAR 340-239-0100(1), 340-239-0100(2), 340-239-0100(3), or 340-239-0100(4) must calculate the methane generation rate using the calculation procedures specified in OAR 340-239-0800(2) and report the results, along with a summary of efforts being implemented at the landfill to reduce landfill gas emissions, to DEQ until the owner or operator submits a Closure Notification pursuant to OAR 340-239-0700(3)(a):

(A) By October 1, 2022 for landfills with greater than 200,000 tons waste-in-place;

(B) Within 90 days of reaching 200,000 tons of waste-in-place;

(C) By March 15 of each subsequent year, unless another date is approved by DEQ in the owner or operator's issued ACDP or TV operating permit, while waste-in-place is greater than 200,000 tons and the methane generation rate is less than 664 metric tons (732 tons) per year. The calculation, along with relevant parameters, must be provided as part of the report; and

(D) The report must include the results of a visual inspection of the landfill cover and any actions done to fix leaks and minimize methane releases.

(g) Liquids Addition Report. An owner or operator subject to OAR 340-239-0110 that has employed leachate recirculation or added liquids based on a Research, Development, and Demonstration permit (issued through Resource Conservation and Recovery Act, subtitle D, part 258) within the last 10 years must submit to DEQ, annually, the following information:

(A) Volume of leachate recirculated (gallons per year) and the reported basis of those estimates (records or engineering estimates);

(B) Total volume of all other liquids added (gallons per year) and the reported basis of those estimates (records or engineering estimates);

(C) Surface area (acres) over which the leachate is recirculated (or otherwise applied);

(D) Surface area (acres) over which any other liquids are applied;

(E) The total waste disposed (megagrams) in the areas with recirculated leachate, added liquids, or both, based on on-site records to the extent data are available, or engineering estimates and the reported basis of those estimates;

(F) The annual waste acceptance rates (megagrams per year) in the areas with recirculated leachate, added liquids, or both, based on on-site records to the extent data are available, or engineering estimates;

(G) The initial report must contain items in OAR 340-239-0700(2)(g)(A) through 340-239-0700(2)(g)(F) per year for the initial annual reporting period as well as for each of the previous 10 years, to the extent historical data are available in on-site records, and the report must be submitted no later than 12 months after the date of commenced construction, modification, or reconstruction;

(H) Subsequent annual reports must contain items in OAR 340-239-0700(2)(g)(A) through 340-239-0700(2)(g)(F) for the 365-day period following the 365-day period included in the previous annual report, and the report must be submitted no later than 365 days after the date the previous report was submitted, unless another date is approved by DEQ in the owner or operator's issued ACDP or TV operating permit; and

(I) Landfills may cease annual reporting of items in paragraphs OAR 340-239-0700(2)(g)(A) through 340-239-0700(2)(g)(F) once they have submitted the Closure Notification in OAR 340-239-0700(3)(a).

(h) Performance Test Report. For a control system designed and operated to meet the requirements of this division, the owner or operator must submit a Performance Test Report that establishes the reduction efficiency or parts per million by volume no later than 180 days after the initial startup of the approved control system using EPA Method 25 or 25C, 40 CFR part 60, Appendix A, which is incorporated by reference herein. The owner or operator must submit any additional Performance Test Reports within 60 days after the date of completing each performance test, including any associated fuel analyses. The Performance Test Report must meet the following requirements:

(A) The Performance Test Report must include the following information:

(i) A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;

(ii) The data upon which the sufficient density of wells, horizontal collectors, surface

collectors, or other gas extraction devices and the gas mover equipment sizing are based;

(iii) The documentation of the presence of asbestos or nondecomposable material for each area from which collection wells have been excluded based on the presence of asbestos or nondecomposable material;

(iv) The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area;

(v) The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and

(vi) The provisions for the control of off-site migration.

(B) The control device must be operated within the parameter ranges established during the initial or most recent performance test, the most recent permit, or manufacturer written specifications. The operating parameters to be monitored are specified in OAR 340-239-0600(2).

(i) Collection and Control System Design Plan. The Collection and Control System Design Plan must be prepared and approved by a professional engineer and must meet the following requirements:

(A) The collection and control system as described in the design plan must meet the design requirements in OAR 340-239-0110(1);

(B) If DEQ does not approve or disapprove the Design Plan, or does not request that additional information be submitted within 90 days of receipt, then the owner or operator may continue with implementation of the Design Plan with the recognition that the owner or operator is proceeding at their own risk. In the event that the Design Plan is required to be modified to obtain approval, the owner or operator must take any steps necessary to conform any prior actions to the approved Design Plan; and

(C) If the owner or operator chooses to demonstrate compliance with the emission control requirements of this division using a treatment system as defined in this division, then the owner or operator must prepare a site-specific treatment system monitoring plan as specified in OAR 340-0110(2)(d)(C).

(j) Amended Design Plan. The owner or operator who has already been required to submit a design plan under OAR 340-239-0110(2) must submit an Amended Design Plan to DEQ as follows:

(A) At least 90 days before expanding operations to an area not covered by the previously approved Design Plan; and

(B) At least 90 days prior to installing, repairing, or expanding the gas collection system in a way that is not consistent with the Design Plan previously approved by DEQ.

(k) Corrective Action Reports:

(A) For corrective action that is required according to OAR 340-239-0600(3) and is expected to take longer than 120 days after the initial exceedance to complete, the owner or operator must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to DEQ as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature monitoring value greater than 62.8 degrees Celsius (145 degrees Fahrenheit). The owner or operator must receive DEQ approval regarding the plan for corrective action and the corresponding timeline.

(B) For corrective action that is required according to OAR 340-239-0600(3) and is not completed within 60 days after the initial exceedance, the owner or operator must submit a notification to DEQ as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature exceedance.

(C) If an owner or operator cannot fully implement a corrective action described in paragraph (3)(k)(A) or (3)(k)(B) of this rule within 60 days following the positive pressure or excess temperature measurement for which the root cause analysis was required, the owner or operator must also conduct a corrective action analysis and develop an implementation schedule to complete the corrective action(s) as soon as practicable, but no more than 120 days following the positive pressure measurement.

(l) Instantaneous Surface Emission Monitoring Report.

(A) A landfill owner or operator conducting surface emission monitoring pursuant to OAR 340-239-0100(6)(b) must submit an Instantaneous Surface Monitoring Report within 30 days after the fourth consecutive quarter or monitoring if no exceedances are detected, or 30 days after a measured concentration of methane of 200 ppmv or greater, whichever is first.

(B) An Instantaneous Surface Emissions Monitoring Report required under paragraph (3)(l)(A) of this rule must include documentation of the following:

(i) Any corrective actions taken as a result of the surface emissions monitoring and clearly identify the location, date and time (to nearest second), average wind speeds including wind gusts, and reading (in parts per million) of concentrations of methane above 100 ppmv, other than non-repeatable, momentary readings. For location, the landfill owner or operator must determine the latitude and longitude coordinates using an instrument with an accuracy of at least four meters. The coordinates must be in decimal degrees with at least five decimal places; and

(ii) The results of the most recent methane generation rate calculation.

(m) 24-Hour High Temperature Report. Where a landfill owner or operator must

demonstrate compliance with the operational standard for temperature in OAR 340-239-0600(3)(b), a landfill gas temperature measured at either the wellhead or at any point in the well is greater than or equal to 76.7 degrees Celsius (170 degrees Fahrenheit), and the carbon monoxide concentration measured is greater than or equal to 1,000 ppmv, the owner or operator must report the date, time, well identifier, temperature and carbon monoxide reading to DEQ within 24 hours of the measurement unless a higher operating temperature value has been approved by DEQ for the well.

(n) Repairs and Temporary Shutdown Notification. At least 30 days prior to a scheduled shutdown, any landfill owner or operator that temporarily shuts down a gas collection and control system per OAR 340-239-0110(5) must submit a notification of the shutdown that includes a justification for the shutdown, the system component(s) that will require shutdown, and the approximate timeline for the shutdown. If the shutdown occurred due to catastrophic or other unplanned event as stipulated in OAR 340-239-0110(5), the notification must be submitted within 10 days after the shutdown.

(o) Root Cause Analysis Report. If a landfill owner or operator cannot fully implement a corrective action required according to OAR 340-239-0600(3) within 120 days after the initial exceedance, the landfill owner or operator must submit the root cause analysis and additional analysis and reporting according to OAR 340-239-0700(3)(k) as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature monitoring value greater than 62.8 degrees Celsius (145 degrees Fahrenheit). The root cause analysis must include a thorough investigation of the landfill gas collection and control system to determine the primary cause, and any other contributing causes, of positive pressure or high temperature at a wellhead. The report must include all factors investigated, methods used, and alternative causes that were analyzed.

(p) Bioreactor Moisture Content Report. If a landfill owner or operator calculates moisture content to establish the date the bioreactor is required to begin operating the collection and control system, within 90 days after the bioreactor achieves 40-percent moisture content, the landfill owner or operator must submit a Bioreactor Moisture Content Report that includes the results of the calculation, the date the bioreactor achieved 40-percent moisture content by weight, and the date the landfill owner or operator will begin collection and control system operation.

(q) Notwithstanding any other provision of this division, when any provision of this division requires that any report, or information be submitted by an owner or operator, the report must contain certification by a responsible official of the truth, accuracy, and completeness of the report. This certification, and any other certification required under this division, must state that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

(r) Design Capacity Report. An amended design capacity report must be submitted providing notification of an increase in the design capacity of the landfill, within 90 days of an increase in the maximum design capacity of the landfill to meet or exceed 2.5 million megagrams and 2.5 million cubic meters. This increase in design capacity may

result from an increase in the permitted volume of the landfill or an increase in the density.

Statutory/Other Authority: ORS 468.020, ORS 468A.025, ORS 468A.040 & ORS 468A.050

Statutes/Other Implemented: ORS 468A.025, ORS 468A.040 & ORS 468A.050

History:

[DEQ 10-2022, minor correction filed 08/09/2022, effective 08/09/2022](#)

[DEQ 16-2021, adopt filed 10/04/2021, effective 10/04/2021](#)

340-239-0800

Test Methods and Procedures

When required as provided in OAR 340-239-0100 through 340-239-0700, the owner or operator of a landfill must comply with the test methods and procedures for monitoring and measurements in this rule.

(1) Hydrocarbon Detector Specifications. Any instrument used for the measurement of methane must be a gas detector, or other equivalent instrument approved by DEQ, that meets the calibration, specifications, and performance criteria of EPA Reference Method 21, Determination of Volatile Organic Compound Leaks, 40 CFR part 60, Appendix A, except that those rules must be applied with the following adjustments:

- (a) "Methane" replaces all references to volatile organic compounds (VOC);
- (b) The calibration gas must be methane, diluted to a nominal concentration of 500 parts per million in air;
- (c) To meet the performance evaluation requirements in section 8.1 of Method 21 of 40 CFR part 60, Appendix A, the instrument evaluation procedures of section 8.1 of Method 21 of 40 CFR part 60, Appendix A must be used; and
- (d) The calibration procedures provided in sections 8 and 10 of Method 21 of 40 CFR part 60, Appendix A must be followed immediately before commencing a surface monitoring survey.

(2) Determination of Methane Generation Rate. The methane generation rate must include wastes received up to December 31 of the previous year. The methane generation rate must be determined as follows, as applicable:

- (a) For landfills without Carbon Adsorption or Passive Venting Systems, the methane generation rate must be calculated using the procedures specified in 40 CFR §§ 98.343(a)(1) or 98.463(a)(1). DEQ may request additional information as may be necessary to verify the methane generation rate from the landfill. Site-specific data may be substituted when available.
- (b) For landfills with Carbon Adsorption Systems, the methane generation rate must be determined by measuring the actual total landfill gas flow rate, in standard cubic feet per

minute (scfm), using a flow meter or other flow measuring device such as a standard pitot tube and methane concentration (percent by volume) using a hydrocarbon detector meeting the requirements of OAR 340-239-0800(1). The total landfill gas flow rate must be multiplied by the methane concentration to determine the methane generation rate.

(c) For landfills with Passive Venting Systems, the methane generation rate must be determined pursuant to both of the following and is the higher of these determined values:

(A) OAR 340-239-0800(2)(a); and

(B) The owner or operator must measure actual landfill gas flow rates (in units of scfm) by using a flow measuring device such as a standard pitot tube and methane concentration (percent by volume) using a hydrocarbon detector meeting the requirements of OAR 340-239-0800(1) from each venting pipe that is within the waste mass. Each gas flow rate must then be multiplied by its corresponding methane concentration to obtain the individual methane flow rate. The individual methane flow rates must be added together to determine the methane generation rate.

(3) Surface Emissions Monitoring Procedures. The landfill owner or operator must measure the landfill surface concentration of methane using a hydrocarbon detector meeting the requirements of OAR 340-239-0800(1). The landfill surface must be inspected and monitored quarterly using all of the following procedures:

(a) Monitoring Area. The entire landfill surface must be divided into individually identified 50,000 square foot grids and include the entire perimeter of the collection area. The grids must be used for both instantaneous and integrated surface emissions monitoring. The monitoring must comply with all of the following requirements:

(A) Surface monitoring must be performed in accordance with section 8.3.1 of EPA Method 21 of appendix A of 40 CFR part 60, except that the probe inlet must be placed within two inches of the landfill surface while traversing the grid.

(B) The walking pattern must be no more than a 25-foot spacing interval and must traverse each monitoring grid and:

(i) If the owner or operator has no exceedances of the limits specified in OAR 340-239-0200 after any four consecutive quarterly monitoring periods, the walking pattern spacing may be increased to 100-foot intervals. The owner or operator must return to a 25-foot spacing interval upon any exceedances of the limits specified in OAR 340-239-0200 that cannot be remediated within 10 days or upon any exceedances detected during a DEQ inspection; and

(ii) If an owner or operator of a landfill can demonstrate that in the past three years before the effective date of this division that there were no measured exceedances of the limit specified in OAR 340-239-0200(1)(a) by annual or quarterly monitoring, the owner or operator may increase the walking pattern spacing to 30 meter intervals. The owner or operator must return to a 25-foot spacing interval upon any exceedances of

the limits specified in OAR 340-239-0200 that cannot be remediated within 10 days or upon any exceedances detected during a DEQ inspection.

(C) The owner or operator must use a wind barrier, similar to a funnel, when onsite average wind speed exceeds 4 miles per hour or 2 meters per second or gusts exceeding 10 miles per hour. Average on-site wind speed must also be determined in an open area at 5-minute intervals using an on-site anemometer with a continuous recorder and data logger for the entire duration of the monitoring event. The wind barrier must surround the SEM monitor, and must be placed on the ground, to ensure wind turbulence is blocked. SEM cannot be conducted if average wind speed exceeds 25 miles per hour.

(D) Monitoring must be performed during typical meteorological conditions.

(b) Instantaneous Surface Emissions Monitoring Procedures must comply with the following:

(A) The landfill owner or operator must record any instantaneous surface readings of methane 100 ppmv or greater. The landfill owner or operator must document if the reading is a confirmed reading or whether it is a nonrepeatable, momentary reading;

(B) Surface areas of the landfill that meet or exceed a methane concentration of 500 ppmv, or 200 ppmv if this is to determine compliance with OAR 340-239-0100(6)(b), must be marked and remediated pursuant to OAR 340-239-0600(1)(a);

(C) Surface areas of the landfill that exceed a methane concentration of 250 ppmv, or 100 ppmv if this is to determine compliance with OAR 340-239-0100(6)(b), must be monitored in a five foot grid around the location to determine the extents of the methane leak;

(D) The wind speed must be recorded during the sampling period;

(E) The landfill surface areas with cover penetrations, distressed vegetation, cracks or seeps must also be inspected visually and with a hydrocarbon detector meeting the requirements of OAR 340-239-0800(1). If a landfill would not be subject to quarterly penetration monitoring as otherwise required pursuant to another state or federal regulation such as, including: OAR 340-236-0500, 40 CFR part 63 subpart AAAA, 40 CFR 60 subpart WWW or XXX, and if no methane is detected with the hydrocarbon detector at a specific penetration point for four consecutive quarters, then the landfill may reduce monitoring to annually at that penetration. If any methane concentration is detected during annual monitoring, the penetration location must return to quarterly monitoring; and

(F) The location of each monitored exceedance must be marked and the location and concentration recorded. The location must be recorded using an instrument with an accuracy of at least four meters. The coordinates must be in decimal degrees with at least five decimal places.

(c) Integrated Surface Emissions Monitoring Procedures must comply with the following:

(A) Integrated surface readings must be recorded and then averaged for each grid;

(B) Individual monitoring grids that exceed an average methane concentration of 25 ppmv must be identified and remediated pursuant to OAR 340-239-0600(1)(b); and

(C) The wind speed must be recorded during the sampling period.

(4) Gas Collection and Control System Leak Inspection Procedures. Landfill owners and operators must measure leaks using a hydrocarbon detector meeting the requirements of OAR 340-239-0800(1).

(5) Determination of Expected Gas Generation Flow Rate. Landfill owners and operators must determine the expected gas generation flow rate as prescribed in 40 CFR §§ 98.343(1)(a) or 63.1960(a)(1), which are incorporated by reference herein.

(6) Control Device Destruction Efficiency Determination. Owners and operators must use the following methods of analysis to determine the efficiency of the control device in reducing methane:

(a) For Enclosed Combustors, one of the following test methods, all of which are incorporated by reference herein (and all as promulgated in 40 CFR, part 60, Appendix A), must be used to determine the efficiency of the control device in reducing methane by at least 99 percent, or for lean burn internal combustion engines, instead reducing the outlet methane concentration to less than 3,000 ppmv, dry basis, corrected to 15 percent oxygen:

(A) U.S. EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions By Gas Chromatography;

(B) U.S. EPA Reference Method 25, Determination of Total Gaseous Nonmethane Organic Emissions as Carbon. EPA Reference Method 25A, Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer; or

(C) U.S. EPA Reference Method 25C, Determination of Nonmethane Organic Compounds in Landfill Gases;

(b) The following equation must be used to calculate destruction efficiency:

$$\text{Destruction Efficiency} = [1 - (\text{Mass of Methane}_{\text{outlet}}) / (\text{Mass of Methane}_{\text{inlet}})] \times 100\%$$

(7) Wellhead monitoring.

(a) Landfill owners and operators must determine wellhead nitrogen levels using EPA Reference Method 3C, Determination of Volatile Organic Compound Leaks, 40 CFR part 60, Appendix A, unless an alternative test method is approved by DEQ.

(b) Unless an alternative test method is established and approved by DEQ, landfill owners and operators must determine wellhead oxygen levels by an oxygen meter using EPA Reference Method 3A or 3C, 40 CFR part 60, Appendix A, or ASTM D6522-20, except that, if sample location is prior to combustion:

(A) The span must be set between 10 and 12 percent oxygen;

(B) A data recorder is not required;

(C) Only two calibration gases are required, a zero and span;

(D) A calibration error check is not required; and

(E) The allowable sample bias, zero drift, and calibration drift are ± 10 percent.

(c) Landfill owners and operators may use a portable gas composition analyzer to monitor wellhead oxygen levels provided that the analyzer is calibrated and the analyzer meets all quality assurance and quality control requirements for 40 CFR part 60, Appendix A-1, Method 3A or ASTM D6522-11.

(d) Determination of Gauge Pressure. Landfill owners and operators must determine wellhead gauge pressure using a hand-held manometer, magnahelic gauge, or other pressure measuring device approved by DEQ. The device must be calibrated and operated in accordance with the manufacturer's specifications.

(e) Landfill owners and operators must calibrate wellhead temperature measuring devices annually using the procedure in 40 CFR part 60, Appendix A-1, Method 2, Section 10.3 except that a minimum of two temperature points, bracket within 10 percent of all landfill absolute temperature measurements or two fixed points of ice bath and boiling water, corrected for barometric pressure, are used.

(8) Enhanced monitoring. The landfill owner or operator must initiate enhanced monitoring at each well with a measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit) as follows:

(a) Visual observations for subsurface oxidation events (smoke, smoldering ash, damage to well) within the radius of influence of the well;

(b) Monitor oxygen or nitrogen concentration as provided in OAR 340-239-0110(3)(a);

(c) Monitor temperature of the landfill gas at the wellhead as provided in OAR 340-239-0600(3);

(d) Monitor temperature of the landfill gas every 10 vertical feet of the well as provided in OAR 340-239-0600(3);

(e) Monitor the methane concentration with a methane meter using EPA Method 3C of Appendix A-6 to 40 CFR part 60, EPA Method 18 of Appendix A-6 to 40 CFR part 60, or

a portable gas composition analyzer to monitor the methane levels provided that the analyzer is calibrated and the analyzer meets all quality assurance and quality control requirements for EPA Method 3C or EPA Method 18;

(f) Monitor carbon monoxide concentrations, as follows:

(A) Collect the sample from the wellhead sampling port in a passivated canister or multi-layer foil gas sampling bag (such as the Cali-5-Bond Bag) and analyze that sample using EPA Method 10, 40 CFR part 60, Appendix A-4, EPA Alternative Method – 144, or an equivalent method with a detection limit of at least 100 ppmv of carbon monoxide in high concentrations of methane; or

(B) Collect and analyze the sample from the wellhead using EPA Method 10, 40 CFR part 60, Appendix A-4 to measure carbon monoxide concentrations;

(g) The enhanced monitoring must begin 7 days after the first measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit);

(h) The enhanced monitoring must be conducted on a weekly basis. If four consecutive weekly carbon monoxide readings are under 100 ppmv, then enhanced monitoring may be decreased to monthly. If monthly carbon monoxide readings exceed 100 ppmv, the landfill must return to weekly monitoring;

(i) The enhanced monitoring can be stopped once a higher operating value is approved, at which time the monitoring provisions issued with the higher operating value must be followed, or once the measurement of landfill gas temperature at the wellhead is less than or equal to 62.8 degrees Celsius (145 degrees Fahrenheit); and

(j) For each wellhead with a measurement of landfill gas temperature greater than or equal to 73.9 degrees Celsius (165 degrees Fahrenheit), annually monitor temperature of the landfill gas every 10 vertical feet of the well. This temperature can be monitored either with a removable thermometer, or using temporary or permanent thermocouples installed in the well.

(9) Bioreactor moisture content. The bioreactor moisture content calculation must consider the waste mass, moisture content of the incoming waste, mass of water added to the waste including leachate recirculation and other liquids addition and precipitation, and the mass of water removed through leachate or other water losses. Moisture level sampling or mass balances. The landfill owner or operator must document the calculations and the basis of any assumptions. Keep the record of the calculations until liquids addition ceases.

(10) Alternative Test Methods. Notwithstanding any other provision in this division, owners and operators may use alternative test methods for any of the test methods described in this rule provided that the alternative methods are approved in writing by DEQ pursuant to OAR 340-239-0500.

Statutory/Other Authority: ORS 468.020, ORS 468A.025, ORS 468A.040 & ORS

468A.050

Statutes/Other Implemented: ORS 468A.025, ORS 468A.040 & ORS 468A.050

History:

[DEQ 1-2022, minor correction filed 01/13/2022, effective 01/13/2022](#)

[DEQ 16-2021, adopt filed 10/04/2021, effective 10/04/2021](#)

Division 244

OREGON FEDERAL HAZARDOUS AIR POLLUTANT PROGRAM

[340-244-0234](#)

Gasoline Dispensing Facilities: Affected Equipment and Sources

- (1) The emission sources to which the Gasoline Dispensing Facilities rules under OAR 340-244-0231 through 340-244-0252 apply are gasoline storage tanks and all associated equipment components in vapor or liquid gasoline service at a GDF.
- (2) The affected source to which the emission standards apply is each GDF. The affected source includes each gasoline cargo tank during the delivery of gasoline to a GDF, each gasoline storage tank, pressure/vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at a GDF.
- (3) The emissions standards in OAR 340-244-0231 through 340-244-0252 do not apply to agricultural operations as defined in ORS 468A.020. Agricultural operations are however required to comply with the Gasoline Dispensing NESHAP, if applicable (40 CFR part 63 subpart CCCCCC).
- (4) Each GDF will fall into one or more of the categories listed in this subsection. Where multiple categories apply to one GDF, the requirements of each applicable category apply to that GDF. Each GDF category is followed by a number which is used to indicate which rules in this division apply to that GDF:
 - (a) A GDF located anywhere in the state that has only gasoline storage tanks with capacity of less than 250 gallons, hereafter referred to as GDF 1.
 - (b) A GDF located anywhere in the state with a gasoline storage tank that has a capacity of 250 gallons or more, hereafter referred to as GDF 2.
 - (c) A GDF located anywhere in the state with 120,000 gallons or more of annual gasoline throughput, hereafter referred to as GDF 3.
 - (d) A GDF located anywhere in the state with 600,000 gallons or more of annual gasoline throughput, hereafter referred to as GDF 4.
 - (e) A GDF located anywhere in the state with 1,000,000 gallons or more of annual gasoline throughput, hereafter referred to as GDF 5.
- (5) The owner or operator of a GDF is not required to obtain an Oregon Title V Operating

Permit as a result of being subject to OAR 340-244-0231 through 340-244-0252. However, the owner or operator of a GDF must still apply for and obtain an Oregon Title V Operating Permit if meeting one or more of the applicability criteria found in 340-218-0020.

(6) The loading of aviation gasoline storage tanks at airports, and the subsequent transfer of aviation gasoline within the airport, is not subject to OAR 340-244-0231 through 340-244-0252, except in Clackamas, Multnomah, and Washington Counties, Medford-Ashland AQMA and the Salem-Keizer SKATS. In these geographic areas, aviation gasoline is subject to 340-244-0231 through 340-244-0252.

(7) 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 340-244-0245(1).

(8) If the affected source ever exceeds an applicable threshold, throughput or otherwise, the affected source will remain subject to the requirements for sources above the threshold, even if the affected source later falls below the applicable threshold.

(9) The owner or operator of a source that becomes subject to a requirement to install a Stage I vapor balance system, Enhanced Vapor Recovery system, or complete any other equipment change because of an increase in throughput, must have completed the equipment changes no later than 24 months after the affected source becomes subject to the additional or changed requirement, unless otherwise specified within this division.

(10) A split compartment gasoline storage tank (i.e., one storage tank that is internally divided to hold two or more different types of liquid) will have each compartment of the tank treated as a separate storage tank for purposes of compliance with OAR 340-244-0231 through -0252.

(11) The owner or operator of a new GDF, a reconstructed GDF that has ever had annual throughput of 1,000,000 gallons of gasoline or more, or any new or replaced storage tank(s) at a GDF that has ever had annual throughput of 1,000,000 gallons of gasoline or more must comply with OAR 340-244-0248(1).

(12) All equipment installed at a GDF that is in gasoline liquid or vapor service must be compatible with gasoline according to the equipment manufacturer's instructions or documentation.

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-200-0040 only for affected sources in the Portland-Vancouver, Medford-Ashland, and Salem-Keizer Area Transportation Study air quality management areas and all of Clackamas, Multnomah, and Washington counties.

Statutory/Other Authority: ORS 468.020 & 468A.025

Statutes/Other Implemented: ORS 468A.025

History:

[DEQ 4-2024, amend filed 03/25/2024, effective 03/25/2024](#) DEQ 7-2015, f. & cert. ef. 4-16-15

DEQ 4-2013, f. & cert. ef. 3-27-13

DEQ 1-2011, f. & cert. ef. 2-24-11 DEQ 15-2008, f. & cert. ef. 12-31-08

[340-244-0237](#)**Gasoline Dispensing Facilities: GDF 1**

The owner or operator of a GDF 1 as described in OAR 340-244-0234(4) must comply with the following requirements:

(1) Work Practices, No Top Off, and Submerged Fill under OAR 340-244-0245, as applicable; and

(2) Recordkeeping under OAR 340-244-0250.

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-200-0040 only for affected sources in the Portland-Vancouver, Medford-Ashland, and Salem-Keizer Area Transportation Study air quality management areas and all of Clackamas, Multnomah, and Washington counties.

Statutory/Other Authority: ORS 468.020 & 468A.025

Statutes/Other Implemented: ORS 468A.025

History:

[DEQ 4-2024, adopt filed 03/25/2024, effective 03/25/2024](#)

[340-244-0241](#)**Gasoline Dispensing Facilities: GDF 3**

(1) The owner or operator of a GDF 3 as described in OAR 340-244-0234(4) must comply with the following requirements:

(a) All applicable requirements under OAR 340-244-0238; and

(b) Testing requirements under OAR 340-244-0249.

(2) The owner or operator of a GDF 3 which commenced construction on or after July 1, 2024 must comply with OAR 340-244-0248 and install a dual-point vapor balance system on each gasoline storage tank with 250 gallon or greater capacity.

Notwithstanding the testing requirements of OAR 340-244-0249, a complete Stage I vapor balance system must be installed before equipment is placed into gasoline service.

(3) The owner or operator of a GDF 3 which commenced construction before July 1, 2024 must comply with the following for each new or replaced gasoline storage tank with 250 gallon or greater capacity: All requirements in OAR 340-244-0248 and, in addition, the storage tank must be dual-point.

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-200-0040 only for affected sources in the Portland-Vancouver, Medford-Ashland, and Salem-Keizer Area Transportation Study air quality management areas and all of Clackamas, Multnomah, and Washington counties.

Statutory/Other Authority: ORS 468.020 & ORS 468A.025

Statutes/Other Implemented: ORS 468A.025

History:

[DEQ 4-2024, adopt filed 03/25/2024, effective 03/25/2024](#)

340-244-0246

Gasoline Dispensing Facilities: Enhanced Vapor Recovery Requirements

- (1) The owner or operator of a GDF with storage tanks referred to this rule that are new, replaced, or reconstructed after July 1, 2024 must be equipped with CARB certified Stage I Enhanced Vapor Recovery equipment before being placed into gasoline service. CARB certified Enhanced Vapor Recovery system components are listed in Table 2 of this rule.
- (2) The owner or operator of a GDF with gasoline dispensing nozzles referred to this rule and not in Stage II vapor recovery service must be Enhanced Conventional Nozzles by no later than July 1, 2024, unless otherwise specified.
- (3) Any alteration of the equipment, parts, design, or operation of the Enhanced Vapor Recovery system as certified by CARB is prohibited and must not be performed.
- (4) The owner or operator of a GDF referred to this rule must comply with the following:
 - (a) In order to ensure that the Enhanced Vapor Recovery equipment is maintained to be vapor tight and in good working order, have the equipment inspected on at least an annual basis to discover potential or actual equipment failures. Some components require more frequent inspection or maintenance. Where this annual inspection requirement and Table 2 conflict, the more frequent inspection or maintenance requirement applies;
 - (b) Replace, repair or modify the affected component or design element within 24 hours after the owner or operator knows or reasonably should know of the component or design element being worn or ineffective to ensure the vapor-tight integrity and efficiency of the Enhanced Vapor Recovery system. If repair parts must be ordered, either a written or oral order for those parts must be initiated within two working days of detecting such a leak. Such repair parts must be installed within five working days after receipt; and
 - (c) Maintain spill containers (buckets) for gasoline storage tanks free of liquid and solid materials.
- (5) The owner or operator of a GDF equipped with an Enhanced Vapor Recovery system must operate and maintain all EVR components in accordance with

manufacturer's specifications and Table 2 of this rule.

(6) The owner or operator of a GDF equipped with an EVR system must retain records as specified under OAR 340-244-0250 and Table 2 of this rule for the applicable EVR equipment or component.

(7) An owner or operator of a GDF required to install a Stage I EVR system may install components from different sections of Table 2 of this rule (i.e., 'mix and match') as long as each component specified in each section of Table 2 has a CARB approved component installed and the complete EVR system can pass all required performance tests.

(8) The owner or operator must maintain an equipment installation checklist or similar (e.g., record) which clearly documents which components were installed on each affected gasoline storage tank. The equipment installation checklist or similar document must be replaced, updated or revised each time a required EVR component is replaced.

NOTE: For additional information on Enhanced Vapor Recovery systems, including manufacturer's requirements, installation specifications, and warranty information, please see the applicable California Air Resources Board Executive Orders.

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-200-0040 only for affected sources in the Portland-Vancouver, Medford-Ashland, and Salem-Keizer Area Transportation Study air quality management areas and all of Clackamas, Multnomah, and Washington counties.

[\[ED. NOTE: To view attachments referenced in rule text, click here to view rule.\]](#)

Statutory/Other Authority: ORS 468.020, 468A.025 & 468A.050

Statutes/Other Implemented: ORS 468A.025 & 468A.050

History:

[DEQ 4-2024, amend filed 03/25/2024, effective 03/25/2024](#) DEQ 7-2015, f. & cert. ef. 4-16-15

DEQ 4-2013, f. & cert. ef. 3-27-13 DEQ 8-2009, f. & cert. ef. 12-16-09 DEQ 15-2008, f. & cert. ef 12-31-08

[340-244-0249](#)

Gasoline Dispensing Facilities: Testing and Monitoring Requirements

(1) Effective March 23, 2024, the owner or operator must conduct and pass the testing listed in this rule for each Stage I vapor balance system, Enhanced Vapor Recovery system, and Stage II vapor recovery system, as applicable. Initial tests must be completed no later than July 1, 2025. For owners or operators assigned to or issued an Air Contaminant Discharge Permit which requires testing, the testing requirements of both the Air Contaminant Discharge Permit and this rule must be met for the initial and subsequent tests.

(2) All subsequent tests must be conducted at the frequency required by this rule and no later than the end of the calendar month during which the most recent passing test was conducted.

(3) Stage I Vapor Balance and Stage II vapor recovery. The following test requirements apply to owners and operators of a GDF equipped with Stage I vapor balance and Stage II vapor recovery systems:

(a) An owner or operator of a GDF installing a complete Stage I vapor balance or Stage II vapor recovery system must conduct and pass a “Pressure test” and “PV Vent Valve test” under section (6) prior to placing the equipment into gasoline service. If necessary for testing purposes, enough gasoline to conduct the performance test may be loaded into the gasoline storage tank(s) at the GDF;

(b) A GDF owner or operator who has only conducted initial testing upon installation of the Stage I vapor balance system for “Pressure test” and “PV Vent Valve test”, as listed under section (6), or who has never conducted these tests, must conduct and pass a test for both of these before July 1, 2025;

(c) A GDF owner or operator with a Stage I vapor balance system must conduct and pass a “Pressure test,” and “PV Vent Valve test” under section (6) at least once every 24 months.

(4) Enhanced Vapor Recovery. The following test requirements apply to owners and operators of a GDF that is equipped with an Enhanced Vapor Recovery system:

(a) An owner or operator of a GDF installing an Enhanced Vapor Recovery system must conduct and pass the following tests, as listed under section (6) prior to placing the equipment into gasoline service. If necessary for testing purposes, enough gasoline to conduct the performance test may be loaded into the gasoline storage tank(s) at the GDF:

(A) “Pressure test”;

(B) “PV Vent Valve test”;

(C) “Static Torque test” if the EVR system has rotatable adapters; and

(D) “Leak Rate of Drop Tube test”.

(b) An owner or operator of a GDF that is equipped with an Enhanced Vapor Recovery system must conduct the tests listed in paragraph (4)(a)(A) through (D) at least once every 24 months.

(5) A failed test completed timely and a passing test completed after the required frequency is not compliant with this rule. Frequency requirements established in section (6) of this rule pertain to test results which demonstrate the vapor control equipment is functioning properly according to the applicable test method.

(6) Compliance tests for gasoline vapor control equipment are as follows, as applicable based on the vapor equipment installed at the facility:

(a) Owners and operators of a GDF equipped with Stage I vapor balance and Stage I EVR systems must:

(A) Conduct a Pressure test every 24 months. A pressure test is either CARB Vapor Recovery Test Procedure 201.3 (TP-201.3) 'Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities' or Bay Area Air Quality Management District Source Test Procedure ST-30 'Static Pressure Integrity Test — Underground Storage Tanks'.

(B) Conduct a Leak Rate of Drop Tube test every 24 months. This test only applies to Stage I EVR systems. A Leak Rate of Drop Tube test is either Test Procedure 201.1C (TP-201.1C) 'Leak Rate of Drop Tube/Drain Valve Assembly' or Test Procedure 201.1D (TP-201.1D) 'Leak Rate of Drop Tube Overfill Prevention Devices and Spill Container Drain Valves' depending on the system configuration.

(C) Conduct a PV Vent Valve test every 24 months. A PV Vent Valve test is either CARB Vapor Recovery Test Procedure 201.1E (TP-201.1E) 'Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves' or CARB Vapor Recovery Test Procedure 201.1E (TP-201.1E) Alternate version (August 5, 2005).

(b) Owners and operators of a GDF equipped with a Stage I EVR system with rotatable adapters must conduct a Static Torque test every 24 months. A static torque test is CARB test procedure 201.1B (TP-201.1B) 'Static Torque of Rotatable Phase I Adaptors'.

(7) The owner or operator of a GDF choosing to use a Stage I vapor balance system other than that described in this division, must comply with the procedures specified in the provisions of 40 CFR 63.6(g) before placing the alternative system into gasoline service.

(a) The owner or operator must retain documentation of EPA's approval of the alternative for as long as the alternative system is in use at the site; and

(b) The owner or operator must comply with all conditions and stipulations included with the alternative approval from EPA.

(8) Conduct of performance tests. All performance tests must be conducted under conditions based on representative performance, i.e., performance based on normal operating conditions, of the affected source. Upon request by DEQ, the owner or operator of a GDF must make available such records as may be necessary to determine the conditions of performance tests and representative performance.

(9) Owners and operators of gasoline cargo tanks subject to the provisions of OAR 340-244-0248(3) must conduct annual certification testing according to the vapor tightness testing requirements found in 40 CFR 63.11092(f). EPA Method 27 as in effect on July 1, 2023 is hereby incorporated by reference. 40 CFR part 60 Appendix A-8.

(10) Owners or operators of a gasoline storage tank that has a drop tube replaced not in association with the installation of a Stage I Vapor Balance system or Enhanced Vapor Recovery system must conduct and pass a 'Pressure Test' as described in section (6) within 45 days of the date a drop tube was installed.

NOTE: This rule, excluding section (7), is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-200-0040 only for affected sources in the Portland-Vancouver, Medford-Ashland, and Salem-Keizer Area Transportation Study air quality management areas and all of Clackamas, Multnomah, and Washington counties.

NOTE: View a PDF of referenced documents by clicking on 'Tables' link below.

[\[ED. NOTE: To view attachments referenced in rule text, click here to view rule.\]](#)

Statutory/Other Authority: ORS 468.020, 468A.025 & 468A.070

Statutes/Other Implemented: 468A.070 & ORS 468A.025

History:

[DEQ 5-2024, renumbered from 340-244-0244, filed 03/25/2024, effective 03/25/2024](#)

[DEQ 4-2024, amend filed 03/25/2024, effective 03/25/2024](#)

[DEQ 13-2019, amend filed 05/16/2019, effective 05/16/2019](#)

DEQ 7-2015, f. & cert. ef. 4-16-15

DEQ 4-2013, f. & cert. ef. 3-27-13

DEQ 1-2011, f. & cert. ef. 2-24-11

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

[340-244-0251](#)

Gasoline Dispensing Facilities: Reporting

(1) **Test Reports.** Each owner or operator of a GDF subject to the requirement to perform a test under OAR 340-244-0249 must report the results to DEQ within 30 days of the completion of the performance testing.

(2) **Annual reports.** Each owner or operator of a GDF 3, 4 or 5 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 and the annual total for the previous calendar year;

(b) A summary of changes made at the GDF on any equipment in gasoline or vapor service which may affect emissions;

(c) List of all major maintenance performed on pollution control devices and equipment in gasoline service;

(d) The number, duration, and a brief description of each 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 340-244-0235, including actions taken to correct the malfunction.

(3) Initial Notifications. Each owner or operator of a GDF 3, 4, or 5 must:

(a) Submit an Initial Notification that the owner or operator is subject to the Gasoline Dispensing Facilities NESHAP by May 9, 2008, or within 120 days of becoming a GDF 3, 4, or 5. The Initial Notification must contain the information specified in paragraphs (3)(a)(A) through (D). The notification must be submitted to EPA's Region 10 Office and DEQ as specified in 40 CFR 63.13.

(A) The name and mailing 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 the volume of gasoline dispensed from all storage tanks during the previous twelve months; and

(D) A statement that the notification is being submitted in response to the Gasoline Dispensing Facilities NESHAP and identifying the requirements in OAR 340-244-0245 that apply to the owner or operator of a GDF.

(b) The owner or operator of a GDF who has already submitted an Initial Notification does not need to submit an additional Initial Notification to comply with this section (3) unless requested to do so, in writing, by DEQ.

(4) Notification of Compliance Status. The owner or operator of a GDF must submit a Notification of Compliance Status to EPA's Region 10 Office and DEQ, as specified in 40 CFR 63.13, within 60 days of the GDF becoming an affected source subject to the requirements of this division.

(a) The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this division, and must indicate whether the GDF's 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.

(b) If the owner or operator of a GDF is in compliance with the requirements of this division at the time the Initial Notification required under section (3) 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 section (3).

(c) The owner or operator of a GDF who has already submitted a Notification of Compliance Status does not need to submit an additional Notification of Compliance

Status to comply with this section (4) unless requested to do so, in writing, by DEQ.

(5) **Notification of Performance Test.** The owner or operator of a GDF must submit a Notification of Performance Test, as specified in 40 CFR 63.9(e), at least 60 days prior to initiating testing required by OAR 340-244-0249.

(6) The owner or operator of a GDF must submit additional notifications specified in 40 CFR 63.9, as applicable.

(7) The owner or operator of a GDF that has removed, capped, or otherwise decommissioned a Stage II vapor recovery system under OAR 340-244-0247(10) must notify DEQ in writing. The notification must comply with the following:

(a) The notification is due to DEQ 30 days after completing the decommissioning;

(b) The notification must include:

(A) Pressure test results report;

(B) The physical address of the GDF;

(C) The date the work started and the date the decommissioning was completed;

(D) The name of the company or service provider entity that conducted the decommissioning work, including a contact phone number and email address;

(E) The Enhanced Vapor Recovery system equipment checklist under OAR 340-244-0246(8) documenting the EVR components that were installed;

(F) For each requirement under OAR 340-244-0247(10)(a) through (n), the date the specific step was completed and a signature or initials of the individual who certified the step was completed; and

(G) A certification statement by a responsible official of truth, accuracy, and completeness. This certification must state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-200-0040 only for affected sources in the Portland-Vancouver, Medford-Ashland, and Salem-Keizer Area Transportation Study air quality management areas and all of Clackamas, Multnomah, and Washington counties.

NOTE: This rule was renumbered from 340-244-0250 and combined with language from 340-244-0246 'notifications'.

NOTE: Tables referenced are available from the agency.

Statutory/Other Authority: ORS 468.020, ORS 468A.025 & 468A.050

Statutes/Other Implemented: ORS 468A.025 & 468A.050

History:

[DEQ 4-2024, adopt filed 03/25/2024, effective 03/25/2024](#)

Table 1

Activities and Sources

The following source categories must obtain a permit as required by OAR 340-216-0020 Applicability and Jurisdiction.

Part A: Basic ACDP

- 1 Autobody repair or painting shops painting more than 25 automobiles in a year and that are located inside the Portland AQMA.
- 2 Concrete manufacturing including redi-mix and CTB, both stationary and portable, more than 5,000 but less than 25,000 cubic yards per year output.
- 3 Crematory incinerators with less than 20 tons/year material input.
- 4 Individual natural gas or propane-fired boilers with heat input rating between 9.9 and 29.9 MMBTU/hour, constructed after June 9, 1989, that do not use more than 9,999 gallons per year of #2 diesel oil as a backup fuel.
- 5 Prepared feeds for animals and fowl and associated grain elevators more than 1,000 tons/year but less than 10,000 tons per year throughput.
- 6 Rock, concrete or asphalt crushing, both stationary and portable, more than 5,000 tons/year but less than 25,000 tons/year crushed.
- 7 Surface coating operations whose actual or expected usage of coating materials is greater than 250 gallons per month but does not exceed 3,500 gallons per year, excluding sources that exclusively use non-VOC and non-HAP containing coatings, e.g., powder coating operations.
- 8 Sources subject to permitting under Part B of this table, number 85 if all of the following criteria are met:
 - a. The source is not subject to any category listed on this table other than Part B number 85;
 - b. The source has requested an enforceable limit on their actual emissions, if the source were to operate uncontrolled, to below Part B number 85 of this table as applicable depending on the source's location through one or both of the following:
 - i. A limit on hours of operation;
 - ii. A limit on production;
 - c. Control devices are not required to be used or otherwise accounted for to maintain emissions levels compliant with 8.b above;
 - d. The source is not subject to and does not have any affected emissions units subject to a 40 CFR part 60, part 61, or part 63 standard (NSPS or NESHAP);
 - e. The source is not subject to any specific industry or operation standard in OAR chapter 340, divisions 232, 234, or 236.
 - f. DEQ has determined that the source is not required to conduct source testing and source testing for emission factor verification will not be required.

9 Reserved

Part B: General, Simple or Standard ACDP

- 1 Aerospace or aerospace parts manufacturing subject to RACT under OAR chapter 340, division 232.
- 2 Aluminum, copper, and other nonferrous foundries subject to an area source NESHAP under OAR chapter 340, division 244.
- 3 Aluminum production – primary.
- 4 Ammonia manufacturing.
- 5 Animal rendering and animal reduction facilities.
- 6 Asphalt blowing plants.
- 7 Asphalt felts or coating manufacturing.
- 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 Lead-acid battery manufacturing and re-manufacturing.
- 12 Beet sugar manufacturing.
- 13 Oil-fired boilers and other fuel burning equipment whose total heat input rating at the source is over 10 MMBTU/hour; or individual natural gas, propane, or butane-fired boilers and other fuel burning equipment 30 MMBTU/hour or greater heat input rating.
- 14 Building paper and building board mills.
- 15 Calcium carbide manufacturing.
- 16 Can or drum coating subject to RACT under OAR chapter 340, division 232.²
- 17 Cement manufacturing.
- 18 Cereal preparations and associated grain elevators with more than 10,000 tons/year throughput.¹
- 19 Charcoal manufacturing.
- 20 Chlorine and alkali manufacturing.
- 21 Chrome plating and anodizing subject to a NESHAP under OAR chapter 340, division 244.
- 22 Clay ceramics manufacturing subject to an area source NESHAP under OAR chapter 340, division 244.

- 23 Coffee roasting, roasting more than 30 green tons per year.
- 24 Concrete manufacturing including redi-mix and CTB, both stationary and portable, more than 25,000 cubic yards per year output.
- 25 Crematory incinerators with more than 20 tons/year material input.
- 26 Degreasing operations, halogenated solvent cleanings subject to a NESHAP under OAR chapter 340, division 244.
- 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 under OAR chapter 340, division 244.
- 30 Flatwood coating subject to RACT under OAR chapter 340, division 232.²
- 31 Flexographic or rotogravure printing subject to RACT under OAR chapter 340, division 232.²
- 32 Flour, blended and/or prepared and associated grain elevators with more than 10,000 tons/year throughput.¹
- 33 Galvanizing and pipe coating, except galvanizing operations that use less than 100 tons of zinc/year.
- 34 Bulk gasoline plants, bulk gasoline terminals, and pipeline facilities.
- 35 Gasoline dispensing facilities, excluding gasoline dispensing facilities with monthly throughput of less than 10,000 gallons of gasoline per month³.
- 36 Glass and glass container manufacturing subject to a NSPS under OAR chapter 340, division 238 or a NESHAP under OAR chapter 340, division 244.
- 37 Grain elevators used for intermediate storage with more than 10,000 tons/year throughput.¹
- 38 Reserved.
- 39 Gray iron and steel foundries, malleable iron foundries, steel investment foundries, steel foundries with more than 100 tons/year metal charged, not elsewhere identified.
- 40 Gypsum products manufacturing.
- 41 Hardboard manufacturing, including fiberboard.

- 42 Hospital sterilization operations subject to an area source NESHAP under OAR chapter 340, division 244.
- 43 Incinerators with two or more tons per day capacity.
- 44 Lime manufacturing.
- 45 Liquid storage tanks subject to RACT under OAR chapter 340, division 232.²
- 46 Magnetic tape manufacturing.
- 47 Manufactured home, mobile home and recreational vehicle manufacturing.
- 48 Marine vessel petroleum loading and unloading subject to RACT under OAR chapter 340, division 232.
- 49 Metal fabrication and finishing operations subject to an area source NESHAP under OAR chapter 340, division 244, excluding facilities that meet all the following:
- a. Do not perform any of the operations listed in OAR 340-216-0060(3)(b)(R)(i) 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 manufacturing, including kitchen cabinets and structural wood members, with more than 25,000 board feet/maximum 8 hour input.
- 51 Molded plastic container manufacturing, using extrusion, molding, lamination, and foam processing and molded fiberglass container manufacturing, excluding injection molding.
- 52 Motor coach, travel trailer, and camper manufacturing.
- 53 Motor vehicle and mobile equipment surface coating operations subject to an area source NESHAP under OAR chapter 340, division 244, 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 Nonferrous metal foundries with more than 100 tons/year of metal charged.

- 57 Organic or inorganic chemical manufacturing and distribution with $\frac{1}{2}$ or more tons per year emissions of any one criteria pollutant, sources in this category with less than $\frac{1}{2}$ ton/year of each criteria pollutant are not required to have an ACDP.
- 58 Paint and allied products manufacturing subject to an area source NESHAP under OAR chapter 340, division 244.
- 59 Paint stripping and miscellaneous surface coating operations subject to an area source NESHAP under OAR chapter 340, division 244, excluding paint stripping and miscellaneous surface coating operations using less than 20 gallons of coating and also using less than 20 gallons of methylene chloride containing paint stripper per year.
- 60 Paper or other substrate coating subject to RACT under OAR chapter 340, division 232.²
- 61 Particleboard manufacturing, including strandboard, flakeboard, and waferboard.
- 62 Perchloroethylene dry cleaning operations subject to an area source NESHAP under OAR chapter 340, division 244, excluding perchloroethylene dry cleaning operations registered pursuant to OAR 340-210-0100(2).
- 63 Pesticide manufacturing with more than 5,000 tons/year 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 under OAR chapter 340, division 244.
- 66 Plywood manufacturing and/or veneer drying.
- 67 Prepared feeds manufacturing for animals and fowl and associated grain elevators with more than 10,000 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 stationary and portable, with more than 25,000 tons/year crushed.
- 71 Sawmills and/or planing mills with more than 25,000 board feet/maximum 8 hour finished product.
- 72 Secondary nonferrous metals processing subject to an Area Source NESHAP under OAR chapter 340, division 244.
- 73 Secondary smelting and/or refining of ferrous and nonferrous metals.

- 74 Seed cleaning and associated grain elevators with more than 5,000 tons/year throughput.¹
- 75 Sewage treatment facilities employing internal combustion engines for digester gasses.
- 76 Soil remediation facilities, both stationary and portable.
- 77 Steel works, rolling and finishing mills.
- 78 Surface coating in manufacturing subject to RACT under OAR chapter 340, division 232.²
- 79 Surface coating operations with actual emissions of VOCs, if the source were to operate uncontrolled, of 10 or more tons/year.
- 80 Synthetic resin manufacturing.
- 81 Tire manufacturing or Tire Retreading.
- 82 Wood furniture and fixtures with more than 25,000 board feet/maximum 8 hour input.
- 83 Wood preserving (excluding waterborne).
- 84 All other sources, both stationary and portable, not listed herein that DEQ determines an air quality concern exists or one which would emit significant malodorous emissions.
- 85 All other sources, both stationary and portable, not listed herein which would have the capacity of 5 or more tons per year of direct PM_{2.5} or PM₁₀ if located in a PM_{2.5} or PM₁₀ nonattainment or maintenance area, or 10 or more tons per year of any single criteria pollutant.⁴
- 86 Chemical manufacturing facilities subject to 40 CFR part 63 subpart VVVVVV.
- 87 Stationary internal combustion engines if:
- a. For emergency generators and firewater pumps, the aggregate engine horsepower rating is greater than 30,000 horsepower; or
 - b. For any individual non-emergency or non-fire pump engine, the engine is subject to 40 CFR part 63, subpart ZZZZ and is rated at 500 horsepower or more, excluding two stroke lean burn engines, engines burning exclusively landfill or digester gas, and four stroke engines located in remote areas; or
 - c. For any individual non-emergency engine, the engine is subject to 40 CFR part 60, subpart IIII and:
 - A. The engine has a displacement of 30 liters or more per cylinder; or
 - B. The engine has a displacement of less than 30 liters per cylinder and is rated at 500 horsepower or more and the engine and control device are either not certified by the manufacturer to meet the

NSPS or not operated and maintained according to the manufacturer's emission-related instructions; or

- d. For any individual non-emergency engine, the engine is subject to 40 CFR part 60, subpart JJJJ and is rated at 500 horsepower or more and the engine and control device are either not certified by the manufacturer to meet the NSPS or not operated and maintained according to the manufacturer's emission-related instructions.

88 All sources subject to RACT under OAR chapter 340, division 232, BACT or LAER under OAR chapter 340, division 224, a NESHAP under OAR chapter 340, division 244, a NSPS under OAR chapter 340, division 238, or State MACT under OAR 340-244-0200(2), except sources:

- a. Exempted in any of the categories above;
- b. For which a Basic ACDP is available; or
- c. Registered pursuant to OAR 340-210-0100(2).

89 Pathological waste incinerators.

90 Landfills with more than 200,000 tons of waste in place and calculated methane generation rate is less than 664 metric tons per year which are subject to the requirements in OAR 340 division 239.

1 Applies only to Special Control Areas

2 Portland AQMA, Medford-Ashland AQMA or Salem-Keizer in the SKATS only

3 "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

4 A source subject to permitting from this category may be able to obtain a Basic ACDP under Part A number 8 of this table. For sources that meet the criteria of Part A number 8 of this table, the enforceable production or hours limitation in an issued ACDP may be used to demonstrate a permit is not required by Part B number 85 of this table irrespective of the term 'uncontrolled'.

Part C: Standard ACDP

1 Incinerators for PCBs, other hazardous wastes, or both.

2 All sources that DEQ determines have emissions that constitute a nuisance.

3 All sources electing to maintain the source's netting basis.

4 All sources that request a PSEL equal to or greater than the SER for a regulated pollutant.

- 5 All sources having the potential to emit 100 tons or more of any regulated pollutant, except GHG, in a year.
- 6 All sources having the potential to emit 10 tons or more of a single hazardous air pollutant in a year.
- 7 All sources having the potential to emit 25 tons or more of all hazardous air pollutants combined in a year.
- 8 Landfills with more than 200,000 tons of waste in place and calculated methane generation rate is greater than or equal to 664 metric tons per year which are subject to the requirements in OAR 340 division 239.

NOTE: For the history of these tables prior to 2014 see the history under OAR 340-216-0020. This history is also shown below:

DEQ 9-2013(Temp), f. & cert. ef. 10-24-13 thru 4-22-14
DEQ 4-2013, f. & cert. ef. 3-27-13
DEQ 14-2011, f. & cert. ef. 7-21-11
DEQ 13-2011, f. & cert. ef. 7-21-11
DEQ 11-2011, f. & cert. ef. 7-21-11
DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11
DEQ 1-2011, f. & cert. ef. 2-24-11
DEQ 12-2010, f. & cert. ef. 10-27-10
DEQ 10-2010(Temp), f. 8-31-10, cert. ef. 9-1-10 thru 2-28-11
DEQ 9-2009(Temp), f. 12-24-09, cert. ef. 1-1-10 thru 6-30-10
DEQ 8-2009, f. & cert. ef. 12-16-09
DEQ 15-2008, f. & cert. ef. 12-31-08
DEQ 8-2007, f. & cert. ef. 11-8-07
DEQ 7-2007, f. & cert. ef. 10-18-07
DEQ 4-2002, f. & cert. ef. 3-14-02
DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01
DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-028-1720
DEQ 22-1996, f. & cert. ef. 10-22-96
DEQ 19-1996, f. & cert. ef. 9-24-96
DEQ 22-1995, f. & cert. ef. 10-6-95
DEQ 22-1994, f. & cert. ef. 10-4-94
DEQ 19-1993, f. & cert. ef. 11-4-93
DEQ 12-1993, f. & cert. ef. 9-24-93, Renumbered from 340-020-0155
DEQ 4-1993, f. & cert. ef. 3-10-93
DEQ 27-1991, f. & cert. ef. 11-29-91
DEQ 12-1987, f. & cert. ef. 6-15-87
DEQ 3-1986, f. & cert. ef. 2-12-86
DEQ 11-1983, f. & cert. ef. 5-31-83
DEQ 23-1980, f. & cert. ef. 9-26-80
DEQ 20-1979, f. & cert. ef. 6-29-79
DEQ 125, f. & cert. ef. 12-16-76
DEQ 107, f. & cert. ef. 1-6-76, Renumbered from 340-020-0033
DEQ 63, f. 12-20-73, cert. ef. 1-11-74
DEQ 47, f. 8-31-72, cert. ef. 9-15-72

