

**WAC 173-400-030 Definitions.** The definitions in this section apply statewide except where a permitting authority has redefined a specific term. Except as provided elsewhere in this chapter, the definitions in this section apply throughout the chapter:

(1) **"Actual emissions"** means the actual rate of emissions of a pollutant from an emission unit, as determined in accordance with (a) through (c) of this subsection.

(a) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. Ecology or an authority shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the emissions unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(b) Ecology or an authority may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the emissions unit.

(c) For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the emissions unit on that date.

(2) **"Adverse impact on visibility"** is defined in WAC 173-400-117.

(3) **"Air contaminant"** means dust, fumes, mist, smoke, other particulate matter, vapor, gas, odorous substance, or any combination thereof. "Air pollutant" means the same as "air contaminant."

(4) **"Air pollution"** means the presence in the outdoor atmosphere of one or more air contaminants in sufficient quantities, and of such characteristics and duration as is, or is likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interferes with enjoyment of life and property. For the purposes of this chapter, air pollution shall not include air contaminants emitted in compliance with chapter 17.21 RCW, the Washington Pesticide Application Act, which regulates the application and control of the use of various pesticides.

(5) **"Allowable emissions"** means the emission rate of a source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

(a) The applicable standards as in 40 C.F.R. Part 60, 61, 62, or 63;

(b) Any applicable SIP emissions standard including those with a future compliance date; or

(c) The emissions rate specified as a federally enforceable approval condition, including those with a future compliance date.

(6) **"Alternative emission limit"** or **"alternative emission limitation"** means an emission limitation that applies to a source or an emissions unit only during a specifically defined transient mode of operation. An alternative emission limitation is a component of a continuously applicable emission limit. An alternative emission limit may be a numerical limit or a design characteristic of the emission unit and associated emission controls, work practices, or other operational standard, such as a control device operating range.

(7) **"Ambient air"** means the surrounding outside air.

(8) **"Ambient air quality standard"** means an established concentration, exposure time, and frequency of occurrence of air contaminant(s) in the ambient air which shall not be exceeded.

(9) **"Approval order"** is defined in **"order of approval."**

(10) **"Attainment area"** means a geographic area designated by EPA at 40 C.F.R. Part 81 as having attained the National Ambient Air Quality Standard for a given criteria pollutant.

(11) **"Authority"** means any air pollution control agency whose jurisdictional boundaries are coextensive with the boundaries of one or more counties.

(12) **"Begin actual construction"** means, in general, initiation of physical on-site construction activities on an emission unit that are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipe work and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

(13) **"Best available control technology (BACT)"** means an emission limitation based on the maximum degree of reduction for each air pollutant subject to regulation under chapter 70.94 RCW emitted from or which results from any new or modified stationary source, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant. In no event shall application of the "best available control technology" result in emissions of any pollutants which will exceed the emissions allowed by any applicable standard under 40 C.F.R. Part 60 and Part 61. Emissions from any source utilizing clean fuels, or any other means, to comply with this paragraph shall not be allowed to increase above levels that would have been required under the definition of BACT in the federal Clean Air Act as it existed prior to enactment of the Clean Air Act Amendments of 1990.

(14) **"Best available retrofit technology (BART)"** means an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing stationary facility. The emission limitation must be established, on a case-by-case basis, taking into consideration the technology available, the costs of compliance, the energy and nonair quality environmental impacts of compliance, any pollution control equipment in use or in existence at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology.

(15) **"Brake horsepower (BHP)"** means the measure of an engine's horsepower without the loss in power caused by the gearbox, alternator, differential, water pump, and other auxiliary components.

(16) **"Bubble"** means a set of emission limits which allows an increase in emissions from a given emissions unit in exchange for a decrease in emissions from another emissions unit, pursuant to RCW 70.94.155 and WAC 173-400-120.

(17) **"Capacity factor"** means the ratio of the average load on equipment or a machine for the period of time considered, to the manufacturer's capacity rating of the machine or equipment.

(18) "**Class I area**" means any area designated under section 162 or 164 of the federal Clean Air Act (42 U.S.C., Sec. 7472 or 7474) as a Class I area. The following areas are the Class I areas in Washington state:

- (a) Alpine Lakes Wilderness;
- (b) Glacier Peak Wilderness;
- (c) Goat Rocks Wilderness;
- (d) Mount Adams Wilderness;
- (e) Mount Rainier National Park;
- (f) North Cascades National Park;
- (g) Olympic National Park;
- (h) Pasayten Wilderness; and
- (i) Spokane Indian Reservation.

(19) "**Combustion and incineration units**" means units using combustion for waste disposal, steam production, chemical recovery or other process requirements; but excludes outdoor burning.

(20)(a) "**Commence**" as applied to construction, means that the owner or operator has all the necessary preconstruction approvals or permits and either has:

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

(ii) 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 actual construction of the source to be completed within a reasonable time.

(b) For the purposes of this definition, "necessary preconstruction approvals" means those permits or orders of approval required under federal air quality control laws and regulations, including state, local and federal regulations and orders contained in the SIP.

(21) "**Concealment**" means any action taken to reduce the observed or measured concentrations of a pollutant in a gaseous effluent while, in fact, not reducing the total amount of pollutant discharged.

(22) "**Criteria pollutant**" means a pollutant for which there is established a National Ambient Air Quality Standard at 40 C.F.R. Part 50. The criteria pollutants are carbon monoxide (CO), particulate matter, ozone (O<sub>3</sub>) sulfur dioxide (SO<sub>2</sub>), lead (Pb), and nitrogen dioxide (NO<sub>2</sub>).

(23) "**Director**" means director of the Washington state department of ecology or duly authorized representative.

(24) "**Dispersion technique**" means a method that attempts to affect the concentration of a pollutant in the ambient air other than by the use of pollution abatement equipment or integral process pollution controls.

(25) "**Ecology**" means the Washington state department of ecology.

(26) "**Electronic means**" means email, fax, FTP site, or other electronic method approved by the permitting authority.

(27) "**Emission**" means a release of air contaminants into the ambient air.

(28) "**Emission reduction credit (ERC)**" means a credit granted pursuant to WAC 173-400-131. This is a voluntary reduction in emissions.

(29) "**Emission standard,**" "**emission limitation**" and "**emission limit**" means a requirement established under the federal Clean Air Act or chapter 70.94 RCW which limits the quantity, rate, or concentration of emissions of air contaminants on a continuous basis, including any

requirement relating to the operation or maintenance of a source to assure continuous emission reduction and any design, equipment, work practice, or operational standard adopted under the federal Clean Air Act or chapter 70.94 RCW.

(30) "**Emission threshold**" means an emission of a listed air contaminant at or above the following rates:

| Air Contaminant  | Annual Emission Rate                |
|--|-------------------------------------|
| Carbon monoxide:                                       | 100 tons per year                   |
| Fluorides:   | 3 tons per year                     |
| Hydrogen sulfide (H <sub>2</sub> S):                   | 10 tons per year                    |
| Lead:  | 0.6 tons per year                   |
| Nitrogen oxides:                                       | 40 tons per year                    |
| Particulate matter (PM):                               | 25 tons per year of PM emissions    |
|  | 10 tons per year of PM-2.5          |
|  | 15 tons per year of PM-10 emissions |
| Reduced sulfur compounds (including H <sub>2</sub> S): | 10 tons per year                    |
| Sulfur dioxide:  | 40 tons per year                    |
| Sulfuric acid mist:                                    | 7 tons per year                     |
| Total reduced sulfur (including H <sub>2</sub> S):     | 10 tons per year                    |
| Volatile organic compounds:                            | 40 tons per year                    |

(31) "**Emissions unit**" or "**emission unit**" means any part of a stationary source or source which emits or would have the potential to emit any pollutant subject to regulation under the federal Clean Air Act, chapter 70.94 or 70.98 RCW.

(32) "**Excess emissions**" means emissions of an air pollutant in excess of any applicable emission standard or an emission limit established in a permit or order, including an alternative emission limit.

(33) "**Excess stack height**" means that portion of a stack which exceeds the greater of sixty-five meters or the calculated stack height described in WAC 173-400-200(2).

(34) "**Existing stationary facility (facility)**" is defined in WAC 173-400-151.

(35) "**Federal Clean Air Act (FCAA)**" means the federal Clean Air Act, also known as Public Law 88-206, 77 Stat. 392, December 17, 1963, 42 U.S.C. 7401 et seq., as last amended by the Clean Air Act Amendments of 1990, P.L. 101-549, November 15, 1990.

(36) "**Federal Class I area**" means any federal land that is classified or reclassified Class I. The following areas are federal Class I areas in Washington state:

- (a) Alpine Lakes Wilderness;
- (b) Glacier Peak Wilderness;
- (c) Goat Rocks Wilderness;
- (d) Mount Adams Wilderness;
- (e) Mount Rainier National Park;
- (f) North Cascades National Park;
- (g) Olympic National Park; and
- (h) Pasayten Wilderness.

(37) "**Federal land manager**" means the secretary of the department with authority over federal lands in the United States.

(38) "**Federally enforceable**" means all limitations and conditions which are enforceable by EPA, including those requirements developed under 40 C.F.R. Parts 60, 61, 62 and 63, requirements established within the Washington SIP, requirements within any approval or order established under 40 C.F.R. 52.21 or under a SIP approved new source review regulation, emissions limitation orders issued under WAC 173-400-081(4), 173-400-082, or 173-400-091.

(39) "**Fossil fuel-fired steam generator**" means a device, furnace, or boiler used in the process of burning fossil fuel for the primary purpose of producing steam by heat transfer.

(40) "**Fugitive dust**" means a particulate emission made airborne by forces of wind, man's activity, or both. Unpaved roads, construction sites, and tilled land are examples of areas that originate fugitive dust. Fugitive dust is a type of fugitive emission.

(41) "**Fugitive emissions**" means emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(42) "**General process unit**" means an emissions unit using a procedure or a combination of procedures for the purpose of causing a change in material by either chemical or physical means, excluding combustion.

(43) "**Good engineering practice (GEP)**" refers to a calculated stack height based on the equation specified in WAC 173-400-200 (2) (a) (ii).

(44) "**Greenhouse gases (GHGs)**" includes carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

(45) "**Hog fuel**" (hogged fuel) means waste wood that is reduced in size to facilitate burning.

(46) "**Incinerator**" means a furnace used primarily for the thermal destruction of waste.

(47) "**In operation**" means engaged in activity related to the primary design function of the source.

(48) "**Mandatory Class I federal area**" means any area defined in Section 162(a) of the federal Clean Air Act (42 U.S.C., 7472(a)). The following areas are the mandatory Class I federal areas in Washington state:

- (a) Alpine Lakes Wilderness;
- (b) Glacier Peak Wilderness;
- (c) Goat Rocks Wilderness;
- (d) Mount Adams Wilderness;
- (e) Mount Rainier National Park;
- (f) North Cascades National Park;
- (g) Olympic National Park; and
- (h) Pasayten Wilderness;

(49) "**Masking**" means the mixing of a chemically nonreactive control agent with a malodorous gaseous effluent to change the perceived odor.

(50) "**Materials handling**" means the handling, transporting, loading, unloading, storage, and transfer of materials with no significant chemical or physical alteration.

(51) "**Modification**" means any physical change in, or change in the method of operation of, a stationary source that increases the amount of any air contaminant emitted by such source or that results in the emissions of any air contaminant not previously emitted. The

term modification shall be construed consistent with the definition of modification in Section 7411, Title 42, United States Code, and with rules implementing that section.

(52) **"National Ambient Air Quality Standard (NAAQS)"** means an ambient air quality standard set by EPA at 40 C.F.R. Part 50 and includes standards for carbon monoxide (CO), particulate matter, ozone (O<sub>3</sub>), sulfur dioxide (SO<sub>2</sub>), lead (Pb), and nitrogen dioxide (NO<sub>2</sub>).

(53) **"National Emission Standards for Hazardous Air Pollutants (NESHAP)"** means the federal rules in 40 C.F.R. Part 61.

(54) **"National Emission Standards for Hazardous Air Pollutants for Source Categories"** means the federal rules in 40 C.F.R. Part 63.

(55) **"Natural conditions"** means naturally occurring phenomena that reduce visibility as measured in terms of light extinction, visual range, contrast, or coloration.

(56) **"New source"** means:

(a) The construction or modification of a stationary source that increases the amount of any air contaminant emitted by such source or that results in the emission of any air contaminant not previously emitted; and

(b) Any other project that constitutes a new source under the federal Clean Air Act.

(57) **"New Source Performance Standards (NSPS)"** means the federal rules in 40 C.F.R. Part 60.

(58) **"Nonattainment area"** means a geographic area designated by EPA at 40 C.F.R. Part 81 as exceeding a National Ambient Air Quality Standard (NAAQS) for a given criteria pollutant. An area is nonattainment only for the pollutants for which the area has been designated nonattainment.

(59) **"Nonroad engine"** means:

(a) Except as discussed in (b) of this subsection, a nonroad engine is any internal combustion engine:

(i) In or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers); or

(ii) In or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers); or

(iii) That, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

(b) An internal combustion engine is not a nonroad engine if:

(i) The engine is used to propel a motor vehicle or a vehicle used solely for competition, or is subject to standards promulgated under section 202 of the federal Clean Air Act (42 U.S.C., Sec. 7521); or

(ii) The engine is regulated by a New Source Performance Standard promulgated under section 111 of the federal Clean Air Act (42 U.S.C., Sec. 7411); or

(iii) The engine otherwise included in (a)(iii) of this subsection remains or will remain at a location for more than twelve consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces

an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. This paragraph does not apply to an engine after the engine is removed from the location.

(60) **"Notice of construction application"** means a written application to allow construction of a new source, modification of an existing stationary source or replacement or substantial alteration of control technology at an existing stationary source.

(61) **"Opacity"** means the degree to which an object seen through a plume is obscured, stated as a percentage.

(62) **"Outdoor burning"** means the combustion of material in an open fire or in an outdoor container, without providing for the control of combustion or the control of the emissions from the combustion. Waste wood disposal in wigwam burners or silo burners is not considered outdoor burning.

(63) **"Order"** means any order issued by ecology or a local air authority pursuant to chapter 70.94 RCW, including, but not limited to RCW 70.94.332, 70.94.152, 70.94.153, 70.94.154, and 70.94.141(3), and includes, where used in the generic sense, the terms order, corrective action order, order of approval, and regulatory order.

(64) **"Order of approval"** or **"approval order"** means a regulatory order issued by a permitting authority to approve the notice of construction application for a proposed new source or modification, or the replacement or substantial alteration of control technology at an existing stationary source.

(65) **"Ozone depleting substance"** means any substance listed in Appendices A and B to Subpart A of 40 C.F.R. Part 82.

(66) **"Particulate matter"** or **"particulates"** means any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100 micrometers.

(67) **"Particulate matter emissions"** means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by applicable reference methods, or an equivalent or alternative method specified in Title 40, chapter I of the Code of Federal Regulations or by a test method specified in the SIP.

(68) **"Parts per million (ppm)"** means parts of a contaminant per million parts of gas, by volume, exclusive of water or particulates.

(69) **"Permitting authority"** means ecology or the local air pollution control authority with jurisdiction over the source.

(70) **"Person"** means an individual, firm, public or private corporation, association, partnership, political subdivision, municipality, or government agency.

(71) **"PM-10"** means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method based on 40 C.F.R. Part 50 Appendix J and designated in accordance with 40 C.F.R. Part 53 or by an equivalent method designated in accordance with 40 C.F.R. Part 53.

(72) **"PM-10 emissions"** means finely divided solid or liquid material, including condensable particulate matter, with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air as measured by an applicable reference method, or an

equivalent or alternate method, specified in 40 C.F.R. Part 51, Appendix M (in effect on the date in WAC 173-400-025) or by a test method specified in the SIP.

(73) "**PM-2.5**" means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by a reference method based on 40 C.F.R. Part 50 Appendix L and designated in accordance with 40 C.F.R. Part 53 or by an equivalent method designated in accordance with 40 C.F.R. Part 53.

(74) "**PM-2.5 emissions**" means finely divided solid or liquid material, including condensable particulate matter, with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers emitted to the ambient air as measured by an applicable reference method, or an equivalent or alternate method, specified in 40 C.F.R. Part 51 (in effect on the date in WAC 173-400-025) or by a test method specified in the SIP.

(75) "**Portable source**" means a type of stationary source which emits air contaminants only while at a fixed location but which is capable of being transported to various locations. Examples include a portable asphalt plant or a portable package boiler.

(76) "**Potential to emit**" means the maximum capacity of a source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is enforceable. Secondary emissions do not count in determining the potential to emit of a source.

(77) "**Prevention of significant deterioration (PSD)**" means the program in WAC 173-400-700 to 173-400-750.

(78) "**Projected width**" means that dimension of a structure determined from the frontal area of the structure, projected onto a plane perpendicular to a line between the center of the stack and the center of the building.

(79) "**Reasonably attributable**" means attributable by visual observation or any other technique the state deems appropriate.

(80) "**Reasonably available control technology (RACT)**" means the lowest emission limit that a particular source or source category is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. RACT is determined on a case-by-case basis for an individual source or source category taking into account the impact of the source upon air quality, the availability of additional controls, the emission reduction to be achieved by additional controls, the impact of additional controls on air quality, and the capital and operating costs of the additional controls. RACT requirements for any source or source category shall be adopted only after notice and opportunity for comment are afforded.

(81) "**Regulatory order**" means an order issued by a permitting authority that requires compliance with:

(a) Any applicable provision of chapter 70.94 RCW or rules adopted there under; or

(b) Local air authority regulations adopted by the local air authority with jurisdiction over the sources to whom the order is issued.

(82) "**Secondary emissions**" means emissions which would occur as a result of the construction or operation of a major stationary source

or major modification, but do not come from the major stationary source or major modification itself. Secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the major stationary source or major modification which causes the secondary emissions. Secondary emissions include emissions from any off-site support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

(83) "**Shutdown**" means, generally, the cessation of operation of a stationary source or emission unit for any reason.

(84) "**Source**" means all of the emissions unit(s) including quantifiable fugitive emissions, that are located on one or more contiguous or adjacent properties, and are under the control of the same person or persons under common control, whose activities are ancillary to the production of a single product or functionally related groups of products.

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

(86) "**Stack**" means any point in a source designed to emit solids, liquids, or gases into the air, including a pipe or duct.

(87) "**Stack height**" means the height of an emission point measured from the ground-level elevation at the base of the stack.

(88) "**Standard conditions**" means a temperature of 20°C (68°F) and a pressure of 760 mm (29.92 inches) of mercury.

(89) "**Startup**" means, generally, the setting in operation of a stationary source or emission unit for any reason.

(90) "**State implementation plan (SIP)**" or "**Washington SIP**" means the Washington SIP in 40 C.F.R. Part 52, Subpart WW. The SIP contains state, local and federal regulations and orders, the state plan and compliance schedules approved and promulgated by EPA, for the purpose of implementing, maintaining, and enforcing the National Ambient Air Quality Standards.

(91) "**Stationary source**" means any building, structure, facility, or installation which emits or may emit any air contaminant. This term does not include emissions resulting directly from an internal combustion engine for transportation purposes or from a nonroad engine or nonroad vehicle as defined in Section 216(11) of the federal Clean Air Act (42 U.S.C., 7550(11)).

(92) "**Sulfuric acid plant**" means any facility producing sulfuric acid by the contact process or by burning elemental sulfur, alkylation acid, hydrogen sulfide, or acid sludge.

(93) "**Synthetic minor**" means any source whose potential to emit has been limited below applicable thresholds by means of an enforceable order, rule, or approval condition.

(94) "**Total reduced sulfur (TRS)**" means the sum of the sulfur compounds hydrogen sulfide, mercaptans, dimethyl sulfide, dimethyl disulfide, and any other organic sulfides emitted and measured by 40 C.F.R. Part 60, Appendix A, Test Method 16 (in effect on the date in WAC 173-400-025) or an EPA approved equivalent method and expressed as hydrogen sulfide.

(95) "**Total suspended particulate**" means particulate matter as measured by the method described in 40 C.F.R. Part 50 Appendix B.

(96) "**Toxic air pollutant (TAP)**" or "**toxic air contaminant**" means any toxic air pollutant listed in WAC 173-460-150. The term toxic air

pollutant may include particulate matter and volatile organic compounds if an individual substance or a group of substances within either of these classes is listed in WAC 173-460-150. The term toxic air pollutant does not include particulate matter and volatile organic compounds as generic classes of compounds.

(97) **"Transient mode of operation"** means a short-term operating period of a source or an emission unit with a specific beginning and end, such as startup, shutdown, or maintenance.

(98) **"Unclassifiable area"** means an area that cannot be designated attainment or nonattainment on the basis of available information as meeting or not meeting the National Ambient Air Quality Standard for the criteria pollutant and that is listed by EPA at 40 C.F.R. Part 81.

(99) **"United States Environmental Protection Agency (USEPA)"** shall be referred to as EPA.

(100) **"Useful thermal energy"** means energy (steam, hot water, or process heat) that meets the minimum operating temperature, flow, and/or pressure required by any system that uses energy provided by the affected boiler or process heater.

(101) **"Visibility impairment"** means any humanly perceptible change in visibility (light extinction, visual range, contrast, or coloration) from that which would have existed under natural conditions.

(102) **"Volatile organic compound (VOC)"** means any carbon compound that participates in atmospheric photochemical reactions.

(a) Exceptions. The following compounds are not a VOC: Acetone; carbon monoxide; carbon dioxide; carbonic acid; metallic carbides or carbonates; ammonium carbonate, methane; ethane; methylene chloride (dichloromethane); 1,1,1-trichloroethane (methyl chloroform); 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113); trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12); chlorodifluoromethane (HCFC-22); trifluoromethane (HFC-23); 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123); 1,1,1,2-tetrafluoroethane (HFC-134a); 1,1-dichloro 1-fluoroethane (HCFC-141b); 1-chloro 1,1-difluoroethane (HCFC-142b); 2-chloro 1,1,1,2-tetrafluoroethane (HCFC-124); pentafluoroethane (HFC-125); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); parachlorobenzotrifluoride (PCBTF); cyclic, branched, or linear completely methylated siloxanes; perchloroethylene (tetrachloroethylene); 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca); 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb); 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee); difluoromethane (HFC-32); ethylfluoride (HFC-161); 1,1,1,3,3,3-hexafluoropropane (HFC-236fa); 1,1,2,2,3-pentafluoropropane (HFC-245ca); 1,1,2,3,3-pentafluoropropane (HFC-245ea); 1,1,1,2,3-pentafluoropropane (HFC-245eb); 1,1,1,3,3-pentafluoropropane (HFC-245fa); 1,1,1,2,3,3-hexafluoropropane (HFC-236ea); 1,1,1,3,3-pentafluorobutane (HFC-365mfc); chlorofluoromethane (HCFC-31); 1 chloro-1-fluoroethane (HCFC-151a); 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a); 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane (C<sub>4</sub>F<sub>9</sub>OCH<sub>3</sub> or HFE-7100); 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF<sub>3</sub>)<sub>2</sub>CF<sub>2</sub>OCH<sub>3</sub>); 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C<sub>4</sub>F<sub>9</sub>OC<sub>2</sub>H<sub>5</sub> or HFE-7200); 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF<sub>3</sub>)<sub>2</sub>CF<sub>2</sub>OC<sub>2</sub>H<sub>5</sub>); methyl acetate; 1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (n-C<sub>3</sub>F<sub>7</sub>OCH<sub>3</sub> or HFE-7000); 3-

ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane (HFE-7500); 1,1,1,2,3,3,3-heptafluoropropane (HFC 227ea); methyl formate (HCOOCH<sub>3</sub>); 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300); dimethyl carbonate; propylene carbonate; trans-1,3,3,3-tetrafluoropropene; HCF<sub>2</sub>OCF<sub>2</sub>H (HFE-134); HCF<sub>2</sub>OCF<sub>2</sub>OCF<sub>2</sub>H (HFE-236cal2); HCF<sub>2</sub>OCF<sub>2</sub>CF<sub>2</sub>OCF<sub>2</sub>H (HFE-338pcc13); HCF<sub>2</sub>OCF<sub>2</sub>OCF<sub>2</sub>CF<sub>2</sub>OCF<sub>2</sub>H (H-Galden 1040x or H-Galden ZT 130 (or 150 or 180)); trans 1-chloro-3,3,3-trifluoroprop-1-ene; 2,3,3,3-tetrafluoropropene; 2-amino-2-methyl-1-propanol; t-butyl acetate; 1,1,2,2-tetrafluoro-1-(2,2,2-trifluoroethoxy) ethane; and perfluorocarbon compounds that fall into these classes:

- (i) Cyclic, branched, or linear completely fluorinated alkanes;
- (ii) Cyclic, branched, or linear completely fluorinated ethers with no saturations;
- (iii) Cyclic, branched, or linear completely fluorinated tertiary amines with no saturations; and
- (iv) Sulfur containing perfluorocarbons with no saturations and with sulfur bonds only to carbon and fluorine.

(b) For the purpose of determining compliance with emission limits, VOC will be measured by the appropriate methods in 40 C.F.R. Part 60, Appendix A (in effect on the date in WAC 173-400-025). Where the method also measures compounds with negligible photochemical reactivity, these negligibly reactive compounds may be excluded as VOC if the amount of the compounds is accurately quantified, and the exclusion is approved by ecology, the authority, or EPA.

(c) As a precondition to excluding these negligibly reactive compounds as VOC or at any time thereafter, ecology or the authority may require an owner or operator to provide monitoring or testing methods and results demonstrating, to the satisfaction of ecology, the authority, or EPA the amount of negligibly reactive compounds in the source's emissions.

(103) **"Wigwam"** or **"silo burner"** means a cone-shaped or cylindrical structure that burns waste wood for disposal. A silo burner is a cylinder and may be made with refractory material rather than metal.

(104) **"Wood-fired boiler"** means an enclosed device using controlled flame combustion of wood or waste wood with the primary purpose of recovering thermal energy in the form of a steam or hot water boiler that burns wood or waste wood for fuel for the primary purpose of producing hot water or steam by heat transfer. Controlled flame combustion refers to a steady-state, or near steady-state, process wherein fuel and/or air feed rates are controlled.

(105) **"Waste wood"** means wood pieces or particles generated as a by-product or waste from the manufacturing of wood products, and the handling and storage of raw materials, trees, and stumps. This includes, but is not limited to, sawdust, chips, shavings, bark, pulp, log sort yard waste, and wood materials from forest health logging, land clearing or pruning, but does not include wood pieces or particles containing chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenate.

[Statutory Authority: Chapter 70.94 RCW. WSR 18-17-111 (Order 15-07), § 173-400-030, filed 8/16/18, effective 9/16/18; WSR 12-24-027 (Order 11-10), § 173-400-030, filed 11/28/12, effective 12/29/12; WSR 11-06-060 (Order 09-01), § 173-400-030, filed 3/1/11, effective 4/1/11. Statutory Authority: RCW 70.94.395 and 70.94.331. WSR 07-11-039 (Order 06-03), § 173-400-030, filed 5/8/07, effective

6/8/07. Statutory Authority: RCW 70.94.152. WSR 05-03-033 (Order 03-07), § 173-400-030, filed 1/10/05, effective 2/10/05. Statutory Authority: Chapter 70.94 RCW, RCW 70.94.141, [70.94.]152, [70.94.]331, [70.94.]510 and 43.21A.080. WSR 01-17-062 (Order 99-06), § 173-400-030, filed 8/15/01, effective 9/15/01. Statutory Authority: RCW 70.94.152. WSR 98-01-183 (Order 96-01), § 173-400-030, filed 12/23/97, effective 1/23/98. Statutory Authority: Chapter 70.94 RCW. WSR 96-19-054 (Order 94-35), § 173-400-030, filed 9/13/96, effective 10/14/96; WSR 95-07-126 (Order 93-40), § 173-400-030, filed 3/22/95, effective 4/22/95; WSR 93-18-007 (Order 93-03), § 173-400-030, filed 8/20/93, effective 9/20/93; WSR 91-05-064 (Order 90-06), § 173-400-030, filed 2/19/91, effective 3/22/91. Statutory Authority: RCW 70.94.331, 70.94.395 and 70.94.510. WSR 85-06-046 (Order 84-48), § 173-400-030, filed 3/6/85. Statutory Authority: Chapters 43.21A and 70.94 RCW. WSR 83-09-036 (Order DE 83-13), § 173-400-030, filed 4/15/83. Statutory Authority: RCW 70.94.331. WSR 80-11-059 (Order DE 80-14), § 173-400-030, filed 8/20/80. Statutory Authority: RCW 43.21A.080 and 70.94.331. WSR 79-06-012 (Order DE 78-21), § 173-400-030, filed 5/8/79; Order DE 76-38, § 173-400-030, filed 12/21/76. Formerly WAC 18-04-030.]