



Ohio Administrative Code Rule 3745-17-01 Definitions.

Effective: January 20, 2018

[Comment: For dates and availability of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see paragraph (C) of this rule titled "referenced materials."]

(A) Except as otherwise provided in this rule, the definitions in rule 3745-15-01 of the Administrative Code shall apply to this chapter.

(B) As used in Chapter 3745-17 of the Administrative Code:

(1) "Banked condition" means the condition where fuel is burned on the grates of fuel burning equipment at rates which are sufficient to maintain ignition only.

(2) "British thermal unit" or "Btu" means the amount of heat required to raise the temperature of one pound of water from fifty-nine degrees Fahrenheit to sixty degrees Fahrenheit at a constant pressure of one atmosphere.

(3) "Central heater" means a fuel-burning device designed to burn wood or wood pellet fuel that warms spaces other than the space where the device is located, by the distribution of air heated by the furnace through ducts or liquid heated in the device and distributed typically through pipes. Unless otherwise specified, these devices include, but are not limited to, residential forced-air furnaces (small and large) and residential hydronic heaters.

(4) "Chip wood fuel" means wood chipped into small pieces that are uniform in size, shape, moisture, density and energy content.

(5) "Facility" means any building, structure, installation, operation, or combination thereof which contains one or more stationary sources of air contaminants. As used in paragraph (D) of rule 3745-17-08 of the Administrative Code, the definition of facility shall not include agricultural activities,



such as the tilling of land, the harvesting of crops, the application of fertilizers, pesticides or herbicides, and grain drying, which are conducted on a farm.

(6) "Fireplace" means a wood-burning appliance intended to be used primarily for aesthetic enjoyment and not as a space heater. An appliance is a fireplace if it is in a model line that satisfies one of the following:

(a) The model line includes a safety listing under recognized American or Canadian safety standards, as documented by a permanent label from a nationally recognized certification body affixed on each unit sold, and that said safety listing only allows operation of the fireplace with doors fully open. Operation with any required safety screen satisfies this requirement.

(b) The model line has a safety listing that allows operation with doors closed, has no user-operated controls other than flue or outside air dampers that can only be adjusted to either a fully closed or fully opened position, and either of the following are satisfied:

(i) Appliances are sold with tempered glass panel doors only (either as standard or optional equipment).

(ii) The fire viewing area is equal to or greater than five hundred square inches.

(c) A model line that is clearly positioned in the marketplace as intended to be used primarily for aesthetic enjoyment and not as a room heater, as demonstrated by product literature (including owner's manuals), advertising targeted at the trade or public (including web-based promotional materials) or training materials is presumptively a fireplace model line.

The presumption in this paragraph of this definition can be rebutted by test data from a United States environmental protection agency-approved test laboratory reviewed by a United States environmental protection agency-approved third-party certifier that were generated when operating the appliance with the doors closed, and that demonstrate an average stack gas carbon dioxide concentration over the duration of the test run equal to or less than 5.00 per cent and a ratio of the average stack gas carbon dioxide to the average stack gas carbon monoxide equal to or greater than 15:1. The stack gas average carbon dioxide and carbon monoxide concentrations for the test run shall be determined in



accordance with the requirements in CSA B415.1-10 (R2015), clause 6.3, using a sampling interval no greater than one minute. The average stack gas carbon dioxide and carbon monoxide concentrations for purposes of this determination shall be the average of the stack gas concentrations from all sampling intervals over the full test run.

(7) "Fuel" means wood, refuse, natural gas, coke oven gas, petroleum, coal, and any combustible solid, liquid, or gas derived from such materials.

(8) "Fuel burning equipment" means any furnace or boiler, and any appurtenances thereto such as stacks, ducting and similar apparatus, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer, where the products of combustion do not come into contact with process materials.

(9) "Fugitive dust" means particulate matter which is emitted from any source by means other than a stack.

(10) "Fugitive dust source" means any source which emits fugitive dust or which emitted fugitive dust prior to the installation of any control equipment that was installed on or after February 15, 1972.

(11) "Grain elevator" means any plant or installation at which grain is unloaded, handled, cleaned, dried, stored, or loaded, except those located at the following: animal food, pet food or cereal manufacturers; breweries; livestock feedlots; wheat flour, wet corn, dry corn, rice mills; or soybean oil extraction plants.

(12) "Incinerator" means any equipment, machine, device, article, contrivance, structure, or part of a structure used to burn liquid, semi-solid or solid refuse or to process salvageable materials by burning other than by open burning as defined in rule 3745-19-01 of the Administrative Code.

(13) "OEPA" or "Ohio EPA" means the Ohio environmental protection agency.

(14) "Opacity" means the degree to which emissions reduce the transmission of light and obscure the view of the background.



(15) "Particulate emissions" or "particulate matter emissions" means particulate matter measurable by one of the following:

(a) The applicable test methods in 40 CFR part 60, appendix A, "Standards of Performance for New Stationary Sources."

(b) Continuous emissions monitoring certified in accordance with 40 CFR part 60, appendix B, performance specification 11, for any owner or operator complying with paragraph (D) or rule 3745-17-03 of the Administrative Code.

(16) "Particulate matter" means any material, except water in uncombined form, that is or has been airborne, and exists as a liquid or a solid at standard conditions.

(17) "Pellet fuel" means refined and densified fuel shaped into small pellets or briquettes that are uniform in size, shape, moisture, density and energy content.

(18) "Pellet stove" (sometimes called pellet heater or pellet space heater) means an enclosed, pellet or chip fuel-burning device capable of and intended for residential space heating or space heating and domestic water heating. Pellet stoves include a fuel storage hopper or bin and a fuel feed system. Pellet stoves include, but are not limited to the following:

(a) Free-standing pellet stoves, which are pellet stoves that are installed on legs or on a pedestal or other supporting base. These stoves generally are safety listed under ASTM E1509-12, UL-1482, ULC S627-00 or ULC ORD-C1482-M1990.

(b) Pellet stove fireplace inserts, which are pellet stoves intended to be installed in masonry fireplace cavities or in other enclosures. These stoves generally are safety listed under ASTM E1509-12, UL-1482, ULC-S628 or ULC ORD-C1482-M1990.

(c) Built-in pellet stoves, which are pellet stoves intended to be recessed into the wall. These stoves generally are safety listed under ASTM E1509-12, UL-127, ULC-S610 or ULC ORD-C1482-M1990.



(19) "Permanent storage capacity" means grain storage capacity which is inside a building, bin or silo.

(20) "PM_{2.5}" means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured either by a reference method that is based on 40 CFR part 50, appendix L and designated in accordance with 40 CFR part 53 or by an equivalent method designated in accordance with 40 CFR part 53.

(21) "PM₁₀" means particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers as measured either by a reference method that is based on 40 CFR part 50, appendix J and designated in accordance with 40 CFR part 53 or by an equivalent method designated in accordance with 40 CFR part 53.

(22) "Process weight" means the total weight of all materials introduced into the source operation, including solid fuels, but excluding gaseous fuels and liquid fuels when they are used solely as fuels, and excluding air introduced for the purpose of combustion.

(23) "Reasonably available control measures" means the control technology which enables a particular fugitive dust source to achieve the lowest particulate matter emission level possible and which is reasonably available considering technological feasibility and cost-effectiveness.

(24) "Refuse" means any discarded matter, or any matter which is to be reduced in volume, or otherwise changed in chemical or physical properties, in order to facilitate its discard, removal or disposal.

(25) "Residential forced-air furnace" means a fuel burning device designed to burn wood or wood pellet fuel that warms spaces other than the space where the furnace is located, by the distribution of air heated by the furnace through ducts.

(26) "Residential hydronic heater" means a fuel burning device designed to burn wood or wood pellet fuel for the purpose of heating building space and/or water through the distribution, typically through pipes, of a fluid heated in the device, typically water or a water and antifreeze mixture.



(27) "Residential masonry heater" means a factory-built or site-built wood-burning device in which the heat from intermittent fires burned rapidly in the firebox is stored in the refractory mass for slow release to building spaces. Masonry heaters are site-built (using local materials or a combination of local materials and manufactured components) or site-assembled (using factory-built components), solid fuel-burning heating appliances constructed mainly of refractory materials (e.g., masonry materials or soapstone). They typically have an interior construction consisting of a firebox and heat exchange channels built from refractory components, through which flue gases are routed. ASTM E1602-03(2010)e1 provides design and construction information for the range of masonry heaters most commonly built in the United States. The site-assembled models are generally listed to UL-1482.

(28) "Residential wood burning appliances" means wood heaters, residential masonry heaters, residential hydronic heaters, residential forced-air furnaces, fireplace, and central heaters that are designed to burn wood, chip wood or pellet fuel.

(29) "Salvageable material" means any material which is to be reduced in volume, or otherwise changed in chemical or physical properties, in order to facilitate its reuse.

(30) "Single fuel burning unit" means any single, enclosed combustion chamber in which fuel is burned for the primary purpose of producing heat or power by indirect heat transfer, where the products of combustion do not come into contact with process materials.

(31) "Stack" means any chimney, flue, conduit or duct, including the outlet of any air pollution control equipment, which is arranged to conduct emissions to the ambient air.

(32) "Stand-by fuel burning equipment" means any fuel burning equipment which is used only as a direct substitution for other fuel burning equipment for a limited period due to unpredictable and unavoidable breakdown or failure, or routine scheduled maintenance of such other fuel burning equipment.

(33) "Start-up" means the commencement of firing of fuel burning equipment from a cold, non-fired condition.



(34) "Stationary gas turbine" means an engine that is not self-propelled (although it may be mounted on a vehicle for portability), in which a turbine is driven by expanding hot combustion gases. Such an engine typically consists of an axial-flow air compressor, one or more combustion chambers, and a turbine. A gas turbine employed in a jet engine is not included in this definition.

(35) "Stationary small internal combustion engine" means an engine, other than an engine used to, or intended to, propel any vehicle, with a rated power of less than or equal to six hundred horsepower and in which combustion occurs within one or more cylinders, thereby converting heat energy into mechanical energy that can be used to drive an electric generator or other mechanical equipment.

(36) "Stationary large internal combustion engine" means an engine, other than an engine used to, or intended to, propel any vehicle, with a rated power of greater than six hundred horsepower and in which combustion occurs within one or more cylinders, thereby converting heat energy into mechanical energy that can be used to drive an electric generator or other mechanical equipment.

(37) "Topping-off" means that portion of a ship loading operation at a grain terminal during which the following occurs:

(a) The top portion of a hold (not to exceed twenty-five per cent of the total volume of the hold) is filled with grain.

(b) The control of particulate emissions through the use of tarpaulin covers and associated ventilation and control equipment is impractical or impossible.

(38) "Uncontrolled mass rate of emission" means the total weight rate of particulate emissions which are, or in the absence of control equipment would be, emitted from an air contaminant source when such source is operated at its maximum capacity.

(39) "Wood heater" means an enclosed, wood burning-appliance capable of and intended for residential space heating or space heating and domestic water heating. These devices include, but are not limited to, adjustable burn rate wood heaters, single burn rate wood heaters, pellet stoves, hydronic heaters and forced-air furnaces. Wood heaters may or may not include air ducts to deliver some portion of the heat produced to areas other than the space where the wood heater is located.



Wood heaters include, but are not limited to the following:

(a) Free-standing wood heaters, which are wood heaters that are installed on legs, on a pedestal or suspended from the ceiling. These products generally are safety listed under UL-1482, UL-737 or ULC-S627-00.

(b) Fireplace insert wood heaters, which are wood heaters intended to be installed in masonry fireplace cavities or in other enclosures. These appliances generally are safety listed under UL-1482, UL-737 or ULC-S628.

(c) Built-in wood heaters, which are wood heaters that are intended to be recessed into the wall. These appliances generally are safety listed under UL-1482, UL-737, UL-127 or ULC-S610.

(C) Referenced materials. This chapter includes references to certain matter or materials. The text of the referenced materials is not included in the regulations contained in this chapter. The materials are hereby made a part of the regulations in this chapter. For materials subject to change, only the specific versions specified in the regulation are incorporated. Material is incorporated as it exists on the effective date of this rule. Except for subsequent annual publication of existing (unmodified) Code of Federal Regulation compilations, any amendment or revision to a referenced document is not incorporated unless and until this rule has been amended to specify the new dates.

(1) Availability. The materials reference materials are available as follows:

(a) "Acid Rain Program Continuous Emission Monitoring Systems (CEMS) Field Audit Manual." Information and copies may be obtained by writing to: "US EPA (6204J), Attn: Louis Nichols, 1200 Pennsylvania Ave., NW, Washington, D.C. 20460." This document is also available in electronic format at <http://www.epa.gov/airmarkets/participants/monitoring/audit-manual.html>. The manual can also be obtained for inspection and copying at most public libraries and "The State Library of Ohio."

(b) American Society for Testing Materials (ASTM). Information and copies of documents may be obtained by writing to: "ASTM International, 100 Bar Harbor Drive, P.O. Box C700, West Conshohocken, Pennsylvania 19426- 2959." These documents are also available for purchase at <http://www.astm.org>. ASTM documents are also available for inspection and copying at most public



libraries and "The State Library of Ohio."

(c) "Canadian Standards Association" (CSA). Information and copies of documents may be obtained by writing to: "CSA Group, 178 Rexdale Blvd. Toronto, ON Canada M9W 1R3." These documents are also available for purchase at www.csagroup.org. CSA documents are also available for inspection and copying at most public libraries and "The State Library of Ohio."

(d) Code of Federal Regulations (CFR). Information and copies may be obtained by writing to: "U.S. government printing office, P.O. Box 979050, St. Louis, MO 63197-9000." The full text of the CFR is also available in electronic format at <http://www.ecfr.gov>. The CFR compilations are also available for inspection and copying at most public libraries and "The State Library of Ohio."

(e) Engineering Guides. Information and copies may be obtained by writing to: "Ohio EPA Division of Air Pollution Control, 50 West Town Street, Suite 700, Columbus, OH 43215" or by calling (614) 644-2270. Engineering Guides are also available for downloading at <http://www.epa.ohio.gov/dapc/engineer/eguides.aspx>.

(f) EPA 340/1-86-010 and EPA 450/3-88-008. Information and copies may be obtained by writing to: "US EPA Office of Air Quality Planning and Standards (OAQPS), TTN EMC Webmaster, Mail Code E143-02, Research Triangle Park, NC 27711". These documents can also be obtained for inspection and copying at most public libraries and "The State Library of Ohio."

(g) "Standard Methods for the Examination of Water and Wastewater." Information and copies may be ordered by writing to: "Water Environment Federation, 601 Wythe Street, Alexandria, VA 22314-1994," or by calling 571-830-1545. This document is also available for ordering at <https://www.wef.org/Default.aspx?TabId=192&ProductId=17997>. A copy of the document is also available for inspection and copying at most public libraries and "The State Library of Ohio."

(h) "Underwriters Laboratories" (UL). Information and copies of documents may be obtained by writing to: "UL, 2600 N.W. Lake Rd., Camas, WA 98607-8542." These documents are also available for purchase at www.ul.com. UL documents are also available for inspection and copying at most public libraries and "The State Library of Ohio."



(i) "Underwriters Laboratories of Canada" (ULC). Information and copies of documents may be obtained by writing to: "Underwriters Laboratories of Canada, 7 Underwriters Road Toronto, Ontario, Canada M1R 3A9." These documents are also available for purchase at www.canada.ul.com. ULC documents are also available for inspection and copying at most public libraries and "The State Library of Ohio."

(2) Referenced materials.

(a) 40 CFR 50.6; "National primary and secondary ambient air quality standards for PM₁₀;" as published in the July 1, 2016 Code of Federal Regulations.

(b) 40 CFR 60.13; "Monitoring requirements;" as published in the July 1, 2016 Code of Federal Regulations.

(c) 40 CFR part 50, appendix J; "Reference Method for the Determination of Particulate Matter as PM₁₀ in the Atmosphere;" as published in the July 1, 2016 Code of Federal Regulations.

(d) 40 CFR part 50, appendix K; "Reference Method for the Determination for Particulate Matter;" as published in the July 1, 2016 Code of Federal Regulations.

(e) 40 CFR part 50, appendix L; "Reference Method for the Determination of Fine Particulate Matter as PM_{2.5} in the Atmosphere;" as published in the July 1, 2016 Code of Federal Regulations.

(f) 40 CFR part 50, appendix N; "Interpretation of the National Ambient Air Quality Standards for PM_{2.5};" as published in the July 1, 2016 Code of Federal Regulations.

(g) 40 CFR part 51, appendix P; "Minimum Emission Monitoring Requirements;" as published in the July 1, 2016 Code of Federal Regulations.

(h) 40 CFR part 53; "Ambient Air Monitoring Reference and Equivalent Methods;" as published in the July 1, 2016 Code of Federal Regulations.

(i) 40 CFR part 60, appendix A; "Standards of Performance for New Stationary Sources;" as



published in the July 1, 2016 Code of Federal Regulations.

(j) 40 CFR part 60, appendix B; "Performance Specifications;" as published in the July 1, 2016 Code of Federal Regulations.

(k) "Acid Rain Program Continuous Emission Monitoring Systems (CEMS) Field Audit Manual" July 16, 2003.

(l) ASTM D240-14; "Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter;" approved October 1, 2014.

(m) ASTM D1826-94(2010); "Standard Test Method for Calorific (Heating) Value of Gases in Natural Gas Range by Continuous Recording Calorimeter;" approved May 1, 2010.

(n) ASTM D3174-12; "Standard Test Method for Ash in the Analysis Sample of Coal and Coke from Coal;" approved November 1, 2012.

(o) ASTM D5685-11; "Standard Specification for Fiberglass (Glass-Fiber-Reinforced Thermosetting-Resin) Pressure Pipe Fittings;" approved February 1, 2011.

(p) ASTM E1509-12; "Standard Specification for Room Heaters, Pellet Fuel-Burning Type;" approved October 1, 2012.

(q) ASTM E1602-03(2010)e1; "Standard Guide for Construction of Solid Fuel Burning Masonry Heaters;" approved April 1, 2010.

(r) ASTM E870-82(2013); "Standard Test Methods for Analysis of Wood Fuels;" approved June 1, 2013.

(s) CSA B415.1-10 (R2015); "Performance Testing of Solid-Fuel-Burning Heating Appliances;" approved March 1, 2010.

(t) EPA 340/1-86-010; "Recommended Quality Assurance Procedures Opacity Continuous Emission



Monitoring Systems;" February 1986.

(u) EPA 450/3-88-008; "Control of Open Fugitive Dust Sources;" September, 1988.

(v) Engineering Guide #13; "Procedures for EVEL Determinations;" June 20, 1997.

(w) Engineering Guide #15; "Testing Procedure to Establish EVEL's for Identical Sources;" June 20, 1997.

(x) Section 209(C); "Standard Methods for the Examination of Water and Wastewater;" 22nd Edition, published 2012.

(y) UL-127; "Factory-Built Fireplaces;" approved April 21, 2011.

(z) UL-1482; "Solid-Fuel Type Room Heaters;" approved April 25, 2011.

(aa) UL-737; "Fireplace Stoves;" approved march 21, 2011.

(bb) ULC-S610; "Standard for Factory-Built Fireplaces;" approved October 1, 1998.

(cc) ULC-S627-00; "Standard for Space Heaters for Use with Solid Fuels;" approved June 1, 2000.

(dd) ULC-S628; "Standard for Fireplace Inserts;" approved January 1, 1997.

(ee) ULC ORD-C1482-M1990; "Space Heaters for Use With Particulate Solid Fuels;" approved January 1, 1990.

(ff) USEPA method 3a; contained in 40 CFR part 60, appendix A-2; "Determination of Oxygen and Carbon Dioxide Concentrations in Emissions From Stationary Sources (Instrumental Analyzer Procedure);" as published in the July 1, 2016 Code of Federal Regulations.

(gg) USEPA method 3b; contained in 40 CFR part 60, appendix A-2; "Gas analysis for the determination of emission rate correction factor or excess air;" as published in the July 1, 2016 Code



of Federal Regulations.

(hh) USEPA method 5; contained in 40 CFR part 60, appendix A-3; "Determination of particulate matter emissions from stationary sources;" as published in the July 1, 2016 Code of Federal Regulations.

(ii) USEPA method 5b; contained in 40 CFR part 60, appendix A-3; "Determination of nonsulfuric acid particulate matter emissions from stationary sources;" as published in the July 1, 2016 Code of Federal Regulations.

(jj) USEPA method 9; contained in 40 CFR part 60, appendix A-4; "Visual Determination of the Opacity of Emissions From Stationary Sources;" as published in the July 1, 2016 Code of Federal Regulations.

(kk) USEPA method 22; contained in 40 CFR part 60, appendix A; "Visual determination of fugitive emissions from material sources and smoke emissions from flares;" as published in the July 1, 2016 Code of Federal Regulations.

(ll) USEPA Performance Specification 1; "Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources;" contained in 40 CFR part 60, appendix B; as published in the July 1, 2016 Code of Federal Regulations.