

3745-75-01 **Applicability, definitions, and reference to materials.**

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see the last paragraph of this rule titled "Reference to materials."]

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

(B) For the purpose of Chapter 3745-75 of the Administrative Code:

- (1) "Batch incinerator" means an incinerator which is loaded and undergoes a cycle of combustion, ash burndown, cooling-off and ash removal, prior to being loaded again.
- (2) "Biologicals" means preparations made from living organisms and their products, including but not limited to vaccines and cultures intended for use in diagnosing, immunizing, or treating humans or animals or in research pertaining thereto.
- (3) "Body fluids" means liquid emanating or derived from humans and limited to blood; dialysate; amniotic, cerebrospinal, synovial, pleural, peritoneal and pericardial fluids; and semen and vaginal secretions.
- (4) "Bypass stack" means a device used for discharging combustion gases to avoid severe damage to the air pollution control device or other equipment.
- (5) "Chemotherapeutic waste" means waste material resulting from the production or use of antineoplastic agents used for the purpose of stopping or reversing the growth of malignant cells.
- (6) "Co-fired combustor" means a unit combusting hospital waste and/or medical/infectious waste with other fuels or wastes (e.g., coal, municipal solid waste) and subject to an enforceable requirement limiting the unit to combusting a fuel feed stream, ten per cent of the weight of which is comprised, in aggregate, of hospital waste and medical/infectious waste as measured on a calendar quarter basis. For the purpose of this definition, pathological waste, chemotherapeutic waste, and low-level radioactive waste are considered "other" wastes when calculating the percentage of hospital waste and medical/infectious waste combusted.
- (7) "Continuous duty incinerator" means an incinerator of either a multiple chamber or controlled-air design into which waste can be charged at periodic intervals and from which ash can be removed at periodic intervals, without an ash burndown and cooling-off cycle.

- (8) "Continuous temperature recorder" means a device, which uses a temperature sensor (such as a thermocouple), that is part of an instrument which continuously monitors and records the temperature at a specific location in an air pollution source.
- (9) "Dioxin" means total tetra- through octachlorinated dibenzo-p-dioxins (PCDDs), as measured by USEPA method 23.
- (10) "Dry scrubber" means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gases in the HMIWI exhaust stream forming a dry powdery material.
- (11) "Fabric filter" or "baghouse" means an add-on pollution control system that removes particulate matter (PM) and nonvaporous metals emissions by passing flue gas through filter bags.
- (12) "Facilities manager" means the individual in charge of purchasing, maintaining, and operating the HMIWI or the owner's or operator's representative responsible for the management of the HMIWI. Alternative titles may include director of facilities or vice president of support services.
- (13) "Furan" means total tetra- through octachlorinated dibenzofurans (PCDFs), as measured by USEPA method 23.
- (14) "High-air phase" means the stage of the batch operating cycle when the primary chamber reaches and maintains maximum operating temperatures.
- (15) "Hospital" means any facility which has an organized medical staff, maintains at least six inpatient beds, and where the primary function of the institution is to provide diagnostic and therapeutic patient services and continuous nursing primarily to human inpatients who are not related and who stay on average in excess of twenty-four hours per admission. This definition does not include facilities maintained for the sole purpose of providing nursing or convalescent care to human patients who generally are not acutely ill but who require continued medical supervision.
- (16) "Hospital waste" means discards generated at a hospital, except unused items returned to the manufacturer. The definition of hospital waste does not include human corpses, remains, and anatomical parts that are intended for interment or cremation.
- (17) "Hospital waste incinerator" means any device used to provide the combustion of hospital waste.

- (18) "Hospital/medical/infectious waste incinerator" or "HMIWI" or "HMIWI unit" means any device that combusts any amount of hospital waste and/or medical/infectious waste.
- (19) "Infectious agent" means a type of microorganism, helminth or virus that causes, or significantly contributes to the cause of, increased morbidity or mortality of human beings.
- (20) "Intermittent feed incinerator" means an incinerator of either a multiple chamber or controlled-air design into which waste can be charged at periodic intervals and from which ash is removed after a burndown and cooling-off cycle.
- (21) "Large HMIWI" means a continuous duty or intermittent feed HMIWI whose maximum charge rate is more than five hundred pounds per hour, or a batch HMIWI whose maximum charge rate is more than four thousand pounds per day.
- (22) "Low-level radioactive waste" means waste material which contains radioactive nuclides emitting primarily beta or gamma radiation, or both, in concentrations or quantities that exceed applicable federal or state standards for unrestricted release. Low-level radioactive waste is not high-level radioactive waste, spent nuclear fuel, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC 2014(e)(2)).
- (23) "Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused, in part, by poor maintenance or careless operation are not malfunctions. During periods of malfunction the operator shall operate within established parameters as much as possible, and monitoring of all applicable operating parameters shall continue until all waste has been combusted or until the malfunction ceases, whichever comes first.
- (24) "Maximum charge rate" means
- (a) For continuous-duty and intermittent-feed incinerators, one hundred ten per cent of the lowest three-hour average charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits.
 - (b) For batch incinerators, one hundred ten per cent of the lowest daily charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits.
- (25) "Maximum fabric filter inlet temperature" means one hundred ten per cent on the absolute scale of the lowest three-hour average temperature at the inlet to the

fabric filter (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the dioxin/furan emission limit.

- (26) "Maximum flue gas temperature" means one hundred ten per cent on the absolute scale of the lowest three-hour average temperature at the outlet from the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the mercury emission limit.
- (27) "Medical/infectious wastes" include all of the following substances or categories of substances:
- (a) Cultures and stocks of infectious agents and associated biologicals, including, without limitation, specimen cultures, cultures and stocks of infectious agents, wastes from production of biologicals, discarded live and attenuated vaccines, and culture dishes and devices used to transfer, inoculate, and mix cultures;
 - (b) Laboratory wastes that were, or are likely to have been, in contact with infectious agents that may present a substantial threat to public health if improperly managed;
 - (c) Human pathological waste, including tissues, organs, and body parts and body fluids that are removed during surgery or autopsy, or other medical procedures, and specimens of body fluids and their containers;
 - (d) Waste materials from the rooms of humans, or the enclosures of animals, that have been isolated because of diagnosed communicable disease that are likely to transmit infectious agents. Also included are waste materials from the rooms of patients who have been placed on blood and body fluid precautions under the universal precaution system established by the "Centers for Disease Control" in the public health service of the United States department of health and human services, if specific wastes generated under the universal precautions system have been identified as infectious wastes by rules referred to in paragraph (B)(27)(i) of this rule;
 - (e) Human blood and blood products, including:
 - (i) Liquid waste human blood;
 - (ii) Products of blood;
 - (iii) Items saturated and/or dripping with human blood; and

- (iv) Items that were saturated and/or dripping with human blood that are now caked with dried human blood; including serum, plasma, and other blood components, and their containers, which were used or intended for use in either patient care, testing and laboratory analysis or the development of pharmaceuticals. Intravenous bags are also included in this category. The category does not include patient care waste such as bandages or disposable gowns that are lightly soiled with blood or other body fluids, unless such wastes are soiled to the extent that the generator of the wastes determined that they should be managed as infectious wastes;
 - (f) Contaminated carcasses, body parts, and bedding of animals that were intentionally exposed to infectious agents from zoonotic or human diseases during research, production of biologicals, or testing of pharmaceutical products, and carcasses and bedding of animals otherwise infected by zoonotic or infectious agents that may present a substantial threat to public health if improperly managed;
 - (g) Sharp wastes used in the treatment, diagnosis, or inoculation of human beings or animals or that have, or are likely to have, come in contact with infectious agents in medical, research or industrial laboratories, including, but not limited to, hypodermic needles and syringes, scalpel blades, and glass articles whether broken or unbroken;
 - (h) Unused sharps including unused, discarded hypodermic needles, suture needles, syringes and scalpel blades;
 - (i) Any other waste materials generated in the diagnosis, treatment or immunization of human beings or animals, in research pertaining thereto or in the production or testing of biological materials, that the public health council created in section 3701.33 of the Revised Code, by rules adopted in accordance with Chapter 119. of the Revised Code, identifies as infectious wastes after determining that the wastes present a substantial threat to human health when improperly managed because they are contaminated with, or are likely to be contaminated with, infectious agents; and
 - (j) Any other waste materials the generator designates as infectious waste.
- (28) "Medical/infectious waste incinerator" means any device used to provide the combustion of medical/infectious waste.
- (29) "Medium HMIWI" means a continuous duty or intermittent feed HMIWI whose maximum charge rate is more than two hundred pounds per hour and less than or equal to five hundred pounds per hour, or a batch HMIWI whose maximum charge rate is more than one thousand six hundred pounds per day and less than or equal to four thousand pounds per day.

- (30) "Minimum dioxin/furan sorbent flow rate" means ninety per cent of the highest three-hour average dioxin/furan sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the dioxin/furan emission limit.
- (31) "Minimum horsepower or amperage" means ninety per cent of the highest three-hour average horsepower or amperage to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable emission limits.
- (32) "Minimum hydrogen chloride sorbent flow rate" means ninety per cent of the highest three-hour average hydrogen chloride sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the hydrogen chloride emission limit.
- (33) "Minimum mercury sorbent flow rate" means ninety per cent of the highest three-hour average mercury sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the mercury emission limit.
- (34) "Minimum pressure drop across the wet scrubber" means ninety per cent of the highest three-hour average pressure drop across the wet scrubber particulate-matter control device (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the particulate-matter emission limit.
- (35) "Minimum scrubber liquor flow rate" means ninety per cent of the highest three-hour average liquor flow rate at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with all applicable emission limits.
- (36) "Minimum scrubber liquor pH" means ninety per cent of the highest three-hour average liquor pH at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the hydrogen chloride emission limit.
- (37) "Minimum secondary chamber temperature" means ninety per cent on the absolute scale of the highest three-hour average secondary chamber temperature (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the particulate matter, carbon monoxide, and dioxin/furan limits.
- (38) "Modification" means any change to an HMIWI such that

- (a) The cumulative costs of the modifications, over the life of the unit, exceed fifty per cent of the original cost of the construction and installation of the unit (not including the cost of any land purchased in connection with such construction or installation) updated to current costs, or
 - (b) The change involves a physical change in or change in the method of operation of the unit which increases the amount of any air pollutant emitted by the unit for which standards have been established under Section 129 or Section 111 of the Clean Air Act.
- (39) "Off-site facility" means a medical/infectious waste incinerator that burns any medical/infectious waste from a generator that is located off-site from the location of the medical/infectious waste incinerator.
- (40) "Operating day" means a twenty-four hour period between twelve a.m. and the following midnight during which any amount of hospital waste or medical/infectious waste is combusted at any time in the HMIWI.
- (41) "Operator" means the person with immediate responsibility for keeping the incinerator and related equipment within the proper operating range of temperature and emission rate, and assuring that overcharging or loading of prohibited materials does not occur. The term does not include those personnel whose responsibilities consist merely of loading waste into the incinerator, so long as such loading operation is subject to the knowledge and control of a properly qualified operator.
- (42) "Pathological waste" means waste material consisting of only human or animal remains, anatomical parts, and/or tissue, the bags/containers used to collect and transport the waste material, and animal bedding if applicable.
- (43) "Primary chamber" means the chamber in an HMIWI that receives waste material, in which the waste is ignited, and from which ash is removed.
- (44) "Pyrolysis" means the endothermic gasification of hospital waste and/or medical/infectious waste using external energy.
- (45) "Retention time" means the average time for gases to pass through a chamber. The retention time of the secondary chamber of an incinerator shall be calculated using the volume of the secondary chamber divided by the actual volumetric flow rate emitted from the secondary chamber at maximum operating temperature and burning rate.
- (46) "Secondary chamber" means a component of the HMIWI that receives combustion gases from the primary chamber and in which the combustion process is completed.

- (47) "Shutdown" means the period of time after all waste has been combusted in the primary chamber. For continuous HMIWI, shutdown shall commence no less than two hours after the last charge to the incinerator. For intermittent HMIWI, shutdown shall commence no less than four hours after the last charge to the incinerator. For batch HMIWI, shutdown shall commence no less than five hours after the high-air phase of combustion has been completed.
- (48) "Small HMIWI" means a continuous duty or intermittent feed HMIWI whose maximum charge rate is less than or equal to two hundred pounds per hour, or a batch HMIWI whose maximum charge rate is less than or equal to one thousand six hundred pounds per day.
- (49) "USEPA" means United States environmental protection agency.
- (50) "Startup" means the period of time between the activation of the system and the first charge to the unit. For batch HMIWI, startup means the period of time between activation of the system and ignition of the waste.
- (51) "Wet scrubber" means an add-on air pollution control device that utilizes an alkaline scrubbing liquor to collect particulate matter (including nonvaporous metals and condensed organics) and/or to absorb and neutralize acid gases.
- (52) "Zoonotic agent" means a type of microorganism, helminth, or virus that causes disease in vertebrate animals and that is transmissible to human beings and causes or significantly contributes to the cause of increased morbidity or mortality of human beings.
- (C) This chapter applies to the owner or operator of any medical/infectious or hospital waste incinerator except the following:
- (1) Incinerators that burn infectious wastes generated by individuals for purposes of their own care or treatment that are disposed of with solid waste from the individual's residence.
 - (2) Crematories that only combust human remains and coffins.
 - (3) Veterinary clinics and animal shelters that only burn carcasses and bedding of animals not intentionally exposed to infectious agents during research, production of biological material, or testing of pharmaceutical products, unless the improper disposal of those materials would present a substantial threat to public health.
 - (4) Incinerators on which construction was commenced after June 20, 1996.
 - (5) Incinerators on which modification was commenced after March 16, 1998.

(6) Any combustor during periods in which only pathological waste, low-level radioactive waste, and/or chemotherapeutic waste are burned, provided the owner or operator

(a) Notifies the director and the USEPA of an exemption claim; and

(b) Keeps records on a calendar quarter basis of the periods of time when only pathological waste, low-level radioactive waste, and/or chemotherapeutic waste are burned.

[Note: a combustor exempted under this paragraph is subject to the requirements for pathological waste incinerators under Chapter 3745-105 of the Administrative Code.]

(7) Any co-fired combustor, provided the owner or operator

(a) Notifies the director and the USEPA of an exemption claim;

(b) Provides an estimate of the relative weight of hospital waste, medical/infectious waste, and other fuels and/or wastes to be combusted; and

(c) Keeps records on a calendar quarter basis of the weight of hospital waste and medical/infectious waste combusted, and the weight of all other fuels and wastes combusted at the co-fired combustor.

(8) Any combustor required to have a permit under section 3005 of the Solid Waste Disposal Act.

(9) Any combustor which meets the applicability requirements under 40 CFR Part 60, subpart Cb; 40 CFR Part 60, subpart Ea; or 40 CFR Part 60, subpart Eb (standards or guidelines for certain municipal waste combustors).

(10) Cement kilns.

(11) Any pyrolysis unit as defined by this rule.

(D) Reference to materials. This chapter includes references to certain matter or materials. The text of the referenced material is not included in the rules contained in this chapter. Information on the availability of the referenced materials as well as the date of, and/or the particular edition or version of the material is included in this rule. For materials subject to change, only the specific versions specified in this rule are referenced. Material is referenced 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 applicable unless and until this rule has been amended to specify the new dates.

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

- (a) "An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities." Information and copies may be obtained from the American Hospital Association, Chicago, Illinois, 1993, AHA catalogue number 057007, ISBN 0-87258-673-5. The publication is also available on their website at: www.aha.org. Copies of this publication are also available for inspection and copying at most public libraries and "The State Library of Ohio."
- (b) Clean Air Act. Information and copies may be obtained by writing to: "Superintendent of Documents, Attn: New Orders, PO Box 371954, Pittsburgh, PA 15250-7954." The full text of the Act as amended in 1990 is also available in electronic format at www.epa.gov/oar/caa/. A copy of the Act is also available for inspection and copying at most public libraries and "The State Library of Ohio."
- (c) Code of Federal Regulations. Information and copies may be obtained by writing to: "Superintendent of Documents, Attn: New Orders, PO Box 371954, Pittsburgh, PA 15250-7954." The full text of the CFR is also available in electronic format at www.access.gpo.gov/nara/cfr. The CFR compilations are also available for inspection and copying at most public libraries and "The State Library of Ohio."
- (d) United States Code. Information and copies may be obtained by writing to: "Superintendent of Documents, Attn: New Orders, PO Box 371954, Pittsburgh, PA 15250-7954." The full text of the U.S.C. is also available in electronic format at www.access.gpo.gov/uscode/index.html. The U.S.C. compilations are also available for inspection and copying at most public libraries and "The State Library of Ohio."

(2) Referenced materials.

- (a) 40 CFR 60.7; "Notification and record keeping;" as published in the July 1, 2008 Code of Federal Regulations.
- (b) 40 CFR 60.13; "Monitoring requirements;" as published in the July 1, 2008 Code of Federal Regulations.
- (c) 40 CFR Part 60; "Standards of Performance for New Stationary Sources;" as published in the July 1, 2008 Code of Federal Regulations.
- (d) 40 CFR Part 60, Appendix A-4; "Test Methods 6 through 10B;" as published in the July 1, 2008 Code of Federal Regulations.

- (e) 40 CFR Part 60, Appendix B; "Performance Specifications;" as published in the July 1, 2008 Code of Federal Regulations.
- (f) 40 CFR Part 60, Appendix F; "Quality Assurance Procedures;" as published in the July 1, 2008 Code of Federal Regulations.
- (g) 40 CFR Part 60, Subpart Cb; "Emission Guidelines and Compliance Times for Large Municipal Waste Combustors That Are Constructed on or Before September 20, 1994," as published in the July 1, 2008 Code of Federal Regulations.
- (h) 40 CFR Part 60, Subpart Ea; "Standards of Performance for Municipal Waste Combustors for Which Construction is Commenced After December 20, 1989 and on or Before September 20, 1994," as published in the July 1, 2008 Code of Federal Regulations.
- (i) 40 CFR Part 60, Subpart Eb; "Standards of Performance for Large Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994 or for Which Modification or Reconstruction Is Commenced After June 19, 1996," as published in the July 1, 2008 Code of Federal Regulations.
- (j) 40 CFR Part 60, Subpart Ec; "Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996;" as published in the July 1, 2008 Code of Federal Regulations.
- (k) 40 CFR Part 60, Subpart HHH; "Federal Plan Requirements for Hospital/Medical/Infectious Waste Incinerators Constructed on or Before June 20, 1996," as published in the July 1, 2008 Code of Federal Regulations.
- (l) 40 CFR 62.14470; "When must I comply with this subpart if I plan to continue operation of my HMIWI?;" as published in the July 1, 2008 Code of Federal Regulations.
- (m) 40 CFR 62.14471; "When must I comply with this subpart if I plan to shut down?;" as published in the July 1, 2008 Code of Federal Regulations.
- (n) 42 USC 4012; "Definitions;" published January 2, 2006 in Supplement V of the 2000 Edition of the United States Code.
- (o) "An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities;" as published April 1, 1993.

- (p) Section 111 of the Clean Air Act; contained in 42 USC 7411; "Standards of performance for new stationary sources;" published January 2, 2006 in Supplement V of the 2000 Edition of the United States Code.
- (q) Section 129 of the Clean Air Act; contained in 42 USC 7429; "Solid Waste Combustion;" published January 2, 2006 in Supplement V of the 2000 Edition of the United States Code.
- (r) Section 3005 of the Solid Waste Disposal Act; contained in 42 USC 6925; "Permits for treatment, storage, or disposal of hazardous waste;" published January 2, 2006 in Supplement V of the 2000 Edition of the United States Code.
- (s) USEPA method 1; "Sample and Velocity Traverses for Stationary Sources;" as contained in 40 CFR Part 60, Appendix A; as published in the July 1, 2008 Code of Federal Regulations.
- (t) USEPA method 3; "Gas Analysis for the Determination of Dry Molecular Weight;" as contained in 40 CFR Part 60, Appendix; as published in the July 1, 2008 Code of Federal Regulations.
- (u) USEPA method 3A; "Determination of Oxygen and Carbon Dioxide Concentrations in Emissions From Stationary Sources (Instrumental Analyzer Procedure);" as contained in 40 CFR Part 60, Appendix A; as published in the July 1, 2008 Code of Federal Regulations.
- (v) USEPA method 3B; "Gas analysis for the determination of emission rate correction factor or excess air;" as contained in 40 CFR Part 60, Appendix A; as published in the July 1, 2008 Code of Federal Regulations.
- (w) USEPA method 5; "Determination of Particulate Emissions From Stationary Sources;" as contained in 40 CFR Part 60, Appendix A; as published in the July 1, 2008 Code of Federal Regulations.
- (x) USEPA method 9; "Visual Determination of the Opacity of Emissions from Stationary Sources;" as contained in 40 CFR Part 60, Appendix A; as published in the July 1, 2008 Code of Federal Regulations.
- (y) USEPA method 10; "Determination of Carbon Monoxide Emissions From Stationary Sources;" as contained in 40 CFR Part 60, Appendix A; as published in the July 1, 2008 Code of Federal Regulations.
- (z) USEPA method '10B;' "Determination of Carbon Monoxide Emissions From Stationary Sources;" as contained in 40 CFR Part 60, Appendix A as published in the July 1, 2008 Code of Federal Regulations.

- (aa) USEPA method 23; "Determination of Polychlorinated Dibenzo-P-dioxins and Polychlorinated Dibenzofurans From Stationary Sources;" as contained in 40 CFR Part 60, Appendix A; as published in the July 1, 2008 Code of Federal Regulations.
- (bb) USEPA method 26; "Determination of Hydrogen Halide and Halogen Emissions From Stationary Sources Non-Isokinetic Method;" as contained in 40 CFR Part 60, Appendix A; as published in the July 1, 2008 Code of Federal Regulations.
- (cc) USEPA method 26A; "Determination of hydrogen halide and halogen emissions from stationary sources - isokinetic method;" as published in the July 1, 2008 Code of Federal Regulations.
- (dd) USEPA method 29; "Determination of Metals Emissions From Stationary Sources;" as contained in 40 CFR Part 60, Appendix A; as published in the July 1, 2008 Code of Federal Regulations.
- (ee) Section 3005 of the Solid Waste Disposal Act; contained in 42 USC 6925; "Permits for treatment, storage, or disposal of hazardous waste;" published January 2, 2006 in Supplement V of the 2000 edition of the United States Code.

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