

Chapter 3745-20 Asbestos Emission Control

3745-20-01 Definitions and incorporation by reference.

[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 "Incorporation by reference" section at the end of this rule.]

(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) The following definitions shall apply exclusively to this chapter:

(1) "Active waste disposal site" means any disposal site of asbestos materials other than an inactive disposal site.

(2) "Adequately wet" means sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed coming from asbestos-containing material, then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wet.

(3) "Asbestos" means the asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite, anthophyllite, and actinolite-tremolite, as determined using the method specified in 40 CFR, Part 763, Subpart E, Appendix E, Section 1, Polarized Light Microscopy (PLM).

(4) "Asbestos-containing waste materials" means mill tailings or any waste that contains commercial asbestos and is generated by a source subject to the provisions of this chapter. This term includes filters from control devices, friable asbestos-containing material, and bags or other similar packaging contaminated with commercial asbestos. As applied to demolition and renovation operations, this term also includes regulated asbestos-containing material waste and materials contaminated with asbestos including disposable equipment and clothing.

(5) "Asbestos material" means asbestos or any material containing asbestos.

(6) "Asbestos mill" means any facility engaged in converting, or in any intermediate step in converting, asbestos ore into commercial asbestos. Outside storage of asbestos material is not considered a part of the asbestos mill.

(7) "Asbestos tailings" means any solid waste that contains asbestos and is a product of asbestos mining or milling operations.

(8) "Asbestos waste from control devices" means any waste material that contains asbestos and is collected by a pollution control device.

(9) "Category I nonfriable asbestos-containing material" means asbestos-containing packing, gaskets, resilient floor covering, and asphalt roofing products containing more than one per cent asbestos as determined using the method specified in 40 CFR Part 763, Subpart E, Appendix E, Section 1, Polarized Light Microscopy (PLM).

(10) "Category II nonfriable asbestos-containing material" means any material, excluding Category I nonfriable asbestos-containing material, containing more than one percent asbestos as determined using the method specified in 40 CFR Part 763, Subpart E, Appendix E, Section 1, Polarized Light Microscopy (PLM), that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

(11) "Commercial asbestos" means any material containing asbestos that is extracted from ore and has value because of its asbestos content.

(12) "Cutting" means to penetrate with a sharp-edged instrument and includes sawing, but does not include shearing, slicing, or punching.

(13) "Demolition" means the wrecking, or taking out of any load-supporting structural member of a facility together with any related handling operations or the intentional burning of any facility.

(14) "Emergency demolition" means any demolition operation conducted under a written order issued by a state or local governmental agency because a facility is structurally unsound and in danger of imminent collapse.

(15) "Emergency renovation operation" means a renovation operation that was not planned but results from a sudden, unexpected event that, if not immediately attended to, presents a safety or public health hazard, is necessary to protect equipment from damage, or is necessary to avoid imposing an unreasonable financial burden. This term includes operations necessitated by nonroutine failures of equipment.

(16) "Encapsulate" means to coat, bind or resurface walls, ceilings, pipes or other structures or asbestos-containing materials with suitable products to prevent friable asbestos from becoming airborne.

(17) "Fabricating" means any processing (including but not limited to cutting, sawing, drilling) of a manufactured product that contains commercial asbestos, with the exception of processing at temporary sites (field fabricating) for the construction or restoration of facilities. In the case of friction products, fabricating includes bonding, debonding, grinding, sawing, drilling, or other similar operations performed as part of fabricating.

(18) "Facility" means any institutional, commercial, public, industrial or residential structure, installation, or building (including any structure, installation, or building containing condominiums or individual dwelling units operated as a residential cooperative, but excluding residential buildings having four or fewer dwelling units); any ship; and any active or inactive waste disposal site. For purposes of this definition, any structure, installation or building that contains a loft used as a dwelling is not considered a residential structure, installation or building. Any structure, installation or building that was previously subject to this rule due to its prior use or function is not excluded, regardless of its current use or function.

(19) "Facility component" means any part of a facility, including but not limited to any structural member, pipe, duct, boiler, tank, reactor, turbine, furnace, or other equipment at or in a facility; or any structural member of a facility.

(20) "Friable asbestos material" means any material containing more than one per cent asbestos by area, as determined using the method specified in 40 CFR Part 763, Subpart E, Appendix E, Section 1 Polarized Light Microscopy (PLM), that, when dry can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than ten percent as determined by a method other than point counting by Polarized Light Microscopy, verify the asbestos content by point counting using Polarized Light Microscopy.

(21) "Fugitive source" means any source of emissions not controlled by an air pollution control device.

(22) "General ventilation device" means any air moving device specifically designed for increasing air flow through an area and exhausting the air through a HEPA filter in such a way that there is no bypass of air around the filter.

(23) "Glove bag" means a sealed compartment with attached inner gloves used for the handling of asbestos-containing materials.

(24) "Grinding" means to reduce to powder or small fragments and includes mechanical chipping or drilling.

(25) "HEPA filter" means a high efficiency particulate air filter certified by the manufacturer to have a collection efficiency of not less than ninety-nine and ninety-seven one hundredths per cent as determined by ASTM Method D-2986-71.

(26) "In poor condition" means the binding of the material is losing its integrity as indicated by peeling, cracking, or crumbling of the material.

(27) "Inactive waste disposal site" means any disposal site or portion thereof, which contains asbestos-containing waste materials, but where such material has not been deposited within the past year.

(28) "Installation" means any building or structure or any group of buildings or structures at a single demolition or renovation site that are under the control of the same owner or operator, or owner or operator under common control.

(29) "Leak-tight" means that liquids cannot escape or spill out. It also means dust-tight.

(30) "Local exhaust ventilation and collection system" means equipment designed to collect or capture particulate material at the point of generation and which exhausts air through a HEPA filter so that there is no bypass of air around the filter.

(31) "Malfunction" means any sudden and unavoidable failure of air pollution control equipment or process equipment, or the failure of a process to operate in a normal or usual manner so that asbestos emissions are increased. Failures of equipment shall not be considered malfunctions if they are caused in any way by poor maintenance, careless operation, or any other preventable upset conditions, equipment breakdown, or process failure.

(32) "Manufacturing" means the combining of commercial asbestos, or, in the case of woven friction products, the combining of textiles containing commercial asbestos, with any other materials (s), including commercial asbestos, and the processing of this combination into a product. Chlorine production is considered a part of manufacturing.

(33) "Natural barrier" means a natural object that effectively precludes or deters access. Natural barriers include physical obstacles such as cliffs, lakes, or other large bodies of water, deep and wide ravines, and mountains. Remoteness by itself is not a natural barrier.

(34) "NESHAP" means national emission standards for hazardous air pollutants.

(35) "Nonfriable asbestos-containing material" means any material containing more than one percent asbestos as determined using the method specified in 40 CFR Part 763, Subpart E, Appendix E, Section 1, Polarized Light Microscopy (PLM) that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

(36) "Nonscheduled renovation operation" means a renovation operation necessitated by the routine failure of equipment, which is expected to occur within a given period based on past operating experience, but for which an exact date cannot be predicted.

(37) "Ohio EPA field office" means any Ohio environmental protection agency district office or local air agency.

(38) "Outside air" means the air outside buildings and structures, including, but not limited to, the air under a bridge or in an open air ferry dock.

(39) "Owner or operator" means:

(a) As it applies to rules [3745-20-02](#) to [3745-20-05](#) of the Administrative Code, any person who owns, leases, operates, controls, or supervises the facility being demolished or renovated or any person who owns, leases, operates, controls or supervises the demolition or renovation, or both; or

(b) As it applies to rules [3745-20-06](#) to [3745-20-07](#) of the Administrative Code, any person who owns, leases, operates, controls, or supervises an active or inactive asbestos waste disposal site or operation; or

(c) As it applies to rules [3745-20-08](#) to [3745-20-15](#) of the Administrative Code, any person who owns, leases, operates, controls, or supervises the activities referenced in those rules.

(40) "Particulate asbestos material" means finely divided particles of asbestos or material containing asbestos.

(41) "Planned renovation operations" means any renovation operation, or a number of such operations, in which some regulated asbestos-containing material will be removed or stripped within a given period of time and that can be predicted. Individual nonscheduled operations are included if a number of such operations can be predicted to occur during a given period of time, based on operating experience.

(42) "Regulated asbestos-containing material" means:

(a) Friable asbestos material;

(b) Category I nonfriable asbestos-containing material that has become friable;

(c) Category I nonfriable asbestos-containing material that will be or has been subjected to sanding, grinding, cutting, or abrading; or

(d) Category II non friable asbestos-containing material that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this chapter.

(43) "Remove" means to take out regulated asbestos-containing material or facility components that contain or are covered with regulated asbestos-containing material from any facility.

(44) "Renovation" means altering a facility or one or more facility components in any way, including the stripping or removal of regulated asbestos-containing material from a facility component. Operations in which load-supporting structural members are wrecked or taken out are demolitions.

(45) "Resilient floor covering" means asbestos-containing floor tile, including asphalt and vinyl floor tile, and sheet vinyl floor covering containing more than one percent asbestos as determined using the method specified in 40 CFR Part 763, Subpart E, Appendix E, Section 1, Polarized Light Microscopy (PLM).

(46) "Roadways" means surfaces on which vehicles travel. This term includes public and private highways, roads, streets, parking areas, and driveways.

(47) "Strip" means to take off regulated asbestos-containing material from any part of a facility or facility components.

(48) "Structural member" means any load-supporting member of a facility, such as beams and load supporting walls; or any nonload-supporting member such as ceilings and nonload-supporting walls.

(49) "USEPA" means United States environmental protection agency.

(50) "Visible emissions" means any emissions that are visually detectable without the aid of instruments, coming from regulated asbestos-containing material or asbestos-containing waste material, or from any asbestos milling, manufacturing, or fabricating operation. This does not include condensed uncombined water vapor.

(51) "Waste generator" means any owner or operator of a source subject to this chapter whose act or process produces asbestos-containing waste material.

(52) "Waste shipment record" means the shipping document, required to be originated and signed by the waste generator, used to track and substantiate the disposition of asbestos-containing waste material.

(53) "Working day" means Monday through Friday and includes holidays that fall on any of the days Monday through Friday.

(C) Incorporation by reference. This chapter includes references to certain matter or materials. The text of the incorporated 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 version 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 incorporated by reference are available as follows:

(a) 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."

(b) Specifications of the "American Society for Testing and Materials." Information and copies may be obtained by writing to: "ASTM International, 100 Bar Harbor Drive, P.O. Box C700, West Conshohocken, Pennsylvania 19426-2959." These documents are available for purchase at www.astm.org. ASTM documents are also generally available at local public libraries and "The State Library of Ohio."

(c) "Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects." Information and copies may be obtained by writing to: "Federal Highway Administration HFPD-3, 400 Seventh Street, SW, Washington D.C. 20590." The full text of the document is also available in electronic format at <http://www.wfl.fhwa.dot.gov/design/specs/>. The document is also available for inspection and copying at most public libraries and "The State Library of Ohio."

(2) Incorporated materials.

(a) 29 CFR 1910.145(d)(4) ; "Specifications for accident prevention signs and tags;" as published in the July 1, 2006 Code of Federal Regulations.

(b) 40 CFR 61.154 ; "Standard for active waste disposal sites;" as published in the July 1, 2006 Code of Federal Regulations.

(c) 40 CFR Part 61, Appendix A; "National Emission Standards for Hazardous Air Pollutants Compliance Status Information Source Report;" 40 FR 48303, Oct.14, 1975, as amended at 43 FR 8800, March 3, 1978 and 50 FR 46295, Sept. 9, 1985.

(d) 40 CFR Part 61, Subpart M; "National Emission Standards for Hazardous Air Pollutants;" 38 FR 8820, Apr. 6, 1973, as amended at 55 FR 48414, Nov. 20, 1990.

(e) 40 CFR Part 763; "Asbestos;" 52 FR 41846, Oct. 30, 1987.

(f) 40 CFR Part 763, Appendix E, Subpart E, Section 1; "Polarized Light Microscopy (PLM), Interim Method of the Determination of Asbestos in Bulk Insulation Samples;" 47 FR 23369, May 27, 1982 and 47 FR 38535, Sept. 1, 1982. Redesignated at 60 FR 31922, June 19, 1995.

(g) ASTM D737-75; "Test Method for Air Permeability of Textile Fabrics," originally approved 1975, reapproved, Dec. 1, 2004.

(h) ASTM D-2986-71, "Standard Test Method for Collection Efficiency of High Efficiency Particulate Air Filter;" approved 1971, as amended on Jan. 15, 1995 and Sept. 10, 1995; and reapproved in 1999.

(i) Section 401 of FP-03; "Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects;" United States department of transportation, federal highway administration (FHWA); adopted 1985 (FP-85); revised 1996 (FP-96), 2003 (FP-03).

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[3745-20-02 Standards for demolition and renovation, facility inspection, and determination of applicability.](#)

(A) Notwithstanding any other exclusion of this rule, and to determine which requirements of this rule and of rules [3745-20-03](#) and [3745-20-04](#) of the Administrative Code apply, each owner or operator of any demolition or renovation operation shall have the affected facility or part of the facility where a demolition or renovation operation will occur thoroughly inspected by a certified asbestos hazard evaluation specialist, in accordance with paragraph (C) of rule [3701-34-02](#) of the Administrative Code prior to the commencement of the demolition or renovation for the presence of asbestos, including category I and category II nonfriable asbestos-containing material.

Note: Inspections pursuant to paragraph (A) of this rule are subject to the Ohio department of health regulations under paragraph (C) of rule [3701-34-02](#) of the Administrative Code which states in part that no person shall identify, detect, or assess asbestos containing materials,[or] determine appropriate response actions unless he or she is certified as an asbestos hazard evaluation specialist by the director of the Ohio department of health in accordance with Chapter 3710. of the Revised Code.

(B) The requirements of rules [3745-20-03](#), [3745-20-04](#), and [3745-20-05](#) of the Administrative Code apply to each owner or operator of a demolition or renovation operation as follows:

(1) If the combined amount of regulated asbestos-containing material is at least two hundred sixty linear feet on pipes or at least one hundred sixty square feet on other facility components, or at least thirty-five cubic feet off facility components where the length or area could not be measured previously in a facility being demolished, all the requirements of rules [3745-20-03](#), [3745-20-04](#), and [3745-20-05](#) of the Administrative Code apply, except as provided in paragraph (B)(3) of this rule.

(2) If the combined amount of regulated asbestos-containing material is less than two hundred sixty linear feet on pipes and less than one hundred sixty square feet on other facility components, and less than thirty-five cubic feet off facility components where the length or area could not be measured previously or if there is no asbestos-containing material in a facility being demolished, only the notification requirements of paragraphs (A)(1), (A)(2), (A)(3)(a), and (A)(3)(d)(i) to (A)(3)(d)(iii), and (A)(4)(a) to (A)(4)(h), (A)(4)(m) and (A)(4)(n), and (D)(1) to (D)(3), and (E) of rule [3745-20-03](#) of the Administrative Code apply.

(3) If the operation is an emergency demolition, the requirements of paragraphs (A)(1), (A)(2), (A)(3)(c), (A)(4) {except (A)(4)(i)}, (B), and (C) of rule [3745-20-03](#), and paragraphs (A)(4) to (A)(7), (B) and (D) of rule [3745-20-04](#), and rule [3745-20-05](#) of the Administrative Code apply.

(4) In a facility being renovated, including any individual nonscheduled renovation operation, all the requirements of rules [3745-20-03](#), [3745-20-04](#) and [3745-20-05](#) of the Administrative Code apply if the combined amount of regulated asbestos-containing material to be stripped, removed, dislodged, cut, drilled, or similarly disturbed is at least two hundred sixty linear feet on pipes or at least one hundred sixty square feet on other facility components, or at least thirty-five cubic feet off facility components where the length or area could not be measured previously.

(a) Paragraph (B)(4) of this rule applies to planned renovation operations involving a series of individual nonscheduled operations, that individually are exempt from this chapter, if the combined amount of regulated asbestos-containing material to be removed or striped during a calendar year, January first through December thirty-first, exceeds two hundred sixty linear feet on pipes or at least one hundred sixty square feet on other facility components or thirty-five cubic feet off facility components.

(b) Paragraph (B)(4) of this rule applies to emergency renovation operations if the combined amount of regulated asbestos-containing material to be removed or stripped as a result of the sudden, unexpected event that necessitated the renovation exceeds two hundred sixty linear feet on pipes or at least one hundred sixty square feet on facility components or thirty-five cubic feet off facility components.

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3745-20-03 Standard for notification prior to demolition or renovation.

(A) Each owner or operator to whom this rule applies shall:

(1) Provide the director of Ohio EPA with written notice of intention to demolish or renovate.

(2) Delivery of the notice shall be by the United States postal service, commercial delivery service, or hand delivery. Update notice, as necessary, including when the amount of asbestos affected changes by at least twenty percent.

(3) Postmark or deliver the notice to the Ohio EPA field office having jurisdiction in the county where the demolition or renovation is to occur as follows:

(a) At least ten working days before the beginning of any demolition operation, asbestos stripping or removal work, or any other activity including salvage activities and preparations that break up, dislodge or similarly disturb asbestos material if the operation is a demolition or renovation operation subject to this rule; or

(b) At least ten working days before the end of the calendar year preceding the year for which notice is being given for individual nonscheduled renovations described in paragraph (B)(4)(a) of rule [3745-20-02](#) of the Administrative Code; or

(c) As early as possible before, but not later than, the following working day if the operation is an emergency demolition, or if the operation is an emergency renovation;

(d) For asbestos stripping or removal work in any subject demolition or renovation operation (except for any nonscheduled renovation operations, emergency renovation operations and emergency demolition operations) that will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the director as follows:

(i) When the asbestos stripping or removal operation or demolition operation covered by this paragraph will begin after the date contained in the notice,

(a) Notify the Ohio EPA field office of the new start date by telephone as soon as possible before the original start date, and

(b) Postmark or deliver to the Ohio EPA field office a written notice of the new start date as soon as possible before, and no later than, the original start date. Delivery of the amended notice shall be by the United States postal service, commercial delivery service, or hand delivery.

(ii) When the asbestos stripping or removal operation or demolition operation covered by this paragraph will begin on a date earlier than the original start date,

(a) Provide the Ohio EPA field office written notice of the new start date at least ten working days before asbestos stripping or removal work begins.

(b) For demolition covered by paragraph (B)(2) of rule [3745-20-02](#) of the Administrative Code, provide the Ohio EPA field office written notice of a new start date at least ten working days before commencement of demolition. Delivery of amended notice shall be by the United States postal service, commercial delivery service, or hand delivery.

(iii) In no event shall an operation covered by this paragraph begin on a date other than the date contained in the written notice of the new start date.

(4) Include the following information in the notice:

(a) An indication of whether the notice is the original or a revised notification;

(b) Name, address, and telephone number of the facility owner and of the facility operator;

(c) Name, address, telephone number, and Ohio asbestos hazard abatement contractor license number (if applicable) of the asbestos demolition or renovation operator;

(d) Location and street address (including building number or name and floor or room number, if appropriate), city, county, and state of the facility being demolished or renovated. Attach to the notification, any site plans, floor plans or other information that may be necessary to enable the operations to be located for inspection;

(e) Type of operation: demolition or renovation;

(f) Description of the facility or affected part of the facility including the size (square feet, and number of floors), age, and present and prior use of the facility;

(g) Estimate of the amount of regulated asbestos-containing material to be removed from the facility in terms of length of pipe in linear feet, surface area in square feet on other facility components, or volume in cubic feet where the length or area cannot be measured. Also, estimate the approximate amount of category I and category II nonfriable asbestos-containing material in the affected part of the facility that will not be removed before demolition;

(h) Description of the procedures, including analytical methods, employed to detect the presence of and to estimate the quantity of regulated asbestos-containing material and category I and category II nonfriable asbestos-containing material in the facility;

(i) Scheduled starting and completion dates of asbestos removal work or any other activity, such as site preparation that would break up, dislodge, or similarly disturb asbestos material in the demolition or renovation; planned renovation operations involving individual nonscheduled operations shall only include the beginning and ending dates of the report period as described in paragraph (B)(4)(a) of rule [3745-20-02](#) of the Administrative Code;

(j) Description of the planned demolition or renovation work to be performed and method(s) to be employed including demolition or renovation techniques to be used and a description of affected facility components;

(k) Description of work practices and engineering controls to be used to comply with the requirements of this chapter, including asbestos removal and waste handling emission control procedures;

(l) Name and location of the waste disposal site where the asbestos-containing waste material will be deposited;

(m) Scheduled starting and completion dates of demolition or renovation;

(n) Description of procedures to be followed in the event that unexpected regulated asbestos-containing material is found or nonfriable asbestos-containing material becomes crumbled, pulverized, or reduced to powder;

(o) Name, address, and telephone number of the waste transporter;

(p) A certification that at least one person trained as required by paragraph (B) of rule [3745-20-04](#) of the Administrative Code will supervise the stripping and removal described by this notification.

(B) In addition to the information required in paragraph (A)(4) of this rule, each owner or operator of an emergency renovation operation shall supply the date and hour that the emergency occurred, a description of the sudden unexpected event, and an explanation of how the event caused an unsafe condition, or would cause equipment damage or would pose an unreasonable financial burden if not immediately corrected.

(C) In addition to the information required in paragraph (A)(4) of this rule, each owner or operator of an emergency demolition shall provide the name, title, and authority of the state or local government authority who has ordered the demolition, the date that the order was issued, and the date on which the demolition is ordered to begin. A copy of the order shall be attached to the notification.

(D) Each owner or operator shall inform the appropriate Ohio EPA field office by telephone or facsimile concerning any of the following changes to information provided by the notice. An amended written notification shall be submitted to that office as soon as possible but not later than one working day following discovery of the change. The changes requiring amended written notification are:

(1) When the amount of regulated asbestos-containing material affected by the demolition or renovation operations changes by at least twenty per cent;

(2) Any deviation in the demolition or renovation schedule or in the methods to be used for asbestos removal or disposal;

(3) Any change in the owner or operator; and

(4) Any change in the name and location of the selected waste disposal site.

(E) All notifications required by this rule shall identify the name and title of the person submitting the notification, and shall be signed and dated by the person submitting the notification. The certification required in paragraph (A)(4)(p) of this rule shall acknowledge the existence of laws prohibiting the submission of false or misleading statements and shall certify that the facts contained in the notice are true, accurate and complete.

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3745-20-04 Demolition and renovation procedures for asbestos emission control.

(A) Each owner or operator of a demolition or renovation operation to whom this rule applies shall comply with the following procedures:

(1) Remove all regulated asbestos-containing material from a facility being demolished or renovated before any activity begins that would break up, dislodge, or similarly disturb the materials or preclude access to the materials for subsequent removal. However, regulated asbestos-containing material need not be removed before demolition, except in accordance with paragraph (E) of this rule, if:

(a) It is category I nonfriable asbestos-containing material that is not in poor condition and is not friable.

(b) It is on facility components that are encased in concrete or other similarly hard material, and the asbestos-containing materials are adequately wet whenever exposed during demolition.

(c) It was not accessible for testing and was, therefore, not discovered until after demolition began and, as a result of the demolition, the material cannot be safely removed. If not removed for safety reasons, the exposed regulated asbestos-containing material and any asbestos-contaminated debris must be treated as asbestos-containing waste material and adequately wet at all times until disposed of.

(d) It is category II nonfriable asbestos-containing material, and the probability is low the material will become crumbled, pulverized, or reduced to powder during demolition.

(2) When a facility component covered with, coated with or containing regulated asbestos-containing material is being taken out of the facility as units or in sections:

(a) Adequately wet all regulated asbestos-containing material exposed during cutting or disjoining operations; and

(b) Carefully lower the units or sections to the floor and to ground level not dropping, throwing, sliding or otherwise damaging or disturbing the regulated asbestos-containing material.

(3) Adequately wet regulated asbestos-containing materials when they are being stripped from facility components. In renovation operations, wetting that would unavoidably damage equipment or cause an unreasonable safety hazard, is not required if the following conditions are met:

(a) The owner or operator submits a written request to Ohio EPA no less than thirty days prior to the starting date of such operations, asking the director to determine whether wetting to comply with this rule would unavoidably damage equipment or present an unreasonable safety hazard, and supplies the director with adequate information to make this determination; and

(b) The director issues a written determination that equipment damage or an unreasonable safety hazard would be unavoidable; and

(c) The owner or operator uses alternative emission controls in accordance with the terms of the determination. At a minimum the owner or operator shall use one of the following:

(i) A local exhaust ventilation and collection system designed and operated to capture the particulate asbestos materials produced by the stripping and removal of friable asbestos material. The system shall exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements in rule [3745-20-12](#) of the Administrative Code.

(ii) A glove-bag system designed and operated to contain the particulate asbestos material produced by the stripping of the asbestos materials.

(iii) Leak-tight wrapping to contain all regulated asbestos-containing material prior to dismantlement.

(d) In renovation operations where wetting would result in equipment damage or a safety hazard, and the methods allowed in paragraph (A)(3)(c) of this rule cannot be used, an alternate method may be used after obtaining written approval from the

director based upon a determination that it is equivalent to wetting in controlling emissions. Requests for alternative emission control methods shall be submitted concurrently with the request contained in paragraph (A)(3)(a) of this rule.

(e) A copy of the director's written determination shall be displayed at the worksite during the renovation operation.

(4) After a facility component covered with, coated with or containing regulated asbestos-containing material has been taken out of the facility as a unit or in sections, pursuant to paragraph (A)(2) of this rule, except as provided in paragraph (A)(5) of this rule, either:

(a) Adequately wet the regulated asbestos-containing material during stripping; or

(b) During stripping, use a local exhaust ventilation and collection system operated to capture the particulate asbestos material produced by the stripping. The system must exhibit no visible emissions to the outside air or must be designed and operated in accordance with the requirements in rule [3745-20-12](#) of the Administrative Code; or

(c) Encase the regulated asbestos-containing material on the component with a suitable leak-tight container in accordance with rule [3745-20-05](#) of the Administrative Code. Regulated asbestos-containing material, contained in leak-tight wrapping, that has been removed in accordance with this paragraph need not be wetted.

(5) For large facility components such as reactor vessels, large tanks, and steam generators, but not beams (which must be handled in accordance with paragraphs (A)(2), (A)(3), and (A)(4) of this rule), the regulated asbestos-containing material is not required to be stripped if all of the following requirements are met:

(a) The component is removed, stored, transported, and either disposed of or reused without disturbing or damaging the regulated asbestos-containing material.

(b) The component is encased in a leak-tight wrapping.

(c) The leak-tight wrapping is labeled according to paragraph (D) of rule [3745-20-05](#) of the Administrative Code. Regulated asbestos-containing material, contained in leak-tight wrapping, that has been removed in accordance with this paragraph need not be wetted.

(6) For all regulated asbestos-containing material including material that has been removed or stripped:

(a) Adequately wet the materials and ensure that the materials remain adequately wet until collected and contained or treated in preparation for disposal in accordance with rule [3745-20-05](#) of the Administrative Code; and

(b) Carefully lower the materials to the ground or floor not dropping, throwing, sliding or otherwise damaging or disturbing the material;

(c) Transport the materials to the ground via leak-tight chutes, HEPA equipped vacuum transport system, or in leak-tight containers if the materials have been removed or stripped more than fifty feet above ground level and were not removed as units or in sections.

(7) When the temperature at the point of wetting is below thirty-two degrees Fahrenheit:

(a) Comply with paragraphs (A)(4) and (A)(6) of this rule. The owner or operator need not comply with the other wetting requirements of this rule; and

(b) Use a local exhaust ventilation and collection system designed and operated to capture the particulate asbestos materials produced by the stripping and removal of friable asbestos material. The system shall exhibit no visible emissions; and

(c) Remove facility components coated or covered with regulated asbestos-containing material as units or sections to the maximum extent possible.

(d) During periods when wetting operations are suspended due to freezing temperatures, the owner or operator shall record the temperature in the area containing the facility components at the beginning, middle, and end of each operating day and

keep daily temperature records available for inspection by the director or his representative during normal business hours at the demolition or renovation site. The owner or operator shall retain the temperature records for at least two years.

(B) No regulated asbestos-containing material shall be stripped, removed, or otherwise handled or disturbed at a facility regulated by this chapter unless all of the following provisions are met:

(1) At least one authorized representative, trained in the provisions of this chapter and the means of complying with them, is present at the location of operations.

(2) The training required in paragraph (B)(1) of this rule shall include, as a minimum, adequate training in the provisions of this chapter for:

(a) Definitions;

(b) Applicability (including facility inspection, asbestos material identification and classification);

(c) Notifications (including contents, delivery requirements and requirements to revise notices);

(d) Emission control procedures for removals (including, adequate wetting, encapsulation, removal of facility components in units or sections, minimizing drop height, waste collection, local exhaust collection and ventilation systems, HEPA filters, negative pressure enclosures and glove-bag procedures);

(e) Waste disposal work practices (including at least wetting, containers, container labeling, vehicle marking, waste shipment records and transport requirements, waste disposal site requirements);

(f) Reporting and record keeping; and

(g) Asbestos hazards and worker protection.

(3) Every two years, the trained on-site authorized representative shall receive refresher training in the provisions of this chapter.

(4) Evidence that the required training has been completed shall be posted and made available for inspection by the director or his representative at the demolition or renovation site.

(C) Each owner or operator of any demolition or renovation operation, shall ensure all regulated asbestos-containing materials which have been damaged or made friable by demolition, renovation or adjacent stripping operations are repaired, encapsulated, or removed for disposal in accordance with rule [3745-20-05](#) of the Administrative Code, prior to the removal of emission controls.

(D) For emergency demolition operations, adequately wet the portion of the facility that contains regulated asbestos-containing material during the wrecking operation and ensure that the materials remain adequately wet until collected for disposal in accordance with rule [3745-20-05](#) of the Administrative Code.

(E) If a facility is demolished by intentional burning, or if demolition debris is to be burned, all regulated asbestos-containing material including category I and category II nonfriable asbestos-containing material must be removed in accordance with this chapter before burning.

Effective: 02/02/2007

R.C. [119.032](#) review dates: 11/13/2006 and 02/02/2012

Promulgated Under: [119.03](#)

Statutory Authority: 3704.03(E)

Rule Amplifies: 3704.03(A), 3704.03(E)

Prior Effective Dates: 05/29/1990, 11/18/2002, 02/25/2004

3745-20-05 Standard for asbestos waste handling.

[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 rule [3745-20-01](#) of the Administrative Code titled "Incorporation by reference."]

(A) All asbestos-containing waste material shall be deposited as soon as is practical by the waste generator at:

(1) A waste disposal site in Ohio operated in accordance with the provisions of rule [3745-20-06](#) of the Administrative Code, or

(2) A waste disposal site not in Ohio operated in accordance with the provisions of 40 CFR 61.154, or

(3) A site that converts regulated asbestos-containing material and asbestos-containing waste material into nonasbestos (asbestos-free) material in accordance with the provisions of rule [3745-20-13](#) of the Administrative Code.

(B) Each owner or operator of any demolition, renovation, manufacturing, fabricating or spraying operation to whom this rule applies, shall discharge no visible emissions to the outside air during the collection, processing (including incineration), packaging, transporting, or deposition of any asbestos-containing waste material, and use one of the methods specified in paragraphs (B)(1) to (B)(4) of this rule:

(1) Adequately wet asbestos-containing waste material as follows:

(a) Mix control device asbestos waste to form a slurry; adequately wet other asbestos-containing waste material; and

(b) Discharge no visible emissions to the outside air from collecting, mixing, wetting, and handling operations, or use the methods specified by rule [3745-20-12](#) of the Administrative Code to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air; and

(c) After wetting, seal all asbestos-containing waste material while wet in durable leak-tight containers or wrapping that complies with paragraph (C) of this rule.

(2) For facilities demolished in accordance with paragraph (A)(1) of rule [3745-20-04](#) or paragraph (D) of rule [3745-20-04](#) of the Administrative Code, where asbestos was not removed prior to demolition, keep asbestos-containing waste material adequately wet at all times during and after demolition, and during handling, loading, transport and disposal at an active waste disposal site. Asbestos-containing waste materials covered by this paragraph shall either be sealed in leak-tight containers that comply with paragraph (C) of this rule or may be transported in bulk by leak-tight transport vehicles or containers that are securely covered or enclosed and cause no visible emissions.

(3) Process asbestos-containing waste material into nonfriable forms, as follows:

(a) Form all asbestos-containing waste material into nonfriable pellets or other shapes;

(b) Discharge no visible emissions to the outside air from collection and processing operations, including incineration, or use the method specified by rule [3745-20-12](#) of the Administrative Code to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

(4) Use an alternative emission control and waste treatment method that has received prior approval by the director according to paragraph (A)(3) of rule [3745-20-04](#) of the Administrative Code.

(5) As applied to demolition and renovation, the requirements of paragraphs (B) and (C) of this rule do not apply to category I nonfriable asbestos-containing material waste and category II nonfriable asbestos-containing material waste that has not been crumbled, pulverized, or reduced to powder.

(C) Each waste generator shall ensure that asbestos waste containers shall meet the following minimum standards:

(1) All containers of asbestos-containing waste material and wrapped material shall be labeled, using permanent markings with letters of sufficient size and contrast so as to be readily visible and legible, as follows:

"DANGER

CONTAINS ASBESTOS FIBERS

AVOID CREATING DUST

CANCER AND LUNG DISEASE HAZARD

R.Q., ASBESTOS

CLASS 9

NA 2212, III"

For wrapped material or material to be transported off the facility site, label the containers or wrapped material with the name of the waste generator and the location at which the waste was generated.

(2) Asbestos-containing waste materials shall be sealed in plastic bags having a thickness of at least 0.006 inch (six-mils). A second clean, leak-tight plastic bag having a thickness of at least 0.006 inch (six-mils) shall fully contain the first bag; or

(3) A combination of a 0.006 inch (six-mils) plastic bag and a leak-tight steel, plastic, or fiber drum, or reinforced disposal box, leak-tight polypropylene woven fabric bag, or similar suitable and durable container. Drums shall be fitted with a matching lid and lock-rims, and boxes shall be banded and sealed with reinforced tape or in accordance with manufacturers recommendations; or

(4) Facility components removed in units or sections, or materials that will not fit into containers without additional breaking, shall be sealed with at least 0.012 inch (twelve mils) of leak-tight plastic or at least 0.010 inch (ten mils) of leak-tight polypropylene woven fabric; or

(5) Asbestos-containing waste materials, facility components, and contaminated debris may be disposed of using an alternative disposal system or may be processed into nonfriable forms using an alternative emission control and waste treatment system or method, which has received the prior written approval of the director.

(a) To obtain approval for an alternative asbestos waste disposal system or emission control and waste treatment method, the applicant must submit:

(i) Complete details regarding the reason that an alternative disposal system or emission control and waste treatment system or method is requested; and

(ii) The estimated quantity of materials to be disposed of or treated using this system or method; and

(iii) A description of the disposal system or treatment method and an operating plan describing the methods which are to be utilized to ensure that there are no visible emissions during the collection, treatment, transport and disposal of the asbestos-containing waste materials; and

(iv) The name(s) and address(es) of the waste disposal or treatment site(s) where the system will be utilized contingent upon the director's approval.

(b) Any owner or operator using an approved alternative waste disposal system or emission control and waste treatment method shall operate the system in accordance with the conditions of the director's approval.

(D) Each waste generator shall mark vehicles used to transport asbestos-containing waste material during the loading and unloading of waste so that the signs are visible.

(1) Display the following legend in the lower panel of a sign which conforms to the requirements for twenty inch by fourteen inch upright sign specified in 29 CFR 1910.145(d)(4) :

"DANGER

ASBESTOS DUST HAZARD

CANCER AND LUNG DISEASE HAZARD

Authorized Personnel Only"

(2) In the legend use letter sizes and styles of a visibility at least equal to the following specifications: one inch sans serif, gothic or block, in the first and second line; and at least three-fourths inches sans serif, gothic or block, in the third line; and fourteen point gothic in the fourth line. Spacing between any two lines must be at least equal to the height of the upper of the two lines.

(E) For all asbestos-containing waste material transported off the facility site, each waste generator and owner or operator of a waste disposal site shall maintain waste shipment records. The waste shipment record shall be legible, complete, signed and dated by the waste generator and waste disposal site operator as follows:

(1) The waste shipment record shall include the following information:

(a) The name of the work site or facility where the asbestos-containing waste was generated, the mailing address, and telephone number of the facility owner.

(b) The name, mailing address and telephone number of the owner or operator (waste generator) responsible for handling, packing, marking and labeling the asbestos-containing waste material.

(c) The name, mailing address, telephone number and site location of the active waste disposal site designated by the generator to receive the asbestos-containing waste material for disposal.

(d) The name and address of the local, state or EPA USEPA regional agency responsible for administering the asbestos NESHAP program.

(e) A description of the asbestos-containing waste materials included in the waste shipment.

(f) The number and type of containers included in the waste shipment.

(g) The approximate volume of asbestos-containing waste material included in the waste shipment in cubic yards.

(h) Special handling instructions or additional information relative to the waste shipment the waste generator may specify.

(i) A certification that the contents of this consignment are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.

(j) The name, address and telephone number of the transporter.

(k) A signature by the transporter to acknowledge receipt of the asbestos-containing waste shipment described by the waste generator in paragraphs (E)(1)(a) to (E)(1)(i) of this rule.

(l) A discrepancy indication space to be completed by the owner or operator of the waste disposal site if any improperly contained asbestos waste is observed or if there is any discrepancy in the quantity of asbestos shipped and the quantity of asbestos waste received at the asbestos waste disposal site.

(m) A signature by the waste disposal site owner or operator to acknowledge receipt of the asbestos-containing waste shipment described by the waste generator in paragraphs (E)(1)(a) to (E)(1)(i) of this rule except as noted in the discrepancy indication space.

(2) The waste generator and the owner or operator of the waste disposal site shall conform to the following procedures:

(a) Before releasing the waste shipment for off-site disposal the waste generator shall complete the information required by paragraphs (E)(1)(a) to (E)(1)(h) of this rule, and sign and date on the date of shipment, the certification required by paragraph (E)(1)(i) of this rule.

(b) Upon receiving the waste shipment the waste disposal site operator shall:

(i) Sign and date the waste shipment record making note of any improperly contained asbestos-containing waste material or any discrepancy in the quantity or waste received on the discrepancy indication space and provide a copy of the waste shipment record to the transporter for his receipt and records.

(ii) As soon as possible and no longer than thirty days after receipt of the waste, send the original completed copy of the signed waste shipment record to the waste generator and retain the remaining copy for the waste disposal site record.

(iii) Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within fifteen days after receiving the waste, immediately report the discrepancy in writing to the local, state, or USEPA regional office responsible for administering the asbestos NESHAP program for the waste generator, and, if different, the local, state, or USEPA regional office responsible for administering the asbestos NESHAP program for the disposal site. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report to Ohio EPA.

(3) When the waste generator does not receive a completed waste shipment record signed by the owner or operator of the designated disposal site, within thirty-five days of the date the waste was accepted by the initial transporter, the waste generator shall contact the transporter and/or the owner or operator of the designated disposal site to determine the status of the waste shipment.

(4) The waste generator shall report in writing to the Ohio EPA field office where notification was submitted if a copy of the waste shipment record, signed by the owner or operator of the designated waste disposal site, is not received by the waste generator within forty-five days of the date the waste was accepted by the initial transporter. Include in the report the following information:

(a) A copy of the waste shipment record for which a confirmation of delivery was not received; and

(b) A cover letter signed by the waste generator explaining the efforts taken to locate the asbestos waste shipment and the results of those efforts.

(5) The waste generator and waste disposal site owner or operator, shall retain a copy of all waste shipment records for at least two years.

(F) Each waste generator or facility owner shall furnish upon request, and make available for inspection by the director or his representative, all records required to be maintained under this rule.

(G) When removing or transporting asbestos-containing waste material to a disposal site, each owner or operator of any demolition or renovation operation to whom this rule applies shall prepare and secure any load of asbestos-containing waste material in a manner that prevents any visible emissions, load loss, and spillage or leakage of liquids.

Effective: 02/02/2007

R.C. [119.032](#) review dates: 11/13/2006 and 02/02/2012

Promulgated Under: [119.03](#)

Statutory Authority: 3704.03(E)

Rule Amplifies: 3704.03(A), 3704.03(E)

Prior Effective Dates: 05/29/1990, 11/18/2002

3745-20-06 Standard for active asbestos waste disposal sites.

(A) Each owner or operator of an active asbestos waste disposal site shall cause or permit no visible emissions to the outside air; or shall comply with the requirements of paragraph (B) of this rule.

(B) Rather than meet the no visible emissions requirement of paragraph (A) of this rule, each owner or operator of an active asbestos waste disposal site that receives waste that contains asbestos-containing material shall comply with the following:

(1) There shall be no visible emissions to the outside air from asbestos-containing waste materials during the on-site transportation, transfer, deposition or compacting operations.

(2) Deposition and burial operations shall be conducted in a manner which prevents handling by equipment or persons that causes asbestos-containing waste materials to be broken-up or dispersed before the materials are buried.

(3) As soon as practicable after deposition of the asbestos-containing waste materials but no later than at the end of each operating day, the asbestos-containing waste material deposited at the site during the operating day shall be covered with at least twelve inches of compacted nonasbestos-containing material. Alternatively, an owner or operator of an active waste disposal site may apply for approval of the director to utilize alternative control methods to bind dust, control wind erosion or convert asbestos to nonfriable forms.

(4) During the unloading, deposition, burial and initial compaction of asbestos-containing waste materials, the owner or operator of the active waste disposal site shall establish a restricted area adequate to deter the unauthorized entry of the general public and any unauthorized personnel from any location within one hundred feet of the operations; and

(5) Shall display the following information on a sign not less than twenty by fourteen inches, so that it is visible at all entrances and at intervals of three hundred feet or less along the property line or fencing immediately surrounding the restricted area using letter sizes and styles of a visibility at least equal to the following specifications: one inch sans serif, gothic or block in the first and second line; and at least three-fourths inches sans serif, gothic or block in the third line; and fourteen point gothic in the fourth line. Spacing between any two lines must be at least equal to the height of the upper of the two lines:

"ASBESTOS WASTE DISPOSAL SITE

DO NOT CREATE DUST

BREATHING ASBESTOS IS

HAZARDOUS TO YOUR HEALTH"

(C) For all asbestos-containing waste material received, the owner or operator of the active waste disposal site shall:

(1) Maintain waste shipment records, in accordance with paragraph (E) of rule [3745-20-05](#) of the Administrative Code.

(2) Maintain until closure records of the location, depth, area, and quantity in cubic yards of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area.

(3) Retain a copy of all other records and reports required by this chapter for at least two years.

(D) The owner or operator of the active waste disposal site shall furnish all records required under this rule upon request and make them available during normal business hours for inspection by the director or his representative.

(E) Upon closure of the facility, the owner or operator of the active waste disposal site shall comply with all the provisions of rule [3745-20-07](#) of the Administrative Code and shall submit a copy of the records of the asbestos waste disposal locations and quantities to the director.

(F) The owner or operator of the active waste disposal site shall notify the director in writing at least forty-five days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and

covered. If the excavation will begin on a date other than the one contained in the original notice, provide notice of the new start date to the director at least ten working days before excavation begins. In no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

(1) Scheduled starting and completion dates.

(2) Reason for disturbing the waste.

(3) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the director may require changes in the emission control procedures to be used.

(4) Location of any temporary storage site and the final disposal site.

Effective: 02/02/2007

R.C. [119.032](#) review dates: 11/13/2006 and 02/02/2012

Promulgated Under: [119.03](#)

Statutory Authority: 3704.03(E)

Rule Amplifies: 3704.03(A), 3704.03(E)

Prior Effective Dates: 5/29/90, 11/18/2002

3745-20-07 Standard for inactive asbestos waste disposal sites.

[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 rule [3745-20-01](#) of the Administrative Code titled "Incorporation by reference."]

(A) Each owner or operator of an inactive asbestos waste disposal site shall either:

(1) Discharge no visible emissions to the outside air from an inactive asbestos waste disposal site; or

(2) Cover the asbestos-containing waste material with at least six inches of compacted nonasbestos-containing material, and grow and maintain a cover of vegetation on the area adequate to prevent exposure of the asbestos-containing waste material; or

(3) Cover the asbestos-containing waste material with at least two feet of compacted nonasbestos-containing material, and maintain the cover to prevent exposure of the asbestos-containing waste material.

(B) Unless a natural barrier adequately deters access by the general public, each owner or operator of an inactive asbestos waste disposal site shall install and maintain warning signs and fencing as follows, or comply with paragraph (A)(2) or (A)(3) of this rule.

(1) Display warning signs at all entrances and at intervals of three hundred feet or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material was deposited. The warning signs must:

(a) Be posted in such a manner and location that a person can easily read the legend; and

(b) Conform to the requirements for a twenty inch by fourteen inch upright format warning sign and display the following legend in the lower panel with letter sizes of at least one inch sans serif, gothic or block. Spacing between any two lines must be at least equal to the height of the upper of the two lines:

"ASBESTOS WASTE DISPOSAL SITE

DO NOT CREATE DUST

BREATHING ASBESTOS IS HAZARDOUS TO YOUR HEALTH"

(2) Fence the perimeter of the site in a manner adequate to deter access by the general public.

(3) Upon request and submission of appropriate information, the director will determine whether a fence or a natural barrier adequately deters access by the public.

(4) When requesting a determination on whether a natural barrier adequately deters public access, supply information enabling the director to determine whether a fence or a natural barrier adequately deters access by the general public.

(C) The owner or operator may use an alternative control method that has received prior approval of the director rather than comply with the requirements of paragraph (A) or (B) of this rule.

(D) Each owner or operator of an inactive asbestos waste disposal site shall notify the director in writing at least forty-five days prior to excavating or otherwise disturbing or removing any asbestos-containing waste material. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the director at least ten working days before excavation begins. In no event shall excavation begin earlier than the date specified in the original notification. Each owner or operator shall include the following information in the notice:

(1) Scheduled starting and completion dates.

(2) Reason for disturbing the waste.

(3) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the director may require changes in the emission control procedures to be used.

(4) Location of any temporary storage site including names and address(es) and the final disposal site.

(E) Within sixty days of a site becoming inactive and after November 20, 1990, record a notation of the presence of asbestos-containing waste material on the deed to the facility property and on any other instrument that would normally be examined during a title search; this notation will, in perpetuity, notify any potential purchaser of the property that:

(1) The land has been used for the disposal of asbestos-containing waste material; and

(2) The survey plot and record of the location and quantity of asbestos-containing waste disposed of within the disposal site required in paragraph (C)(2) of rule [3745-20-06](#) of the Administrative Code has been filed with the director; and

(3) The site is subject to Chapter 3745-20 of the Administrative Code and 40 CFR Part 61, Subpart M.

Effective: 02/02/2007

R.C. [119.032](#) review dates: 11/13/2006 and 02/02/2012

Promulgated Under: [119.03](#)

Statutory Authority: 3704.03(E)

Rule Amplifies: 3704.03(A), 3704.03(E)

Prior Effective Dates: 05/29/1990, 11/18/2002

3745-20-08 Reporting, certification and permit application requirements.

[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 rule [3745-20-01](#) of the Administrative code titled "Incorporation by reference."]

(A) Any owner or operator of a new source to which this chapter applies with the exception of sources subject to rules [3745-20-04](#) (demolition and renovation), [3745-20-09](#) (roadways), [3745-20-14](#) (insulating), and [3745-20-15](#) (spraying), of the Administrative Code, and which has an initial start up date preceding November 20, 1990, was required to provide the following information to the director postmarked or delivered by February 18, 1991. In the case of a new source that does not have an initial start up date preceding November 20, 1990, the information shall be provided by the owner or operator, postmarked or delivered, within ninety days of the initial start up date of that source. Any owner or operator of an existing source was required to provide the following information to the director within ninety days of November 20, 1990, unless the owner or operator of the existing source has previously provided this information to the director:

- (1) A description of the emission control equipment used for each process; and
 - (2) If a fabric filter device is used to control emissions,
 - (a) The airflow permeability in cubic feet per minute per square foot if the fabric filter device uses a woven fabric, and, if the fabric is synthetic, whether the fill yarn is spun or not spun; and
 - (b) The density in ounces per square yard, the minimum thickness in inches, and the airflow permeability in cubic feet per minute per square foot, if the fabric filter device uses a felted fabric.
 - (3) If a HEPA filter is used to control emissions, the certified efficiency.
 - (4) For asbestos waste disposal handling sources subject to rule [3745-20-05](#) of the Administrative Code:
 - (a) A brief description of each process that generates asbestos-containing waste material; and
 - (b) The average volume of asbestos-containing waste material disposed of, measured in cubic yards per day; and
 - (c) The emission control methods used in all stages of waste disposal; and
 - (d) The type of disposal site or treatment site used for ultimate disposal, the name of the site operator, and the name and location of the disposal site.
 - (5) For active waste disposal and inactive waste disposal sites subject to rules [3745-20-06](#) and [3745-20-07](#) of the Administrative Code:
 - (a) A brief description of the site; and
 - (b) The method or methods used to comply with the standard, or alternative procedures to be used.
- (B) Any changes in the information provided for paragraph (A) of this rule by any existing source shall be provided to the director, postmarked or delivered, within thirty days after the change.
- (C) All owners and operators of sources except roadways, demolition and renovation, spraying, and insulating materials shall comply with this paragraph. In addition to the information required in paragraph (A) of this rule, the owner or operator of each existing source or each new source which had an initial start up before the effective date of this rule shall provide the following information in writing to the director within ninety days after the effective date of this rule. The information described in this rule must be reported using the format provided in 40 CFR Part 61, Appendix A:
- (1) Name and address of the owner or operator.

(2) The location of the source.

(3) The type of hazardous air pollutants potentially emitted by the stationary source.

(4) A brief description of the nature, size, design, and method of operation of the stationary source including the operating design capacity of the source. The description must identify each point or fugitive source of emission for each hazardous air pollutant.

(5) The average weight per month of the hazardous materials being processed by the source over the last twelve months preceding the date of the report.

(6) A description of the existing control equipment for each emission point including:

(a) Each control device for each hazardous air pollutant; and

(b) Estimated control efficiency (per cent) for each control device.

(7) A statement by the owner or operator of the source as to whether the source can comply with the standards within ninety days after the effective date.

(D) Any changes in the information provided for paragraph (C) of this rule by any existing source shall be provided to the director, postmarked or delivered, within thirty days after the change.

(E) No person shall install or operate a new source regulated under rule [3745-20-06](#), [3745-20-10](#), [3745-20-11](#), or [3745-20-13](#) of the Administrative Code unless the owner or operator applies for and obtains from the Ohio EPA a permit- to- install in accordance with the requirements of Chapter 3745-31 of the Administrative Code and a permit- to- operate in accordance with the requirements of Chapter 3745-35 of the Administrative Code.

Effective: 02/02/2007

R.C. [119.032](#) review dates: 11/13/2006 and 02/02/2012

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Statutory Authority: 3704.03(E)

Rule Amplifies: 3704.03(A), 3704.03(E)

Prior Effective Dates: 05/29/1990, 11/18/2002, 02/25/2004

3745-20-09 Standard for roadways.

[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 rule [3745-20-01](#) of the Administrative Code titled "Incorporation by reference."]

No person may construct or maintain a roadway with asbestos tailings or asbestos-containing waste material on that roadway, unless, for asbestos tailings:

(A) It is a temporary roadway on an area of asbestos ore deposits (asbestos mine); or

(B) It is a temporary roadway at an active asbestos mill site and is encapsulated with a resinous or bituminous binder. The encapsulated road surface must be maintained at a minimum frequency of once per year to prevent dust emissions; or

(C) It is encapsulated in asphalt concrete meeting the United States department of transportation, federal highway administration specifications contained in Section 401 of FP-03; "Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects" or their equivalent.

Effective: 02/02/2007

R.C. [119.032](#) review dates: 11/13/2006 and 02/02/2012

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Statutory Authority: 3704.03(E)

Rule Amplifies: 3704.03(A), 3704.03(E)

Prior Effective Dates: 11/18/2002

3745-20-10 Standards for asbestos mills and manufacturing.

(A) This standard applies to asbestos mills and to the following manufacturing operations using commercial asbestos.

(1) The manufacture of cloth, cord, wicks, tubing, tape, twine, rope, thread, yarn, roving, lap, or other textile materials.

(2) The manufacture of cement products.

(3) The manufacture of fireproofing and insulating materials.

(4) The manufacture of friction products.

(5) The manufacture of paper, millboard, and felt.

(6) The manufacture of floor tile.

(7) The manufacture of paints, coatings, caulks, adhesives, and sealants.

(8) The manufacture of plastics and rubber materials.

(9) The manufacture of chlorine utilizing asbestos diaphragm technology.

(10) The manufacture of shotgun shell wads.

(11) The manufacture of asphalt concrete.

(B) Each owner or operator of an asbestos mill or any of the asbestos manufacturing operations to which this rule applies shall either:

(1) Discharge no visible emissions to the outside air from these operations or from any building or structure in which they are conducted or from any other fugitive sources; or

(2) Use the methods specified by rule [3745-20-12](#) of the Administrative Code to clean emissions from these operations containing particulate asbestos material before they escape to, or are vented to, the outside air; or

(3) Monitor each potential source of asbestos emissions from any part of the manufacturing facility, including air cleaning devices, process equipment, and buildings housing material processing and handling equipment, at least once on each day of operation, during daylight hours for visible emissions to the outside air during periods of operation. The monitoring shall be by visual observation of at least fifteen seconds duration per source of emissions; or

(4) Inspect each air cleaning device at least once each week for proper operation and for changes that signal the potential for malfunctions to the maximum extent possible without dismantling other than opening the device, including the presence of tears, holes, and abrasions in filter bags and for dust deposits on the clean side of bags. For air cleaning devices that cannot be inspected on a weekly basis according to this paragraph, submit to the Ohio EPA field office, and revise as necessary, a written maintenance plan to include, at a minimum, the following:

(a) Maintenance schedule.

(b) Recordkeeping plan.

(5) Maintain records of the results of visible emission monitoring and air cleaning device inspections using a form with the following information.

(a) Date and time of each inspection.

- (b) Presence or absence of visible emissions.
- (c) Condition of fabric filters, including presence of any tears, holes and abrasions.
- (d) Presence of dust deposits on clean side of fabric filters.
- (e) Brief description of corrective actions taken, including date and time.
- (f) Daily hours of operation for each air cleaning device.
- (6) Furnish upon request, and make available at the affected facility during normal business hours for inspection by the director or his representative, all records required under this rule.
- (7) Retain a copy of all monitoring and inspection records for at least two years.
- (8) Submit semiannually a copy of the visible emission monitoring records to the Ohio EPA field office if visible emissions occurred during the report period. Semiannual reports shall be postmarked by the thirtieth day following the end of the six-month period.

Effective: 02/02/2007

R.C. [119.032](#) review dates: 11/13/2006 and 02/02/2012

Promulgated Under: [119.03](#)

Statutory Authority: 3704.03(E)

Rule Amplifies: 3704.03(A), 3704.03(E)

Prior Effective Dates: 11/18/2002

3745-20-11 Standard for fabricating.

(A) This rule applies to the following fabricating operations using commercial asbestos:

- (1) The fabrication of cement building products.
- (2) The fabrication of friction products except those operations that primarily install asbestos friction materials on motor vehicles.
- (3) The fabrication of cement or silicate board for ventilation hoods; ovens; electrical panels; laboratory furniture, bulkheads, partitions, and ceilings for marine construction; and flow control devices for the molten metal industry.

(B) Each owner or operator of any of the fabricating operations to which this rule applies shall either:

(1) Discharge no visible emissions to the outside air from any of the operations, or from any building or structure in which they are conducted, or from any other fugitive sources; or

(2) Use the methods specified by rule [3745-20-12](#) of the Administrative Code to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air; or

(3) Monitor each potential source of asbestos emissions from any part of the fabricating facility, including air cleaning devices, process equipment, and buildings that house equipment for material processing and handling, at least once each day of operation, during daylight hours, for visible emissions to the outside air during periods of operation. The monitoring shall be by visual observation of at least fifteen seconds duration per source of emissions; or

(4) Inspect each air cleaning device to the maximum extent possible without dismantling other than opening the device at least once each week for proper operation and for changes that signal the potential for malfunctions, including the presence of tears, holes, and abrasions in filter bags and for dust deposits on the clean side of bags. For air cleaning devices that cannot be inspected on a weekly basis according to this paragraph, submit to the Ohio EPA field office, and revise as necessary, a written maintenance plan to include, at a minimum, the following:

(a) Maintenance schedule.

(b) Recordkeeping plan.

(5) Maintain records of the results of daily visible emission monitoring and weekly air cleaning device inspections, and include the following information:

(a) Date and time of each inspection.

(b) Presence or absence of visible emissions.

(c) Condition of fabric filters, including presence of any tears, holes, and abrasions.

(d) Presence of dust deposits on clean side of fabric filters.

(e) Brief description of corrective actions taken, including date and time.

(f) Daily hours of operation for each air cleaning device.

(6) Furnish upon request and make available at the affected facility during normal business hours for inspection by the director or his representative, all records required under this rule.

(7) Retain a copy of all monitoring and inspection records for at least two years.

(8) Submit semiannually a copy of the visible emission monitoring records to the Ohio EPA field office if visible emissions occurred during the report period. Semiannual reports shall be postmarked by the thirtieth day following the end of the six-month period.

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Prior Effective Dates: 11/18/2002

3745-20-12 Air cleaning.

[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 rule [3745-20-01](#) of the Administrative Code titled "Incorporation by reference."]

(A) The owner or operator who uses air cleaning, as specified in this chapter of the Administrative Code shall:

(1) Use fabric filter collection devices, except as noted in paragraph (B) of this rule, as follows:

(a) Ensure that the airflow permeability, as determined by ASTM D737-75, does not exceed thirty cubic feet per minute per square foot for woven fabrics or thirty-five cubic feet per minute per square foot for felted fabrics, except that forty cubic feet per minute per square foot for woven and forty-five cubic feet per minute per square foot for felted fabrics is allowed for filtering air from asbestos ore dryers; and

(b) Ensure that felted fabric weighs at least fourteen ounces per square yard and is at least one-sixteenth inch thick throughout; and

(c) Avoid the use of synthetic fabrics that contain fill yarn other than that which is spun.

(2) Properly install, use, operate, and maintain all air-cleaning equipment authorized by this rule. Bypass devices may be used only during upset or emergency conditions and then only for so long as it takes to shut down the operation generating the particulate asbestos material.

(3) For fabric filter collection devices installed after January 10, 1989, provide for easy inspection for faulty bags.

(B) There are the following exceptions to paragraph (A)(1) of this rule.

(1) If the use of fabric creates a fire or explosion hazard, or if the director determines that a fabric filter is not feasible, the director may authorize as a substitute the use of wet collectors designed to operate with a unit contacting energy of at least forty inches water gauge pressure.

(2) Use a HEPA filter that is manufacturer certified to be at least 99.97 per cent efficient for 0.3 micron particles.

(3) The director may authorize the use of filtering equipment other than described in paragraphs (A)(1), (B)(1) and (B)(2) of this rule if the owner or operator demonstrates to the director's satisfaction that it is equivalent to the described equipment in filtering particulate asbestos material.

Effective: 02/02/2007

R.C. [119.032](#) review dates: 11/13/2006 and 02/02/2012

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Statutory Authority: 3704.03(E)

Rule Amplifies: 3704.03(A), 3704.03(E)

Prior Effective Dates: 11/18/2002

3745-20-13 Standard for operations that convert asbestos-containing waste material into nonasbestos (asbestos-free) material.

(A) Each owner or operator of an operation that converts regulated asbestos-containing material and asbestos-containing waste material into nonasbestos (asbestos-free) material shall obtain from the director a permit- to- install pursuant to Chapter 3745-31 of the Administrative Code to construct the facility and a permit- to- operate the facility pursuant to Chapter 3745-35 of the Administrative Code.

(1) To obtain a permit- to- install the owner or operator shall submit a completed application in accordance with Chapter 3745-31 of the Administrative Code, and provide the director with the following information:

- (a) Description of waste feed handling and temporary storage,
- (b) Description of process operating conditions,
- (c) Description of the handling and temporary storage of the end product,
- (d) Description of the protocol to be followed when analyzing output materials by transmission electron microscopy,
- (e) Performance test protocol, including provisions for obtaining information required under paragraph (A)(2) of this rule.
- (f) The director may require that a demonstration of the process be performed prior to issuing the permit to install.

(2) Prior to being issued a permit to operate, the owner or operator shall conduct a start-up performance test. Test results shall include:

(a) A detailed description of the types and quantities of nonasbestos material, regulated asbestos-containing material, and asbestos-containing waste material processed, including but not limited to asbestos cement products, friable asbestos insulation, plaster, wood, plastic, wire, etc. Test feed is to include the full range of materials that will be encountered in actual operation of the process.

(b) Results of analyses, using polarized light microscopy, that document the asbestos content of the wastes processed.

(c) Results of analyses, using transmission electron microscopy, that document that the output materials are free of asbestos. Samples for analysis are to be collected as eight-hour composite samples (one two hundred gram (seven ounce) sample per hour), beginning with the initial introduction of regulated asbestos-containing material or asbestos-containing waste material and continuing until the end of the performance test.

(d) A description of operating parameters, such as temperature and residence time, defining the full range over which the process is expected to operate to produce nonasbestos (asbestos-free) materials. Specify the limits for each operating parameter within which the process will produce nonasbestos (asbestos-free) materials.

(e) The length of the test.

(B) During the initial ninety days of operation, each owner or operator of an operation that converts regulated asbestos-containing material and asbestos-containing waste material into nonasbestos (asbestos-free) material, shall:

(1) Continuously monitor and log the operating parameters identified during start-up performance tests that are intended to ensure the production of nonasbestos (asbestos-free) output material.

(2) Monitor input materials to ensure that they are consistent with the test feed materials described during start-up performance tests in paragraph (A)(2)(a) of this rule.

(3) Collect and analyze samples, taken as ten-day composite samples (one twohundred gram (seven ounce) sample collected every eight hours of operation) of all output material for the presence of asbestos. Composite samples may be for fewer than ten days. Transmission electron microscopy (TEM) shall be used to analyze the output material for the presence of asbestos.

During the initial ninety-day period, all output materials must be stored on-site until analysis shows the material to be asbestos-free or disposed of as asbestos-containing waste material in accordance with rule [3745-20-05](#) of the Administrative Code.

(C) After the initial ninety days of operation each owner or operator of an operation that converts regulated asbestos-containing material and asbestos-containing waste material into nonasbestos (asbestos-free) material shall:

(1) Continuously monitor and record the operating parameters identified during start-up performance testing and any subsequent performance testing.

(2) Continuously monitor any output produced during a period of deviation from the range of operating conditions established to ensure the production of nonasbestos (asbestos-free) material.

(3) Output materials shall be:

(a) Disposed of as asbestos-containing waste material according to rule [3745-20-05](#) of the Administrative Code, or

(b) Recycled as waste feed during process operation within the established range of operating conditions, or

(c) Stored temporarily on-site in a leak-tight container until analyzed for asbestos content. Any product material that is not asbestos-free shall be either disposed of as asbestos-containing waste material or recycled as waste feed to the process.

(4) Collect and analyze monthly composite samples (one two hundred- gram (seven ounce) sample collected every eight hours of operation) of the output material. Transmission electron microscopy shall be used to analyze the output material for the presence of asbestos.

(D) Each owner or operator of an operation that converts regulated asbestos-containing material and asbestos-containing waste material into nonasbestos (asbestos-free) material shall discharge no visible emissions to the outside air from any part of the operation, or use the methods specified by rule [3745-20-12](#) of the Administrative Code to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

(E) Each owner or operator of an operation that converts regulated asbestos-containing material and asbestos-containing waste material into nonasbestos (asbestos-free) material shall maintain records on-site and include the following information:

(1) Results of start-up performance testing and all subsequent performance testing, including operating parameters, feed characteristic, and analyses of output materials;

(2) Results of the composite analyses required during the initial ninety days of operation under paragraph (B) of this rule;

(3) Results of the monthly composite analyses required under paragraph (C) of this rule;

(4) Results of continuous monitoring and logs of process operating parameters required under paragraphs (B) and (C) of this rule;

(5) The information on waste shipments received as required in paragraph (B) of rule [3745-20-06](#) of the Administrative Code;

(6) For output materials where no analyses were performed to determine the presence of asbestos, record the name and location of the purchaser or disposal site to which the output materials were sold or deposited, and the date of sale or disposal;

(7) Retain records required by this rule for at least two years.

(F) Each owner or operator of an operation that converts regulated asbestos-containing material and asbestos-containing waste material into nonasbestos (asbestos-free) material shall submit the following reports to the director:

(1) A report for each analysis of product composite samples performed during the initial ninety days of operation.

(2) A quarterly report, including the following information concerning activities during each consecutive three-month period:

(a) Results of analyses of monthly product composite samples;

(b) A description of any deviation from the operating parameters established during performance testing, the duration of the deviation, and steps taken to correct the deviation;

(c) Disposition of any product produced during a period of deviation, including whether it was recycled, disposed of as asbestos-containing waste material, or stored temporarily on-site until analyzed for asbestos content;

(d) The information on waste disposal activities as required in paragraph (B)(2) of rule [3745-20-06](#) of the Administrative Code.

(G) Output material, found to be asbestos free according to paragraph (C)(3) of this rule, is not subject to any of the provisions of this chapter. Output materials in which asbestos is detected, or output materials produced when the operating parameters deviated from those established during the start-up performance testing, unless shown by transmission electron microscopy analysis to be asbestos-free, shall be considered to be asbestos-containing waste and shall be handled and disposed of according to rules [3745-20-05](#) and [3745-20-06](#) of the Administrative Code or reprocessed while all of the established operating parameters are being met.

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Statutory Authority: 3704.03(E)

Rule Amplifies: 3704.03(A), 3704.03(E)

Prior Effective Dates: 11/18/2002

[3745-20-14 Standard for insulating materials.](#)

No owner or operator of a facility may install or reinstall on a facility component any insulating materials that contain commercial asbestos if the materials are either molded and friable or wet-applied and friable after drying. The provisions of this rule do not apply to spray-applied insulating materials regulated under rule [3745-20-15](#) of the Administrative Code.

R.C. [119.032](#) review dates: 11/30/2011 and 11/30/2016

Promulgated Under: [119.03](#)

Statutory Authority: [3704.03\(E\)](#)

Rule Amplifies: [3704.03\(A\)](#), [3704.03\(E\)](#)

Prior Effective Dates: 11/18/02, 2/2/07

3745-20-15 Standard for spraying.

[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 rule [3745-20-01](#) of the Administrative Code titled "Incorporation by reference."]

(A) No owner or operator of an operation in which asbestos-containing materials are spray applied on buildings, structures, pipes, and conduits, shall use material containing more than one per cent asbestos, as determined using the method specified in 40 CFR Part 763, Subpart E, Appendix E, Section 1, Polarized Light Microscopy (PLM), except as provided in paragraph (C) of this rule.

(B) The owner or operator of an operation in which asbestos-containing materials that contain more than one per cent asbestos, as determined using the method specified in 40 CFR Part 763, Subpart E, Appendix E, Section 1, Polarized Light Microscopy (PLM), are spray applied on equipment and machinery, except as provided in paragraph (C) of this rule, shall:

(1) Notify the director at least twenty days before beginning the spraying operation. Include the following information in the notice:

(a) Name and address of owner or operator.

(b) Location of spraying operation.

(c) Procedures to be followed to meet the requirements of this rule.

(2) Discharge no visible emissions to the outside air from spray-on application of asbestos-containing material or use the methods specified by rule [3745-20-12](#) of the Administrative Code to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

(C) The requirements of paragraphs (A) and (B) of this rule do not apply to the spray-on application of materials where the asbestos fibers in the materials are encapsulated with a bituminous or resinous binder during spraying and the materials are not friable after drying.

(D) Owners or operators of sources subject to this rule are exempt from the requirements of Chapters 3745-31, and 3745-35, and rule [3745-20-08](#) of the Administrative Code.

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