

3745-560-01 Composting facilities - applicability.

- (A) This chapter is the program chapter for composting facilities.
- (B) Except as otherwise provided in paragraph (E) of this rule, this chapter shall apply to any person who establishes or operates a solid waste composting facility in the state of Ohio.
- (C) In addition to the multi-program rules made applicable by reference in this chapter, the following multi-program rules apply to this chapter:
 - (1) Rule 3745-500-35 of the Administrative Code which pertains to relationships among authorizing documents, rules, and the authority of the director and board of health.
 - (2) Rule 3745-500-210 of the Administrative Code which pertains to a variance from this chapter.
 - (3) Rule 3745-500-220 of the Administrative Code which pertains to an exemption from this chapter.
- (D) The compost distribution requirements of rules 3745-560-220 and 3745-560-320 of the Administrative Code shall not apply to the owner or operator of a class II or class III composting facility provided that the following conditions are met:
 - (1) The owner or operator composts only those feedstocks, bulking agents, and additives authorized by rule for their class of facility.
 - (2) All compost produced is utilized exclusively on property owned by the owner of the facility.
- (E) This chapter shall not apply to the following:
 - (1) Any person composting yard waste, agricultural waste, animal waste, food scraps, bulking agents, and additives within an aggregate area not greater than three hundred square feet on any premises in a manner that noise, dust, and odors do not constitute a nuisance or health hazard and does not cause or contribute to surface or ground water pollution.
 - (2) Animal and crop production operations. Composting facilities that compost yard waste, agricultural waste, animal waste, food scraps, and bulking agents generated from animal or crop production operations provided that the following conditions are met:
 - (a) The owner of the composting facility is the same as the owner of the animal or crop production operation where the yard waste, agricultural waste, animal waste, food scraps, and bulking agents are generated.
 - (b) The composting facility is located on property owned by the animal or crop production operation.
 - (c) The composting facility is operated in such a manner that noise, dust, and odors do not constitute a nuisance or health hazard and does not cause or contribute to surface or ground water pollution.
 - (d) All compost produced is utilized exclusively at the animal or crop production operation.
 - (3) On-farm mortality composting. Except as otherwise provided in section 3734.029 of the Revised Code, composting facilities that compost animal carcasses pursuant to section 1511.022 of the Revised Code and distribute for use or give away compost are subject to the compost quality standards requirements established in rules 3745-560-220, 3745-560-225, and 3745-560-230 of the Administrative Code.
 - (4) Restricted yard waste composting facilities. Composting facilities that compost yard waste and bulking

agents provided that the following conditions are met:

- (a) The owner or operator composts only yard waste and bulking agents generated by the owner of an operation engaged in providing lawn mowing or landscaping services or operations that generate yard waste while lawn mowing or landscaping the owner's premises.
 - (b) The owner of the composting facility is the same as the owner of the operation.
 - (c) The composting facility is located on the owner's property.
 - (d) The limits of materials placement on the facility site are less than twelve hundred square feet of total area.
 - (e) The composting facility is operated in such a manner that noise, dust, and odors do not constitute a nuisance or health hazard and does not cause or contribute to surface or ground water pollution.
 - (f) All compost produced is utilized exclusively on the owner's property. The use of the compost in plant potting media by nurseries and greenhouses that grow plant stock is considered use on the owner's property for the purposes of this rule.
- (5) Sewage sludge composting. Sewage sludge composting with solid wastes when that sewage sludge composting is sewage sludge treatment or disposal pursuant to Chapter 3745-40 of the Administrative Code and is authorized by a current permit issued under Chapter 6111. of the Revised Code.

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3745-560-02 Composting facilities - definitions.

If a term used in this chapter is defined in rule 3745-500-02 of the Administrative Code the definition in rule 3745-500-02 of the Administrative Code is applicable to this chapter unless the term is defined in this rule.

As used in this chapter:

- (A)
- (1) "Accept" or "acceptance," in the context of material acceptance, handling, and disposal activities, means to record material in the log of operations or to place material on the materials placement area at a composting facility.
 - (2) "Active composting facility" means a composting facility where authorized feedstocks, bulking agents, and additives are received, processed, or stored.
 - (3) "Additive" means a supplemental material mixed with or otherwise added to feedstocks and bulking agents to create a favorable condition for the composting process and includes urea, crushed egg shells, earthworms, and bacterial or fungal inoculum.
 - (4) "Aerated static pile" means a method of composting where solid waste is constructed into a pile and air is forced through the pile to enable aerobic composting.
 - (5) "Agricultural waste" means plant material including but not limited to stems, leaves, vines, or roots from an agricultural operation.
 - (6) "Alteration" means a change, other than a modification, to a class I composting facility or to a permit to install issued pursuant to Chapter 3734. of the Revised Code for a class I composting facility which is at least equivalent to the rule requirements. An alteration includes but is not limited to changes in the type of waste received, replacement of equipment, and repair of the facility.
 - (7) "Alternative material" means a waste that might be suitable for use as a feedstock, bulking agent, or additive in the composting process including but not limited to animal carcasses, raw rendering material, and exceptional quality biosolids.
 - (8) "Animal carcass" means a carcass or parts thereof of a domestic or non-domestic animal.
 - (9) "Animal waste" means animal excreta, bedding, wash waters, incidental waste feed, and silage drainage.
- (B)
- (1) "Biofilter material" means material consisting of bulking agents, shredded yard waste, or compost that is applied over the composting mixture to control odors, dust, or vectors.
 - (2) "Bulking agent" means a material added to a composting process to provide structural support, improve aeration, or absorb moisture and includes wood chips, straw, clean untreated wood, shredded newspaper, shredded cardboard, sawdust, shredded brush, compostable containers, and stover.
- (C)
- (1) "Class I solid waste composting facility" means a facility where the owner or operator may accept yard waste, agricultural waste, animal waste, food scraps, mixed solid waste, bulking agents, additives, and authorized alternative materials.
 - (2) "Class II solid waste composting facility" means a facility where the owner or operator may accept yard

waste, agricultural waste, animal waste, food scraps, bulking agents, additives, and authorized alternative materials.

- (3) "Class III solid waste composting facility" means a facility where the owner or operator may accept yard waste, agricultural waste, animal waste, bulking agents, and additives.
 - (4) "Class IV solid waste composting facility" means a facility where the owner or operator may accept only yard waste, bulking agents, and additives limited to urea and bacterial or fungal inoculum.
 - (5) "Clean untreated wood" means source-separated wood including but not limited to sawdust, pallets, and dimensional lumber that has not been treated chemically or with adhesives and coatings including but not limited to paint, glue, or any other visible contaminant.
 - (6) "Commingled yard waste" means yard waste that has been mixed with other solid wastes. Commingled yard waste does not include yard waste in bags mixed with other solid wastes.
 - (7) "Compost" means a humus-like organic material resulting from the biological decomposition of solid waste.
 - (8) "Compostable container" means a container composed of materials such as vegetable matter, paper, cardboard, and plastic that meets ASTM D6400 or D6868 as described in rule 3745-500-03 of the Administrative Code, that may display the international biodegradable products institute's "Compostable Logo," and that will decompose or degrade at a rate equal to or faster than the material with which it is composted under equivalent conditions.
 - (9) "Compostable serveware" means an item such as bowls, plates, cups, cutlery, and films, that meets ASTM D6400 or D6868 as described in rule 3745-500-03 of the Administrative Code, that may display the international biodegradable products institute's "Compostable Logo," and that will decompose or degrade at a rate equal to or faster than the material with which it is composted under equivalent conditions.
 - (10) "Compost product" means compost that meets applicable compost product quality standards.
 - (11) "Composting" means the process of biological decomposition of solid wastes under controlled conditions resulting in compost. Controlled conditions include but are not limited to grinding, shredding, piling, physical turning, aerating, adding moisture, or other processing of solid wastes.
 - (12) "Cross-contamination" means the intentional or unintentional contact of feedstocks subject to a more stringent quality standard with a feedstock subject to a less stringent quality standard and includes but is not limited to contact with the surface of a machine, the mixture of tested compost with untested compost, or contact with leachate that was previously in contact with a feedstock subject to a more stringent quality standard.
- (D) [Reserved.]
- (E) [Reserved.]
- (F)
- (1) "Feedstock" means a solid waste that will readily decompose during the composting process including but not limited to yard waste, agricultural waste, animal waste, food scraps, animal carcasses, raw rendering material, and mixed solid waste.

- (2) "Food scraps" means food residuals including but not limited to vegetables, fruits, grains, dairy products, meats, and the compostable packaging that may be commingled.
- (3) "Foreign/inert matter" means inorganic and organic constituents that were not readily decomposed during the composting process including but not limited to plastics, glass, textiles, rubber, leather, metal, ceramics, styrofoam, sharp objects, and painted, laminated, or treated wood.
- (G) [Reserved.]
- (H) [Reserved.]
- (I)
- (1) "Inactive composting facility" means a composting facility where no solid wastes are received, processed, or stored.
- (2) "In-vessel" means a method of composting where solid wastes are placed in an enclosed or partly enclosed unit and managed to enable composting.
- (J) [Reserved.]
- (K) [Reserved.]
- (L) [Reserved.]
- (M)
- (1) "Materials placement area" means any area of the composting facility where compost products, solid wastes, feedstocks, bulking agents, or additives are received, placed, processed, or stored.
- (2) "Mixed solid waste" means a feedstock consisting of solid wastes that will readily decompose and waste materials that will not readily decompose and may contain household solid wastes that are excluded from regulation as hazardous wastes in accordance with Chapter 3745-51 of the Administrative Code.
- (3) "Modification" means any substantial change to the location or size of the material placement area, or to the design, construction, process, or operation of a class I composting facility.
- (N) [Reserved.]
- (O) [Reserved.]
- (P) [Reserved.]
- (Q) [Reserved.]
- (R)
- (1) "Raw rendering material" means a feedstock consisting of any part of a carcass or product of a carcass of any dead animal that is unwholesome, condemned, inedible, or otherwise unfit for human consumption.
- (2) "Runoff" means precipitation that has fallen onto the composting facility and has not come in contact with any compost products, solid wastes, feedstocks, bulking agents, or additives.
- (S)

- (1) "Salvaging" means the extracting or removing of materials from the solid waste stream at the working face of a solid waste disposal facility for the intended purpose of recycling or for removal to a salvage facility regulated by Chapter 3737. of the Revised Code and rules adopted thereunder.
 - (2) "Sewage sludge" has the same meaning as in Chapter 6111. of the Revised Code and rules adopted thereunder.
 - (3) "Static pile" means a method of composting where solid wastes are constructed into a pile and are managed and turned to enable aerobic composting.
- (T) "Thermophilic stage" means a biological stage in the composting process characterized by a high rate of decomposition and temperatures above one hundred thirty-one degrees Fahrenheit.
- (U) [Reserved.]
- (V) [Reserved.]
- (W)
- (1) "Windrow" means an elongated pile.
 - (2) "Windrow composting" means a method of composting where solid wastes are constructed into an elongated pile and are managed and turned to enable aerobic composting.
- (X) [Reserved.]
- (Y) "Yard waste" means solid waste that includes only leaves, grass clippings, brush, garden waste, tree trunks, tree stumps, holiday trees, prunings from trees or shrubs, and vegetative waste resulting from the use of commercial products, including but not limited to discarded flowers, potted flowers, or grave blankets that do not include plastic, metal, styrofoam, or other non-biodegradable material. Yard waste does not include wastes from industrial processing, agricultural processing, or food processing.

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3745-560-03 Plan view drawing update for class IV composting facilities.

No later than February 1, 2013, the owner or operator of a class IV composting facility that obtained an acknowledgment of registration prior to the effective date of this rule shall submit a plan view drawing that meets the requirements set forth in rule 3745-560-400 of the Administrative Code.

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3745-560-04 Composting - log of operations and annual report forms.

- (A) An owner or operator of a composting facility shall maintain a log of operations on forms prescribed by the director or by alternate forms either in paper or electronic format which shall contain the following:
- (1) General information: facility name and location, contact name and telephone number, license number for class I and II facilities, registration number for class II, III, and IV facilities, and calendar year for which the log is maintained.
 - (2) Operational information: method of composting used and description of equipment available.
 - (3) Materials acceptance and distribution information: date when waste recorded in log of operations, quantity of waste received entered as tons or cubic yards, type of feedstocks, bulking agents, and additives received, county of generation, and quantity of compost product distributed entered as tons or cubic yards.
 - (4) Materials management information: dates when tree stumps, pallets, and clean whole wood are processed and dates when compost piles, windrows, and vessels are formed, turned, loaded, and sampled.
 - (5) Self-inspection checklist: information acknowledging compliance or noncompliance with operational requirements as specified in rule 3745-560-110, 3745-560-210, 3745-560-310, or 3745-560-410 of the Administrative Code and a description of actions taken to abate violations, if applicable.
 - (6) Unauthorized materials incident information: the date and time the unauthorized material was discovered, description of the material, hauler name, and action taken by the owner or operator.
 - (7) Yard waste load refusal information: the date and time that a load was rejected, the license plate number of the vehicle transporting the rejected load, hauler name, and the reason for rejecting the load.
- (B) An owner or operator of a composting facility shall submit an annual report on forms prescribed by the director which shall contain the following:
- (1) General information: facility name and location, contact name and telephone number, license number for class I and II facilities, registration number for class II, III, and IV facilities, and calendar year for which the report is submitted.
 - (2) Materials acceptance and distribution information: monthly quantity of waste received by feedstock type, bulking agent, and additive entered as tons or cubic yards, county of generation, and monthly quantity of compost product distributed entered as tons or cubic yards.
 - (3) Product testing information: copy of all testing performed on compost product and method utilized and results of the test analysis, if applicable.
 - (4) For class I or class II composting facilities, the current closure cost estimate pursuant to rule 3745-560-05 of the Administrative Code.

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3745-560-05 Composting - closure cost estimate.

- (A) Closure cost estimate. The owner or operator of a class I or class II composting facility shall determine the closure cost estimate as follows:
- (1) Class I composting facility. The closure cost estimate shall be based on the closure costs at the point in the operating life of the facility when the extent and manner of its operation would make the closure the most expensive, and shall be based on a third party conducting the closure activities. The closure cost estimate shall be documented as an itemized written estimate, in current dollars, of the cost of closure. Ohio EPA may require revisions to the closure cost estimate or to the closure financial assurance instrument.
 - (2) Class II composting facility. The closure cost estimate shall be calculated as follows:
 - (a) For facilities accepting solid wastes authorized in accordance with paragraph (B) of rule 3745-560-210 of the Administrative Code, two dollars and fifty cents per cubic yard, based on the maximum capacity of the materials placement area, excluding the storage capacity of compost product, as specified in the authorizing document.
 - (b) For facilities accepting alternative materials not authorized in accordance with paragraph (B) of rule 3745-560-210 of the Administrative Code, eight dollars per cubic yard or the local disposal rate, whichever is higher, based on the maximum capacity of the materials placement area, excluding the storage capacity of compost product, as specified in the authorizing document or that portion of the materials placement area designated for receiving and composting alternative materials specified in the log of operations.Ohio EPA may require revisions to the closure cost estimate or to the closure financial assurance instrument.
- (B) Annual review of closure cost estimate. The owner or operator of a class I or class II composting facility shall annually review and make appropriate revisions to the closure cost estimate in accordance with paragraph (A) of this rule. The review of the closure cost estimate for a class I composting facility shall include an adjustment of the closure cost estimate for inflation. The adjustment shall be made as specified in this paragraph, using an inflation factor derived from the annual implicit price deflator for gross domestic product as published by the U.S. department of commerce in the February issue of "Survey of Current Business" as described in rule 3745-500-03 of the Administrative Code. The inflation factor is the result of dividing the latest published annual deflator by the annual deflator for the previous year.
- (1) The first adjustment is made by multiplying the closure cost estimate by the inflation factor. The result is the adjusted closure cost estimate.
 - (2) Subsequent adjustments are made by multiplying the most recently adjusted closure cost estimate by the most recent inflation factor.
- (C) Review of closure cost estimates associated with modifications or amendments to registrations.
- (1) Upon issuance of a permit to install for a modification of an existing class I composting facility, the owner or operator shall review and make appropriate revisions to the closure cost estimate in accordance with paragraph (A) of this rule.
 - (2) Upon submittal of amendments to the registration of an existing class II composting facility, the owner or operator shall review and make appropriate revisions to the closure cost estimate in accordance with

paragraph (A) of this rule.

(D) The owner or operator of a class I or class II composting facility shall ensure financial assurance instruments account for increases in the closure cost estimate.

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3745-560-100 Class I composting facility establishment.

- (A) No person shall establish or operate a class I composting facility without first having met the following:
- (1) Obtaining a permit to install in accordance with this rule prior to the construction of a new class I composting facility.
 - (2) Obtaining a solid waste license pursuant to Chapter 3745-501 of the Administrative Code.
 - (3) Executing the financial assurance instrument pursuant to rule 3745-503-05 of the Administrative Code for an amount not less than the current closure cost estimate established in accordance with rule 3745-560-05 of the Administrative Code.
- (B) Permit to install for a class I composting facility. A permit to install application shall be submitted to Ohio EPA and shall consist of the following:
- (1) Plan sheets required in paragraph (C) of this rule. Engineering plans, specifications, and information as required by this rule shall be sufficiently detailed to allow for technical review of the permit application and to provide assurance that the facility meets the siting criteria and is designed and will be constructed, operated, and closed in accordance with this chapter and Chapter 3745-501 of the Administrative Code.
 - (2) Narrative report with operational information required in paragraph (D) of this rule. The information required in this rule shall be provided in sufficient detail to allow for technical review of the permit application and to provide assurance that the facility is designed and will be constructed, operated, and closed in accordance with this chapter and Chapter 3745-501 of the Administrative Code.
 - (3) Land owner information including name, address, and contact information, if the land owner is not the applicant. This information shall include a notarized written statement from each titleholder of each tract of land on which the facility is located that each titleholder acknowledges that the applicant is submitting a permit to install application and may use the land for the purpose of establishing a class I composting facility.
 - (4) Copies of the letters of intent required in paragraph (G) of this rule.
 - (5) A notarized statement described in and signed by the applicant in accordance with rule 3745-500-50 of the Administrative Code.
 - (6) For regulatory review purposes, the initial application and any subsequent revisions to the application shall be submitted in duplicate to the director with a third copy sent to the board of health of the health district where the facility is or will be located. Any revisions to the application must be accompanied by an index listing the change and the page where the change occurred. Upon written request from Ohio EPA, the applicant shall submit two additional complete copies of the revised application to the director and a notarized statement described in and signed by the applicant in accordance with rule 3745-500-150 of the Administrative Code.
- (C) Plan sheets. The following detailed engineering plans, specifications, and information for the composting facility shall be shown by means of drawings and narrative descriptions where appropriate and shall be signed and sealed by a professional engineer. Minimum dimensions of the plan drawings shall be twenty-four inches by thirty-six inches. An individual plan drawing may contain information specified in more than one individual subheading. Each individual plan drawing shall clearly show the vertical and horizontal scales used. A scale of one inch equals no greater than one hundred feet shall be used unless

specified otherwise by Ohio EPA.

- (1) Engineering plan cover sheet to be numbered sheet 1 shall contain the following detailed information:
 - (a) The name of the composting facility.
 - (b) The geographical location of the composting facility shown on a USGS 7.5 minute (topographic) map.
 - (c) The name and address of the applicant and the composting facility operator.
 - (d) The name and address of each titleholder of each tract of land to be used for the composting facility.
 - (e) The name, address, and telephone number of the person who prepared the plans.
 - (f) Index of plan sheets.
- (2) A plan drawing to be numbered consecutively as sheets 2A, 2B, 2C, etc. shall contain the following detailed facility construction and operational information:
 - (a) The property lines of land owned or leased for the composting facility as determined by a property survey conducted by a professional skilled in the appropriate discipline.
 - (b) Direction of prevailing winds during each season.
 - (c) Traffic patterns, including on-site access roads.
 - (d) Cross sections and construction materials of all surfaces and facilities on or in which solid wastes will be placed prior to, during, or after composting.
 - (e) Runoff control structures, sedimentation ponds, and leachate management system structures and the layout of the leachate management system including at a minimum leachate flow patterns, drains, piping, storage, and clean-outs.
 - (f) Composting facility boundary.
 - (g) Location of the materials placement areas for each of the following:
 - (i) Composting operations.
 - (ii) Storage of feedstocks, bulking agents, or additives.
 - (iii) Storage of compost product.
 - (h) The location of existing or proposed maintenance buildings, weighing facilities, storage buildings, and other structures.
 - (i) Roads, railroads, and occupied structures.
 - (j) The location of fencing, gates, and natural or other screening on the site (may be shown on an aerial photograph).
 - (k) The north arrow.
- (3) A plan drawing to be numbered consecutively as sheets 3A, 3B, 3C, etc., showing the following detailed

facility siting criteria items located inside the facility boundaries and within one thousand feet beyond the facility boundaries:

- (a) The property lines of land owned or leased for the composting facility as determined by a property survey conducted by a professional skilled in the appropriate discipline.
 - (b) Composting facility boundary.
 - (c) Public roads, railroads, and structures.
 - (d) Existing topography showing streams, wetlands, lakes, springs, and other surface waters of the state.
 - (e) Existing domiciles.
 - (f) Leachate management structures.
 - (g) The limits of the one hundred year floodplain.
 - (h) National park or national recreation areas, candidate areas for potential inclusion into the national park system, and any state park or established state park purchase areas.
 - (i) State nature preserves, state wildlife areas, national and state scenic rivers, and national wildlife refuge, special interest areas and research natural areas in the Wayne national forest, state resource waters, outstanding national resource waters, category 3 wetlands, outstanding high quality waters, coldwater habitats, and exceptional warmwater habitats as classified in accordance with Chapter 3745-1 of the Administrative Code.
 - (j) Existing public water supply wells, developed springs, or private potable water supply wells.
 - (k) The north arrow.
- (4) A plan drawing to be numbered consecutively as sheets 4A, 4B, 4C, etc. shall contain the following detailed facility surface and ground water management information inside the facility boundaries and within five hundred feet beyond the facility boundaries. At a minimum, the plan drawings shall include the following:
- (a) The property lines of land owned or leased for the composting facility as determined by a property survey conducted by a professional skilled in the appropriate discipline.
 - (b) A detailed description of the existing direction of flow and points of concentration of surface water.
 - (c) The existing topography showing vegetation, streams, wetlands, lakes, springs, and other surface waters of the state as defined in Chapter 3745-1 of the Administrative Code with a contour interval no greater than five feet.
 - (d) The proposed topography of the site with contour lines that shall have an interval of no greater than five feet.
 - (e) Existing public and private water system drinking water supply wells.
 - (f) Drainage plans which show the following:
 - (i) Grades.
 - (ii) Swales and streams and existing or proposed diversion trenches.

(iii) Existing or proposed special drainage devices to be used for control of surface erosion.

(g) The north arrow.

(D) Narrative report. The following information shall be presented in narrative form with necessary accompanying diagrams provided on a form prescribed by the director and shall be signed and sealed by a professional engineer:

(1) A detailed discussion of the following general operational information shall include the following:

- (a) The authorized maximum daily waste receipt planned for the facility.
- (b) The equipment to be used in the operation and maintenance of the facility.
- (c) The waste processing rate, performance capabilities, and principal specifications of each piece of powered equipment to be used at the facility for loading, unloading, handling, or processing solid wastes.
- (d) The maximum capacity and type of each container to be used, if applicable, to store solid wastes at the composting facility including feedstocks, bulking agents, additives, and materials that will be removed from the facility including but not limited to salvaged materials and materials that are not utilized in the composting process.
- (e) The maximum available capacity of the facility including area measurements for all stages of composting.
- (f) For informational purposes only, proposed hours of operation and if applicable proposed hours that the facility will be open to the public for receiving waste materials.
- (g) Methods of loading and unloading solid waste materials including compost and materials that will be removed from the facility including but not limited to salvaged materials and materials that are not utilized in the composting process into transportation vehicles at the facility.
- (h) Traffic patterns within the facility boundaries.
- (i) Maximum and average force in pounds per square inch that will be exerted upon the floor of the facility.

(2) A detailed discussion of composting operational information shall include the following:

- (a) Identification of the sources, composition, and estimated quantity of solid waste by type of feedstock, bulking agent, or additive to be used for composting.
- (b) A materials flow diagram for the facility showing both the type of feedstocks, bulking agents, or additives and the quantities of materials received and removed.
- (c) Procedures, frequency, and the sequence of processes and steps involved in converting solid waste to compost including but not limited to handling, sorting, shredding, mixing, adding water, screening, turning, composting, curing, and recirculating leachate and other liquids authorized for use by the director.
- (d) The percentage of mixture of the feedstock, bulking agent, and additive and the resulting carbon to nitrogen ratio.

- (3) A detailed discussion of control measures taken shall include the following:
- (a) The collection, containment, recirculation, treatment, removal, disposal and prevention of generation of leachate and how leachate will be prevented from entering surface and ground waters including either the following:
 - (i) Direct discharge to an approved treatment facility.
 - (ii) Leachate conveyance, recirculation, and storage structures and systems.
 - (b) The collection, containment, recirculation, treatment, removal, disposal and prevention of generation of surface water runoff and how water runoff will be prevented from entering surface and ground waters including either of the following:
 - (i) Direct discharge to an approved treatment facility.
 - (ii) Surface water runoff conveyance, recirculation, and storage structures and systems.
 - (c) How birds, rodents, and other vectors will be prevented from reaching solid wastes at the composting facility.
 - (d) Measures utilized to control fire, dust, scavenging, erosion, and blowing debris.
 - (e) Inspection procedures for incoming wastes to prevent and manage prohibited materials at the composting facility.
 - (f) Inclement weather operation procedures.
 - (g) Salvaging procedures to be conducted on site, if any.
 - (h) Odor management plan including discussion of the circumstances that are likely to result in nuisance odor production, methods that will be taken to reduce or minimize odors that are produced, and methods that will be used to mitigate the effects of odors.
- (E) On the date the permit to install application is received by Ohio EPA, the limits of materials placement and leachate management structures are in compliance with the following siting criteria:
- (1) The materials placement area and leachate management structures shall not be located within the following:
 - (a) Two hundred feet from any surface waters of the state.
 - (b) Three hundred feet from a known sinkhole or agricultural drainage well.
 - (c) The sanitary isolation radius of public water system drinking water supply wells as calculated using the formulas specified in rule 3745-9-04 of the Administrative Code.
 - (d) Three hundred feet from a private water system drinking water supply well that is not controlled by the facility.
 - (e) Fifty feet from a private water system drinking water supply well that is controlled by the facility owner.
 - (f) Three hundred feet from a transient non-community public water system drinking water supply well.

(g) Five hundred feet from a domicile unless the domicile is owned or leased by the owner or operator.

(h) One thousand feet from the following:

(i) An area designated by the Ohio department of natural resources as either a state nature preserve, a state wildlife area, or a state scenic river.

(ii) An area designated, owned, and managed by the Ohio historical society as a nature preserve.

(iii) An area designated by the United States department of the interior as either a national wildlife refuge or a national scenic river.

(iv) An area designated by the United States forest service as either a special interest area or a research natural area in the Wayne national forest.

(v) Surface waters of the state designated by Ohio EPA as either a state resource water, an outstanding national resource water, a category 3 wetland, an outstanding high quality water, a coldwater habitat, or an exceptional warmwater habitat.

(i) A one hundred year floodplain.

(2) The materials placement area and leachate management structures shall not be located within the inner management zone (one year time of travel) of a drinking water source protection area for a community or non-transient, non-community public water system using ground water.

(3) Except for facilities which exclusively compost wastes generated within state parks or national parks, or national recreation areas, as of the date the initial registration application was submitted the materials placement area and leachate management system of the composting facility shall not be located in any of the following:

(a) A national park or national recreation area.

(b) A state park or an established state park purchase area.

(c) A candidate area for potential inclusion in the national park system.

(d) A property that lies within the boundaries of a national park or national recreation area but that has not been acquired or is not administered by the secretary of the United States department of the interior.

(F) Composting facilities registered prior to the effective date of this rule shall comply with siting criteria in effect on the date of initial registration.

(G) Concurrent with submitting the permit to install application, the applicant shall do the following:

(1) Comply with any applicable disclosure statement requirements in accordance with Chapter 3734. of the Revised Code and rules adopted thereunder.

(2) Mail letters of intent to establish a composting facility which include a description of property and facility boundaries by certified mail or any other form of mail accompanied by a receipt to the following:

(a) The governments of the general purpose political subdivisions where the facility is proposed to be located including but not limited to local health departments, county commissioners, legislative authority of a municipal corporation, or the board of township trustees.

- (b) The single or joint county solid waste management district or districts or regional solid waste management authority or authorities where the facility is proposed to be located.
 - (c) The owner or lessee of any easement or right of way bordering or within the proposed facility boundaries which may be affected by the proposed solid waste facility.
 - (d) The local zoning authority having jurisdiction.
 - (e) The park system administrator, if any part of the proposed facility is to be located within or will share the park boundary.
 - (f) The conservancy district, if any part of the proposed facility is to be located within or will share the conservancy district boundary.
 - (g) The fire department having responsibility for providing fire control services where the facility is proposed to be located.
 - (h) The division of air pollution control, the division of surface water, and the division of drinking and ground water of Ohio EPA including a written request for information pertaining to any regulatory requirements under Chapter 3704. or Chapter 6111. of the Revised Code.
- (H) Modifications to a permit to install.
- (1) No person shall modify a class I composting facility without first obtaining a permit to install issued by the director.
 - (2) The owner or operator proposing to modify a class I composting facility shall submit an application to the director in accordance with paragraphs (B), (C), and (D) of this rule.
- (I) Alterations to the permit to install. No person shall alter a class I composting facility without first submitting a request and obtaining written concurrence from Ohio EPA in accordance with rule 3745-500-150 of the Administrative Code.

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3745-560-101 Criteria and procedures for approval, termination, revocation, and administrative change of a class I composting facility permit to install.

(A) Criteria for approval.

- (1) The director shall not approve a class I composting facility permit to install unless the following are determined:
 - (a) Establishment or modification and operation of the class I composting facility will not violate Chapters 3704., 3734., or 6111. of the Revised Code.
 - (b) The applicant or person listed as the operator who has previously or is currently responsible for the management or operation of one or more solid waste facilities has managed or operated such facility in substantial compliance with applicable provision of Chapters 3704., 3714., 3734., and 6111. of the Revised Code and any rules adopted and permits issued thereunder and has maintained substantial compliance with all applicable orders issued by the director, environmental review appeals commission, or courts having jurisdiction in accordance with Chapter 3746-13 of the Administrative Code in the course of such previous or current management or operations. The director may take into consideration whether compliance has been maintained with any applicable order of a board of health maintaining a program on the approved list.
 - (c) The applicant meets the requirements of sections 3734.40 and 3734.43 of the Revised Code and rules adopted thereunder.
 - (d) The person listed as operator of the facility shall meet the requirements of division (L) of section 3734.02 of the Revised Code and rules adopted thereunder.
 - (e) The permit to install application contains the information required pursuant to rule 3745-560-100 of the Administrative Code.
 - (f) The siting criteria as established in rule 3745-560-100 of the Administrative Code have been met.
 - (g) The facility preparation requirements are met as established in rule 3745-560-102 of the Administrative Code.
 - (h) The letters of intent were sent in accordance with rule 3745-560-100 of the Administrative Code.
- (2) An application notwithstanding any deficiency may be considered and acted upon if sufficient information is provided for the director to determine whether the permit to install requirements set forth in rule 3745-560-100 of the Administrative Code are satisfied.
- (3) If the director determines that information in addition to that required by rule 3745-560-100 of the Administrative Code is necessary to determine whether the criteria set forth in paragraph (A) of this rule are satisfied, the director may require that the applicant supply such information as a precondition to further consideration of the permit to install application.
- (4) The director may deny a permit to install application for a class I composting facility if not later than thirty days after receipt of notification that the application is incomplete the owner or operator has not corrected noted deficiencies and resubmitted the application or has not submitted a written request for and obtained approval of a thirty day extension.
- (5) The director may deny a permit to install application for a class I composting facility that proposes to be established on land where a hazardous or solid waste facility was operated and has not obtained previous

authorization as required by rule 3745-27-13 of the Administrative Code.

(B) Criteria for termination of a class I composting facility permit to install.

- (1) A class I composting facility permit to install shall terminate in accordance with rule 3745-500-330 of the Administrative Code.
- (2) A class I composting facility permit to install shall expire upon receipt by Ohio EPA of written notification from the owner or operator that the permit to install be terminated.

(C) Criteria for revocation of a class I composting facility permit to install.

The director may revoke a class I composting facility permit to install when any of the following apply:

- (1) The composting facility ceases to be an active composting facility.
 - (2) The siting criteria as established in rule 3745-560-100 of the Administrative Code have not been met.
 - (3) The composting facility was modified or altered and the owner or operator did not submit to Ohio EPA a modification or alteration request for the changes and failed to obtain any applicable authorizing documents.
 - (4) A solid waste facility license held by the owner or operator of the composting facility expires and no license renewal has been applied for in the manner prescribed in Chapter 3745-501 of the Administrative Code.
 - (5) A solid waste facility license held by the owner or operator of the composting facility expires and a license renewal has been applied for and denied as a final action of the licensing authority.
 - (6) A solid waste facility license held by the owner or operator of the composting facility has been revoked as a final action of the licensing authority.
 - (7) The owner or operator sells or offers for sale at retail or wholesale, uses, distributes for use, or gives away any compost that does not comply with the applicable quality standards established in this chapter.
 - (8) The establishment or operation of the composting facility has violated Chapter 3704., 3734., or 6111. of the Revised Code.
 - (9) Any causes for revocation pursuant to rule 3745-500-350 of the Administrative Code.
- (D) Administrative change. A permit to install may be administratively changed in accordance with rule 3745-500-360 of the Administrative Code

(E) Procedures.

- (1) When issuing, denying, modifying, suspending, approving or denying transfer of, or revoking a permit to install, the director shall follow the appropriate procedures set forth in rule 3745-500-120 of the Administrative Code and any applicable procedures set forth in the Revised Code.
- (2) Upon approving or denying the transfer of a permit to install, the director shall retain and distribute copies of the signed approval or denial letter pursuant to rule 3745-500-130 of the Administrative Code.

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3745-560-102 Procedures for commencement of operations at class I composting facilities.

- (A) Facility site preparation. Prior to initial acceptance of feedstocks, bulking agents, or additives at the facility, the following shall be completed:
- (1) Materials placement areas shall be located within enclosed buildings or structures. The area where solid waste is received at the composting facility shall be located within structures that may have one open side.
 - (2) The floor of the composting facility used for materials placement and storage of materials that will be removed from the facility including but not limited to salvaged materials and materials that are not utilized in the composting process shall be designed and installed to meet the following:
 - (a) Constructed of an impermeable material such as concrete, asphalt, or metal to prevent the infiltration of leachate into the ground water.
 - (b) Constructed to withstand at least one hundred and ten per cent of the maximum force in pounds per square inch to be expected during normal operation.
 - (c) Constructed to prevent any unauthorized discharge of leachate from the facility.
 - (d) Constructed in such a manner to readily allow wet or dry cleanup operations.
 - (e) Sloped to direct leachate to collection points and not allow ponding of liquids.
 - (f) Constructed to direct leachate to the leachate management system.
 - (g) Designed to withstand the maximum temperatures encountered during composting.
 - (h) Accessible for annual visual inspection for cracks and breaks.
 - (i) Constructed with materials that enable repairs to be made.
 - (j) Constructed to allow heavy equipment operation during inclement weather.
 - (3) Adequate leachate collection, management, and treatment or disposal shall be provided and proper treatment or disposal facilities shall be used. If conveyance storage structures are utilized, the conveyance storage structures shall provide the following:
 - (a) For storage tanks, be provided with spill containment.
 - (b) For storage structures and other leachate handling areas, have a capacity sufficient for proper operation of the facility.
 - (c) For storage structures, be capable of being monitored or inspected for leaks.
 - (4) The land surface of the materials placement area shall be greater than or equal to one per cent in slope and less than or equal to six per cent in slope so as to direct surface water to collection points or otherwise control the surface water drainage.
 - (5) The materials placement area shall be constructed to allow facility operation during inclement weather.
 - (6) Construction of planned leachate and surface water management structures.
 - (7) Signs are posted in accordance with rule 3745-560-110 of the Administrative Code.

(B) Verification of preparations. Prior to initial acceptance of feedstocks, bulking agents, or additives, the composting facility shall be inspected and written concurrence shall be received from Ohio EPA acknowledging compliance with this rule.

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3745-560-105 Alternative materials request for class I composting facilities.

- (A) The owner or operator of a class I composting facility may submit a written request to the director for approval to accept alternative materials not otherwise authorized in accordance with paragraph (B) of rule 3745-560-110 of the Administrative Code. At a minimum, a request to accept an alternative material shall include the following:
- (1) The name of the composting facility where the material will be accepted and the name of the facility owner and operator.
 - (2) A detailed description of the material to be accepted including any available or requested analytical data.
 - (3) The source and suppliers of the material.
 - (4) The maximum amount of the material that the facility will accept on a daily basis.
 - (5) A detailed description that outlines the technical feasibility of the proposal.
 - (6) A detailed description of any impact that may result from the acceptance of the material in regard to the management of odor, litter, vectors, and leachate or other operational requirements of rule 3745-560-110 of the Administrative Code including the methods that will be used to control the impacts.
 - (7) Whether pathogens are expected to be present in the material and what mechanisms will be in place to prevent exposure for those in contact with the waste or the compost product produced from such wastes.
 - (8) Whether the owner or operator is requesting to compost the material separate from mixed solid waste.
 - (9) Whether the owner or operator is requesting to compost the material as a pilot project or on a permanent basis.
 - (10) A description of any known or potential contaminants that may cause or threaten to cause an adverse effect to the public health or safety or the environment.
 - (11) How the owner or operator intends to distribute or otherwise utilize the compost product.
 - (12) A detailed description of how the material will be processed. At a minimum, the description shall include the following:
 - (a) Whether the owner or operator will utilize the material as a feedstock, bulking agent, or additive.
 - (b) Whether the owner or operator will shred or screen the material prior to incorporation into the composting process.
 - (c) What equipment will be utilized.
 - (d) The percentage of mixture of the feedstock, bulking agent, or additive with other authorized feedstocks, bulking agents, or additives and the resulting carbon to nitrogen ratio.
 - (e) The method of composting utilized to maintain an appropriate environment for biological decomposition.
 - (f) The anticipated moisture level of the incoming feedstock, bulking agent, or additive and the anticipated moisture levels after mixing with other authorized feedstocks, bulking agents, or additives.

- (13) The revised closure cost estimate prepared in accordance with rule 3745-560-05 of the Administrative Code.
 - (14) Any other information deemed necessary by Ohio EPA.
- (B) The director may approve and condition a request submitted in accordance with this rule when the following are determined:
- (1) The use of the alternative material is technically feasible for composting and the owner or operator will use a technically appropriate composting method.
 - (2) The owner or operator has sufficient resources including but not limited to equipment, personnel, and facility capacity to manage and process the alternative material.
 - (3) The owner or operator is capable of maintaining an appropriate moisture level, carbon to nitrogen ratio, and an environment suitable to the composting process.
 - (4) The process used for composting alternative materials of pathogen concern will minimize the risk of exposure from pathogens and will not cause a substantial threat to public health or safety or the environment.
 - (5) The owner or operator of the composting facility is in substantial compliance with Chapter 3734. of the Revised Code, this chapter, and all other applicable laws and regulations.
 - (6) The acceptance of the alternative material is unlikely to cause violations of Chapter 3704. or 6111. of the Revised Code, this chapter, or any other applicable federal or state laws.
 - (7) The acceptance, processing, and use of the material will not otherwise cause or threaten to cause an adverse effect to public health or safety or the environment.
 - (8) The submitted analytical data demonstrates that the alternative material exceeds the parameters specified in rule 3745-560-130 of the Administrative Code, but the applicant has demonstrated that the compost produced with that material will meet the compost quality standards specified in rule 3745-560-130 of the Administrative Code.
- (C) The director may establish compost quality standards for the alternative materials requested to protect public health and safety and the environment.

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3745-560-110 Operational requirements for class I composting facilities.

- (A) Authorizing documents. The owner or operator shall operate the facility in accordance with applicable authorizing documents. The owner or operator shall have a copy of applicable authorizing documents available for inspection by Ohio EPA or the approved board of health during normal operating hours.
- (B) Authorized materials. The owner or operator shall only accept those feedstocks, bulking agents, and additives authorized in the permit to install. The owner or operator may accept alternative materials upon approval of a permit alteration issued by the director pursuant to rule 3745-560-105 of the Administrative Code.
- (C) Prohibited material management. The owner or operator shall not accept any prohibited material at the facility.
 - (1) Prohibited material includes but is not limited to the following:
 - (a) Any solid waste, feedstock, bulking agent, or additive other than those feedstocks, bulking agents, or additives authorized by paragraph (B) of this rule.
 - (b) Hazardous waste.
 - (c) Infectious waste.
 - (d) Asbestos including "asbestos-containing waste material" as defined in rule 3745-500-02 of the Administrative Code.
 - (e) Lead acid batteries.
 - (f) Wastes that may include heat stable toxins produced by microorganisms including but not limited to improperly processed foods that are contaminated or likely to be contaminated with *Clostridium botulinum*.
 - (g) Scrap tires.
 - (h) Any other material that the facility is otherwise prohibited to accept under federal or state laws.
 - (2) If prohibited material is detected, the owner or operator shall immediately do the following:
 - (a) Remove the prohibited material from the materials placement area.
 - (b) Manage the prohibited material in accordance with applicable laws and regulations.
 - (c) Record incidents in the log of operations.
- (D) Methods of composting. The owner or operator shall manage authorized materials by utilizing one of the following methods of composting:
 - (1) Windrow composting. The windrow construction, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process. Windrows shall be constructed parallel to the line of slope on the site and turned at a minimum four times per year to mix materials, distribute moisture and heat, increase porosity, and change the location of materials in a pile or windrow to ensure consistent composting. If a windrow is in place for at least twelve months, it shall have been turned a minimum of four times during that that period.

- (2) In-vessel composting. The construction, loading, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process.
 - (3) Aerated static pile composting. The construction, including the aeration system, carbon to nitrogen ratio, and moisture content, shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process.
 - (4) Static pile composting. The construction, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process. Static piles shall be turned at a minimum two times per year to reintroduce oxygen into the composting process.
 - (5) Other methods. The owner or operator may submit a written request to the director for approval of an alternative composting method. The request shall include at a minimum a detailed description of the alternative composting method and how the method will enable controlled biological decomposition and comply with the operational requirements specified in this rule.
- (E) Authorized materials management. The owner or operator shall distribute compost product at a minimum rate of one fourth the amount of material received the previous calendar year.
- (F) Certified operator. The owner or operator shall ensure that the technical operation and maintenance of the composting facility is under the responsible charge of an operator certified by the director as having completed the operator training required by Chapter 3734. of the Revised Code and rules adopted thereunder.
- (G) Containers management. Containers used to transport authorized materials shall be removed, shredded, or otherwise processed to increase the exposed surface area for composting if incorporated into the composting process.
- (H) Operational control. The owner or operator shall operate the composting facility in such a manner that does the following:
- (1) Controls noise, dust, and odors so as not to cause a nuisance or a health hazard.
 - (2) Controls the attraction, breeding, and emergence of insects, birds, rodents, and other vectors so as not to cause a nuisance or a health hazard. The owner or operator shall initiate vector control measures as deemed necessary by the approved board of health or Ohio EPA.
 - (3) Prevents the occurrence of fire, the spread of fire, and extinguishes fire. The owner or operator shall act immediately to prevent the spread of fire and extinguish fire.
 - (4) Employs reasonable measures to collect, properly contain, and dispose of scattered litter.
 - (5) Prevents the creation of water pollution as to not violate Chapter 6111. of the Revised Code or any rules adopted thereunder.
 - (6) Prevents the creation of air pollution as to not violate Chapter 3704. of the Revised Code or any rules adopted thereunder.
- (I) Facility access. The owner or operator shall do the following:
- (1) Employ reasonable measures to limit access to the composting facility by non-employees during

non-operating hours or in the absence of operating personnel.

- (2) Maintain materials placement areas and access roads within the facility boundary in such a manner to allow facility operations and access at all times with minimum erosion and ponding of surface water.
 - (3) Exclude domestic and farm animals from the facility, except for animals utilized for security purposes or vector control.
- (J) Equipment availability. The owner or operator shall have operable equipment of adequate size and quantity for the operations of the facility available at all times.
- (K) Facility signage. The owner or operator shall post signs with letters not less than three inches in height at the composting facility including the receiving and distribution areas. The owner or operator shall post signs at the entrance of the composting facility that include the following statement:
- "This composting facility will not accept hazardous wastes, infectious wastes, asbestos, lead acid batteries, or other prohibited materials."
- (L) Wood processing. The owner or operator when accepting tree stumps, trunks, limbs, or clean untreated wood shall do the following:
- (1) Shred or chip the tree stumps, trunks, limbs, or the clean untreated wood, prior to incorporation into the composting process and remove foreign materials including but not limited to nails and banding.
 - (2) Shred, chip, or remove tree stumps, trunks, limbs, and clean untreated wood at a minimum on an annual basis or more often than annually if conditions causing a nuisance or safety hazard warrant processing or removal of the tree stumps, trunks, limbs, and clean untreated wood, or when required by Ohio EPA or the approved board of health.
- (M) Surface water management. The owner or operator shall do the following:
- (1) Control surface water runoff and runoff, prevent ponding and erosion, and minimize the impact to surface water and ground water.
 - (2) Manage surface water in accordance with Chapter 6111. of the Revised Code.
 - (3) Divert surface water from the materials placement area. The land surface of the materials placement area shall be greater than or equal to one per cent in slope and less than or equal to six per cent in slope to direct surface water to collection points or otherwise control the surface water drainage.
 - (4) Monitor surface water runoff or ground water as required by the director or approved board of health if a substantial threat of surface water or ground water pollution exists.
- (N) Leachate management. The owner or operator shall do the following:
- (1) Take action to minimize the production of leachate.
 - (2) Eliminate ponding of leachate and the conditions that contribute to the discharge of leachate from the composting facility.
 - (3) Collect and contain leachate within the boundary of the composting facility and prevent leachate from discharging to waters of the state. Leachate may be collected and contained for reintroduction into the composting process.

- (4) If applicable, maintain any structures or mechanisms used for the collection or containment of leachate to prevent blockage, clogging, leakage, or breakage that may impede proper collection or containment of leachate.
- (O) Cross-contamination. The owner or operator shall prevent and manage cross-contamination of feedstocks, bulking agents, additives, compost, and compost product. If cross-contamination occurs, the owner or operator shall do one of the following:
- (1) Comply with the more stringent testing standard required by rule 3745-560-120 of the Administrative Code if the cross-contamination is from a more stringently tested feedstock or material.
 - (2) Reintroduce the compost or compost product into the composting process.
 - (3) Remove and properly manage the contaminated feedstock, compost, bulking agent, or additive if the cross-contamination is from a prohibited material.
- (P) Food scraps management. An owner or operator who accepts food scraps shall do the following:
- (1) Incorporate the food scraps into the composting process or combine with bulking agents in a manner to prevent nuisances including but not limited to odor, vectors, and litter no later than the end of operating hours, as specified in the license application, on the date of receipt.
 - ~~(3)~~(2) Maintain a stockpile of biofilter material to provide at a minimum a six inch cover to piles containing food scraps and apply a biofilter cover consisting of at a minimum six inches on the piles if odors, dust, or vectors are present or upon written request by Ohio EPA or the approved board of health.
 - ~~(4)~~(3) Control free liquid from the incoming food scraps using a berm consisting of compost, bulking agents, or other absorbent material placed around the area where the incoming material is handled and mixed.
- (Q) The director, health commissioner, or board of health may order that compost or compost product be disposed in a licensed solid waste landfill if the director, health commissioner, or board of health determine that the compost or compost product does not meet the applicable standards of quality or causes or threatens to cause a nuisance or adversely affects the public health or safety or the environment.

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3745-560-115 Record keeping requirements for class I composting facilities.

- (A) Record retention and availability. The owner or operator shall do the following:
- (1) Maintain records specified in this rule for a period of at least three years.
 - (2) Have records available for inspection by the approved board of health or Ohio EPA during normal operating hours.
 - (3) Upon request, submit records to Ohio EPA or the approved board of health.
- (B) Log of operation. The owner or operator shall do the following:
- (1) Record the facility operations on the log of operation forms as specified in rule 3745-560-04 of the Administrative Code.
 - (2) Complete the log of operation daily at an active composting facility and once per month at an inactive composting facility.
- (C) Annual report. Not later than February first of each year, the owner or operator shall submit an annual report to Ohio EPA. The annual report shall include the following:
- (1) The required information specified in rule 3745-560-04 of the Administrative Code.
 - (2) A summary of any maintenance performed on the waste handling floor and the leachate control system installed at the facility.

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3745-560-120 Compost distribution requirements for class I composting facilities.

(A) Compost product distribution.

- (1) Compost produced from mixed solid waste shall be disposed at a licensed sanitary landfill facility or may be used at a licensed sanitary landfill facility where the operator has obtained authorization for use of such compost in accordance with Chapter 3745-27 of the Administrative Code.
- (2) Except as provided in paragraph (A)(1) of this rule, an owner or operator shall only distribute compost that has been sampled in accordance with rule 3745-560-125 of the Administrative Code and meets the compost quality standards of rule 3745-560-130 of the Administrative Code.
- (3) Compost that meets the applicable quality standards of rule 3745-560-130 of the Administrative Code may be distributed as compost product for use in accordance with accepted agricultural, silvicultural, or horticultural practices.
- (4) Compost that does not meet the quality standards shall be reintroduced into the composting process, taken to another appropriate class of composting facility for further composting, disposed in a licensed solid waste disposal facility, or distributed for an alternative use after approval by the director in accordance with this rule.
- (5) If compost that has been previously sampled and tested is mixed with any amount of additional feedstocks, bulking agents, additives, or other untested compost, then the tested compost is considered to be cross-contaminated and shall be re-sampled and re-tested prior to distribution.

[Comment: Compost containing mixed solid waste may only be distributed in accordance with paragraph (A)(1) of this rule.]

(B) Product information and availability of test results.

- (1) Compost product that is distributed in packaged form shall be conspicuously labeled with product information. Product information shall be available in written form for compost distributed without packaging. At a minimum, product information shall contain the following information:
 - (a) Name and address of the composting facility.
 - (b) Any feedstocks, bulking agents, and additives used.
 - (c) Recommended uses for the compost product.
 - (d) Any owner or operator recommended restrictions on the use of the compost product.
- (2) Upon request, the owner or operator shall provide the customer a summary of results from testing required in accordance with this rule.

(C) Request for approval for land application or alternative use of compost that does not meet applicable standards for compost product. The owner or operator whose compost has been sampled and tested in accordance with rules 3745-560-125 and 3745-560-130 of the Administrative Code and exceeds any of the applicable concentration limits may submit a written request for approval for land application or alternative use of the compost. At a minimum, a request for approval for land application or alternative use shall include the following information:

- (1) Total quantity of compost and a detailed list of all feedstocks, bulking agents, and additives utilized to

produce the compost.

- (2) A copy of the test results of the compost required in accordance with rule 3745-560-130 of the Administrative Code.
 - (3) An explanation as to why the compost is unable to meet the quality standards specified in rule 3745-560-130 of the Administrative Code.
 - (4) A detailed description of the proposed alternative use, if not requesting land application.
 - (5) A detailed narrative of how the requested alternative use will not adversely affect the public health or safety or the environment.
 - (6) A copy of test results for soil from the proposed location of land application. The soil tests shall include the same parameters for the standards exceeded by the compost.
 - (7) The location of proposed land application, total acreage to be utilized, and proposed application rate including justification of specific application rates, safe uses, and any applicable restrictions.
 - (8) Any other information deemed necessary by the director.
- (D) Criteria for approval of a request for land application or alternative use of compost that does not meet applicable standards for compost product. The director may approve and condition a request for land application or alternative use of compost that does not meet applicable quality standards if the director determines the following:
- (1) The compost was not produced from mixed solid waste feedstock.
 - (2) The proposed land application or alternative use does not cause or threaten to cause an adverse effect to the public health or safety or the environment.
 - (3) The proposed land application or alternative use is in accordance with accepted agricultural, silvicultural, or horticultural practices.

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3745-560-125 Compost sampling and testing requirements for class I composting facilities.

- (A) The owner or operator shall sample the compost in accordance with the following:
- (1) Determine the volume of the pile of compost and record in the log of operations.
 - (2) Obtain one composite sample from each pile no greater than ten thousand cubic yards as follows:
 - (a) Each composite sample shall consist of nine grab samples of equal volume.
 - (b) Three grab samples shall be taken at different depths from three equally divided locations of the pile of compost.
 - (c) Thoroughly mix grab samples in a clean container to form one composite sample of a minimum volume of four quarts.
 - (3) Extract a sub-sample of a minimum volume of two quarts from the composite sample and place in a clean container.
 - (4) At a minimum, label the sample container to document the collection date, time, and person obtaining the sample.
 - (5) Samples collected for testing of Table 2 in rule 3745-560-130 of the Administrative Code shall be prepared and analysis started within one of the following time frames:
 - (a) Not later than eight hours after the collection of the sample.
 - (b) Not later than forty-eight hours after the collection of the sample when refrigerated and maintained at four degrees Centigrade.
 - (6) Sample collection and preservation shall ensure valid and representative results.
- (B) Authorization for alternative frequency of sampling, sampling method, or testing method. The director may approve and condition a request for an alternative frequency of sampling, sampling method, or testing method if, in the determination of the director, the alternative frequency or method ensures equivalent protection of public health and safety and the environment. The determination of the director shall be based on the information provided in paragraph (C) of this rule and any other information required by the director.
- (C) Request for approval of an alternative frequency of sampling, sampling method, or testing method. After one year of operation, the owner or operator may submit a written request for approval for an alternative frequency of sampling, sampling method, or testing method including at a minimum the following information:
- (1) A description of the proposed alternative frequency of sampling, sampling method, or testing method.
 - (2) The feedstocks, bulking agents, and additives accepted at the facility.
 - (3) A copy of the test results for at least five consecutive sampling and testing cycles in accordance with this rule and rule 3745-560-130 of the Administrative Code.
 - (4) A detailed narrative of how the requested alternative frequency of sampling, sampling method, or testing method will ensure compliance with applicable quality standards.
 - (5) If applicable, the scientifically recognized test preparation and analytical method that will provide

equivalent or improved test results.

(6) A description of the composting mix including but not limited to the feedstock to bulking agent ratio.

(7) Any other information deemed necessary by the director.

(D) The owner or operator who has obtained an approval for an alternative frequency of sampling, sampling method, or testing method shall immediately notify the director of changes in the feedstocks, bulking agents, or additives composted or mix ratio for composting and simultaneously shall commence complying with this rule and rule 3745-560-130 of the Administrative Code.

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3745-560-130 Compost quality standards for class I composting facilities.

[Comment: For dates of non regulatory government publications, publications of recognized organizations and associations, test methods, federal rules, and federal statutory provisions referenced in this rule, see rule 3745-500-03 of the Administrative Code titled "Incorporation by reference."]

(A) The compost quality standards in this paragraph are applicable to all compost produced from yard waste, animal waste, agricultural waste, food scraps, and alternative materials. The owner or operator shall have the samples collected pursuant to rule 3745-560-125 of the Administrative Code analyzed to demonstrate that concentration limits are not exceeded for the parameters listed in the following tables:

Table 1 - Heavy metals

Parameter	Concentration limit mg/kg dry weight	Preparation methods	Analytical methods	TMECC equivalent methods
Arsenic	41	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7010	TMECC 04.06-As
Boron	See Table 4			
Cadmium	35	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Cd
Copper	1500	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Cu
Lead	300	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020C or SW-846 7000B or SW-846 7010	TMECC 04.06-Pb
Mercury	7.8	SW-846 7471B	SW-846 7471B SW-846 6010C or SW-846 6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Hg
Nickel	420	SW-846 3050B	SW-846 6010C	TMECC 04.06-Ni

Table 1 - Heavy metals

		or SW-846 3051A	or SW-846 6020A or SW-846 7010	
Selenium	100	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846	TMECC 04.06-Se
Zinc	2800	SW-846 3050B or SW-846 3051A	6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Zn

Table 2 - Pathogens

Parameter	Microbial count	Preparation method	Analytical method	TMECC equivalent method
Fecal coliform	Limit of less than 1000 Most Probable Number per gram of total solids (dry weight) (1000 MPN/GTS)	Standard methods part 9221E or part 9222D	Standard methods 9260D and either 9222D or 9221E	TMECC 07.01-B
Salmonella spp.	Limit of less than 3 Most Probable Number per 4 grams of total solids (3MPN/4GTS)	Standard method part 9260D	Standard methods 9260D and either 9222D or 9221E	TMECC 07.02

Table 3 - Foreign/inert matter

Parameter	Concentration limit mg/kg dry weight	Preparation method	Analytical method	TMECC equivalent method
Foreign/inert matter	1.0% by weight on No. 5 sieve (four mm screen) and no more than a fourth of this foreign matter may be plastic	SW-846 160.3	Detailed below	TMECC 03.08

Method for determining percent foreign matter.

Foreign matter content shall be determined by passing a dried, weighed sample of not less than one hundred grams of compost through a U.S. standard No. 5 sieve (four millimeter). The material remaining on the screen shall be inspected and the foreign matter shall be separated and weighed. The weight of the foreign matter divided by the total weight of the compost sample and multiplied by one hundred shall be the per cent dry weight of the foreign matter content.

Table 4 - General parameters

Parameter	Analytical method
Boron	TMECC 04.05-B or Preparation: SW-846 3050B or SW-846 3051A and Analytical: SW-846 6010C or SW-846 6020A
Maturity	TMECC 05.08-A Specific Oxygen Uptake Rate or TMECC 05.08-B Carbon Dioxide Evolution Rate or TMECC 05.08-C In-situ Oxygen Refresh Rate or TMECC 05.08-D Dewar Self-Heating Test or TMECC 05.08-E Solvita® Maturity Index or TMECC 05.08-F Biologically Available Carbon
pH	TMECC 04.11-A or North central regional (NCR) publication 221 or SW-846 9045D soil pH or ASTM D2976
Salinity	TMECC 04.10 A or NCR publication 221
Total nitrogen	AOAC 968.06 or TMECC 04.02-D or TMECC 04.02-A
Total organic carbon	SW-846 9060 A or TMECC 04.01-A
Total phosphorus	TMECC 04.03-A or Preparation: SW-846 3050B or SW-846 3051A and Analytical: SW-846 6010C or SW-846 6020A
Total potassium	TMECC 04.04-A or Preparation: SW-846 3050B or SW-846 3051A and Analytical: SW-846 6010C or SW-846 6020A or SW-846 7000B

[Comment: The parameters identified for testing in table 4 have no associated concentration limits. The analysis is necessary to ensure that compost quality is appropriate for the recipient's specific use of the compost product.

Acceptable levels of maturity will vary according to end-user application (note: check date of maturity test).

Acceptable pH level will vary according to end-user application and will generally be in the 5.5 - 8.5 range.

Acceptable levels of soluble salts will vary according to end-user applications. The optimal ranges for growing media (compost amended soil) is 0.5 to 4.5 millimho per centimeter.

Compost producers may provide pH and soluble salts information in product literature for the intended end-user application that reflect user industry standards.]

- (B) Supplementary compost quality standards. Additional information or testing of feedstocks, bulking agents, additives, compost, or compost product may be required to ensure the standards are appropriately protective of public health or safety or the environment.
- (1) Upon written notification by the director, the owner or operator shall provide information regarding the feedstocks, bulking agents, additives, compost, or compost product including but not limited to the following:
 - (a) A description of the agricultural, industrial, or commercial process used to produce the feedstock, bulking agents, additives, compost, or compost product.
 - (b) A description of the chemical and biological constituents.
 - (c) A description of any known or potential heavy metals and organic compounds that may threaten to cause an adverse effect to public health or safety or the environment.
 - (2) Upon written notification by the director, the owner or operator shall sample and test for additional parameters as deemed necessary to ensure the standards are appropriately protective of public health and safety and the environment.
 - (3) Upon review of such additional information, the director may establish additional conditions or quality standards for the compost. The director shall provide written notification to the owner or operator of such conditions or standards.

[Comment: Compost containing mixed solid waste does not have testing parameters as it may only be distributed in accordance with paragraph (A)(1) of rule 3745-560-120 of the Administrative Code.]

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3745-560-135 Closure requirements for class I composting facilities.

- (A) The owner or operator of a composting facility shall perform closure as specified in this rule if any of the following occur:
- (1) The facility permit to install has terminated in accordance with paragraph (B) of rule 3745-560-101 of the Administrative Code.
 - (2) The director revokes the facility permit to install pursuant to paragraph (B) of rule 3745-560-101 of the Administrative Code.
 - (3) Any of the following mandatory closure activities occurs:
 - (a) The composting facility ceases to be an active composting facility.
 - (b) A solid waste facility license held by the owner or operator of the composting facility expires and no license renewal has been applied for in the manner prescribed in Chapter 3745-501 of the Administrative Code.
 - (c) A solid waste facility license held by the owner or operator of the composting facility expires and a license renewal has been applied for and denied as a final action of the licensing authority.
 - (d) A solid waste facility license held by the owner or operator of the composting facility has been revoked as a final action of the licensing authority.
 - (e) The owner or operator sells or offers for sale at retail or wholesale, uses, distributes for use, or gives away any compost that does not comply with the applicable quality standards established in this chapter.
 - (f) The establishment or operation of the composting facility has violated Chapter 3704., 3734., or 6111. of the Revised Code or rules adopted thereunder.
- (B) Closure requirements.
- (1) The owner or operator shall continue to comply with rule 3745-560-110 of the Administrative Code until the closure certification statement is submitted and concurrence is received from Ohio EPA.
 - (2) Not later than seven days after closure is required under paragraph (A) of this rule, the owner or operator of a composting facility that allowed public access shall post signs, stating in letters not less than three inches high that the facility is closed. The signs shall be posted in such a manner as to be easily visible at all access points into the facility and must be maintained in legible condition for not less than one year, or until the facility re-opens as a registered composting facility or is converted to an alternative use. The text of the signs shall be the following:

"This facility is closed for all composting activities and all receipt of waste materials. Depositing solid wastes at this site constitutes open dumping which is a violation of Chapter 3734. of the Revised Code."
 - (3) Not later than thirty days after closure is required under paragraph (A) of this rule, the owner or operator shall remove compost products and solid wastes from the composting facility.
 - (4) Not later than thirty days after closure is required under paragraph (A) of this rule, the owner or operator shall do the following:
 - (a) Remove and properly dispose of leachate remaining on the site in accordance with applicable laws

and regulations.

- (b) Modify, remove, or seal the leachate collection system to prevent discharges from the system to surface waters of the state or ground water unless such discharges are otherwise regulated in accordance with Chapter 6111. of the Revised Code.
 - (c) Clean containers, equipment, machines, and materials placement area surfaces that were in contact with solid wastes at any time during the operation of the facility using procedures that substantially reduce or eliminate any remaining constituents or contaminants. This paragraph does not apply to materials placement area surfaces composed of soil, gravel, slag, or other permeable material.
- (C) Not later than thirty days after completing the requirements as outlined in paragraph (B) of this rule or before the closed facility may be converted to other uses, the owner or operator shall certify to Ohio EPA and the approved board of health that the facility has been closed pursuant to paragraph (B) of this rule. At a minimum, the certification shall include the registration number of the composting facility, the date when closure was completed, and a statement certifying that closure was completed in accordance with this rule.

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3745-560-200 Class II composting facility establishment.

- (A) No person shall establish a new class II composting facility or continue to operate an existing facility without first having submitted the following:
- (1) A registration application in accordance with this rule.
 - (2) An executed financial assurance instrument pursuant to rule 3745-503-05 of the Administrative Code for an amount not less than the current closure cost estimate established in accordance with rule 3745-560-05 of the Administrative Code. If the closure cost estimate is three thousand five hundred dollars or less, no financial assurance is required.
- (B) No person shall operate a class II composting facility without first having obtained a solid waste license pursuant to Chapter 3745-501 of the Administrative Code.
- (C) Registration of class II composting facility. A registration application shall include the following:
- (1) Registration form prescribed by the director including but not limited to business name, contact person including operator and property owner, contact information, location of the proposed composting facility, closure cost estimate, and notarized statement certifying compliance with the siting criteria specified in paragraph (D) of this rule.
 - (2) Plan view drawing, using a scale of one inch equals no greater than one hundred feet, showing the following information inside the facility boundaries and within five hundred feet beyond the facility boundaries:
 - (a) The property lines of all land owned or leased for the composting facility.
 - (b) The boundary lines for the composting facility.
 - (c) Public roads, railroads, and structures.
 - (d) Existing topography showing streams, wetlands, lakes, springs, and other surface waters of the state.
 - (e) The north arrow.
 - (f) Location of the materials placement areas for each of the following:
 - (i) Composting operations.
 - (ii) Storage of feedstocks, bulking agents, or additives.
 - (iii) Storage of compost product.
 - (g) Existing occupied structures.
 - (h) Any leachate management structure.
 - (i) The limits of the one hundred year floodplain.
 - (j) National park or national recreation areas, candidate areas for potential inclusion into the national park system, and any state park or established state park purchase areas.
 - (k) State nature preserves, state wildlife areas, national and state scenic rivers, and national wildlife refuge, special interest areas and research natural areas in the Wayne national forest, state resource

waters, outstanding national resource waters, category 3 wetlands, outstanding high quality waters, coldwater habitats, and exceptional warmwater habitats as classified in accordance with Chapter 3745-1 of the Administrative Code.

- (1) Existing public water supply wells, developed springs, or private potable water supply wells.
 - (3) Copies of the letters of intent required in paragraph (E) of this rule.
- (D) On the date the registration application is received by Ohio EPA, the limits of materials placement and leachate management structures shall meet the following siting criteria:
- (1) The materials placement area and leachate management structures shall not be located within the following:
 - (a) Two hundred feet from any surface waters of the state.
 - (b) Three hundred feet from a known sinkhole or agricultural drainage well.
 - (c) The sanitary isolation radius of public water system drinking water supply wells as calculated using the formulas specified in rule 3745-9-04 of the Administrative Code.
 - (d) Three hundred feet from a private water system drinking water supply well that is not controlled by the facility.
 - (e) Fifty feet from a private water system drinking water supply well that is controlled by the facility owner.
 - (f) Three hundred feet from a transient non-community public water system drinking water supply well.
 - (g) Two hundred fifty feet from an occupied dwelling, unless the occupied dwelling is owned or leased by the owner or operator.
 - (h) Five hundred feet from the following:
 - (i) An area designated by the Ohio department of natural resources as either a state nature preserve, a state wildlife area, or a state scenic river.
 - (ii) An area designated, owned, and managed by the Ohio historical society as a nature preserve.
 - (iii) An area designated by the United States department of the interior as either a national wildlife refuge or a national scenic river.
 - (iv) An area designated by the United States forest service as either a special interest area or a research natural area in the Wayne national forest.
 - (v) Surface waters of the state designated by Ohio EPA as either a state resource water, an outstanding national resource water, a category 3 wetland, an outstanding high quality water, a coldwater habitat, or an exceptional warmwater habitat.
 - (i) A one hundred year floodplain.
 - (2) The materials placement area and leachate management structures shall not be located within the inner management zone (one year time of travel) of a drinking water source protection area for a community or non-transient, non-community public water system using ground water.

- (3) Except for facilities which exclusively compost wastes generated within state parks or national parks, or national recreation areas, as of the date the initial registration application was submitted, the materials placement areas and leachate management system of the composting facility shall not be located in any one or combination of the following:
- (a) A national park or national recreation area.
 - (b) A state park or an established state park purchase area.
 - (c) A candidate area for potential inclusion in the national park system.
 - (d) A property that lies within the boundaries of a national park or national recreation area but that has not been acquired or is not administered by the secretary of the United States department of the interior.
- (E) Concurrent to submittal of the registration application, letters of intent to establish a composting facility which include a description of property and facility boundaries shall be sent by certified mail or any other form of mail accompanied by a receipt requested to the following:
- (1) The governments of the general purpose political subdivisions where the facility is proposed to be located including but not limited to local health departments, county commissioners, legislative authority of a municipal corporation, or the board of township trustees.
 - (2) The single or joint county solid waste management district or districts or regional solid waste management authority or authorities where the facility is proposed to be located.
 - (3) The owner or lessee of any easement or right of way bordering or within the proposed facility boundaries which may be affected by the proposed solid waste facility.
 - (4) The local zoning authority having jurisdiction.
 - (5) The park system administrator, if any part of the proposed facility is to be located within or will share the park boundary.
 - (6) The conservancy district, if any part of the proposed facility is to be located within or will share the conservancy district boundary.
 - (7) The fire department having responsibility for providing fire control services where the proposed facility is to be located.
- (F) Upon written notification by Ohio EPA that the registration application is incomplete, the applicant shall correct noted deficiencies and resubmit the registration application not later than thirty days after receipt of the notification.
- (G) Amendments to an existing registration. The registrant shall ensure that changes to the composting facility are in compliance with applicable regulations and all information contained on the plan view drawing and registration application is current by submitting an amended registration application as follows:
- (1) An amendment to an existing registration is required for changes in the information on the registration application, which may include but is not limited to, facility name, registrant, and contact information including the operator and property owner.
 - ~~(1)~~(2) An amendment to an existing registration involving any proposed change to the materials placement area shall include a revised plan view drawing submitted prior to implementation of any change. The

plan view drawing shall include the information required in this rule. Any change to the materials placement area requires written concurrence from Ohio EPA acknowledging compliance with this chapter. If the amendment to the existing registration does not involve any proposed changes to the existing registration's plan drawing, the amendment may reference the existing registration's plan drawing.

~~(H)~~(H) Composting facilities registered prior to the effective date of this rule shall comply with siting criteria in effect on the date of initial registration.

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3745-560-201 Criteria for approval and termination of a class II composting facility registration.

(A) Criteria for approval.

- (1) A class II composting facility shall not be considered registered unless compliance with the following are determined by Ohio EPA:
 - (a) The registration application contains the information required in forms prescribed by the director as established in rule 3745-560-200 of the Administrative Code.
 - (b) The siting criteria as established in rule 3745-560-200 of the Administrative Code have been met.
 - (c) The plan view drawing contains the information required in rule 3745-560-200 of the Administrative Code.
 - (d) The letters of intent were sent in accordance with rule 3745-560-200 of the Administrative Code.
 - (e) If the proposed composting facility is established on land where a hazardous or solid waste facility was operated, the owner or operator has obtained previous authorization as required by rule 3745-27-13 of the Administrative Code.
 - (f) The owner or operator is in substantial compliance at other solid waste disposal facilities that are owned or operated by the owner or operator.
 - (g) The establishment and operation of the composting facility will not violate Chapter 3704., 3734., or 6111. of the Revised Code.
- (2) If Ohio EPA determines that information in addition to that required by rule 3745-560-200 of the Administrative Code is necessary to determine whether the criteria set forth in paragraph (A) of this rule are satisfied, Ohio EPA may require that the applicant supply such information as a precondition to further consideration of the registration application.

(B) Criteria for termination of a class II composting facility registration.

A class II composting facility registration shall expire upon receipt by Ohio EPA of written request from the owner or operator that the composting facility registration be terminated.

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3745-560-202 Procedures for commencements of operations at class II composting facilities.

- (A) Facility site preparation. Prior to initial acceptance of feedstocks, bulking agents, or additives at the composting facility the following shall be completed:
- (1) The land surface of the materials placement area shall be greater than or equal to one per cent in slope and less than or equal to six per cent in slope so as to direct surface water to collection points or otherwise control the surface water drainage.
 - (2) Construction of the materials placement area to allow facility operation during inclement weather.
 - (3) Construction of roads within the facility boundary to allow for passage of vehicles at all times.
 - (4) Construction of any planned leachate and surface water management structures.
 - (5) Signs are posted in accordance with rule 3745-560-210 of the Administrative Code.
- (B) Initial acceptance of feedstocks. The owner or operator may begin to accept feedstocks, bulking agents, or additives if the owner or operator has submitted a registration application that complies with paragraph (A) of rule 3745-560-201 of the Administrative Code and the owner or operator has complied with paragraph (A) of this rule and one of the following occurs:
- (1) The prepared composting facility has been inspected and written concurrence has been received from Ohio EPA acknowledging compliance with this rule.
 - (2) Ninety days have passed since Ohio EPA received the registration application.
- (C) Notwithstanding the provisions of paragraph (B) of this rule, the owner and operator shall not begin to accept feedstocks, bulking agents, or additives if not later than ninety days after Ohio EPA received the registration application, the director has provided a written notification of deficiency to the owner or operator that the registration application does not comply with paragraph (A) of rule 3745-560-201 of the Administrative Code or that the owner or operator has not complied with paragraph (A) of this rule. If the owner or operator fails to address the deficiencies, the director may deny the registration application or approve the registration application with a variance or exemption.

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3745-560-205 Alternative materials request for class II composting facilities.

- (A) The owner or operator of a class II composting facility may submit a written request to the director for approval to accept alternative materials not otherwise authorized in accordance with paragraph (B) of rule 3745-560-210 of the Administrative Code. At a minimum, a request to accept an alternative material shall include the following:
- (1) The name of the composting facility where the material will be accepted and the name of the facility owner and operator.
 - (2) A detailed description of the material to be accepted including any available or requested analytical data.
 - (3) The source and suppliers of the material.
 - (4) The maximum amount of the material that the facility will accept on a daily basis.
 - (5) A detailed description that outlines the technical feasibility of the proposal.
 - (6) A detailed description of any impact that may result from the acceptance of the material in regard to the management of odor, litter, vectors, and leachate or other operational requirements of rule 3745-560-210 of the Administrative Code including the methods that will be used to control the impacts.
 - (7) Whether pathogens are expected to be present in the material and what mechanisms will be in place to prevent exposure for those in contact with the waste or the compost product produced from such wastes.
 - (8) Whether the owner or operator is requesting to compost the material as a pilot project or on a permanent basis.
 - (9) A description of any known or potential contaminants that may cause or threaten to cause an adverse effect to the public health or safety or the environment.
 - (10) How the owner or operator intends to distribute or otherwise utilize the compost product.
 - (11) A detailed description of how the material will be processed. At a minimum, the description shall include the following:
 - (a) Whether the owner or operator will utilize the material as a feedstock, bulking agent, or additive.
 - (b) Whether the owner or operator will shred or screen the material prior to incorporation into the composting process.
 - (c) What equipment will be utilized.
 - (d) The percentage of mixture of the feedstock, bulking agent, or additive with other authorized feedstocks, bulking agents, or additives and the resulting carbon to nitrogen ratio.
 - (e) The method of composting utilized to maintain an appropriate environment for biological decomposition.
 - (f) The anticipated moisture level of the incoming feedstock, bulking agent, or additive and the anticipated moisture levels after mixing with other authorized feedstocks, bulking agents, or additives.
 - (12) The revised closure cost estimate prepared in accordance with rule 3745-560-05 of the Administrative

Code.

(13) Any other information deemed necessary by Ohio EPA.

(B) The director may approve and condition a request submitted in accordance with this rule when the following are determined:

(1) The use of the alternative material is technically feasible for composting and the owner or operator will use a technically appropriate composting method.

(2) The owner or operator has sufficient resources including but not limited to equipment, personnel, and facility capacity to manage and process the alternative material.

(3) The owner or operator is capable of maintaining an appropriate moisture level, carbon to nitrogen ratio, and an environment suitable to the composting process.

(4) The process used for composting alternative materials of pathogen concern will minimize the risk of exposure from pathogens and will not cause a substantial threat to public health or safety or the environment.

(5) The owner or operator of the composting facility is in substantial compliance with Chapter 3734. of the Revised Code, this chapter, and all other applicable laws and regulations.

(6) The acceptance of the alternative material is unlikely to cause violations of Chapter 3704. or 6111. of the Revised Code, this chapter, or any other applicable federal or state laws.

(7) The acceptance, processing, and use of the material will not otherwise cause or threaten to cause an adverse effect to public health or safety or the environment.

(8) The submitted analytical data demonstrates that the alternative material exceeds the parameters specified in rule 3745-560-230 of the Administrative Code, but the applicant has demonstrated that the compost produced with that material will meet the compost quality standards specified in rule 3745-560-230 of the Administrative Code.

(C) The director may establish compost quality standards for the alternative materials requested to protect public health and safety and the environment.

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3745-560-210 Operational requirements for class II composting facilities.

- (A) Authorizing documents. The owner or operator shall operate the facility in accordance with applicable authorizing documents. The owner or operator shall have a copy of applicable authorizing documents available for inspection by Ohio EPA or the approved board of health during normal operating hours.
- (B) Authorized materials. The owner or operator shall only accept yard waste, agricultural waste, animal waste, food scraps, bulking agents, and additives. The owner or operator may accept alternative materials, as approved by the director pursuant to rule 3745-560-205 of the Administrative Code.
- (C) Prohibited material management. The owner or operator shall not accept any prohibited material at the facility.
 - (1) Prohibited material includes but is not limited to the following:
 - (a) Any solid waste, feedstock, bulking agent, or additive other than those feedstocks, bulking agents, or additives authorized by paragraph (B) of this rule.
 - (b) Commingled yard waste.
 - (c) Construction and demolition debris, except for construction and demolition debris that meets the definition of clean untreated wood.
 - (d) Hazardous waste.
 - (e) Infectious waste.
 - (f) Asbestos including "asbestos-containing waste material" as defined in rule 3745-500-02 of the Administrative Code.
 - (g) Batteries.
 - (h) Wastes that may include heat stable toxins produced by microorganisms including but not limited to improperly processed foods that are contaminated or likely to be contaminated with *Clostridium botulinum*.
 - (i) Any other material that the facility is otherwise prohibited to accept under federal or state laws.
 - (2) If prohibited material is detected, the owner or operator shall immediately do the following:
 - (a) Remove the prohibited material from the materials placement area.
 - (b) Manage the prohibited material in accordance with applicable laws and regulations.
 - (c) Record incidents in the log of operations.
- (D) Methods of composting. The owner or operator shall manage authorized materials by utilizing one of the following methods of composting:
 - (1) Windrow composting. The windrow construction, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process. Windrows shall be constructed parallel to the line of slope on the site and turned at a minimum four times per year to mix materials, distribute moisture and heat, increase porosity, and change the location of materials in a pile or windrow to ensure consistent

composting. If a windrow is in place for at least twelve months, it shall have been turned a minimum of four times during that that period.

- (2) In-vessel composting. The construction, loading, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process.
 - (3) Aerated static pile composting. The construction, including the aeration system, carbon to nitrogen ratio, and moisture content, shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process.
 - (4) Static pile composting. The construction, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process. Static piles shall be turned at a minimum two times per year to reintroduce oxygen into the composting process.
 - (5) Other methods. The owner or operator may submit a written request to the director for approval of an alternative composting method. The request shall include at a minimum a detailed description of the alternative composting method and how the method will enable controlled biological decomposition and comply with the operational requirements specified in this rule.
- (E) Authorized materials management. The owner or operator shall distribute compost product at a minimum rate of one fourth the amount of material received the previous calendar year.
- (F) Certified operator. The owner or operator shall ensure that the technical operation and maintenance of the composting facility is under the responsible charge of an operator certified by the director as having completed the operator training required by Chapter 3734. of the Revised Code and rules adopted thereunder.
- (G) Containers management. The owner or operator shall properly manage any containers used to transport authorized materials to a composting facility according to the following:
- (1) Compostable containers shall be shredded or otherwise processed to increase the exposed surface area for composting prior to incorporation into the composting process.
 - (2) Feedstocks, bulking agents, and additives shall be removed from containers that do not meet the definition of compostable containers prior to incorporation into the composting process. These containers shall not be shredded and shall be managed as solid waste.
- (H) Operational control. The owner or operator shall operate the composting facility in such a manner that does the following:
- (1) Controls noise, dust, and odors so as not to cause a nuisance or a health hazard.
 - (2) Controls the attraction, breeding, and emergence of insects, birds, rodents, and other vectors so as not to cause a nuisance or a health hazard. The owner or operator shall initiate vector control measures as deemed necessary by the approved board of health or Ohio EPA.
 - (3) Prevents the occurrence of fire, the spread of fire, and extinguishes fire. The owner or operator shall act immediately to prevent the spread of fire and extinguish fire.
 - (4) Employs reasonable measures to collect, properly contain, and dispose of scattered litter.

- (5) Prevents the creation of water pollution as to not violate Chapter 6111. of the Revised Code or any rules adopted thereunder.
- (6) Prevents the creation of air pollution as to not violate Chapter 3704. of the Revised Code or any rules adopted thereunder.
- (I) Facility access. The owner or operator shall do the following:
- (1) Employ reasonable measures to limit access to the composting facility by non-employees during non-operating hours or in the absence of operating personnel.
 - (2) Maintain materials placement areas and access roads within the facility boundary in such a manner to allow facility operations and access at all times with minimum erosion and ponding of surface water.
 - (3) Exclude domestic and farm animals from the facility, except for animals utilized for security purposes or vector control.
- (J) Equipment availability. The owner or operator shall have operable equipment of adequate size and quantity for the operations of the facility available at all times.
- (K) Facility signage. The owner or operator shall post signs with letters not less than three inches in height at the composting facility including the receiving and distribution areas. The owner or operator shall post signs at the entrance of the composting facility that include the following statement:
- "This composting facility only accepts yard waste, agricultural waste, animal waste, and food scraps, and will not accept hazardous wastes, infectious wastes, asbestos, batteries, or other prohibited materials."
- (L) Wood processing. The owner or operator when accepting tree stumps, trunks, limbs, or clean untreated wood shall do the following:
- (1) Shred or chip the tree stumps, trunks, limbs, or the clean untreated wood, prior to incorporation into the composting process and remove foreign materials including but not limited to nails and banding.
 - (2) Shred, chip, or remove tree stumps, trunks, limbs, and clean untreated wood at a minimum on an annual basis or more often than annually if conditions causing a nuisance or safety hazard warrant processing or removal of the tree stumps, trunks, limbs, and clean untreated wood, or when required by Ohio EPA or the approved board of health.
- (M) Surface water management. The owner or operator shall do the following:
- (1) Control surface water runoff and runoff, prevent ponding and erosion, and minimize the impact to surface water and ground water.
 - (2) Manage surface water in accordance with Chapter 6111. of the Revised Code.
 - (3) Divert surface water from the materials placement area. The land surface of the materials placement area shall be greater than or equal to one per cent in slope and less than or equal to six per cent in slope to direct surface water to collection points or otherwise control the surface water drainage.
 - (4) Monitor surface water runoff or ground water as required by the director or approved board of health if a substantial threat of surface water or ground water pollution exists.
- (N) Leachate management. The owner or operator shall do the following:

- (1) Take action to minimize the production of leachate.
 - (2) Eliminate ponding of leachate and the conditions that contribute to the discharge of leachate from the composting facility.
 - (3) Collect and contain leachate within the boundary of the composting facility and prevent leachate from discharging to waters of the state. Leachate may be collected and contained for reintroduction into the composting process.
 - (4) If applicable, maintain any structures or mechanisms used for the collection or containment of leachate to prevent blockage, clogging, leakage, or breakage that may impede proper collection or containment of leachate.
- (O) Cross-contamination. The owner or operator shall prevent and manage cross-contamination of feedstocks, bulking agents, additives, compost, and compost product. If cross-contamination occurs, the owner or operator shall do one of the following:
- (1) Comply with the more stringent testing standard required by rule 3745-560-220 of the Administrative Code if the cross-contamination is from a more stringently tested feedstock or material.
 - (2) Reintroduce the compost or compost product into the composting process.
 - (3) Remove and properly manage the contaminated feedstock, compost, bulking agent, or additive if the cross-contamination is from a prohibited material.
- (P) Food scraps management. An owner or operator who accepts food scraps shall do the following:
- (1) Incorporate the food scraps into the composting process or combine with bulking agents in a manner to prevent nuisances including but not limited to odor, vectors, and litter no later than the end of operating hours, as specified in the license application, on the date of receipt.
 - (2) Maintain a stockpile of biofilter material to provide at a minimum a six inch cover to piles containing food scraps and apply a biofilter cover consisting of at a minimum six inches on the piles if odors, dust, or vectors are present or upon written request by Ohio EPA or the approved board of health.
 - (3) Control free liquid from the incoming food scraps using a berm consisting of compost, bulking agents, or other absorbent material placed around the area where the incoming material is handled and mixed.
- (Q) The director, health commissioner, or board of health may order that compost or compost product be disposed in a licensed solid waste landfill if the director, health commissioner, or board of health determine that the compost or compost product does not meet the applicable standards of quality or causes or threatens to cause a nuisance or adversely affects the public health or safety or the environment.

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3745-560-215 Record keeping requirements for class II composting facilities.

(A) Record retention and availability. The owner or operator shall do the following:

- (1) Maintain records specified in this rule for a period of at least three years.
- (2) Have records available for inspection by the approved board of health or Ohio EPA during normal operating hours.
- (3) Upon request, submit records to Ohio EPA or the approved board of health.

(B) Log of operation. The owner or operator shall do the following:

- (1) Record the facility operations on the log of operation forms as specified in rule 3745-560-04 of the Administrative Code.
- (2) Complete the log of operation daily at an active composting facility and once per month at an inactive composting facility.

(C) Annual report. Not later than February first of each year, the owner or operator shall submit an annual report to Ohio EPA. The annual report shall include the required information specified in rule 3745-560-04 of the Administrative Code.

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3745-560-220 Compost distribution requirements for class II composting facilities.

(A) Compost product distribution.

- (1) An owner or operator shall only distribute compost that has been sampled in accordance with rule 3745-560-225 of the Administrative Code and meets the compost quality standards of rule 3745-560-230 of the Administrative Code.
- (2) Compost that meets the applicable quality standards may be distributed as compost product for use in accordance with accepted agricultural, silvicultural, or horticultural practices.
- (3) Compost that does not meet the quality standards shall be reintroduced into the composting process, taken to another appropriate class of composting facility for further composting, disposed in a licensed solid waste disposal facility, or distributed for an alternative use after approval by the director in accordance with this rule.
- (4) If compost that has been previously sampled and tested is mixed with any amount of additional feedstocks, bulking agents, additives, or other untested compost, then the tested compost is considered to be cross-contaminated and shall be re-sampled and re-tested prior to distribution.
- (5) Any compost product may be blended with other compost products prior to distribution.

(B) Product information and availability of test results.

- (1) Compost product that is distributed in packaged form shall be conspicuously labeled with product information. Product information shall be available in written form for compost distributed without packaging. At a minimum, product information shall contain the following information:
 - (a) Name and address of the composting facility.
 - (b) Any feedstocks, bulking agents, and additives used.
 - (c) Recommended uses for the compost product.
 - (d) Any owner or operator recommended restrictions on the use of the compost product.
- (2) Upon request, the owner or operator shall provide the customer a summary of results from testing required in accordance with this rule.

(C) Request for approval for land application or alternative use of compost that does not meet applicable standards for compost product. The owner or operator whose compost has been sampled and tested in accordance with rules 3745-560-225 and 3745-560-230 of the Administrative Code and exceeds any of the applicable concentration limits may submit a written request for approval for land application or alternative use of the compost. At a minimum, a request for approval for land application or alternative use shall include the following information:

- (1) Total quantity of compost and a detailed list of all feedstocks, bulking agents, and additives utilized to produce the compost.
- (2) A copy of the test results of the compost required in accordance with rule 3745-560-230 of the Administrative Code.
- (3) An explanation as to why the compost is unable to meet the quality standards specified in rule 3745-560-230 of the Administrative Code.

- (4) A detailed description of the proposed alternative use, if not requesting land application.
 - (5) A detailed narrative of how the requested alternative use will not adversely affect the public health or safety or the environment.
 - (6) A copy of test results for soil from the proposed location of land application. The soil tests shall include the same parameters for the standards exceeded by the compost.
 - (7) The location of proposed land application, total acreage to be utilized, and proposed application rate including justification of specific application rates, safe uses, and any applicable restrictions.
 - (8) Any other information deemed necessary by the director.
- (D) Criteria for approval of a request for land application or alternative use of compost that does not meet applicable standards for compost product. The director may approve and condition a request for land application or alternative use of compost that does not meet applicable quality standards if the director determines the following:
- (1) The proposed land application or alternative use does not cause or threaten to cause an adverse effect to the public health or safety or the environment.
 - (2) The proposed land application or alternative use is in accordance with accepted agricultural, silvicultural, or horticultural practices.

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3745-560-225 Compost sampling and testing requirements for class II composting facilities.

- (A) The owner or operator shall sample the compost in accordance with the following:
- (1) Determine the volume of the pile of compost and record in the log of operations.
 - (2) Obtain one composite sample from each pile no greater than ten thousand cubic yards as follows:
 - (a) Each composite sample shall consist of nine grab samples of equal volume.
 - (b) Three grab samples shall be taken at different depths from three equally divided locations of the pile of compost.
 - (c) Thoroughly mix grab samples in a clean container to form one composite sample of a minimum volume of four quarts.
 - (3) Extract a sub-sample of a minimum volume of two quarts from the composite sample and place in a clean container.
 - (4) At a minimum, label the sample container to document the collection date, time, and person obtaining the sample.
 - (5) Samples collected for testing of Table 2 in rule 3745-560-230 of the Administrative Code shall be prepared and analysis started within one of the following time frames:
 - (a) Not later than eight hours after the collection of the sample.
 - (b) Not later than forty-eight hours after the collection of the sample when refrigerated and maintained at four degrees Centigrade.
 - (6) Sample collection and preservation shall ensure valid and representative results.
- (B) Authorization for alternative frequency of sampling, sampling method, or testing method. The director may approve and condition a request for an alternative frequency of sampling, sampling method, or testing method if, in the determination of the director, the alternative frequency or method ensures equivalent protection of public health and safety and the environment. The determination of the director shall be based on the information provided in paragraph (C) of this rule and any other information required by the director.
- (C) Request for approval of an alternative frequency of sampling, sampling method, or testing method. After one year of operation, the owner or operator may submit a written request for approval for an alternative frequency of sampling, sampling method, or testing method including at a minimum the following information:
- (1) A description of the proposed alternative frequency of sampling, sampling method, or testing method.
 - (2) The feedstocks, bulking agents, and additives accepted at the facility.
 - (3) A copy of the test results for at least five consecutive sampling and testing cycles in accordance with this rule and rule 3745-560-230 of the Administrative Code.
 - (4) A detailed narrative of how the requested alternative frequency of sampling, sampling method, or testing method will ensure compliance with applicable quality standards.
 - (5) If applicable, the scientifically recognized test preparation and analytical method that will provide

equivalent or improved test results.

(6) A description of the composting mix including but not limited to the feedstock to bulking agent ratio.

(7) Any other information deemed necessary by the director.

(D) The owner or operator who has obtained an approval for an alternative frequency of sampling, sampling method, or testing method shall immediately notify the director of changes in the feedstocks, bulking agents, or additives composted or mix ratio for composting and simultaneously shall commence complying with this rule and rule 3745-560-230 of the Administrative Code.

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3745-560-230 Compost quality standards for class II composting facilities.

[Comment: For dates of non regulatory government publications, publications of recognized organizations and associations, test methods, federal rules, and federal statutory provisions referenced in this rule, see rule 3745-500-03 of the Administrative Code titled "Incorporation by reference."]

(A) The compost quality standards in this paragraph are applicable to all compost produced from yard waste, animal waste, agricultural waste, food scraps, and alternative materials. The owner or operator shall have the samples collected pursuant to rule 3745-560-225 of the Administrative Code analyzed to demonstrate that concentration limits are not exceeded for the parameters listed in the following tables:

Table 1 - Heavy metals

Parameter	Concentration limit mg/kg dry weight	Preparation methods	Analytical methods	TMECC equivalent methods
Arsenic	41	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7010	TMECC 04.06-As
Boron	See Table 4			
Cadmium	35	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Cd
Copper	1500	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Cu
Lead	300	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020C or SW-846 7000B or SW-846 7010	TMECC 04.06-Pb
Mercury	7.8	SW-846 7471B	SW-846 7471B SW-846 6010C or SW-846 6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Hg
Nickel	420	SW-846 3050B	SW-846 6010C	TMECC

Table 1 - Heavy metals

		or SW-846 3051A	or SW-846 6020A or SW-846 7010	04.06-Ni
Selenium	100	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846	TMECC 04.06-Se
Zinc	2800	SW-846 3050B or SW-846 3051A	6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Zn

Table 2 - Pathogens

Parameter	Microbial count	Preparation method	Analytical method	TMECC equivalent method
Fecal coliform	Limit of less than 1000 Most Probable Number per gram of total solids (dry weight) (1000 MPN/GTS)	Standard methods part 9221E or part 9222D	Standard methods 9260D and either 9222D or 9221E	TMECC 07.01-B
Salmonella spp.	Limit of less than 3 Most Probable Number per 4 grams of total solids (3MPN/4GTS)	Standard method part 9260D	Standard methods 9260D and either 9222D or 9221E	TMECC 07.02

Table 3 - Foreign/inert matter

Parameter	Concentration limit mg/kg dry weight	Preparation method	Analytical method
Foreign/inert matter	1.0% by weight on No. 5 sieve (four mm screen) and no more than a fourth of this foreign matter may be plastic	U.S. EPA 160.3 Methods for Chemical Analysis of Water and Wastes	Detailed below

Method for determining percent foreign matter.

Foreign matter content shall be determined by passing a dried, weighed sample of not less than one hundred grams of compost through a U.S. standard No. 5 sieve (four millimeter). The material remaining on the

screen shall be inspected and the foreign matter shall be separated and weighed. The weight of the foreign matter divided by the total weight of the compost sample and multiplied by one hundred shall be the per cent dry weight of the foreign matter content.

Table 4 - General parameters

Parameter	Analytical method
Boron	TMECC 04.05-B or Preparation: SW-846 3050B or SW-846 3051A and Analytical: SW-846 6010C or SW-846 6020A
Maturity	TMECC 05.08-A Specific Oxygen Uptake Rate or TMECC 05.08-B Carbon Dioxide Evolution Rate or TMECC 05.08-C In-situ Oxygen Refresh Rate or TMECC 05.08-D Dewar Self-Heating Test or TMECC 05.08-E Solvita® Maturity Index or TMECC 05.08-F Biologically Available Carbon
pH	TMECC 04.11-A or North central regional (NCR) publication 221 or SW-846 9045D soil pH or ASTM D2976
Salinity	TMECC 04.10 A or NCR publication 221
Total nitrogen	AOAC 968.06 or TMECC 04.02-D or TMECC 04.02-A
Total organic carbon	SW-846 9060 A or TMECC 04.01-A
Total phosphorus	TMECC 04.03-A or Preparation: SW-846 3050B or SW-846 3051A and Analytical: SW-846 6010C or SW-846 6020A
Total potassium	TMECC 04.04-A or Preparation: SW-846 3050B or SW-846 3051A and Analytical: SW-846 6010C or SW-846 6020A or SW-846 7000B

[Comment: The parameters identified for testing in table 4 have no associated concentration limits. The analysis is necessary to ensure that compost quality is appropriate for the recipient's specific use of the compost product.

Acceptable levels of maturity will vary according to end-user application (note: check date of maturity test).

Acceptable pH level will vary according to end-user application and will generally be in the 5.5 - 8.5 range.

Acceptable levels of soluble salts will vary according to end-user applications. The optimal ranges for growing media (compost amended soil) is 0.5 to 4.5 millimho per centimeter.

Compost producers may provide pH and soluble salts information in product literature for the intended end-user application that reflect user industry standards.]

- (B) Supplementary compost quality standards. Additional information or testing of feedstocks, bulking agents, additives, compost, or compost product may be required to ensure the standards are appropriately protective of public health or safety or the environment.
- (1) Upon written notification by the director, the owner or operator shall provide information regarding the feedstocks, bulking agents, additives, compost, or compost product including but not limited to the following:
 - (a) A description of the agricultural, industrial, or commercial process used to produce the feedstock, bulking agents, additives, compost, or compost product.
 - (b) A description of the chemical and biological constituents.
 - (c) A description of any known or potential heavy metals and organic compounds that may threaten to cause an adverse effect to public health or safety or the environment.
 - (2) Upon written notification by the director, the owner or operator shall sample and test for additional parameters as deemed necessary to ensure the standards are appropriately protective of public health and safety and the environment.
 - (3) Upon review of such additional information, the director may establish additional conditions or quality standards for the compost. The director shall provide written notification to the owner or operator of such conditions or standards.

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3745-560-235 Closure requirements for class II composting facilities.

- (A) The owner or operator of a composting facility shall perform closure as specified in this rule if any of the following occurs:
- (1) The registration has been terminated in accordance with paragraph (B) of rule 3745-560-201 of the Administrative Code.
 - (2) Any of the following mandatory closure activities occurs:
 - (a) The composting facility ceases to be an active composting facility.
 - (b) A solid waste facility license held by the owner or operator of the composting facility expires and no license renewal has been applied for in the manner prescribed in Chapter 3745-501 of the Administrative Code.
 - (c) A solid waste facility license held by the owner or operator of the composting facility expires and a license renewal has been applied for and denied as a final action of the licensing authority.
 - (d) A solid waste facility license held by the owner or operator of the composting facility has been revoked as a final action of the licensing authority.
 - (e) The owner or operator sells or offers for sale at retail or wholesale, uses, distributes for use, or gives away any compost that does not comply with the applicable quality standards established in this chapter.
 - (f) The establishment or operation of the composting facility has violated Chapter 3704., 3734., or 6111. of the Revised Code or rules adopted thereunder.
 - (3) The director issues a final action for either of the following:
 - (a) The owner or operator sells or offers for sale at retail or wholesale, uses, distributes for use, or gives away any compost that does not comply with the applicable quality standards established in this chapter.
 - (b) The establishment or operation of the composting facility has violated Chapter 3704., 3734., or 6111. of the Revised Code or rules adopted thereunder.
- (B) Closure requirements.
- (1) The owner or operator shall continue to comply with rule 3745-560-210 of the Administrative Code until the closure certification statement is submitted and concurrence is received from Ohio EPA.
 - (2) Not later than seven days after closure is required under paragraph (A) of this rule, the owner or operator of a composting facility that allowed public access shall post signs, stating in letters not less than three inches high that the facility is closed. The signs shall be posted in such a manner as to be easily visible at all access points into the facility and must be maintained in legible condition for not less than one year, or until the facility re-opens as a registered composting facility or is converted to an alternative use. The text of the signs shall be the following:

"This facility is closed for all composting activities and all receipt of waste materials. Depositing solid wastes at this site constitutes open dumping which is a violation of Chapter 3734. of the Revised Code."
 - (3) Not later than thirty days after closure is required under paragraph (A) of this rule, the owner or operator

shall remove compost products and solid wastes from the composting facility.

- (4) Not later than thirty days after closure is required under paragraph (A) of this rule, the owner or operator shall do the following:
- (a) Remove and properly dispose of leachate remaining on the site in accordance with applicable laws and regulations.
 - (b) Modify, remove, or seal the leachate collection system to prevent discharges from the system to surface waters of the state or ground water unless such discharges are otherwise regulated in accordance with Chapter 6111. of the Revised Code.
 - (c) Clean containers, equipment, machines, and materials placement area surfaces that were in contact with solid wastes at any time during the operation of the facility using procedures that substantially reduce or eliminate any remaining constituents or contaminants. This paragraph does not apply to materials placement area surfaces composed of soil, gravel, slag, or other permeable material.
- (C) Not later than thirty days after completing the requirements as outlined in paragraph (B) of this rule or before the closed facility may be converted to other uses, the owner or operator shall certify to Ohio EPA and the approved board of health that the facility has been closed pursuant to paragraph (B) of this rule. At a minimum, the certification shall include the registration number of the composting facility, the date when closure was completed, and a statement certifying that closure was completed in accordance with this rule.
- (D) This rule does not apply when the registrant requests the termination of the composting facility registration due to obtaining a permit to install and annual license for that property as a class I composting facility.
- (E) The registrant who requests the termination of the composting facility registration for the purpose of a change to a class III or IV composting facility classification status may submit a written request to the director for alternative closure requirements. The director may approve alternative closure requirements provided the requirements are protective of public health and safety and the environment.

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3745-560-300 Class III composting facility establishment.

- (A) No person shall establish a new class III composting facility or continue to operate an existing facility without first submitting a registration application in accordance with this rule.
- (B) Registration of class III composting facility. A registration application shall include the following:
- (1) Registration form prescribed by the director including but not limited to business name, contact person including the operator and property owner, contact information, location of the proposed composting facility, and notarized statement certifying compliance with the siting criteria specified in paragraph (C) of this rule.
 - (2) Plan view drawing, using a scale of one inch equals no greater than one hundred feet, showing the following information inside the facility boundaries and within five hundred feet beyond the facility boundaries:
 - (a) The property lines of all land owned or leased for the composting facility.
 - (b) The boundary lines for the composting facility.
 - (c) Public roads, railroads, and structures.
 - (d) Existing topography showing streams, wetlands, lakes, springs, and other surface waters of the state.
 - (e) The north arrow.
 - (f) Location of the materials placement areas for each of the following:
 - (i) Composting operations.
 - (ii) Storage of feedstocks, bulking agents, or additives.
 - (iii) Storage of compost product.
 - (g) Existing occupied structures.
 - (h) Any leachate management structure.
 - (i) The limits of the one hundred year floodplain.
 - (j) National park or national recreation areas, candidate areas for potential inclusion into the national park system, and any state park or established state park purchase areas.
 - (k) State nature preserves, state wildlife areas, national and state scenic rivers, and national wildlife refuge, special interest areas and research natural areas in the Wayne national forest, state resource waters, outstanding national resource waters, category 3 wetlands, outstanding high quality waters, coldwater habitats, and exceptional warmwater habitats as classified in accordance with Chapter 3745-1 of the Administrative Code.
 - (l) Existing public water supply wells, developed springs, or private potable water supply wells.
 - (3) Copies of the letters of intent required in paragraph (D) of this rule.
- (C) On the date the registration application is received by Ohio EPA, the limits of materials placement and leachate management structures shall meet the following siting criteria:

- (1) The materials placement area and leachate management structures shall not be located within the following:
 - (a) Two hundred feet from any surface waters of the state.
 - (b) Three hundred feet from a known sinkhole or agricultural drainage well.
 - (c) The sanitary isolation radius of public water system drinking water supply wells as calculated using the formulas specified in rule 3745-9-04 of the Administrative Code.
 - (d) Three hundred feet from a private water system drinking water supply well that is not controlled by the facility.
 - (e) Fifty feet from a private water system drinking water supply well that is controlled by the facility owner.
 - (f) Three hundred feet from a transient non-community public water system drinking water supply well.
 - (g) Two hundred fifty feet from an occupied dwelling, unless the occupied dwelling is owned or leased by the owner or operator.
 - (h) Five hundred feet from the following:
 - (i) An area designated by the Ohio department of natural resources as either a state nature preserve, a state wildlife area, or a state scenic river.
 - (ii) An area designated, owned, and managed by the Ohio historical society as a nature preserve.
 - (iii) An area designated by the United States department of the interior as either a national wildlife refuge or a national scenic river.
 - (iv) An area designated by the United States forest service as either a special interest area or a research natural area in the Wayne national forest
 - (v) Surface waters of the state designated by Ohio EPA as either a state resource water, an outstanding national resource water, a category 3 wetland, an outstanding high quality water, a coldwater habitat, or an exceptional warmwater habitat.
 - (i) A one hundred year floodplain.
- (2) The materials placement area and leachate management structures shall not be located within the inner management zone (one year time of travel) of a drinking water source protection area for a community or non-transient, non-community public water system using ground water.
- (3) Except for facilities which exclusively compost wastes generated within state parks or national parks, or national recreation areas, as of the date the initial registration application was submitted, the materials placement areas and leachate management system of the composting facility shall not be located in any one or combination of the following:
 - (a) A national park or national recreation area.
 - (b) A state park or an established state park purchase area.
 - (c) A candidate area for potential inclusion in the national park system.

- (d) A property that lies within the boundaries of a national park or national recreation area but that has not been acquired or is not administered by the secretary of the United States department of the interior.
- (4) The materials placement area shall not exceed one hundred thirty-five thousand square feet of total area on any one premises.
- (D) Concurrent to submittal of the registration application, letters of intent to establish a composting facility which include a description of property and facility boundaries shall be sent by certified mail or any other form of mail accompanied by a receipt requested to the following:
- (1) The governments of the general purpose political subdivisions where the facility is proposed to be located including but not limited to local health departments, county commissioners, legislative authority of a municipal corporation, or the board of township trustees.
 - (2) The single or joint county solid waste management district or districts or regional solid waste management authority or authorities where the facility is proposed to be located.
 - (3) The owner or lessee of any easement or right of way bordering or within the proposed facility boundaries which may be affected by the proposed solid waste facility.
 - (4) The local zoning authority having jurisdiction.
 - (5) The park system administrator, if any part of the proposed facility is to be located within or will share the park boundary.
 - (6) The conservancy district, if any part of the proposed facility is to be located within or will share the conservancy district boundary.
 - (7) The fire department having responsibility for providing fire control services where the proposed facility is to be located.
- (E) Upon written notification by Ohio EPA that the registration application is incomplete, the applicant shall correct noted deficiencies and resubmit the registration application not later than thirty days after receipt of the notification.
- (F) Amendments to an existing registration. The registrant shall ensure that changes to the composting facility are in compliance with applicable regulations and all information contained on the plan view drawing and registration application is current by submitting an amended registration application as follows:
- (1) An amendment to an existing registration is required for changes in the information on the registration application, which may include but is not limited to, facility name, registrant, and contact information including the operator and property owner.
 - ~~(1)~~(2) An amendment to an existing registration involving any proposed change to the materials placement area shall include a revised plan view drawing submitted prior to implementation of any change. The plan view drawing shall include the information required in this rule. Any change to the materials placement area requires written concurrence from Ohio EPA acknowledging compliance with this chapter. If the amendment to the existing registration does not involve any proposed changes to the existing registration's plan drawing, the amendment may reference the existing registration's plan drawing.
- ~~(H)~~(G) Composting facilities registered prior to the effective date of this rule shall comply with siting criteria in

effect on the date of initial registration.

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3745-560-301 Criteria for approval and termination of a class III composting facility registration.

(A) Criteria for approval.

- (1) A class III composting facility shall not be considered registered unless compliance with the following are determined by Ohio EPA:
 - (a) The registration application contains the information required in forms prescribed by the director as established in rule 3745-560-300 of the Administrative Code.
 - (b) The siting criteria as established in rule 3745-560-300 of the Administrative Code have been met.
 - (c) The plan view drawing contains the information required in rule 3745-560-300 of the Administrative Code.
 - (d) The letters of intent were sent in accordance with rule 3745-560-300 of the Administrative Code.
 - (e) If the proposed composting facility is established on land where a hazardous or solid waste facility was operated, the owner or operator has obtained previous authorization as required by rule 3745-27-13 of the Administrative Code.
 - (f) The owner or operator is in substantial compliance at other solid waste disposal facilities that are owned or operated by the owner or operator.
 - (g) The establishment and operation of the composting facility will not violate Chapter 3704., 3734., or 6111. of the Revised Code.
- (2) If Ohio EPA determines that information in addition to that required by rule 3745-560-300 of the Administrative Code is necessary to determine whether the criteria set forth in paragraph (A) of this rule are satisfied, Ohio EPA may require that the applicant supply such information as a precondition to further consideration of the registration application.

(B) Criteria for termination of a class III composting facility registration.

A class III composting facility registration shall expire upon receipt by Ohio EPA of a written request from the owner or operator that the composting facility registration be terminated.

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3745-560-302 Procedures for commencement of operations at class III composting facilities.

- (A) Facility site preparation. Prior to initial acceptance of feedstocks, bulking agents, or additives at the composting facility the following shall be completed:
- (1) The land surface of the materials placement area shall be greater than or equal to one per cent in slope and less than or equal to six per cent in slope so as to direct surface water to collection points or otherwise control the surface water drainage.
 - (2) Construction of the materials placement area to allow facility operation during inclement weather.
 - (3) Construction of roads within the facility boundary to allow for passage of vehicles at all times.
 - (4) Construction of any planned leachate and surface water management structures.
 - (5) Signs are posted in accordance with rule 3745-560-310 of the Administrative Code.
- (B) Initial acceptance of feedstocks. The owner or operator may begin to accept feedstocks, bulking agents, or additives if the owner or operator has submitted a registration application that complies with paragraph (A) of rule 3745-560-301 of the Administrative Code and the owner or operator has complied with paragraph (A) of this rule and one of the following occurs:
- (1) The prepared composting facility has been inspected and written concurrence has been received from Ohio EPA acknowledging compliance with this rule.
 - (2) Ninety days have passed since Ohio EPA received the registration application.
- (C) Notwithstanding the provisions of paragraph (B) of this rule, the owner and operator shall not begin to accept feedstocks, bulking agents, or additives if not later than ninety days after Ohio EPA received the registration application, the director has provided a written notification of deficiency to the owner or operator that the registration application does not comply with paragraph (A) of rule 3745-560-301 of the Administrative Code or that the owner or operator has not complied with paragraph (A) of this rule. If the owner and operator fail to address the deficiencies, the director may deny the registration application or approve the registration application with a variance or exemption.

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3745-560-310 Operational requirements for class III composting facilities.

- (A) Authorizing documents. The owner or operator shall operate the facility in accordance with applicable authorizing documents. The owner or operator shall have a copy of applicable authorizing documents available for inspection by Ohio EPA or the approved board of health during normal operating hours.
- (B) Authorized materials. The owner or operator shall only accept yard waste, agricultural waste, animal waste, bulking agents, and additives.
- (C) Prohibited material management. The owner or operator shall not accept any prohibited material at the facility.
 - (1) Prohibited material includes but is not limited to the following:
 - (a) Any solid waste, feedstock, bulking agent, or additive other than those feedstocks, bulking agents, or additives authorized by paragraph (B) of this rule.
 - (b) Commingled yard waste.
 - (c) Construction and demolition debris, except for construction and demolition debris that meets the definition of clean untreated wood.
 - (d) Hazardous waste.
 - (e) Infectious waste.
 - (f) Asbestos including "asbestos-containing waste material" as defined in rule 3745-500-02 of the Administrative Code.
 - (g) Batteries.
 - (h) Wastes that may include heat stable toxins produced by microorganisms including but not limited to improperly processed foods that are contaminated or likely to be contaminated with *Clostridium botulinum*.
 - (i) Containerized bulk liquids.
 - (j) Any other material that the facility is otherwise prohibited to accept under federal or state laws.
 - (2) If prohibited material is detected, the owner or operator shall immediately do the following:
 - (a) Remove the prohibited material from the materials placement area.
 - (b) Manage the prohibited material in accordance with applicable laws and regulations.
 - (c) Record incidents in the log of operations.
- (D) Methods of composting. The owner or operator shall manage authorized materials by utilizing one of the following methods of composting:
 - (1) Windrow composting. The windrow construction, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process. Windrows shall be constructed parallel to the line of slope on the site and turned at a minimum four times per year to mix materials, distribute moisture and

heat, increase porosity, and change the location of materials in a pile or windrow to ensure consistent composting. If a windrow is in place for at least twelve months, it shall have been turned a minimum of four times during that that period.

- (2) In-vessel composting. The construction, loading, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process.
 - (3) Aerated static pile composting. The construction, including the aeration system, carbon to nitrogen ratio, and moisture content, shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process.
 - (4) Static pile composting. The construction, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process. Static piles shall be turned at a minimum two times per year to reintroduce oxygen into the composting process.
 - (5) Other methods. The owner or operator may submit a written request to the director for approval of an alternative composting method. The request shall include at a minimum a detailed description of the alternative composting method and how the method will enable controlled biological decomposition and comply with the operational requirements specified in this rule.
- (E) Authorized materials management. The owner or operator shall distribute compost product at a minimum rate of one fourth the amount of material received the previous calendar year.
- (F) Certified operator. The owner or operator shall ensure that the technical operation and maintenance of the composting facility is under the responsible charge of an operator certified by the director as having completed the operator training required by Chapter 3734. of the Revised Code and rules adopted thereunder.
- (G) Containers management. The owner or operator shall properly manage any containers used to transport authorized materials to a composting facility according to the following:
- (1) Compostable containers shall be shredded or otherwise processed to increase the exposed surface area for composting prior to incorporation into the composting process.
 - (2) Feedstocks, bulking agents, and additives shall be removed from containers that do not meet the definition of compostable containers prior to incorporation into the composting process. These containers shall not be shredded and shall be managed as solid waste.
- (H) Operational control. The owner or operator shall operate the composting facility in such a manner that does the following:
- (1) Controls noise, dust, and odors so as not to cause a nuisance or a health hazard.
 - (2) Controls the attraction, breeding, and emergence of insects, birds, rodents, and other vectors so as not to cause a nuisance or a health hazard. The owner or operator shall initiate vector control measures as deemed necessary by the approved board of health or Ohio EPA.
 - (3) Prevents the occurrence of fire, the spread of fire, and extinguishes fire. The owner or operator shall act immediately to prevent the spread of fire and extinguish fire.
 - (4) Employs reasonable measures to collect, properly contain, and dispose of scattered litter.

- (5) Prevents the creation of water pollution as to not violate Chapter 6111. of the Revised Code or any rules adopted thereunder.
- (6) Prevents the creation of air pollution as to not violate Chapter 3704. of the Revised Code or any rules adopted thereunder.
- (I) Facility access. The owner or operator shall do the following:
- (1) Employ reasonable measures to limit access to the composting facility by non-employees during non-operating hours or in the absence of operating personnel.
 - (2) Maintain materials placement areas and access roads within the facility boundary in such a manner to allow facility operations and access at all times with minimum erosion and ponding of surface water.
 - (3) Exclude domestic and farm animals from the facility, except for animals utilized for security purposes or vector control.
- (J) Equipment availability. The owner or operator shall have that operable equipment of adequate size and quantity for the operations of the facility available at all times.
- (K) Facility signage. When public access is allowed, the owner or operator shall post signs with letters not less than three inches in height at the composting facility including the receiving and distribution areas. The owner or operator shall post signs at the entrance of the composting facility that include the following statement:
- "This composting facility only accepts yard waste, agricultural waste, and animal waste, and will not accept hazardous wastes, infectious wastes, asbestos, batteries, or other prohibited materials."
- (L) Wood processing. The owner or operator when accepting tree stumps, trunks, limbs, or clean untreated wood shall do the following:
- (1) Shred or chip the tree stumps, trunks, limbs, or the clean untreated wood, prior to incorporation into the composting process and remove foreign materials including but not limited to nails and banding.
 - (2) Shred, chip, or remove tree stumps, trunks, limbs, and clean untreated wood at a minimum on an annual basis or more often than annually if conditions causing a nuisance or safety hazard warrant processing or removal of the tree stumps, trunks, limbs, and clean untreated wood, or when required by Ohio EPA or the approved board of health.
- (M) Surface water management. The owner or operator shall do the following:
- (1) Control surface water runoff and runoff, prevent ponding and erosion, and minimize the impact to surface water and ground water.
 - (2) Manage surface water in accordance with Chapter 6111. of the Revised Code.
 - (3) Divert surface water from the materials placement area. The land surface of the materials placement area shall be greater than or equal to one per cent in slope and less than or equal to six per cent in slope to direct surface water to collection points or otherwise control the surface water drainage.
 - (4) Monitor surface water runoff or ground water as required by the director or approved board of health if a substantial threat of surface water or ground water pollution exists.
- (N) Leachate management. The owner or operator shall do the following:

- (1) Take action to minimize the production of leachate.
 - (2) Eliminate ponding of leachate and the conditions that contribute to the discharge of leachate from the composting facility.
 - (3) Collect and contain leachate within the boundary of the composting facility and prevent leachate from discharging to waters of the state. Leachate may be collected and contained for reintroduction into the composting process.
 - (4) If applicable, maintain any structures or mechanisms used for the collection or containment of leachate to prevent blockage, clogging, leakage, or breakage that may impede proper collection or containment of leachate.
- (O) Cross-contamination. The owner or operator shall prevent and manage cross-contamination of feedstocks, bulking agents, additives, compost, and compost product. If cross-contamination occurs, the owner or operator shall do one of the following:
- (1) Comply with the more stringent testing standard required by rule 3745-560-320 of the Administrative Code if the cross-contamination is from a more stringently tested feedstock or material.
 - (2) Reintroduce the compost or compost product into the composting process.
 - (3) Remove and properly manage the contaminated feedstock, compost, bulking agent, or additive if the cross-contamination is from a prohibited material.
- (P) The director, health commissioner, or board of health may order that compost or compost product be disposed in a licensed solid waste landfill if the director, health commissioner, or board of health determine that the compost or compost product does not meet applicable standards of quality or causes or threatens to cause a nuisance or adversely affects the public health or safety or the environment.

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3745-560-315 Record keeping requirements for class III composting facilities.

(A) Record retention and availability. The owner or operator shall do the following:

- (1) Maintain records specified in this rule for a period of at least three years.
- (2) Have records available for inspection by the approved board of health or Ohio EPA during normal operating hours.
- (3) Upon request, submit records to Ohio EPA or the approved board of health.

(B) Log of operation. The owner or operator shall do the following:

- (1) Record the facility operations on the log of operation forms as specified in rule 3745-560-04 of the Administrative Code.
- (2) Complete the log of operation at a minimum once per week at an active composting facility and once per month at an inactive composting facility.
- (3) Complete the log of operation more often than weekly if conditions warrant a higher frequency of completion in order to effectively monitor operations at the composting facility, or when required by Ohio EPA or the approved health department.

(C) Annual report. Not later than February first of each year, the owner or operator shall submit an annual report to Ohio EPA. The annual report shall include the required information specified in rule 3745-560-04 of the Administrative Code.

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3745-560-320 Compost distribution requirements for class III composting facilities.

(A) Compost product distribution.

- (1) An owner or operator shall only distribute compost that has been sampled in accordance with rule 3745-560-325 of the Administrative Code and meets the compost quality standards of rule 3745-560-330 of the Administrative Code.
- (2) Compost that meets the applicable quality standards may be distributed as compost product for use in accordance with accepted agricultural, silvicultural, or horticultural practices.
- (3) Compost that does not meet the quality standards shall be reintroduced into the composting process, taken to another appropriate class of composting facility for further composting, disposed in a licensed solid waste disposal facility, or distributed for an alternative use after approval by the director in accordance with this rule.
- (4) If compost that has been previously sampled and tested is mixed with any amount of additional feedstocks, bulking agents, additives, or other untested compost, then the tested compost is considered to be cross-contaminated and shall be re-sampled and re-tested prior to distribution.
- (5) Any compost product may be blended with other compost products prior to distribution.

(B) Product information and availability of test results.

- (1) Compost product that is distributed in packaged form shall be conspicuously labeled with product information. Product information shall be available in written form for compost distributed without packaging. At a minimum, product information shall contain the following information:
 - (a) Name and address of the composting facility.
 - (b) Any feedstocks, bulking agents, and additives used.
 - (c) Recommended uses for the compost product.
 - (d) Any owner or operator recommended restrictions on the use of the compost product.
- (2) Upon request, the owner or operator shall provide the customer a summary of results from testing required in accordance with this rule.

(C) Request for approval for land application or alternative use of compost that does not meet applicable standards for compost product. The owner or operator whose compost has been sampled and tested in accordance with rules 3745-560-325 and 3745-560-330 of the Administrative Code and exceeds any of the applicable concentration limits may submit a written request for approval for land application or alternative use of the compost. At a minimum, a request for approval for land application or alternative use shall include the following information:

- (1) Total quantity of compost and a detailed list of all feedstocks, bulking agents, and additives utilized to produce the compost.
- (2) A copy of the test results of the compost required in accordance with rule 3745-560-330 of the Administrative Code.
- (3) An explanation as to why the compost is unable to meet the quality standards specified in rule 3745-560-330 of the Administrative Code.

- (4) A detailed description of the proposed alternative use, if not requesting land application.
 - (5) A detailed narrative of how the requested alternative use will not adversely affect the public health or safety or the environment.
 - (6) A copy of test results for soil from the proposed location of land application. The soil tests shall include the same parameters for the standards exceeded by the compost.
 - (7) The location of proposed land application, total acreage to be utilized, and proposed application rate including justification of specific application rates, safe uses, and any applicable restrictions.
 - (8) Any other information deemed necessary by the director.
- (D) Criteria for approval of a request for land application or alternative use of compost that does not meet applicable standards for compost product. The director may approve and condition a request for land application or alternative use of compost that does not meet applicable quality standards if the director determines the following:
- (1) The proposed land application or alternative use does not cause or threaten to cause an adverse effect to the public health or safety or the environment.
 - (2) The proposed land application or alternative use is in accordance with accepted agricultural, silvicultural, or horticultural practices.

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3745-560-325 Compost sampling and testing requirements for class III composting facilities.

- (A) The owner or operator shall sample the compost in accordance with the following:
- (1) Determine the volume of the pile of compost and record in the log of operations.
 - (2) Obtain one composite sample from each pile no greater than ten thousand cubic yards as follows:
 - (a) Each composite sample shall consist of nine grab samples of equal volume.
 - (b) Three grab samples shall be taken at different depths from three equally divided locations of the pile of compost.
 - (c) Thoroughly mix grab samples in a clean container to form one composite sample of a minimum volume of four quarts.
 - (3) Extract a sub-sample of a minimum volume of two quarts from the composite sample and place in a clean container.
 - (4) At a minimum, label the sample container to document the collection date, time, and person obtaining the sample.
 - (5) Samples collected for testing of Table 2 in rule 3745-560-330 of the Administrative Code shall be prepared and analysis started within one of the following time frames:
 - (a) Not later than eight hours after the collection of the sample.
 - (b) Not later than forty-eight hours after the collection of the sample when refrigerated and maintained at four degrees Centigrade.
 - (6) Sample collection and preservation shall ensure valid and representative results.
- (B) Authorization for alternative frequency of sampling, sampling method, or testing method. The director may approve and condition a request for an alternative frequency of sampling, sampling method, or testing method if, in the determination of the director, the alternative frequency or method ensures equivalent protection of public health and safety and the environment. The determination of the director shall be based on the information provided in paragraph (C) of this rule and any other information required by the director.
- (C) Request for approval of an alternative frequency of sampling, sampling method, or testing method. After one year of operation, the owner or operator may submit a written request for approval for an alternative frequency of sampling, sampling method, or testing method including at a minimum the following information:
- (1) A description of the proposed alternative frequency of sampling, sampling method, or testing method.
 - (2) The feedstocks, bulking agents, and additives accepted at the facility.
 - (3) A copy of the test results for at least five consecutive sampling and testing cycles in accordance with this rule and rule 3745-560-330 of the Administrative Code.
 - (4) A detailed narrative of how the requested alternative frequency of sampling, sampling method, or testing method will ensure compliance with applicable quality standards.
 - (5) If applicable, the scientifically recognized test preparation and analytical method that will provide

equivalent or improved test results.

- (6) A description of the composting mix including but not limited to the feedstock to bulking agent ratio.
 - (7) Any other information deemed necessary by the director.
- (D) The owner or operator who has obtained an approval for an alternative frequency of sampling, sampling method, or testing method shall immediately notify the director of changes in the feedstocks, bulking agents, or additives composted or mix ratio for composting and simultaneously shall commence complying with this rule and rule 3745-560-330 of the Administrative Code.

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3745-560-330 Compost quality standards for class III composting facilities.

[Comment: For dates of non regulatory government publications, publications of recognized organizations and associations, test methods, federal rules, and federal statutory provisions referenced in this rule, see rule 3745-500-03 of the Administrative Code titled "Incorporation by reference."]

(A) The compost quality standards in this paragraph are applicable to all compost produced from yard waste, animal waste, and agricultural waste. The owner or operator shall have the samples collected pursuant to rule 3745-560-325 of the Administrative Code analyzed to demonstrate that concentration limits are not exceeded for the parameters listed in the following tables:

Table 1 - Heavy metals

Parameter	Concentration limit mg/kg dry weight	Preparation methods	Analytical methods	TMECC equivalent methods
Arsenic	41	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7010	TMECC 04.06-As
Boron	See Table 4			
Cadmium	35	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Cd
Copper	1500	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Cu
Lead	300	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020C or SW-846 7000B or SW-846 7010	TMECC 04.06-Pb
Mercury	7.8	SW-846 7471B	SW-846 7471B or SW-846 6010C or SW-846 6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Hg
Nickel	420	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7010	TMECC 04.06-Ni
Selenium	100	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846	TMECC 04.06-Se

Table 1 - Heavy metals

Zinc	2800	SW-846 3050B or SW-846 3051A	6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Zn
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Table 2 - Pathogens

Parameter	Microbial count	Preparation method	Analytical method	TMECC equivalent method
Fecal coliform	Limit of less than 1000 Most Probable Number per gram of total solids (dry weight) (1000 MPN/GTS)	Standard methods part 9221E or part 9222D	Standard methods 9260D and either 9222D or 9221E	TMECC 07.01-B
Salmonella spp.	Limit of less than 3 Most Probable Number per 4 grams of total solids (3MPN/4GTS)	Standard method part 9260D	Standard methods 9260D and either 9222D or 9221E	TMECC 07.02

Table 3 - Foreign/inert matter

Parameter	Concentration limit mg/kg dry weight	Preparation method	Analytical method
Foreign/inert matter	1.0% by weight on No. 5 sieve (four mm screen) and no more than a fourth of this foreign matter may be plastic	U.S. EPA 160.3 Methods for Chemical Analysis of Water and Wastes	Detailed below

Method for determining percent foreign matter.

Foreign matter content shall be determined by passing a dried, weighed sample of not less than one hundred grams of compost through a U.S. standard No. 5 sieve (four millimeter). The material remaining on the screen shall be inspected and the foreign matter shall be separated and weighed. The weight of the foreign matter divided by the total weight of the compost sample and multiplied by one hundred shall be the per cent dry weight of the foreign matter content.

Table 4 - General parameters

Table 4 - General parameters

Parameter	Analytical method
Boron	TMECC 04.05-B or Preparation: SW-846 3050B or SW-846 3051A and Analytical: SW-846 6010C or SW-846 6020A
Maturity	TMECC 05.08-A Specific Oxygen Uptake Rate or TMECC 05.08-B Carbon Dioxide Evolution Rate or TMECC 05.08-C In-situ Oxygen Refresh Rate or TMECC 05.08-D Dewar Self-Heating Test or TMECC 05.08-E Solvita® Maturity Index or TMECC 05.08-F Biologically Available Carbon
pH	TMECC 04.11-A or North central regional (NCR) publication 221 or SW-846 9045D soil pH or ASTM D2976
Salinity	TMECC 04.10 A or NCR publication 221
Total nitrogen	AOAC 968.06 or TMECC 04.02-D or TMECC 04.02-A
Total organic carbon	SW-846 9060 A or TMECC 04.01-A
Total phosphorus	TMECC 04.03-A or Preparation: SW-846 3050B or SW-846 3051A and Analytical: SW-846 6010C or SW-846 6020A
Total potassium	TMECC 04.04-A or Preparation: SW-846 3050B or SW-846 3051A and Analytical: SW-846 6010C or SW-846 6020A or SW-846 7000B

[Comment: The parameters identified for testing in table 4 have no associated concentration limits. The analysis is necessary to ensure that compost quality is appropriate for the recipient's specific use of the compost product.

Acceptable levels of maturity will vary according to end-user application (note: check date of maturity test).

Acceptable pH level will vary according to end-user application and will generally be in the 5.5 - 8.5 range.

Acceptable levels of soluble salts will vary according to end-user applications. The optimal ranges for growing media (compost amended soil) is 0.5 to 4.5 millimho per centimeter.

Compost producers may provide pH and soluble salts information in product literature for the intended end-user application that reflect user industry standards.]

(B) Supplementary compost quality standards. Additional information or testing of feedstocks, bulking agents, additives, compost, or compost product may be required to ensure the standards are appropriately protective of public health or safety or the environment.

(1) Upon written notification by the director, the owner or operator shall provide information regarding the

feedstocks, bulking agents, additives, compost, or compost product including but not limited to the following:

- (a) A description of the agricultural, industrial, or commercial process used to produce the feedstock, bulking agents, additives, compost, or compost product.
 - (b) A description of the chemical and biological constituents.
 - (c) A description of any known or potential heavy metals and organic compounds that may threaten to cause an adverse effect to public health or safety or the environment.
- (2) Upon written notification by the director, the owner or operator shall sample and test for additional parameters as deemed necessary to ensure the standards are appropriately protective of public health and safety and the environment.
 - (3) Upon review of such additional information, the director may establish additional conditions or quality standards for the compost. The director shall provide written notification to the owner or operator of such conditions or standards.

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3745-560-335 Closure requirements for class III composting facilities.

- (A) The owner or operator of a composting facility shall perform closure as specified in this rule if any of the following occur:
- (1) The registration is terminated in accordance with paragraph (B) of rule 3745-560-301 of the Administrative Code.
 - (2) The composting facility ceases to be an active composting facility.
 - (3) The director issues a final action for either of the following:
 - (a) The owner or operator sells or offers for sale at retail or wholesale, uses, distributes for use, or gives away any compost that has violated the applicable quality standards established in this chapter.
 - (b) The establishment or operation of the composting facility has violated Chapter 3704., 3734., or 6111. of the Revised Code or rules adopted thereunder.
- (B) Closure requirements.
- (1) The owner or operator shall continue to comply with rule 3745-560-310 of the Administrative Code until the closure certification statement is submitted and concurrence is received from Ohio EPA.
 - (2) Not later than seven days after closure is required under paragraph (A) of this rule, the owner or operator of a composting facility that allowed public access shall post signs, stating in letters not less than three inches high that the facility is closed. The signs shall be posted in such a manner as to be easily visible at all access points into the facility and must be maintained in legible condition for not less than one year, or until the facility re-opens as a registered composting facility or is converted to an alternative use. The text of the signs shall be the following:

"This facility is closed for all composting activities and all receipt of waste materials. Depositing solid wastes at this site constitutes open dumping which is a violation of Chapter 3734. of the Revised Code."
 - (3) Not later than thirty days after closure is required under paragraph (A) of this rule, the owner or operator shall remove compost products and solid wastes from the composting facility.
 - (4) Not later than thirty days after closure is required under paragraph (A) of this rule, the owner or operator shall do the following:
 - (a) Remove and properly dispose of leachate remaining on the site in accordance with applicable laws and regulations.
 - (b) Modify, remove, or seal the leachate collection system to prevent discharges from the system to surface waters of the state or ground water unless such discharges are otherwise regulated in accordance with Chapter 6111. of the Revised Code.
 - (c) Clean containers, equipment, machines, and materials placement area surfaces that were in contact with solid wastes at any time during the operation of the facility using procedures that substantially reduce or eliminate any remaining constituents or contaminants. This paragraph does not apply to materials placement area surfaces composed of soil, gravel, slag, or other permeable material.
- (C) Not later than thirty days after completing the requirements as outlined in paragraph (B) of this rule or before the closed facility may be converted to other uses, the owner or operator shall certify to Ohio EPA and the

approved board of health that the facility has been closed pursuant to paragraph (B) of this rule. At a minimum, the certification shall include the registration number of the composting facility, the date when closure was completed, and a statement certifying that closure was completed in accordance with this rule.

- (D) This rule does not apply when the registrant requests the termination of the composting facility registration due to obtaining appropriate authorization for that property as a class I or class II composting facility.
- (E) The registrant who requests the termination of the composting facility registration for the purpose of a change to a IV composting facility classification status may submit a written request to the director for alternative closure requirements. The director may approve alternative closure requirements provided the requirements are protective of public health and safety and the environment.

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3745-560-400 Class IV composting facility establishment.

- (A) No person shall establish a new class IV composting facility or continue to operate an existing facility without first submitting a registration application in accordance with this rule.
- (B) Registration of class IV composting facility. A registration application shall include the following:
- (1) Registration form prescribed by the director including but not limited to business name, contact person including the operator and property owner, contact information, location of the proposed composting facility, and notarized statement certifying compliance with the siting criteria specified in paragraph (C) of this rule:
 - (2) Plan view drawing, using a scale of one inch equals no greater than one hundred feet, showing the following information inside the facility boundaries and within five hundred feet beyond the facility boundaries:
 - (a) The property lines of all land owned or leased for the composting facility.
 - (b) The boundary lines for the composting facility.
 - (c) Public roads, railroads, and structures.
 - (d) Existing topography showing streams, wetlands, lakes, springs, and other surface waters of the state.
 - (e) The north arrow.
 - (f) Location of the materials placement areas for each of the following:
 - (i) Composting operations.
 - (ii) Storage of feedstocks, bulking agents, or additives.
 - (iii) Storage of compost product.
 - (g) Existing occupied structures.
 - (h) Any leachate management structure.
 - (i) The limits of the one hundred year floodplain.
 - (j) National park or national recreation areas, candidate areas for potential inclusion into the national park system, and any state park or established state park purchase areas.
 - (k) State nature preserves, state wildlife areas, national and state scenic rivers, and national wildlife refuge, special interest areas and research natural areas in the Wayne national forest, state resource waters, outstanding national resource waters, category 3 wetlands, outstanding high quality waters, coldwater habitats, and exceptional warmwater habitats as classified in accordance with Chapter 3745-1 of the Administrative Code.
 - (l) Existing public water supply wells, developed springs, or private potable water supply wells.
 - (3) Copies of the letters of intent required in paragraph (D) of this rule.
- (C) On the date the registration application is received by Ohio EPA, the limits of materials placement and leachate management structures shall meet the following siting criteria:

- (1) The materials placement area and leachate management structures shall not be located within the following:
 - (a) Two hundred feet from any surface waters of the state.
 - (b) Two hundred feet from a public water supply well, a developed spring, or a private potable water supply well, unless either of the following conditions are met:
 - (i) The water supply well or developed spring is controlled by the owner or operator, needed as a source of nonpotable water, and constructed to prevent contamination of the ground water.
 - (ii) The water supply well or developed spring was constructed and is used solely for monitoring ground water quality.
 - (c) Two hundred fifty feet from an occupied dwelling, unless the occupied dwelling is owned or leased by the owner or operator.
 - (d) Five hundred feet from the following:
 - (i) An area designated by the Ohio department of natural resources as either a state nature preserve, a state wildlife area, or a state scenic river.
 - (ii) An area designated, owned, and managed by the Ohio historical society as a nature preserve.
 - (iii) An area designated by the United States department of the interior as either a national wildlife refuge or a national scenic river.
 - (iv) An area designated by the United States forest service as either a special interest area or a research natural area in the Wayne national forest.
 - (v) Surface waters of the state designated by Ohio EPA as either a state resource water, an outstanding national resource water, a category 3 wetland, an outstanding high quality water, a coldwater habitat, or an exceptional warmwater habitat.
 - (e) A one hundred year floodplain.
 - (2) Except for facilities which exclusively compost wastes generated within state parks or national parks, or national recreation areas, as of the date the initial registration application was submitted, the materials placement areas and leachate management system of the composting facility shall not be located in any one or combination of the following:
 - (a) A national park or national recreation area.
 - (b) A state park or an established state park purchase area.
 - (c) A candidate area for potential inclusion in the national park system.
 - (d) A property that lies within the boundaries of a national park or national recreation area but that has not been acquired or is not administered by the secretary of the United States department of the interior.
- (D) Concurrent to submittal of the registration application, letters of intent to establish a composting facility which include a description of property and facility boundaries shall be sent by certified mail or any other form of mail accompanied by a receipt requested to the following:

- (1) The governments of the general purpose political subdivisions where the facility is proposed to be located including but not limited to local health departments, county commissioners, legislative authority of a municipal corporation, or the board of township trustees.
 - (2) The single or joint county solid waste management district or districts or regional solid waste management authority or authorities where the facility is proposed to be located.
 - (3) The owner or lessee of any easement or right of way bordering or within the proposed facility boundaries which may be affected by the proposed solid waste facility.
 - (4) The local zoning authority having jurisdiction.
 - (5) The park system administrator, if any part of the proposed facility is to be located within or will share the park boundary.
 - (6) The conservancy district, if any part of the proposed facility is to be located within or will share the conservancy district boundary.
 - (7) The fire department having responsibility for providing fire control services where the proposed facility is to be located.
- (E) Upon written notification by Ohio EPA that the registration application is incomplete, the applicant shall correct noted deficiencies and resubmit the registration application not later than thirty days of receipt after the notification.
- (F) Amendments to an existing registration. The registrant shall ensure that changes to the composting facility are in compliance with applicable regulations and all information contained on the plan view drawing and registration application is current by submitting an amended registration application as follows:
- (1) An amendment to an existing registration is required for changes in the information on the registration application, which may include but is not limited to, facility name, registrant, and contact information including the operator and property owner.
 - (2) An amendment to an existing registration involving any proposed change to the materials placement area shall include a revised plan view drawing submitted prior to implementation of any change. The plan view drawing shall include the information required in this rule. Any change to the materials placement area requires written concurrence from Ohio EPA acknowledging compliance with this chapter. If the amendment to the existing registration does not involve any proposed changes to the existing registration's plan drawing, the amendment may reference the existing registration's plan drawing.
- ~~(H)~~(G) Composting facilities registered prior to the effective date of this rule shall comply with siting criteria in effect on the date of initial registration.

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3745-560-401 Criteria for approval and termination of a class IV composting facility registration.

(A) Criteria for approval.

- (1) A class IV composting facility shall not be considered registered unless compliance with the following are determined by Ohio EPA:
 - (a) The registration application contains the information required in forms prescribed by the director as established in rule 3745-560-400 of the Administrative Code.
 - (b) The siting criteria as established in rule 3745-560-400 of the Administrative Code have been met.
 - (c) The plan view drawing contains the information required in rule 3745-560-400 of the Administrative Code.
 - (d) The letters of intent were sent in accordance with rule 3745-560-400 of the Administrative Code.
 - (e) If the proposed composting facility is established on land where a hazardous or solid waste facility was operated, the owner or operator has obtained previous authorization as required by rule 3745-27-13 of the Administrative Code.
 - (f) The owner or operator is in substantial compliance at other solid waste disposal facilities that are owned or operated by the owner or operator.
 - (g) The establishment and operation of the composting facility will not violate Chapter 3704., 3734., or 6111. of the Revised Code.
- (2) If Ohio EPA determines that information in addition to that required by rule 3745-560-400 of the Administrative Code is necessary to determine whether the criteria set forth in paragraph (A) of this rule are satisfied, Ohio EPA may require that the applicant supply such information as a precondition to further consideration of the registration application.

(B) Criteria for termination of a class IV composting facility registration.

A class IV composting facility registration shall expire upon receipt by Ohio EPA of written request from the owner or operator that the composting facility registration be terminated.

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3745-560-402 Procedures for commencement of operations at class IV composting facilities.

- (A) Facility site preparation. Prior to initial acceptance of feedstocks, bulking agents, or additives at the composting facility the following shall be completed:
- (1) The land surface of the materials placement area shall be greater than or equal to one per cent in slope and less than or equal to six per cent in slope so as to direct surface water to collection points or otherwise control the surface water drainage.
 - (2) Construction of the materials placement area to allow facility operation during inclement weather.
 - (3) Construction of roads within the facility boundary to allow for passage of vehicles at all times.
 - (4) Construction of any planned leachate and surface water management structures.
 - (5) Signs are posted in accordance with rule 3745-560-410 of the Administrative Code.
- (B) Initial acceptance of feedstocks. The owner or operator may begin to accept feedstocks, bulking agents, or additives if the owner or operator has submitted a registration application that complies with paragraph (A) of rule 3745-560-401 of the Administrative Code and the owner or operator has complied with paragraph (A) of this rule and one of the following occurs:
- (1) The prepared composting facility has been inspected and written concurrence has been received from Ohio EPA acknowledging compliance with this rule.
 - (2) Ninety days have passed since Ohio EPA received the registration application.
- (C) Notwithstanding the provisions of paragraph (B) of this rule, the owner and operator shall not begin to accept feedstocks, bulking agents, or additives if not later than ninety days after Ohio EPA received the registration application, the director has provided a written notification of deficiency to the owner or operator that the registration application does not comply with paragraph (A) of rule 3745-560-401 of the Administrative Code or that the owner or operator has not complied with paragraph (A) of this rule. If the owner and operator fail to address the deficiencies, the director may deny the registration application or approve the registration application with a variance or exemption.

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3745-560-410 Operational requirements for class IV composting facilities.

- (A) Authorizing documents. The owner or operator shall operate the facility in accordance with applicable authorizing documents. The owner or operator shall have a copy of applicable authorizing documents available for inspection by Ohio EPA or the approved board of health during normal operating hours.
- (B) Authorized materials. The owner or operator shall only accept yard waste, bulking agents, and additives consisting only of urea and bacterial or fungal inoculum.
- (C) Prohibited material management. The owner or operator shall not accept any prohibited material at the facility.
 - (1) Prohibited material includes but is not limited to the following:
 - (a) Any solid waste, feedstock, bulking agent, or additive other than those feedstocks, bulking agents, or additives authorized by paragraph (B) of this rule.
 - (b) Commingled yard waste.
 - (c) Construction and demolition debris, except for construction and demolition debris that meets the definition of clean untreated wood.
 - (d) Hazardous waste.
 - (e) Infectious waste.
 - (f) Asbestos including "asbestos-containing waste material" as defined in rule 3745-500-02 of the Administrative Code.
 - (g) Batteries.
 - (h) Wastes that may include heat stable toxins produced by microorganisms including but not limited to improperly processed foods that are contaminated or likely to be contaminated with *Clostridium botulinum*.
 - (i) Containerized bulk liquids.
 - (j) Any other material that the facility is otherwise prohibited to accept under federal or state laws.
 - (2) If prohibited material is detected, the owner or operator shall immediately do the following:
 - (a) Remove the prohibited material from the materials placement area.
 - (b) Manage the prohibited material in accordance with applicable laws and regulations.
 - (c) Record incidents in the log of operations.
- (D) Methods of composting. The owner or operator shall manage authorized materials by utilizing one of the following methods of composting:
 - (1) Windrow composting. The windrow construction, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process. Windrows shall be constructed parallel to the line of slope on the site and turned at a minimum four times per year to mix materials, distribute moisture and

heat, increase porosity, and change the location of materials in a pile or windrow to ensure consistent composting. If a windrow is in place for at least twelve months, it shall have been turned a minimum of four times during that that period.

- (2) In-vessel composting. The construction, loading, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process.
 - (3) Aerated static pile composting. The construction, including the aeration system, carbon to nitrogen ratio, and moisture content, shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process.
 - (4) Static pile composting. The construction, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process. Static piles shall be turned at a minimum two times per year to reintroduce oxygen into the composting process.
 - (5) Other methods. The owner or operator may submit a written request to the director for approval of an alternative composting method. The request shall include at a minimum a detailed description of the alternative composting method and how the method will enable controlled biological decomposition and comply with the operational requirements specified in this rule.
- (E) Authorized materials management. The owner or operator shall distribute compost product at a minimum rate of one fourth the amount of material received the previous calendar year.
- (F) Certified operator. The owner or operator shall ensure that the technical operation and maintenance of the composting facility is under the responsible charge of an operator certified by the director as having completed the operator training required by Chapter 3734. of the Revised Code and rules adopted thereunder.
- (G) Containers management. The owner or operator shall properly manage any containers used to transport authorized materials to a composting facility according to the following:
- (1) Compostable containers shall be shredded or otherwise processed to increase the exposed surface area for composting prior to incorporation into the composting process.
 - (2) Feedstocks, bulking agents, and additives shall be removed from containers that do not meet the definition of compostable containers prior to incorporation into the composting process. These containers shall not be shredded and shall be managed as solid waste.
- (H) Operational control. The owner or operator shall operate the composting facility in such a manner that does the following:
- (1) Controls noise, dust, and odors so as not to cause a nuisance or a health hazard.
 - (2) Controls the attraction, breeding, and emergence of insects, birds, rodents, and other vectors so as not to cause a nuisance or a health hazard. The owner or operator shall initiate vector control measures as deemed necessary by the approved board of health or Ohio EPA.
 - (3) Prevents the occurrence of fire, the spread of fire, and extinguishes fire. The owner or operator shall act immediately to prevent the spread of fire and extinguish fire.
 - (4) Employs reasonable measures to collect, properly contain, and dispose of scattered litter.

- (5) Prevents the creation of water pollution as to not violate Chapter 6111. of the Revised Code or any rules adopted thereunder.
- (6) Prevents the creation of air pollution as to not violate Chapter 3704. of the Revised Code or any rules adopted thereunder.
- (I) Facility access. The owner or operator shall do the following:
- (1) Employ reasonable measures to limit access to the composting facility by non-employees during non-operating hours or in the absence of operating personnel.
 - (2) Maintain materials placement areas and access roads within the facility boundary in such a manner to allow facility operations and access at all times with minimum erosion and ponding of surface water.
 - (3) Exclude domestic and farm animals from the facility, except for animals utilized for security purposes or vector control.
- (J) Equipment availability. The owner or operator shall have operable equipment of adequate size and quantity for the operations of the facility available at all times.
- (K) Facility signage. When public access is allowed, the owner or operator shall post signs with letters not less than three inches in height at the composting facility including the receiving and distribution areas. The owner or operator shall post signs at the entrance of the composting facility that include the following statement:
- "This composting facility only accepts yard waste and will not accept hazardous wastes, infectious wastes, asbestos, batteries, or other prohibited materials."
- (L) Wood processing. The owner or operator when accepting tree stumps, trunks, limbs, or clean untreated wood shall do the following:
- (1) Shred or chip the tree stumps, trunks, limbs, or the clean untreated wood, prior to incorporation into the composting process and remove foreign materials including but not limited to nails and banding.
 - (2) Shred, chip, or remove tree stumps, trunks, limbs, and clean untreated wood at a minimum on an annual basis or more often than annually if conditions causing a nuisance or safety hazard warrant processing or removal of the tree stumps, trunks, limbs, and clean untreated wood, or when required by Ohio EPA or the approved board of health.
- (M) Surface water management. The owner or operator shall do the following:
- (1) Control surface water runoff and runoff, prevent ponding and erosion, and minimize the impact to surface water and ground water.
 - (2) Manage surface water in accordance with Chapter 6111. of the Revised Code.
 - (3) Divert surface water from the materials placement area. The land surface of the materials placement area shall be greater than or equal to one per cent in slope and less than or equal to six per cent in slope to direct surface water to collection points or otherwise control the surface water drainage.
 - (4) Monitor surface water runoff or ground water as required by the director or approved board of health if a substantial threat of surface water or ground water pollution exists.
- (N) Leachate management. The owner or operator shall do the following:

- (1) Take action to minimize the production of leachate.
 - (2) Eliminate ponding of leachate and the conditions that contribute to the discharge of leachate from the composting facility.
 - (3) Collect and contain leachate within the boundary of the composting facility and prevent leachate from discharging to waters of the state. Leachate may be collected and contained for reintroduction into the composting process.
 - (4) If applicable, maintain any structures or mechanisms used for the collection or containment of leachate to prevent blockage, clogging, leakage, or breakage that may impede proper collection or containment of leachate.
- (O) The director, health commissioner, or board of health may order that compost or compost product be disposed in a licensed solid waste landfill if the director, health commissioner, or board of health determined that the compost or compost product causes or threatens to cause a nuisance or adversely affects the public health or safety or the environment.

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3745-560-415 Record keeping requirements for class IV composting facilities.

(A) Record retention and availability. The owner or operator shall do the following:

- (1) Maintain records specified in this rule for a period of at least three years.
- (2) Have records available for inspection by the approved board of health or Ohio EPA during normal operating hours.
- (3) Upon request, submit records to Ohio EPA or the approved board of health.

(B) Log of operation. The owner or operator shall do the following:

- (1) Record the facility operations on the log of operation forms as specified in rule 3745-560-04 of the Administrative Code.
- (2) Complete the log of operation at a minimum once per week at an active composting facility and once per month at an inactive composting facility.
- (3) Complete the log of operation more often than weekly if conditions warrant a higher frequency of completion in order to effectively monitor operations at the composting facility, or when required by Ohio EPA or the approved health department.

(C) Annual report. Not later than February first of each year, the owner or operator shall submit an annual report to Ohio EPA. The annual report shall include the required information specified in rule 3745-560-04 of the Administrative Code.

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3745-560-435 Closure requirements for class IV composting facilities.

- (A) The owner or operator of a composting facility shall perform closure as specified in this rule if any of the following occur:
- (1) The registration is terminated in accordance with paragraph (B) of rule 3745-560-401 of the Administrative Code.
 - (2) Any of the following mandatory closure activities occur:
 - (a) The composting facility ceases to be an active composting facility.
 - (b) The establishment or operation of the composting facility has violated Chapter 3704., 3734., or 6111. of the Revised Code or rules adopted thereunder.
 - (3) The director issues a final action for either of the following:
 - (a) The owner or operator sells or offers for sale at retail or wholesale, uses, distributes for use, or gives away any compost that does not comply with the applicable quality standards established in this chapter.
 - (b) The establishment or operation of the composting facility has violated Chapter 3704., 3734., or 6111. of the Revised Code or rules adopted thereunder.
- (B) Closure requirements.
- (1) The owner or operator shall continue to comply with rule 3745-560-410 of the Administrative Code until the closure certification statement is submitted and concurrence is received from Ohio EPA.
 - (2) Not later than seven days after closure is required under paragraph (A) of this rule, the owner or operator of a composting facility that allowed public access shall post signs, stating in letters not less than three inches high that the facility is closed. The signs shall be posted in such a manner as to be easily visible at all access points into the facility and must be maintained in legible condition for not less than one year, or until the facility re-opens as a registered composting facility or is converted to an alternative use. The text of the signs shall be the following:

"This facility is closed for all composting activities and all receipt of waste materials. Depositing solid wastes at this site constitutes open dumping which is a violation of Chapter 3734. of the Revised Code."
 - (3) Not later than thirty days after closure is required under paragraph (A) of this rule, the owner or operator shall remove compost products and solid wastes from the composting facility.
 - (4) Not later than thirty days after closure is required under paragraph (A) of this rule, the owner or operator shall do the following:
 - (a) Remove and properly dispose of leachate remaining on the site in accordance with applicable laws and regulations.
 - (b) Modify, remove, or seal the leachate collection system to prevent discharges from the system to surface waters of the state or ground water unless such discharges are otherwise regulated in accordance with Chapter 6111. of the Revised Code.
- (C) Not later than thirty days after completing the requirements as outlined in paragraph (B) of this rule or before the closed facility may be converted to other uses, the owner or operator shall certify to Ohio EPA and the

approved board of health that the facility has been closed pursuant to paragraph (B) of this rule. At a minimum, the certification shall include the registration number of the composting facility, the date when closure was completed, and a statement certifying that closure was completed in accordance with this rule.

- (D) This rule does not apply when the registrant requests the termination of the composting facility registration due to obtaining appropriate authorization for that property as a class I, II, or III composting facility.

Effective: 04/02/2012

R.C. 119.032 review dates: 04/02/2017

CERTIFIED ELECTRONICALLY

Certification

02/16/2012

Date

Promulgated Under: 119.03
Statutory Authority: 3734.02, 3734.028, 3734.12
Rule Amplifies: 3734.02, 3734.028, 3734.12