

## TO BE RESCINDED

**3745-27-40 Authorized feedstocks, bulking agents, and additives and classification of composting facilities.**

(A) Feedstock types. The following feedstocks, as used in rules 3745-27-40 to 3745-27-47 of the Administrative Code, may be accepted by the appropriate class of composting facility as specified in paragraphs (C), (D), (E), and (F) of this rule:

- (1) Type A feedstocks. Type A feedstocks are source-separated yard wastes as defined in rule 3745-27-01 of the Administrative Code.
- (2) Type B feedstocks. Type B feedstocks are source-separated plant materials, including stems, leaves, vines, or roots, from an agricultural process.
- (3) Type C feedstocks. Type C feedstocks are source-separated "animal wastes" as defined in rule 3745-27-01 of the Administrative Code.
- (4) Type D feedstocks. Type D feedstocks are source-separated raw, harvested vegetables, fruits, and grains, and the paper from packaging that may be commingled with the type D feedstocks and that are incidental to the load and that have not been commingled with any type I or type J feedstock. Type D feedstocks do not include feedstocks consisting of type D1, E, F, G or H feedstocks.

[Comment: The packaging paper identified in this feedstock type is intended to include only those papers in which the raw, harvested vegetables, fruits, and grains are wrapped. Source-separated paper does not constitute paper incidental to a load and is not type D feedstock material.]

- (5) Type D1 feedstocks. Type D1 feedstocks are source-separated vegetables, fruits, and grains processed for human or animal consumption that have not been commingled with any type I or type J feedstock. For the purpose of this rule, processed for human or animal consumption includes, but is not limited to, type D1 feedstocks that have been cooked, stewed, canned, or packaged.

[Comment: Type D1 feedstocks are distinguished from type D feedstocks because the feedstocks have been processed for human or animal consumption.]

- (6) Type E feedstocks. Type E feedstocks are source-separated dairy products processed for human consumption such as, cheese, butter, milk, yogurt, eggs and cream, and meats processed for human consumption or meats subject to the federal Meat Inspection Act or meats subject to the Poultry Products

Inspection Act, excluding meats from non-domestic animals, meats from slaughter houses and retail stores.

- (7) Type F feedstocks. Type F feedstocks are source-separated raw rendering material accepted from a transporter licensed under Chapter 953. of the Revised Code.
- (8) Type G feedstocks. Type G feedstocks are source-separated carcasses, or parts thereof, of domestic or farm animals, excluding cattle over two years of age with clinical central nervous system (CNS) signs, accepted from a transporter licensed under Chapter 953. of the Revised Code.

[Comment: Contact the Ohio department of agriculture - division of animal industry for technical assistance on clinical CNS signs and licensed transporters.]

- (9) Type H feedstocks. Type H feedstocks are source-separated carcasses, or parts thereof, of non-domestic animals or meat resulting from non-domestic animals.
- (10) Type I feedstocks. Type I feedstocks are source-separated organic wastes, excluding wastes listed for any other feedstock type, that have resulted from industrial or commercial manufacturing processes or treatment works treating domestic sewage.
- (11) Type J feedstocks. Type J feedstocks are not source-separated and consist of organic wastes that will readily decompose and waste materials that will not readily decompose biologically, and may contain household solid wastes which contain materials exhibiting the characteristics of hazardous wastes, but that are exempt from regulation as hazardous wastes in accordance with Chapter 3745-51 of the Administrative Code.

[Comment: Table 1 of the appendix provides a summary of the feedstocks that are authorized for acceptance at a class I, II, III, or IV composting facility.]

- (B) Animal carcasses. Rules 3745-27-40 to 3745-27-47 of the Administrative Code do not apply to any composting facility that composts dead animals pursuant to section 1511.022 of the Revised Code and any rules promulgated thereunder except that testing of the cured compost is required when any of the criteria identified in paragraph (A)(2) of rule 3745-27-46 of the Administrative Code do not apply.

- (C) Class I composting facilities are:

(1) Facilities where the owner or operator may accept the following:

- (a) Type A, type B, type C, type D, type D1, type E, type I, and type J feedstocks, bulking agents, and additives.
- (b) Type F, type G, or type H feedstocks that the director has approved for composting in accordance with paragraphs (G) and (H) of this rule.

[Comment: The owner or operator of a class I composting facility may request authorization to accept type F, type G or type H feedstocks, or other feedstocks, bulking agents, or additives not authorized by rule, by including the information required in paragraph (H) of this rule concurrently with the permit to install application.]

(2) Facilities that are subject to rules 3745-27-40, 3745-27-42 to 3745-27-47 of the Administrative Code, and Chapters 3745-31 and 3745-37 of the Administrative Code, and any other applicable laws or regulations.

(D) Class II composting facilities are:

(1) Facilities where the owner or operator may accept the following:

- (a) Type A, type B, type C, type D, type D1, and type E feedstocks, bulking agents, and additives.
- (b) The following materials upon prior approval by the director, in accordance with paragraphs (G) and (H) of this rule:
  - (i) Type F, type G, type H and type I feedstocks.
  - (ii) Alternative feedstocks, bulking agents, or additives.

(2) Facilities that are subject to the requirements of Chapter 3745-37 of the Administrative Code, rules 3745-27-40, 3745-27-41, and 3745-27-45 to 3745-27-47 of the Administrative Code, and any other applicable laws or regulations.

(3) Facilities that are not subject to the requirements of Chapter 3745-28 of the Administrative Code. In addition, class II composting facilities are not subject to the requirements of paragraphs (A)(10) and (C)(8) of rule 3745-27-45 of the Administrative Code, provided that all of the following conditions are

met:

- (a) The owner or operator uses only type A, type B, or type C feedstocks and bulking agents resulting from the normal operations of the business or service.
  - (b) Such materials have been transported to the facility by the owner or operator.
  - (c) The limits of materials placement on the facility is less than one hundred and thirty-five thousand square feet of total area.
  - (d) Cured compost is utilized exclusively by the owner of the facility as a part of the normal operation of the business or service.
- (4) Facilities that are not subject to the requirements of rules 3745-27-40 to 3745-27-47 and Chapter 3745-37 of the Administrative Code if all of the following conditions are met:
- (a) The owner or operator of the facility is the same owner or operator of an entity that generates sewage sludge.
  - (b) The owner or operator of the facility that exclusively co-composts sewage sludge from the entity that generates the sewage sludge, with type A, type B, or type C feedstocks, bulking agents, and additives.

Such facility shall operate in accordance with the requirements of Chapters 3704. and 6111., and section 3745.11 of the Revised Code and rules adopted thereunder.

[Comment: Composting of sewage sludge at a facility owned or operated by the same owner or operator of an entity that generates sewage sludge is regulated by the division of surface water in accordance with the requirements of Chapter 6111. and section 3745.11 of the Revised Code, and by the division of air pollution control in accordance with the requirements of Chapter 3704. of the Revised Code. Composting of sewage sludge at a location other than a facility owned or operated by the same owner or operator of an entity that generates sewage sludge is regulated under Chapter 3734. of the Revised Code and these rules.]

- (5) Facilities that accept only type A, type B, type C, and type D feedstocks, bulking agents, and additives from animal or crop production operations

owned by the owner of the class II composting facility. Such facilities are not subject to the requirements of rules 3745-27-41, 3745-27-45 with the exception of paragraph (A)(4), and 3745-27-46 of the Administrative Code, provided that all of 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.
- (b) The composting facility is located on the premises of the animal or crop production operation.
- (c) Cured compost produced by the facility is utilized exclusively at the animal or crop production operation.
- (d) The compost facility is separate from those operations conducted for the purpose of animal mortality composting conducted in accordance with either section 3734.02 or section 1511.022 of the Revised Code and rules adopted thereunder.

(E) Class III composting facilities are:

- (1) Facilities where the owner or operator may accept only type A, type B, and type C feedstocks, bulking agents, and additives.
- (2) Facilities where the limits of materials placement is less than one hundred and thirty-five thousand square feet of total area.
- (3) Facilities that are subject to the requirements of rules 3745-27-40, 3745-27-41, and 3745-27-45 to 3745-27-47 of the Administrative Code, and any other applicable laws or regulations.
- (4) Facilities that are not subject to the requirements of Chapters 3745-28 and 3745-37 of the Administrative Code. In addition, class III composting facilities are not subject to the requirements of paragraphs (A)(10) and (C)(8) of rule 3745-27-45 of the Administrative Code, provided that all of the following conditions are met:
  - (a) The owner or operator uses only type A, type B, or type C feedstocks and bulking agents resulting from the normal operations of the business or service.

- (b) Such materials have been transported to the facility by the owner or operator.
- (c) The limits of materials placement on the facility are less than one hundred and thirty-five thousand square feet of total area.
- (d) Cured compost is utilized exclusively by the owner or operator of the facility as a part of the normal operation of the business or service.

[Comment: facilities meeting the criteria specified in paragraphs (E)(4)(a) to (E)(4)(d) of this rule are exempt from the requirements of rule 3745-27-46 of the Administrative Code if cured compost is utilized exclusively on property owned by the owner of the facility.]

- (5) Facilities that accept only type A, type B, and type C feedstocks, bulking agents, and additives from animal or crop production operations owned by the owner of the class III composting facility. Such facilities are not subject to the requirements of rules 3745-27-41, 3745-27-45 with the exception of paragraph (A)(4), and 3745-27-46 of the Administrative Code, provided that all of 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.
  - (b) The composting facility is located on the premises of the animal or crop production operation.
  - (c) Cured compost produced by the facility is utilized exclusively at the animal or crop production operation.
  - (d) The compost facility is separate from those operations conducted for the purpose of animal mortality composting conducted in accordance with either section 3734.02 or section 1511.022 of the Revised Code and rules adopted thereunder.

(F) Class IV composting facilities are:

- (1) Facilities where the owner or operator may accept only type A feedstocks, bulking agents, and additives limited to urea and bacterial or fungal inoculum.

- (2) Facilities that are subject to the requirements of rules 3745-27-40, 3745-27-41, 3745-27-45, and 3745-27-47 of the Administrative Code and any other applicable laws or regulations.
  - (3) Facilities that are not subject to the requirements of Chapters 3745-28 and 3745-37 of the Administrative Code.
  - (4) Facilities that are either business operations engaged in providing lawn mowing or landscaping services, and that are required to remove the type A feedstock generated while providing their services, or business operations that generate type A feedstock while lawn mowing or landscaping their premises. Such facilities are not subject to the requirements of rules 3745-27-41, 3745-27-45 with the exception of paragraph (A)(4), and 3745-27-46 of the Administrative Code, provided that all of the following conditions are met:
    - (a) The owner or operator uses only type A feedstock, bulking agents, and additives generated from the business operation or service.
    - (b) The owner of the composting facility is the same as the owner of the business operation.
    - (c) The composting facility is located on the premises of the business operation.
    - (d) The limits of materials placement on the facility site are less than twelve hundred square feet of total area.
    - (e) Cured compost is utilized exclusively at the business operation.
- (G) The owner or operator of a class I or II composting facility may submit a written request to the director, in accordance with paragraph (H) of this rule, for approval to accept alternative feedstocks, bulking agents, or additives not otherwise specified in rule. The director:
- (1) Shall approve and condition any request submitted in accordance with this paragraph on a permanent or pilot project basis when all of the following is determined:
    - (a) The owner or operator is not requesting to accept type J feedstocks at a class II composting facility.

- (b) The owner or operator is not requesting to accept the following:
- (i) Infectious wastes, as defined in rule 3745-27-01 of the Administrative Code.
  - (ii) Hazardous waste as defined in Chapter 3745-51 of the Administrative Code.
  - (iii) A feedstock, bulking agent, or additive that may be contaminated with the causative agent of those diseases listed in rule 901:1-21-02 of the Administrative Code.

[Comment: Type F, G, or H feedstocks for which the owner of the animal has received written notification from the director of the Ohio department of agriculture may meet the definition of infectious wastes as defined in rule 3745-27-01 of the Administrative Code. Infectious wastes are not type F, G, or H feedstocks and may not be accepted for disposal at a class I or II composting facility.]

- (c) The use of the feedstock, bulking agent, or additive is technically feasible for composting and the owner or operator will use a method of composting appropriate for the type of wastes accepted.

Comment: This condition is intended to encourage the composting of feedstocks, bulking agents, or additives that are regarded as practicable by academia using appropriate methods of composting. An example of a composting process that is not technically feasible is the composting of animal carcasses using worms as an additive.]

- (d) The utilization of the feedstock, bulking agent, or additive, as a carbon, nitrogen, or any other nutrient source, or as a bulking agent or additive, will not impede the composting process.
- (e) Adequate information has been provided in accordance with paragraph (H) of this rule or is available by other means to establish a sound basis for the protection of the public health or safety or the environment after approval to accept the feedstock, bulking agent, or additive.
- (f) The owner or operator has sufficient resources capable of managing the acceptance and processing of the feedstock, bulking agent, or additive including, but not limited to, personnel, bulking agents, and equipment.

- (g) The owner or operator is capable of maintaining an appropriate moisture level, carbon to nitrogen ratio, and aerobic environment suitable to the composting process.
  - (h) The process used for composting will reduce pathogens for feedstocks, bulking agents, or additives of pathogen concern in a manner that will minimize the risk of exposure from pathogens and will not cause a substantial threat to human health or safety or the environment.
  - (i) The owner or operator has proposed adequate methods to control any impact that may result from the acceptance of the feedstock, bulking agent, or additive in regard to the management of odor, litter, vectors, and leachate or other operational requirements of rule 3745-27-45 of the Administrative Code.
  - (j) The owner or operator of the composting facility is in substantial compliance with Chapter 3734. of the Revised Code and Chapters 3745-27 and 3745-37 of the Administrative Code and all other applicable laws and regulations.
  - (k) The acceptance of the feedstock, bulking agent, or additive is unlikely to cause violations of Chapter 6111. or 3704. of the Revised Code, rule 3745-27-45 of the Administrative Code, or any other applicable law or regulation.
  - (l) The cured compost resulting from the use of the feedstock, bulking agent, or additive is adequately tested to determine if it is a compost product that may be sold, offered for sale at retail or wholesale, used, distributed for use or given away, unless the cured compost or compost product is disposed of in a licensed solid waste landfill. To determine if the cured compost is a compost product that may be sold, offered for sale at retail or wholesale, used, distributed for use or given away, the director may require, at a minimum, testing for additional parameters with designated concentration limits that may not be exceeded and specific uses for the compost product.
  - (m) The acceptance of the feedstock, bulking agent, or additive will not otherwise cause or threaten to cause an adverse affect to the public health or safety or the environment.
- (2) May include additional conditions and requirements for a class I or II composting facility that accepts feedstocks, bulking agents, or additives as

authorized by the director in accordance with this paragraph.

[Comment: For example, the director may include additional requirements and conditions for the composting of type H feedstocks after consultation with the director of the Ohio department of agriculture.]

- (H) A request to accept alternative feedstocks, bulking agents, or additives, which the owner or operator is not otherwise authorized to accept, shall include, at a minimum, the following information:
- (1) The name of the facility where the feedstock, bulking agent, or additive will be accepted and the name of the facility owner and operator.
  - (2) A detailed description of the feedstock, bulking agent, or additive to be accepted.
  - (3) A detailed description that outlines the technical feasibility of the proposal.
  - (4) A detailed description of any impact that may result from the acceptance of the feedstock, bulking agent, or additive in regard to the management of odor, litter, vectors, and leachate or other operational requirements of rule 3745-27-45 of the Administrative Code including the methods that will be used to control the impact(s).
  - (5) The supplier(s) of the feedstock, bulking agent, or additive.
  - (6) The maximum amount of the feedstock, bulking agent, or additive that the facility will accept on a daily basis.
  - (7) Whether pathogens, transmittable to humans, are expected to be present as a result of accepting the feedstock, bulking agent, or additive and what mechanism(s) 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 to compost the feedstock, bulking agent, or additive as a pilot project or on a long term 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 to the environment.

- (10) Whether the owner or operator will distribute or otherwise utilize the compost product.
- (11) A detailed description of how the feedstock, bulking agent, or additive will be processed. The description shall include, at a minimum, the following information:
- (a) Equipment to be utilized.
  - (b) Personnel needed to manage the operation of the facility.
  - (c) Whether the owner or operator will shred or screen the feedstock, bulking agent, or additive prior to composting.
  - (d) Whether the owner or operator will utilize the material as a feedstock, bulking agent, or additive.
  - (e) 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.
  - (f) The method utilized to maintain an appropriate aerobic environment.
  - (g) 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) If applicable, the revised final closure cost estimate prepared in accordance with rule 3745-27-15 of the Administrative Code.

[Comment: Rule 3745-27-15 of the Administrative Code addresses the financial assurance revisions that are required when the "current final closure cost estimate" increases to an amount greater than the amount established in the existing financial assurance instrument. When the "current final closure cost estimate" increases to an amount greater than the amount established in the existing financial assurance instrument, the owner or operator shall, not later than sixty days after the increase, either increase the amount assured by the financial assurance instrument to at least equal the "current final closure cost estimate" and submit evidence of such increase to the director, or obtain alternate financial assurance to compensate for the increase.]

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

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CERTIFIED ELECTRONICALLY

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Certification

02/16/2012

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Date

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## TO BE RESCINDED

**3745-27-41 Notification requirements for class II, III, and IV composting facilities.**

(A) No person shall establish or operate a class II, III, or IV composting facility without first submitting the notification required by paragraph (D) or (E) of this rule. Thirty days after the receipt of a complete notification by Ohio EPA, the composting facility shall be considered to be a "registered composting facility" and the owner or operator may do either of the following:

- (1) For a class II composting facility, commence construction of the facility and, after obtaining a license in accordance with Chapter 3745-37 of the Administrative Code, commence operation of the facility.
- (2) For a class III or IV composting facility, commence construction and operation of the facility.

(B) No person shall substantially change a currently registered composting facility without first submitting the notification required by paragraph (D) or (E) of this rule. Thirty days after the receipt of a completed notification by Ohio EPA, the owner or operator may commence operations in accordance with the proposed change provided that applicable requirements of Chapter 3745-27 of the Administrative Code and Chapters 3704. and 6111. of the Revised Code have been met. A written explanation describing the nature of the substantial change shall be submitted with the notification. For the purposes of this rule, a substantial change includes, but is not limited to, the following:

- (1) A change in the physical location of the entire facility.
- (2) For a class II composting facility, a change in the total capacity, or in the authorized maximum daily waste receipt established for the facility resulting in an increase of the facility's financial assurance cost estimate.
- (3) A change in the type of feedstock, bulking agent, or additive received when the acceptance of the new feedstock type, bulking agent, or additive requires a change in the class of the facility.
- (4) A change in ownership of the facility.

[Comment: A change in the class of an existing composting facility may or may not initiate mandatory closure activities. Rule 3745-27-47 of the Administrative Code specifies the conditions for mandatory closure and closure requirements for composting facilities.]

## (C)

(1) The owner or operator of a composting facility that was registered prior to the effective date of this rule is not required to submit the notification required by paragraph (D) or (E) of this rule unless either of the following apply:

(a) The facility has been substantially changed. A written explanation, describing the nature of the substantial change must be submitted with the notification.

[Comment: A change in the class of an existing composting facility may or may not initiate mandatory closure activities. Rule 3745-27-47 of the Administrative Code specifies the conditions for mandatory closure and closure requirements of composting facilities.]

(b) The owner or operator receives a request in writing from Ohio EPA to update its operational status by submitting the notification required by paragraph (D) or (E) of this rule.

[Comment: The owner or operator of a composting facility, registered prior to the effective date of this rule, may continue operations at the composting facility provided that the facility is a "registered composting facility."]

(2) A composting facility that was registered prior to the effective date of this rule is no longer a "registered composting facility" and has triggered mandatory closure according to paragraph (B)(5) of rule 3745-27-47 of the Administrative Code, when any of following apply:

(a) The facility was substantially changed and the owner or operator does not submit the notification required by paragraph (D) or (E) of this rule within one hundred and eighty days of the effective date of this rule.

(b) The owner or operator received a request in writing from Ohio EPA to update its operational status by submitting the notification required by paragraph (D) or (E) of this rule, and the owner or operator did not submit the required notification within one hundred and eighty days of issuance of the request.

(c) The owner or operator has never accepted waste at the composting facility since its initial registration.

- (d) The owner or operator has not accepted waste at the composting facility for at least one year prior to the effective date of this rule.

(D) Notification of class II or class III composting facilities.

- (1) Not less than thirty days prior to the date on which the class II or class III composting facility will accept authorized feedstocks, bulking agents, or additives, the owner or operator of a class II or class III composting facility shall submit to the director and to the approved health district having jurisdiction a complete notification on forms prescribed by the director to register the composting facility which shall consist of the following:

- (a) A 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:

- (i) The property lines of all land owned or leased for the composting facility.

- (ii) All public roads, railroads, and occupied structures.

- (iii) Existing topography showing 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.

- (iv) The north arrow.

- (v) Location of the on-site materials placement areas for the following:

- (a) Composting operations.

- (b) Storage of feedstocks, bulking agents, or additives.

- (c) Storage of curing compost.

- (d) Storage of cured compost.

- (e) Storage of compost product.

- (vi) All existing domiciles.
  - (vii) The limits of the regulatory flood plain.
  - (viii) 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.
  - (ix) 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.
  - (x) All existing public water supply wells, developed springs or private potable water supply wells.
- (b) A notarized statement certifying that the information presented in the notification of registration and the plan drawing is true and accurate, and that on the date the notification is received by Ohio EPA the limits of materials placement meet the applicable location restrictions specified in paragraph (M) of rule 3745-27-45 of the Administrative Code.
- (c) The following Class specific information:
- (i) For class II composting facilities:
    - (a) The authorized "maximum daily waste receipt" as defined in rule 3745-27-01 of the Administrative Code.  
  
[Comment: The information provided for the "authorized maximum daily waste receipt" is the basis for the determination of the appropriate license fee in accordance with section 3734.06 of the Revised Code.]
    - (b) The maximum land surface area in square feet which will be utilized at the facility for the following:

- (i) Composting operations.
  - (ii) Storage of feedstocks, bulking agents, or additives.
  - (iii) Storage of curing compost.
  - (iv) Storage of cured compost.
- (c) The maximum capacity in cubic yards available at the facility for each of the following:
  - (i) Composting operations.
  - (ii) Storage of feedstocks, bulking agents, or additives.
  - (iii) Storage of curing compost.
  - (iv) Storage of cured compost.

[Comment: The total maximum land surface area of the facility, excluding that area used for the storage of compost product, and the total maximum capacity of the facility, excluding that area used for the storage of compost product, is the basis for the itemized written estimate for financial assurance provided in accordance with paragraph (D)(4) of this rule.]
- (d) The maximum land surface area in square feet and maximum capacity in cubic yards that will be utilized at the facility for the storage of compost product.
- (e) Facility information including facility name, location, class of composting facility, contact person, and phone number.
- (f) Owner and operator information including name, address, and phone number.
- (g) Financial assurance information including the following:
  - (i) An itemized written estimate, in current dollars, of the

cost for a third party to complete final closure of the facility in accordance with rule 3745-27-47 of the Administrative Code. The itemized written estimate shall be in accordance with rule 3745-27-15 of the Administrative Code and shall be based on the costs necessary to dispose or transfer a quantity of materials equal to the maximum facility capacity for solid wastes, including cured compost, feedstocks, bulking agents, and additives as documented in the facility notification of registration except that the quantity of compost product which will be stored at the facility shall not be considered when estimating these costs. For the purposes of this rule, disposal costs per ton shall be based upon current rates at the time the final closure costs are estimated, at a solid waste facility in the vicinity.

- (ii) An unexecuted draft of the financial assurance instrument, in accordance with rule 3745-27-15 of the Administrative Code.

(ii) For class III composting facilities:

- (a) The maximum land surface area in square feet which will be utilized at the facility for materials placement as defined in rule 3745-27-01 of the Administrative Code.
- (b) The maximum capacity in cubic yards available at the facility for composting operations and storing of bulking agents, curing compost, cured compost, and compost product.
- (c) Facility information including facility name, location, class of composting facility, contact person, and contact person's phone number.
- (d) Owner and operator information including name, address, and phone number.

(2) A notification shall be deemed incomplete if either of the following apply:

- (a) All information required by paragraphs (D)(1)(a) and (D)(1)(c) of this rule is not included.

- (b) The notarized signature required by paragraph (D)(1)(b) of this rule is not included.

Ohio EPA will review the notification for completeness and notify the owner or operator regarding the completeness of the notification.

(E) Notification of class IV composting facility.

- (1) Not less than thirty days prior to the date on which the owner or operator will accept authorized feedstocks, bulking agents, or additives, the owner or operator of a class IV composting facility shall submit to the director and to the approved health district having jurisdiction a complete notification on forms prescribed by the director to register the composting facility which shall consist of the following:

- (a) Facility information including facility name, location, class of composting facility, contact person, and contact person's phone number.

- (b) The owner and operator's name, address, and phone number.

- (c) A notarized statement certifying that the information presented in the notification of registration is true and accurate, and except for facilities which exclusively compost wastes generated within state or national parks, or national recreation areas, that on the date the notification is received by Ohio EPA the limits of the materials placement area meet the applicable location restrictions specified in paragraph (M) of rule 3745-27-45 of the Administrative Code.

- (2) A notification shall be deemed incomplete if either of the following apply:

- (a) All information required by paragraphs (E)(1)(a) and (E)(1)(b) of this rule is not included.

- (b) The notarized signature required by paragraph (E)(1)(c) of this rule is not included.

Ohio EPA will review the notification for completeness and notify the owner or operator regarding the completeness of the notification.

- (F) The owner or operator shall provide written notice to the director and the approved health district having jurisdiction of any changes to the name, address, and phone

number of the owner and operator, or change in the contact person or contact person's phone number within fourteen days from the date the change occurred.

(G) Concurrent to submittal of the notification required by paragraph (D) or (E) of this rule, letters of intent to establish or substantially change a composting facility which include a description of property and facility boundaries, shall be sent, with return receipt requested, to the following:

- (1) The governments of the general purpose political subdivisions where the facility is situated, i.e., 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 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, if any.
- (5) The park system administrator, if any part of the facility is located within or shares the park boundary.
- (6) The conservancy district, if any part of the facility is located within or shares the conservancy district boundary.
- (7) The fire department having responsibility for providing fire control services where the facility is located.

(H) For class II composting facilities, concurrent with submitting the notification required by paragraph (D) of this rule, an application for a license shall be submitted in accordance with Chapter 3745-37 of the Administrative Code.

(I) Failure to comply with location restrictions. A composting facility that fails to satisfy the location restrictions specified in paragraph (D)(1)(b) or (E)(1)(c) of this rule on the date the notification to register the facility is received by Ohio EPA, is not a "registered composting facility" and therefore is not authorized to accept wastes.

[Comment: The owner or operator of a composting facility is required to include a notarized statement with the registration certifying that the information presented is

true and accurate on the date it is received by Ohio EPA. The statement also certifies that the facility meets the location restrictions specified in paragraph (D)(1)(b) or (E)(1)(c) of this rule. The owner or operator is liable for compliance with the location restriction requirements even if the owner or operator is not notified by Ohio EPA. It is the responsibility of the owner or operator to ensure compliance with all of the registration requirements of this rule.]

(J) When the owner or operator of a composting facility is required to close the facility in accordance with paragraph (B) of rule 3745-27-47 of the Administrative Code, the composting facility is not a "registered composting facility."

(K) Adjacent composting facilities. A person may register adjacent composting facilities when the facilities meet the following requirements, in addition to the registration requirements established in paragraphs (D) and (E) of this rule:

(1) The facilities shall be physically delineated and recognizable as separate facilities.

(2) Each facility shall have its own material placement area.

(3) Each facility shall have independent access that is available to the public. Access to a facility shall not be through the material placement area of another facility.

(4) Each facility shall have its own area for waste receipt.

[Comment: All composting facilities are subject to Chapters 3704. and 6111. of the Revised Code and rules adopted thereunder. Compliance with Chapter 3745-27 of the Administrative Code does not assure compliance with the local zoning authority.]

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Date

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## TO BE RESCINDED

3745-27-42

**Permit to install application for class I composting facilities.**

(A) A permit to install application as required by section 3734.05 of the Revised Code shall be submitted to, and approved by, the director prior to the construction of a new class I composting facility and prior to the modification of an existing class I composting facility. The permit to install application shall include the following:

- (1) All the information required in paragraphs (C), (G), (H), and (I) of this rule so that the director can determine if the criteria set forth in rules 3745-27-02 and 3745-27-43 of the Administrative Code are satisfied.
- (2) Detail engineering plans, specifications, and information that shall be presented in a manner acceptable to the director. Detail shall be sufficient to allow clear understanding for technical review of the permit application, to provide assurance that the facility is designed and will be constructed, operated, and closed in accordance with Chapters 3745-27 and 3745-37 of the Administrative Code, and to be readily understandable by operating personnel at the facility.
- (3) The application, and any revisions or alterations to the permit application, shall be submitted in quadruplicate to the appropriate Ohio EPA district office and a copy sent to the board of health of the health district where the facility is or will be located. Any revisions or alterations to the permit application must be pertinent to the director's review of the initial application.
- (4) Copies of the letters of intent required in paragraph (B) of this rule along with copies of the returned receipts.
- (5) Documentation of property ownership or lease agreement to use the property.
- (6) A notarized statement that, to the best of the knowledge of the applicant, the detail engineering plans, specifications, and information in the permit application are true and accurate.
- (7) Upon request by Ohio EPA, any additional information that Ohio EPA deems necessary to determine whether the criteria set forth in rules 3745-27-02 and 3745-27-43 of the Administrative Code are satisfied. Ohio EPA shall require that the applicant supply such information prior to further consideration of the permit to install application.

(B) Concurrent with submitting the permit to install application, the applicant shall also 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) Send, with return receipt requested, copies of letters of intent to establish or modify a composting facility, which include a description of the property and facility boundaries, to the following:
    - (a) The governments of the general purpose political subdivisions where the facility is situated, i.e., 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 regional solid waste management authority or authorities where the facility is located.
    - (c) The owner or lessee of any easement or right of way that borders or is within the proposed facility boundaries of the proposed solid waste facility.
    - (d) The local zoning authority having jurisdiction, if any.
    - (e) The park system administrator, if any part of the facility is located within or shares the park boundary.
    - (f) The conservancy district, if any part of the facility is located within or shares the conservancy district boundary.
    - (g) The fire department having responsibility for providing fire control services where the facility is 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.
- (C) Applications to modify an existing facility with plans approved after the effective date of this rule shall contain new plan drawings to replace those affected by the proposed change, as well as any revised report sections. New narrative added to the report shall appear in capital letters, or otherwise be highlighted, and narrative to be deleted shall be lined out.

- (D) An application, notwithstanding any deficiency, may be considered and acted upon if sufficient information is in the detail engineering plans, specifications, and report for the director to determine whether the criteria set forth in rules 3745-27-02 and 3745-27-43 of the Administrative Code are satisfied.
- (E) The permit to install shall remain in effect until Ohio EPA and the approved health district having jurisdiction have received certification that all required final closure activities have been completed, until the permit has been revoked or terminated in accordance with rule 3745-27-02 of the Administrative Code.
- (F) Ohio EPA shall send one copy of the permit to install and approved permit application to the board of health in whose jurisdiction the facility is or will be located, shall return a copy to the applicant, and shall retain two copies in the agency's files.
- (G) The following detail engineering plans, specifications and information for the composting facility shall be shown by means of drawings and narrative descriptions where appropriate. 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 and shall consist of the following:
- (1) A detail engineering plan cover sheet, to be numbered sheet 1, which shall contain the following information:
    - (a) The name of the composting facility.
    - (b) The precise geographical location and boundaries of the composting facility, the composting facility property line, and the two hundred foot and five hundred foot radii around the property line, to be shown on a 7-1/2 minute USGS topographical map.
    - (c) The name, address, and telephone number of the applicant and the composting facility operator.
    - (d) The name, address, and telephone number of the owner(s) of the land to be used for the composting facility.
    - (e) The name, address, and telephone number of the person who prepared the

plans.

(2) A plan drawing to be numbered consecutively as sheet(s) 2A, 2B, 2C, etc., a plan drawing which shall show the property lines of all land owned or leased for the composting facility as determined by a property survey conducted by a professional skilled in the appropriate discipline, and:

(a) The following detailed facility construction and operational information:

(i) Direction of prevailing winds during each season.

(ii) Traffic patterns, including on-site access roads.

(iii) Measures to be utilized to control surface water run-on and runoff, sediment discharge, and erosion.

(iv) 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.

(v) All run-off control structures, sedimentation pond(s), 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.

(b) The following items located inside of the facility boundaries:

(i) Location of the composting facility boundary.

(ii) All materials placement areas.

(iii) All roads, railroads, and occupied structures.

(iv) The north arrow.

(3) A plan drawing to be numbered consecutively as sheet(s) 3A, 3B, 3C, etc., which shall show the following items located inside the facility boundaries and within one thousand feet beyond the facility boundaries:

(a) The property lines of all land owned or leased for the composting facility

as determined by a property survey conducted by a professional skilled in the appropriate discipline.

- (b) All existing land uses.
  - (c) All existing domiciles.
  - (d) All public roads, railroads, and occupied structures.
  - (e) The limits of the regulatory flood plain.
  - (f) National park or national recreation areas, areas for potential inclusion into the national park system, and any state park or established state park purchase areas.
  - (g) State nature preserves, state wildlife areas, national and state scenic rivers, any 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, cold water habitats, and exceptional warm water habitats.
- (4) A plan drawing to be numbered consecutively as sheet(s) 4A, 4B, 4C, etc., which shall show the following items located inside the facility boundaries and within two hundred feet beyond the facility boundaries:
- (a) The property lines of all land owned or leased for the composting facility as determined by a property survey conducted by a professional skilled in the appropriate discipline.
  - (b) The location of all existing or proposed maintenance buildings, weighing facilities, storage buildings, and other occupied structures.
  - (c) The location of existing or proposed utilities, including water, sewerage and sewage treatment, electricity, gas, and telephone or other means of communication, and any utility company easements on or bordering the site.
  - (d) The location of all fencing, gates, and natural or other screening on the site (may be shown on an aerial photograph).
- (5) A plan drawing to be numbered consecutively as sheet(s) 5A, 5B, 5C, etc.,

which shall show the following items inside the facility boundaries and within five hundred feet beyond the facility boundaries. At a minimum, the plan drawings shall include:

- (a) The property lines of all 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 all surface waters.
  - (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) All existing public water supply wells, developed springs or private potable 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.
- (H) The following information shall be presented in narrative form with necessary accompanying diagrams in a report organized as follows:
- (1) A summary of the site environs and explanation of how the composting facility will meet the criteria for permit approval by the director specified in rules 3745-27-02 and 3745-27-43 of the Administrative Code.
  - (2) The name and address of each owner and lessee of the property described in paragraph (G)(3)(a) of this rule.

(3) Discussion of the following operational information:

- (a) The authorized maximum daily waste receipt requested for the facility as defined in paragraph (B) of rule 3745-27-01 of the Administrative Code.
- (b) The equipment to be used in the operation and maintenance of the facility.
- (c) The waste processing rate (if applicable), 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) A detailed description of the following:
  - (i) Methods of loading and unloading all solid waste materials, including cured 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.
  - (ii) Traffic patterns within the facility boundaries.
  - (iii) Procedures, frequency, and the sequence of processes and steps involved in converting solid waste to cured compost, including but not limited to handling, sorting, shredding, mixing, adding water, screening, turning, composting, curing, recirculating leachate and other liquids deemed acceptable to the director.

- (iv) Potential impacts of Ohio's climate relative to the facility design, procedures and operations.
  - (v) Maximum and average force in pounds per square inch that will be exerted upon the floor of the facility.
  - (vi) For informational purposes only, anticipated seasonal variations in waste processing flow rates for solid waste.
- (h) A detailed discussion of control measures taken including the following:
- (i) 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 of the following:
    - (a) Direct discharge to an approved treatment facility.
    - (b) Leachate conveyance, recirculation, and storage structures and systems.
  - (ii) 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:
    - (a) Direct discharge to an approved treatment facility.
    - (b) Surface water runoff conveyance, recirculation, and storage structures and systems.
  - (iii) How surface waters, birds, rodents, and other vectors will be prevented from reaching solid wastes at the facility.
  - (iv) Measures utilized to control fire, dust, scavenging, erosion, and blowing debris.
  - (v) Inspection procedures for incoming wastes to prevent undesirable wastes or wastes that may not be legally accepted at the composting facility.

- (i) Inclement weather operation procedures.
  - (j) Salvaging procedures to be conducted on site, if any.
  - (k) Odor management plan, including discussion of the anticipated odors produced, circumstances that are likely to result in serious 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.
- (4) Identification of the sources, composition, quality, and estimated quantity of solid waste by type of feedstock, bulking agent, or additive to be used for composting. In addition, the following information shall be included:
- (a) 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.
  - (b) For informational purposes only, identification of the service area associated with the solid waste deposited at the facility.
- (5) For an applicant who makes a request to accept other feedstocks for which the applicant is not authorized by rule to accept at the facility, information as required by paragraph (H) of rule 3745-27-40 of the Administrative Code.
- (I) All applicants shall submit the following financial assurance information:
- (1) An itemized written estimate, in current dollars, of the cost for a third party to complete final closure of the facility in accordance with rule 3745-27-47 of the Administrative Code. The itemized written estimate shall be in accordance with rule 3745-27-15 of the Administrative Code and shall be based on the costs necessary to dispose or transfer a quantity of materials equal to the maximum capacity for solid wastes, including cured compost, feedstock, bulking agents, additives, and compost product that is not intended for general distribution as defined in the approved permit to install application. For purposes of this rule, disposal costs per ton shall be based upon current rates at the time the final closure costs are estimated, at a solid waste facility in the vicinity.
  - (2) An unexecuted draft of the financial assurance instrument in accordance with rule 3745-27-15 of the Administrative Code.

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## TO BE RESCINDED

3745-27-43

**Additional criteria for approval of permit to install applications for class I composting facilities.**

(A) The director shall not approve any permit to install application for a class I composting facility unless he determines that paragraphs (B) to (E) of this rule are satisfied.

(B)

(1) Establishment or modification and operation of the class I composting facility will not violate Chapter 3704., 3734., or 6111. of the Revised Code.

(2) The applicant and/or person listed as 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 provisions of Chapters 3734., 6111., 3714., and 3704. 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 or 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.

(3) The applicant meets the requirements of sections 3734.40 to 3734.43 of the Revised Code and rules adopted thereunder.

(4) The person or persons listed as operator of the facility shall meet requirements of division (L) of section 3734.02 of the Revised Code and rules adopted thereunder.

(C)

(1) On the date the permit to install application was received by Ohio EPA, the limits of materials placement and leachate management system structures are as follows:

(a) Not located in a "regulatory flood plain" as defined in rule 3745-27-01 of the Administrative Code.

- (b) At least two hundred feet from any surface waters of the state, as defined in Chapter 3745-1 of the Administrative Code.
- (c) At least 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 meets any of the following:
    - (a) Controlled by the applicant.
    - (b) Needed as a source of nonpotable water in order to meet the requirements of paragraph (C)(6) of rule 3745-27-45 of the Administrative Code or to maintain controlled biological decomposition under aerobic conditions, and no other reasonable alternate water source is available.
    - (c) 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.
- (d) At least five hundred feet from a domicile.
- (e) At least one thousand feet from all of the following areas:
  - (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.
- (2) Except for facilities which exclusively compost wastes which are generated within state or national parks or national recreation areas, the facility is not located in any of the following areas, in existence on the date of the receipt of the permit to install application by Ohio EPA:
- (a) A national park or national recreation area.
  - (b) An area for potential inclusion in the national park system.
  - (c) A state park or established state park purchase area.
  - (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)
- (1) All materials placement areas shall be enclosed within buildings, structures, or other methods of cover deemed acceptable by the director. The solid waste handling area where solid waste is received at the facility shall be enclosed within structures that may have one open side.
- (2) The floor of the composting facility used for materials placement and for 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:
- (a) Be constructed of a relatively impermeable material, such as concrete, asphalt, or metal to prevent the infiltration of leachate into the ground water.
  - (b) Be 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) Be constructed to prevent any unauthorized discharge of leachate from the facility.
  - (d) Readily allow wet or dry cleanup operations.
  - (e) Be sloped so as to direct leachate to collection points, and not allow ponding of liquids.
  - (f) Be constructed to direct leachate to the leachate management system.
  - (g) Be designed to withstand the maximum temperatures encountered during composting.
  - (h) Be accessible for annual visual inspection for cracks and breaks.
  - (i) Be constructed with materials that enable repairs to be made.
  - (j) Be 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, they 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 to ensure proper operation of the facility.
  - (c) For storage structures, be capable of being monitored or inspected for leaks.
- (E) For an applicant who makes a request to accept other feedstocks, bulking agents, or additives for which the owner or operator is not authorized by rule to accept at the facility, information as required by paragraph (H) of rule 3745-27-40 of the Administrative Code shall be provided. The director may approve and condition such requests as a pilot project or on a permanent basis in accordance with the criteria named in paragraph (G) of rule 3745-27-40 of the Administrative Code.

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## TO BE RESCINDED

3745-27-45 **Composting facility operations.**

[Comment: Table 1 of the appendix provides a keyword summary for each paragraph found in this rule and identifies the applicable paragraphs for each composting facility class.]

(A) General operational requirements. The owner or operator of a composting facility shall operate the facility in accordance with the following:

- (1) The owner or operator of a composting facility shall operate the facility in compliance with the applicable authorizing document(s). Such authorizing documents may include a permit to install issued under rule 3745-27-02 of the Administrative Code, a solid waste disposal license issued in accordance with Chapter 3745-37 of the Administrative Code, a director's approval granted in accordance with paragraph (H) of rule 3745-27-40 of the Administrative Code, and information submitted for the registration in accordance with rule 3745-27-41 of the Administrative Code.

[Comment: Operation of a composting facility in compliance with the information submitted for the registration and the permit to install includes compliance with the maximum capacity for any materials placement area at the composting facility.]

- (2) The owner or operator of a class II, III, or IV composting facility shall meet the registration requirements prior to initiating operations at the facility and shall maintain status as a "registered composting facility," in accordance with rule 3745-27-41 of the Administrative Code, in order to continue operations at the facility.

[Comment: In accordance with rule 3745-27-41 of the Administrative Code, a composting facility registered prior to the effective date of this rule may be required to submit a new notification of registration in order to remain as a "registered composting facility."]

- (3) The owner or operator of a composting facility shall have a copy of all applicable authorizing documents available for inspection by Ohio EPA or the approved health department during normal operating hours.

- (4) The owner or operator shall not accept any prohibited material at the facility. Prohibited material includes the following:

- (a) Any feedstock, bulking agent, or additive other than those feedstock types, bulking agents, or additives authorized by rule 3745-27-40 of the

Administrative Code.

- (b) Hazardous waste as defined in Chapter 3745-51 of the Administrative Code.
  - (c) Infectious waste as defined in rule 3745-27-01 of the Administrative Code.
  - (d) Asbestos or asbestos-containing waste material that is subject to the provisions of "National Emission Standard for Hazardous Air Pollutants", 40 CFR Part 61, subpart M, July 1, 2003.
  - (e) 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* or other infectious agents.
  - (g) Containerized bulk liquids, unless otherwise deemed acceptable to the director.
  - (h) Any other material that the facility is otherwise prohibited to accept under federal, state or local laws, regulations and ordinances.
- (5) The owner or operator shall properly manage any containers used to transport authorized materials to a composting facility that do not meet the definition of biodegradable containers as defined in rule 3745-27-01 of the Administrative Code. Such containers shall not be introduced into the composting process except at a class I composting facility where the owner or operator is mixing such containers with type J feedstocks.
- (6) The owner or operator shall prepare, maintain and implement a contingency plan to address discovery of prohibited material, fire, explosion, spills, and equipment failure. The owner or operator shall have a copy of the contingency plan available for inspection by Ohio EPA or the approved health department during normal operating hours.
- (7) The owner or operator shall comply with rule 3745-27-46 of the Administrative Code.

[Comment: Paragraph (C) of rule 3745-27-46 of the Administrative Code

prohibits the distribution of compost product without testing the cured compost in accordance with the applicable testing standards. As specified in paragraph (A)(5) of rule 3745-27-46 of the Administrative Code, this requirement does not apply to class IV composting facilities.]

- (8) Owner or operator of a class I or II composting facility shall establish and maintain financial assurance for facility final closure in accordance with rule 3745-27-15 of the Administrative Code.

[Comment: Rule 3745-27-15 of the Administrative Code requires annual review of the financial assurance instrument and the final closure cost estimate.]

- (9) The owner or operator shall provide written notification to the approved health department having jurisdiction or to Ohio EPA, and to the single or joint county solid waste management district or regional solid waste management authority in which the facility is located in the event that all or part of the composting facility should cease to accept material from the general public for a significant period of time. In addition, general notification shall be provided to the service area and customers in the event that all or part of the composting facility should cease to accept material from the general public for a significant period of time.

[Comment: For example, thirty days during the spring, summer or fall would be a significant period of time for a facility to not accept source-separated composting materials from the general public.]

- (10) 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.

- (B) Facility preparations. Prior to initial acceptance of feedstocks, bulking agents, or additives at the facility the following preparations shall be completed:

- (1) For class I, II, and III composting facilities, all site preparations shall be completed, the facility adequately prepared for operations, and the prepared facility inspected by Ohio EPA or the approved health department.

- (2) The owner or operator shall be in compliance with all applicable requirements of Chapters 3704. and 6111. of the Revised Code.

- (3) For a class II or III composting facility the owner or operator shall construct the

materials placement area to allow equipment operation during inclement weather.

(C) Daily operations.

- (1) The owner or operator of a composting facility shall conduct operations at the composting facility in such a manner that:
  - (a) Noise, dust, and odors are controlled so as not to cause a nuisance or a health hazard.
  - (b) The attraction, breeding, and emergence of insects, birds, rodents, and other vectors are controlled so as not to cause a nuisance or a health hazard. The owner or operator shall initiate effective supplemental vector control measures as deemed necessary by the health commissioner or the director.
  - (c) Fires are prevented so as not to cause a nuisance or a health hazard.
  - (d) All reasonable measures are employed to collect, properly contain, and dispose of scattered litter, including the use of portable wind screens and frequent inspection of the facility.
  - (e) Water pollution is not created and Chapter 3704. of the Revised Code or any rule promulgated thereunder is not violated.
- (2) All reasonable measures shall be employed to prevent acceptance of prohibited material at the facility. If prohibited material is detected:
  - (a) All reasonable measures shall be employed to control and remove the prohibited material from the materials placement area, including but not limited to, windrows, piles, or in-vessel composting systems.
  - (b) All incidents concerning the prohibited material shall be noted in the daily log.
  - (c) With any incoming feedstock, bulking agent, or additive, the owner or operator shall refuse acceptance of the prohibited material.
  - (d) The owner or operator shall properly manage the prohibited material in accordance with all applicable laws and regulations.

[Comment: Ohio EPA recognizes that incidental non-biodegradable material such as plastic, styrofoam, glass, metals, and rubber may inadvertently be commingled with authorized source-separated feedstocks, bulking agents, or additives. It is the intent of Ohio EPA that the owner or operator remove such material upon discovery and dispose of the prohibited material in an appropriate manner. The requirements of paragraph (I) of this rule should also be considered when prohibited material is discovered at the composting facility and cross contamination of feedstocks, bulking agents, or additives may have occurred.]

- (3) The owner or operator shall exclude live domestic and farm animals from all areas of the facility, except for animals utilized for security purposes or vector control.
- (4) The owner or operator shall maintain access roads at the facility to allow for passage of loaded vehicles during inclement weather conditions.
- (5) The owner or operator shall employ reasonable measures to limit access to the composting facility by non-employees during non-operating hours or in the absence of operating personnel. This paragraph shall not apply to the representatives of Ohio EPA and the approved health department who upon proper identification may enter the facility to determine compliance with Chapters 3734., 3704., and 6111. of the Revised Code and rules adopted thereunder.
- (6) The owner or operator shall have adequate equipment, materials, and services available at or near the facility to control fire. The owner or operator shall act immediately to control or extinguish any fire.
- (7) The owner or operator shall ensure that operable equipment of adequate size and quantity for the operations of the facility is available at all times.
- (8) The owner or operator of a class I, II, or III composting facility shall post signs with letters not less than three inches in height when feedstocks, bulking agents, or additives are accepted from the public or when public access is otherwise allowed at the facility, including the distribution or removal of compost product. The signs must be posted at or near:
  - (a) The entrance to the facility and at all locations of the facility used for vehicular traffic. These signs shall state traffic flow patterns and speed limits, and shall be clearly visible and readable from access roads.

- (b) The composting facility distribution areas, for facilities that produce compost product, and shall state the following:

"Compost quality information is available from the facility operator upon request."

- (c) The area where feedstocks, bulking agents, or additives are received, and shall state the following:

"This facility will not accept hazardous wastes, infectious wastes, asbestos, batteries or other prohibited material."

- (9) The owner or operator who accepts biodegradable containers shall shred or otherwise process the biodegradable containers to increase the exposed surface area for composting and release the contents.

[Comment: The shredding or processing requirement does not prevent the owner or operator from emptying the biodegradable containers prior to shredding or processing in accordance with this paragraph.]

- (10) The owner or operator who accepts tree stumps shall have the capability to process this yard waste material. For the purposes of this paragraph "capability to process" means the owner or operator shall have equipment available to shred or chip the tree stumps. The owner or operator shall ensure the tree stumps are processed, at a minimum, on an annual basis.

- (11) The director or the health commissioner may require processing or removal of tree stumps if conditions causing a nuisance or safety hazard warrant processing or removal of the tree stumps more often than annually.

- (12) For class I composting facilities, storage of salvaged materials within a building or covered structure may be required if the director or the health commissioner determines that the owner or operator is not in compliance with paragraph (C)(1) of this rule.

- (D) Commingled feedstocks. The owner or operator of a composting facility may accept commingled loads of source-separated feedstocks in accordance with the following:

- (1) At a class I composting facility, any combination of a commingled load of source-separated type A, B, C, D, D1, E, I, and type J feedstock may be accepted. A combination of a commingled load of source-separated type F, G, or H feedstock with other feedstock types may be accepted after approval by

the director in accordance with paragraph (G) of rule 3745-27-40 of the Administrative Code.

- (2) At a class II composting facility, any combination of a commingled load of source-separated type A, B, C, or D feedstock may be accepted. A combination of a commingled load of source-separated type D1, E, F, G, H or I feedstock with all other feedstock types, other than type J, may be accepted after approval by the director in accordance with paragraph (G) of rule 3745-27-40 of the Administrative Code.
- (3) At a class III composting facility, any combination of a commingled load of source-separated type A, B, or C feedstock may be accepted.

[Comment: Table 2 of the appendix provides a summary of the feedstocks that may be commingled prior to arrival at a class I, II, III, or IV composting facility.]

(E) Methods of composting.

- (1) Methods of composting utilized at a class I, II, or III composting facility include the following:
  - (a) Windrow composting. The windrow construction and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process.
  - (b) In-vessel composting. The construction and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process.
  - (c) Aerated static pile composting. The construction, including the aeration system, shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process.
  - (d) Any combination of composting methods that includes one or more methods identified in this paragraph when the use of a combination of composting methods ensures equivalent control of leachate, surface water, and ponding of liquids as set forth in paragraphs (G) and (H) of this rule. The combination of composting methods shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process.

(e) Other methods of composting may be utilized after approval by the director. The director may approve an alternative method of composting provided that it performs equivalently, has equivalent control of leachate, surface water, and ponding of liquids as set forth in paragraphs (G) and (H) of this rule, and is otherwise protective of human health, safety and the environment. The owner or operator shall 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 under primarily aerobic conditions, and how leachate and ponding will be controlled. The information submitted shall identify a process to reduce pathogens during composting of any feedstock, bulking agent, or additive that possesses a pathogen concern.

(2) For the purposes of Chapter 3745-27 of the Administrative Code the addition of earthworms into a composting process is not a method of composting.

[Comment: The definition of "additive," as defined in rule 3745-27-01 of the Administrative Code, includes earthworms. The owner or operator of a class II composting facility may submit a written request to the director, in accordance with paragraph (G) of rule 3745-27-40 of the Administrative Code, for approval to accept other additives for which the owner or operator is not authorized by rule to accept at the facility.]

(3) The methods of composting utilized at a class IV composting facility shall enable biological decomposition and ensure control of leachate, surface water, and ponding of liquids as specified in paragraphs (G) and (H) of this rule.

(F) Pathogen reduction. The owner or operator who produces cured compost from any feedstock, bulking agent, or additive that possesses a pathogen concern shall produce the cured compost in a manner that will reduce pathogens and not cause a substantial threat to human health or the environment. Material that may possess a pathogen concern shall be immediately incorporated into the windrows, in-vessel(s), or piles.

[Comment: Rule 3745-27-46 of the Administrative Code includes tests that evaluate pathogen reduction. Table 3 of rule 3745-27-46 of the Administrative Code specifies microbial counts that apply to cured compost produced from any feedstock, bulking agent, or additive that possesses a pathogen concern.]

(G) Surface water management. The owner or operator of a composting facility shall

control surface water runoff and run-on, prevent ponding and erosion, and minimize the impact to surface and ground waters. For the purpose of this rule runoff includes precipitation that has fallen onto the composting facility and has not come in contact with any compost products, or solid wastes including feedstocks, bulking agents, or additives. At a minimum, the owner or operator shall do the following:

- (1) Manage surface water in compliance with the requirements of Chapter 6111. of the Revised Code.
- (2) Divert surface water from the materials placement areas. The land surface of the waste handling, composting, compost curing, and cured compost areas of the facility 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 to minimize erosion.

[Comment: The owner or operator of a composting facility, where different feedstock types are accepted, may be subject to cross contamination as described in paragraph (I) of this rule. When applicable, the owner or operator should consider cross contamination in the design of the slope at the facility.]

- (3) Monitor surface water runoff or ground water as required by the director or health commissioner if a substantial threat of surface water or ground water pollution exists.

(H) Leachate management.

- (1) For the purpose of this rule, leachate includes liquid that has come in contact or been released from compost products or solid wastes including feedstocks, bulking agents, or additives.
- (2) For the purposes of this rule, leachate storage structure means a container used to store collected leachate in such a way that the structure shall prevent leachate from escaping the container while in the liquid state. Leachate storage structures may include, but are not limited to, tanks and lined or unlined collection ponds.
- (3) The owner or operator of a class I, II, III or IV composting facility shall do the following:
  - (a) Manage leachate in accordance with Chapter 6111. of the Revised Code.

- (b) Take action to minimize the production of leachate and control, or eliminate, ponding of leachate and the conditions that contribute to the discharge of leachate from the facility.
- (c) Maintain any structures or mechanisms used for the collection or containment of leachate to prevent blockage, clogging, or breakage that may impede proper collection or containment of leachate.

[Comment: Paragraphs (H)(3)(a) to (H)(3)(c) do not mandate that a facility must have structures or mechanisms for collection, containment, or storage but only that such structures, if present, be maintained and inspected or monitored.]

(4) The owner or operator of a class I, II, or III composting facility shall do the following:

- (a) Construct windrows parallel to the line of slope on the site, if windrow methodology is being utilized.
- (b) 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 re-introduction into the composting process.

(5) The owner or operator of a class I composting facility that accepts type J feedstocks shall do the following:

- (a) Maintain the floor of the composting facility so as to prevent leakage of leachate.
- (b) Test an annual grab sample of leachate for the parameters specified in appendix I of rule 3745-27-10 of the Administrative Code. The grab sample shall be obtained from the leachate management system and shall be representative of the leachate media.

[Comment: Leachate testing will help the owner or operator identify constituents contained in the leachate that may compromise the function of the leachate storage structures.]

(I) Cross contamination.

(1) For the purposes of this rule, "cross contamination" means any of the following:

- (a) The intentional or unintentional mixing, at any point in the composting process, of feedstocks subject to a more stringent testing standard with any feedstock that has a less stringent testing standard in accordance with rule 3745-27-46 of the Administrative Code.

[Comment: The owner or operator should refer to rule 3745-27-46 of the Administrative Code to determine which feedstock has a more stringent testing standard.]

- (b) The intentional or unintentional mixing of type J feedstocks with any other feedstocks.
- (c) The intentional or unintentional mixing of feedstocks, cured compost, bulking agents, or additives that do not possess a pathogen concern with any feedstocks, cured compost, bulking agents, or additives that do possess a pathogen concern.
- (d) The intentional or unintentional mixing of a prohibited material, as specified in paragraph (A)(4) of this rule, with an authorized feedstock, bulking agent, or additive.

(2) In addition to mixing, cross contamination can occur as follows:

- (a) By contact of feedstocks, cured compost, bulking agents or additives with the surfaces of machines, equipment, and the materials placement areas that were previously in contact with a feedstock with a more stringent testing standard, a type J feedstock, materials that possess a pathogen concern, or a prohibited material unless one of the following occurs:

- (i) The surfaces have been cleaned by washing or otherwise subjected to procedures that substantially reduce or eliminate any potential for contamination.

- (ii) A period of sixty days has elapsed since the surfaces were in contact with the feedstock with a more stringent testing standard, a type J feedstock, materials that possess a pathogen concern, or a prohibited material.

- (b) By the addition of or contact with leachate from a feedstock with a more

stringent testing standard, a type J feedstock, materials that possess a pathogen concern, or a prohibited material with any other feedstocks, cured compost, bulking agents, or additives.

- (3) If cross-contamination occurs, the owner or operator shall do one of the following:
- (a) Comply with paragraph (F) of this rule and test in accordance with table 3 of rule 3745-27-46 of the Administrative Code if the cross contamination is from a waste or material that possesses a pathogen concern.
  - (b) Comply with the more stringent testing standard required by rule 3745-27-46 of the Administrative Code if the cross contamination is from a more stringently tested feedstock or material.
  - (c) Manage the contaminated feedstock, cured compost, bulking agent, or additive as cured compost produced from type J feedstocks in accordance with paragraph (D) of rule 3745-27-46 of the Administrative Code if the cross contamination is from a type J feedstock.
  - (d) Remove and properly manage the contaminated feedstock, cured compost, bulking agent, or additive if the cross contamination is from a prohibited material.
- (J) Records retention. Upon request, copies of the records specified in this paragraph shall be submitted to the approved health department or Ohio EPA. The owner or operator of a composting facility shall have the following records available for a period of no less than three years:
- (1) Copies of the results obtained from all testing required by rule 3745-27-46 of the Administrative Code and any other test results required by the director.
  - (2) The daily log forms required by paragraph (K) of this rule.
- (K) Inspection of the facility, the daily log, and pile, in-vessel, or windrow identification. The owner or operator shall inspect the facility, maintain a daily log, and if applicable, establish a tracking system in accordance with the following:
- (1) The owner or operator shall inspect the facility a minimum of:

- (a) Once per day when feedstocks, bulking agents, or additives are received at the facility.
  - (b) Once every week during the time period when feedstocks, bulking agents, or additives are not received and when feedstocks, bulking agents, or additives or curing or cured compost remain at the facility.
- (2) At a minimum, the owner or operator of a composting facility shall inspect the facility for the purposes identified in this paragraph. During inspection, the owner or operator shall do the following:
- (a) Obtain information for the daily log.
  - (b) Examine the facility for the presence of prohibited material, including litter, and then properly manage the prohibited material in accordance with paragraph (A)(4) of this rule.
  - (c) Evaluate leachate formation and leachate collection systems.
  - (d) Evaluate ponding of water at the facility.
  - (e) For a class I composting facility where type J feedstocks are accepted, visually inspect the floor of the composting facility for cracks and breaks.
  - (f) For a class I, II, III, or IV composting facility, visually inspect or otherwise monitor any leachate management system to detect any leakage, breakage, clogging or blockage in the system.
- (3) The owner or operator of a composting facility shall record the facility operations on a daily log. The daily log information shall:
- (a) Be kept on forms prescribed by the director or alternative forms approved by the director. The owner or operator must receive prior written approval from the director to use an alternative form. Alternative forms may be approved provided that all of the information requested on the prescribed form is present.
  - (b) Be available for inspection by the approved health department or Ohio EPA during normal operating hours.

- (c) Be submitted, upon request, to the approved health department or Ohio EPA. The approved health department or Ohio EPA may request summaries from the daily logs in lieu of the daily log copies.
  - (d) Include information for all entries listed on the log form when the facility is operating.
  - (e) Include the date when samples are obtained at the composting facility for testing in accordance with paragraph (H)(5)(b) of this rule and in accordance with rule 3745-27-46 of the Administrative Code.
  - (f) Include documentation of all incidents concerning detection of prohibited material in accordance with paragraph (A)(4) of this rule.
- (4) When there is a possibility of cross contamination as identified in paragraph (I)(2)(b) of this rule, the owner or operator of a composting facility shall establish a tracking system. A tracking system may include one of the following:
- (a) A physical label or sign on the pile, windrow, or in-vessel. The owner or operator shall assign a readily and clearly distinguishable label or sign to each pile, windrow or in-vessel of material. The label or sign shall remain consistent from day to day unless two or more piles or windrows are combined and the combination results in an additional feedstock. When combined, a new label or sign shall be assigned.
  - (b) Designation of the piles, windrows, or in-vessels in the daily log. The designation narrative or free hand sketch shall correspond to the piles, windrows, or in-vessel(s) present at the facility. The designation shall remain consistent from day to day unless two or more piles or windrows are combined and the combination results in an additional feedstock. When combined, the designation shall be updated.
  - (c) Alternative tracking system. The director may approve an alternative tracking system that provides all the same information requested in paragraphs (K)(4)(a) and (K)(4)(b) of this rule.
- (L) Type D feedstocks. The owner or operator who accepts type D feedstocks for composting shall operate the facility in such a manner that:
- (1) A written notice of intent to accept type D feedstock is provided to Ohio EPA

and the approved health department having jurisdiction at least seven days prior to acceptance of the first load of type D feedstock.

- (2) Any paper with the type D feedstock and that is incidental to the load, shall be shredded to increase the surface area of the material prior to incorporation into the composting process.
- (3) The type D feedstock shall be incorporated into the composting process in a timely manner to prevent nuisances including, but not limited to, odor, vectors, and litter.
- (4) A designated stockpile of biofilter material is maintained at the facility in sufficient quantity to provide a biofilter layer to blanket the entire composting mixture containing the type D feedstock. The biofilter layer shall be considered part of the composting mixture and shall not be removed for reuse. At a minimum, the biofilter shall be applied to the composting mixture containing the type D feedstock when the following occurs:
  - (a) Site conditions warrant the application due to odors or vectors.
  - (b) Requested by the director or the health commissioner.

For the purpose of this rule, biofilter means a layer of a minimum of six inches in depth, consisting of bulking agents, shredded yard waste, finished compost, or materials otherwise authorized in accordance with paragraphs (G) and (H) of rule 3745-27-40 of the Administrative Code, and that is applied over the composting mixture to control odors, dust or vectors.

- (5) Free liquid from the incoming type D feedstock shall be controlled using a berm consisting of cured compost, bulking agents or other absorbent material placed around the area where the incoming type D feedstock is handled and mixed.
- (M) Location restrictions. The owner or operator of a class II, III, or IV composting facility shall operate the facility in accordance with the following location restrictions:
- [Comment: The location restrictions that apply to a class I composting facility are specified in paragraph (C) of rule 3745-27-43 of the Administrative Code.]

- (1) For a class II or III composting facility, as of the date the initial notification of registration was submitted, in accordance with rule 3745-27-41 of the

Administrative Code, the materials placement areas and leachate management system of the composting facility shall be as follows:

- (a) Except for facilities which exclusively compost wastes generated within state or national parks or national recreation areas, not be located in any of the following:
  - (i) A national park or national recreation area.
  - (ii) A state park or an established state park purchase area.
  - (iii) An area for potential inclusion in the national park system.
  - (iv) 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.
- (b) Be located at least two hundred feet from a public water supply well, a developed spring, or a private potable water supply well, unless any of the following conditions are met:
  - (i) The water supply well or developed spring is:
    - (a) Controlled by the owner or operator.
    - (b) Needed as a source of nonpotable water in order to meet the requirement of paragraph (C)(6) of this rule or to maintain controlled biological decomposition under aerobic conditions, and no other reasonable alternate water source is available.
    - (c) 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) Be located at least two hundred fifty feet from a domicile, unless the domicile is owned or leased by the owner or operator.
- (d) Be located at least five hundred feet from all of 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.
- (2) For a class IV composting facility, as of the date the initial notification of registration was submitted, in accordance with rule 3745-27-41 of the Administrative Code, the materials placement areas and leachate management system of the composting facility shall, except for facilities which exclusively compost wastes generated within state or national parks, or national recreation areas, 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.
- (3) For a class II or III composting facility, the materials placement areas and leachate management system of the facility shall not be located in a regulatory flood plain as defined in rule 3745-27-01 of the Administrative Code.

- (4) For a class II, III, or IV composting facility, the materials placement areas and leachate management system of the facility shall be located at least two hundred feet from any surface waters of the state unless the facility was registered prior to the effective date of rule 3745-27-41 of the Administrative Code. A facility registered prior to the effective date of rule 3745-27-41 of the Administrative Code shall be located at least one hundred feet from any surface waters of the state regardless of whether the facility submits another notification in accordance with paragraph (C) of rule 3745-27-41 of the Administrative Code.

[Comment: The effective date of rule 3745-27-41 of the Administrative Code referenced in this paragraph is the same effective date for all the composting rules.]

- (N) Adjacent facilities. The owner or operator of registered adjacent composting facilities shall, at a minimum, prevent cross-contamination of feedstocks, bulking agents or compost through the following:

(1) Controlling and collecting leachate and surface water runoff.

(2) Cleaning any equipment shared between facilities in accordance with paragraph (I)(2) of this rule.

- (O) The director, upon determining that a facility has incorrectly assumed applicability of this rule, or upon determining that substantial violations are not being adequately addressed, may issue proposed orders requiring the facility's cessation of operation and final closure in accordance with rule 3745-27-47 of the Administrative Code.

- (P) Annual report. The owner or operator of a composting facility shall submit an annual report to the appropriate Ohio EPA district office and approved health department no later than the first day of April of each year. The annual report shall include, at a minimum, all of the required information on forms prescribed by the director or alternative forms approved by the director. The owner or operator must receive prior written approval from the director to use an alternative form. Alternative forms may be approved provided that all the required information is present. The following information summarizing the previous year's operations and the condition of the facility shall be included on the annual report:

(1) Identification as to the calendar period to which the submittal applies.

(2) A summary of the facility's operations by month and annual totals including the following:

- (a) Quantity, in tons or cubic yards, of the following:
  - (i) Wastes received.
  - (ii) Materials removed from the facility including, but not limited to, salvaged materials and materials that are not utilized in the composting process.
  - (iii) Cured compost produced.
  - (iv) Cured compost and compost product removed from the facility.
- (b) Origin of the wastes received.
- (c) The solid waste disposal facilities to which solid wastes, including cured compost and materials that are not utilized in the composting process, were taken for disposal.
- (3) Except for facilities which collected all leachate exclusively for re-circulation into the composting process, a monthly summary of the amount of leachate collected for treatment or disposal, not including re-circulation, and where the leachate was treated or disposed.
- (4) For class I composting facilities, verification that the leachate management system is operating in accordance with paragraph (A)(1) of this rule.
- (5) For class I composting facilities, results of the analytical testing of an annual grab sample of leachate in accordance with paragraph (H)(5)(b) of this rule.
- (6) A summary of any maintenance performed on the leachate control system or on any other monitoring and control system installed at the facility.
- (7) For class I and II composting facilities, the most recently updated final closure cost estimate adjusted for inflation prepared in accordance with paragraph (A)(8) of this rule and rule 3745-27-15 of the Administrative Code.
- (8) The name, address and telephone number of the person to contact regarding final closure of the facility.
- (9) A statement certifying compliance with paragraph (H)(2) of this rule.

- (10) A notarized statement certifying that, to the best of the knowledge of the owner or operator, the information contained in the annual report is true and accurate.

Effective: 04/02/2012

R.C. 119.032 review dates: 11/30/2011

CERTIFIED ELECTRONICALLY

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Certification

02/16/2012

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Date

Promulgated Under: 119.03  
Statutory Authority: 3734.02  
Rule Amplifies: 3734.02  
Prior Effective Dates: 06/01/1992, 10/31/1993, 06/01/2003, 07/01/2004

## TO BE RESCINDED

3745-27-46

**Standards for compost products.**

## (A) Applicability.

- (1) This rule applies to the owner and operator of a composting facility subject to rules 3745-27-40 to 3745-27-47 of the Administrative Code, or to section 1511.02 of the Revised Code that produces a cured compost or compost product for sale, at retail or wholesale, for use, distribution for use, or to give away.
- (2) This rule does not apply to the use, distribution for use, or giving away of the cured compost or compost product produced by a composting facility that composts dead animals pursuant to section 1511.022 of the Revised Code and any rules promulgated thereunder when either of the following applies:
  - (a) The composting is conducted by the person who raises the animals and the cured compost or compost product is used in agricultural operations owned or operator by that person, regardless of whether the person owns the animals.
  - (b) The composting is conducted by the person who owns the animals, but does not raise them and the cured compost or compost product is used in agricultural operations by either of the following:
    - (i) A person who raises the animals.
    - (ii) A person who raises grains that is used to feed the animals provided the grain is supplied by the owner of the animals.
- (3) This rule does not apply to any person who disposes of cured compost or compost product in a licensed solid waste landfill or another composting facility authorized to accept the cured compost or compost product as a feedstock type.
- (4) This rule does not apply to the owner or operator of a composting facility provided that all of the following conditions are met:
  - (a) The owner or operator uses only type A, type B, or type C feedstocks and authorized bulking agents resulting from the normal operations of the business or service.

- (b) Such materials have been transported to the facility by the owner or operator.
  - (c) The limits of materials placement on the facility site are less than one hundred and thirty-five thousand square feet of total area.
  - (d) The cured compost is utilized exclusively by the owner or operator of the facility as part of the normal operation of the business or service.
- (5) This rule does not apply to the owner of an animal or crop production operation provided that all of 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.
  - (b) The owner uses only type A, type B, type C, or type D feedstocks and authorized bulking agents resulting from the animal or crop production operation.
  - (c) The composting facility is located on the premises of the animal or crop production operation.
  - (d) The cured compost produced by the facility is utilized exclusively at the animal or crop production operation.
  - (e) The compost facility is separate from those operations conducted for the purpose of animal mortality composting conducted in accordance with either section 1511.022 or section 3734.02 of the Revised Code and rules adopted thereunder.
- (6) This rule does not apply to the owner or operator of a registered class IV composting facility or to cured compost produced from a registered class IV composting facility provided the facility exclusively composts type A feedstocks, bulking agents, or additives as authorized by paragraph (F) of rule 3745-27-40 of the Administrative Code. Such cured compost may be sold, offered for sale at retail or wholesale, used, distributed for use or given away.
- (7) This rule does not apply to: business operations engaged in providing lawn mowing or landscaping services, and that are required to remove the type A feedstock generated while providing their services, or business operations that generate type A feedstock while providing their own lawn mowing or

landscaping services, provided that all of the following conditions are met:

- (a) The owner or operator uses only type A feedstock, bulking agents, and additives generated from the business operation or service.
  - (b) The owner of the composting facility is the same as the owner of the business operation.
  - (c) The composting facility is located on the premises of the business operation.
  - (d) The limits of materials placement on the facility site are less than twelve hundred square feet of total area.
  - (e) Cured compost is utilized exclusively at the business operation.
- (B) No owner or operator of a composting facility shall sell or offer for sale at retail or wholesale, use, distribute for use, or give away any compost product for the use for which the product is being sold, offered for sale, distributed, or given away or for which the product is being used by the owner or operator unless one of the following occurs:
- (1) The owner or operator has demonstrated in accordance with paragraph (C) of this rule that the compost product complies with the applicable compost quality standards.
  - (2) The owner or operator has obtained and is in compliance with a director's approval for an alternative use in accordance with paragraph (M) of this rule.
- (C) Owner or operator requirements for demonstrating compliance with the quality standards for compost products. Prior to the distribution of the cured compost as a compost product, the owner or operator of a composting facility shall demonstrate that the cured compost constitutes a compost product that meets the applicable quality standards by complying with all of the following:
- (1) Sample the cured compost in accordance with sampling methods specified in paragraph (I) of this rule or an alternative method approved in accordance with paragraph (J) of this rule.
  - (2) Sample the cured compost at the frequencies specified in paragraph (I) of this rule, or an alternative frequency approved in accordance with paragraph (J) of this rule.

this rule.

- (3) Test the cured compost for the applicable parameters specified in paragraph (E) of this rule, and any supplementary quality standards required pursuant to paragraph (F) of this rule.
  - (4) Test the cured compost using the applicable analytical methods specified in paragraph (E) of this rule, or any analytical method required pursuant to paragraph (F) of this rule, and alternative preparation or analytical methods approved in accordance with paragraph (J) of this rule.
  - (5) Maintain copies of all testing documentation, including analytical test results and analytical methods.
  - (6) Label the compost product in accordance with requirements specified in paragraph (K) of this rule.
- (D) The owner or operator that fails to meet the applicable quality standards for compost products shall dispose of the cured compost in a licensed solid waste landfill or another composting facility authorized to accept the cured compost or compost product as a feedstock type. Cured compost produced from feedstocks that currently do not have applicable quality standards shall be disposed of in a licensed solid waste landfill.
- (E) Compost product quality standards. The following quality standards are applicable to cured compost produced from type A, B, C, D, D1, E, F, G, H, I, and J feedstocks:
- (1) Type A feedstocks. The compost product quality standards applicable to cured compost produced from type A feedstocks are as follows:
    - (a) Contained in table 1 of this rule. No results shall exceed the concentration limits for the parameters listed in table 1.
    - (b) Contained in table 4 of this rule. No results shall exceed the concentration limits for the parameter listed in table 4. If the owner or operator does not meet the standard specified in table 4 and chooses to further process the cured compost, then the owner or operator must re-test the cured compost to demonstrate that the standard listed in table 4 has not been exceeded.
    - (c) Contained in table 5 of this rule. Analytical results shall be available for the parameters specified in table 5.

- (2) Type B feedstocks. The compost product quality standards applicable to cured compost produced from type B feedstocks are as follows:
- (a) Contained in table 1 of this rule. No results shall exceed the concentration limits for the parameters listed in table 1.
  - (b) Contained in table 3 of this rule. No results shall exceed the microbial count for the parameters listed in table 3.
  - (c) Contained in table 4 of this rule. No results shall exceed the concentration limits for the parameter listed in table 4. If the owner or operator does not meet the standard specified in table 4 and chooses to take action to further reduce the foreign matter content of the cured compost, then the owner or operator must re-test the cured compost to demonstrate that the standard listed in table 4 has not been exceeded.
  - (d) Contained in table 5 of this rule. Analytical results shall be available for the parameters specified in table 5.
- (3) Type C feedstocks. The compost product quality standards applicable to cured compost produced from type C feedstocks are as follows:
- (a) Contained in table 1 of this rule. No results shall exceed the concentration limits for the parameters listed in table 1.
  - (b) Contained in table 3 of this rule. No results shall exceed the microbial count for the parameters listed in table 3.
  - (c) Contained in table 4 of this rule. No results shall exceed the concentration limits for the parameter listed in table 4. If the owner or operator does not meet the standard specified in table 4 and chooses to take action to further reduce the foreign matter content of the cured compost, then the owner or operator must re-test the cured compost to demonstrate that the standard listed in table 4 has not been exceeded.
  - (d) Contained in table 5 of this rule. Analytical results shall be available for the parameters specified in table 5.
- (4) Type D, D1, E, F, G, and H feedstocks. The compost product quality standards applicable to cured compost produced from type D, D1, E, F, G, and H feedstocks are as follows:

- (a) Contained in table 1 of this rule. No results shall exceed the concentration limits for the parameters listed in table 1.
  - (b) Contained in table 3 of this rule. No results shall exceed the microbial count for the parameters listed in table 3.
  - (c) Contained in table 4 of this rule. No results shall exceed the concentration limits for the parameters listed in table 4. If the owner or operator does not meet the standard specified in table 4 and chooses to take action to further reduce the foreign matter content of the cured compost, then the owner or operator must re-test the cured compost to demonstrate that the standard listed in table 4 has not been exceeded.
  - (d) Contained in table 5 of this rule. Analytical results shall be available for the parameters specified in table 5.
- (5) Type I feedstocks. The compost product quality standards applicable to cured compost produced from type I feedstocks are as follows:
- (a) Contained in table 1 of this rule. No results shall exceed the concentration limits for the parameters listed in table 1.
  - (b) Contained in table 2 of this rule. No results shall exceed the concentration limits for the parameters listed in table 2.
  - (c) Contained in table 3 of this rule. No results shall exceed the microbial count for the parameters listed in table 3.
  - (d) Contained in table 4 of this rule. No results shall exceed the concentration limits for the parameters listed in table 4. If the owner or operator does not meet the standard specified in table 4 and chooses to take action to further reduce the foreign matter content of the cured compost, then the owner or operator must re-test the cured compost to demonstrate that the standard listed in table 4 has not been exceeded.
  - (e) Contained in table 5 of this rule. Analytical results shall be available for the parameters specified in table 5.
- (6) Type J feedstocks. Cured compost produced from type J feedstocks has no applicable compost quality standards.

[Comment: Cured compost produced from type J feedstocks may be used at a licensed sanitary landfill facility regulated pursuant to Chapter 3745-27 of the Administrative Code to either protect the re-compacted soil liner [freeze/thaw protection material] from damage, or as alternative daily or intermediate cover materials. The owner or operator of the sanitary landfill facility shall have obtained necessary authorizations for use of such cured compost in accordance with Chapter 3745-27 of the Administrative Code prior to use as an alternative protection material or cover.]

- (F) Supplementary compost quality standards based upon individual feedstocks. The standards in this rule are based upon general information on primarily homogeneous feedstocks. The following additional information, or testing of feedstocks, cured compost, or compost product may be required on a case specific situation to ensure the standards are appropriately protective:
- (1) Upon written notification by the director, the owner or operator shall provide information regarding a characterization of the feedstocks including but not limited to the following:
    - (a) The agricultural, industrial, or commercial process used that produces the feedstock.
    - (b) A description of the chemical and biological component(s).
    - (c) A description of any known or potential heavy metals and organic compounds that may threaten to cause an adverse effect to the public health or safety, or to the environment.
  - (2) Upon written notification by the director, the owner or operator shall sample and test for additional parameters as the director deems necessary to ensure the standards are appropriately protective.
  - (3) Upon review of such additional information, the director may require additional conditions or quality standards for the cured compost. If so, the director shall notify the facility of such standards in writing.
- (G) Quality standards for commingled feedstocks and recirculated leachate. For the purpose of this rule, the quality standards for type A feedstock shall be considered the least stringent and for type J feedstock the most stringent. When commingling feedstocks, the applicable quality standards shall be determined by the feedstock with the more stringent quality standard. When recirculating leachate into the composting mixture, the applicable quality standards shall be determined by the

feedstock with the more stringent quality standard contributing to the leachate.

(H) Re-sampling and re-testing altered cured compost. If cured compost that has been previously sampled and tested in accordance with this rule is mixed with any amount of additional feedstocks, bulking agents, additives, or other untested cured compost, then the tested cured compost is considered to be altered and shall be re-sampled and re-tested in accordance with paragraphs (B), (E), (F), (I), and (J) of this rule.

(I) Frequency of sampling and testing, sampling methods/sample collection and preservation. Sample collection and preservation shall ensure valid and representative results. The owner or operator shall sample the cured compost in accordance with the following:

(1) Sampling from a windrow shall use all of the following:

(a) Use table 1 of this paragraph to determine the number of grab samples required as a multiple of the cured compost volume in the windrow.

Table A

Cured compost volume				
Cubic yards	< 10,000	10,001 - 20,000	20,001 - 30,000	30,001 - 40,000*
Number of sample locations (cross-sections)	3	6	9	12
Number of grab samples per location	3	3	3	3
Total number of samples in composite	9	18	27	36
Total number of samples from composite to be tested	1	2	3	4
*Greater volumes shall be sampled at three (3) additional locations for each increment				

of ten thousand cubic yards.

- (b) Choose three locations along the horizontal length of the windrow for each ten thousand cubic yards of cured compost that will divide the windrow in equal quarter sections. These three locations are the sampling cross-sections.
- (c) Use a clean container to extract a minimum of three grab samples of five hundred cubic centimeters each, at each cross-section.
- (d) Determine sampling locations along the vertical height, from the ground or composting pad to the top of the windrow, randomly at each cross-section.
- (e) Extract the grab samples from each cross-section at depths measured from the windrow's outer surface equal to the following:
  - (i) One-half the horizontal width of the windrow.
  - (ii) One-fourth the horizontal width of windrow.
  - (iii) One-fourth the horizontal width of windrow on the opposite side of the cross-section where the first two grab samples were collected.
- (f) Combine a total of nine grab samples per ten thousand cubic yards of cured compost, in a clean container, to form one composite sample.
- (g) Mix the composite sample thoroughly to ensure a valid and representative sample.

[Comment: A "clean container" includes, but is not limited to, a suitable size plastic or paper bag or bucket that contains no other material.]
- (h) Extract a sub-sample of a minimum of two thousand cubic centimeters in volume from the composite sample and place in an adequately sized, appropriate, clean container, and seal and label to reflect the collection date and time.
- (i) Implement any additional requirements for sampling consistent with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (EPA SW-846), 3rd edition, April 1992.

(2) For sampling from a pile:

- (a) Use table A of this paragraph to determine the number of grab samples required as a multiple of the cured compost volume in the pile.
- (b) Choose three equally distanced locations along the perimeter of the pile for each ten thousand cubic yards of cured compost that will divide the pile in three equal one-third sections. These three locations are the sampling cross-sections.
- (c) Use a clean container to extract a minimum of three grab samples of five hundred cubic centimeters each, at each cross-section.
- (d) Determine sampling locations along the vertical height, from the ground or composting pad to the top of the pile, randomly at each cross-section.
- (e) Extract the grab samples from each cross-section at depths measured from the pile's outer surface equal to the following:
  - (i) One-half the horizontal width of the pile.
  - (ii) One-fourth the horizontal width of pile.
  - (iii) One-fourth the horizontal width of pile on the opposite side of the cross-section where the first two grab samples were collected.
- (f) Combine a total of nine grab samples per ten thousand cubic yards of cured compost, in a clean container, to form one composite sample.
- (g) Mix the composite sample thoroughly to ensure a valid and representative sample.

[Comment: A "clean container" includes, but is not limited to, a suitable size plastic or paper bag or bucket that contains no other material.]
- (h) Extract a sub-sample of a minimum of two thousand cubic centimeters in volume from the composite sample and place in an adequately sized, appropriate, clean container, and seal and label to reflect the collection date and time.

- (i) Implement any additional requirements for sampling consistent with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (EPA SW-846), 3rd edition, April 1992.
- (3) All samples collected for testing in accordance with table 3 of this rule shall be prepared and analysis started within eight hours of the collection of the sample.
- (4) All samples collected for testing of benzene in accordance with analytical method U.S. EPA 8260 in table 2 of this rule shall be prepared using a sufficient volume of cured compost to detect benzene at a minimum concentration of 0.002 milligrams per kilogram (mg/kg).
- (J) Alternative frequency, sampling, and testing methodologies. After one year of operation, the owner or operator may submit a written request to the director for an alternative frequency of sampling; an alternative sampling method; or an alternative preparation or analytical method in accordance with the following:
  - (1) Frequency of sampling. The director may approve and condition a request for an alternative frequency of sampling if the owner or operator demonstrates to the satisfaction of the director that, at a minimum, the following requirements are met:
    - (a) The solid waste feedstocks, bulking agents, and additives accepted at the facility are consistent in quality and type.
    - (b) The operation of the facility results in consistent quality of cured compost.
    - (c) The quality of the cured compost is consistent. The consistency shall be demonstrated through the submittal of copies of the results for five consecutive sampling and testing cycles in accordance with paragraphs (B), (C), (E), (F), (H) and (I) of this rule, where cured compost has met the applicable standards for compost product.
    - (d) Equivalent protection of human health and safety, and the environment is maintained.
  - (2) Alternative sampling method. The director may approve and condition a request for an alternative sampling method if the owner or operator can demonstrate to the satisfaction of the director that, at a minimum, the following requirements are met:

- (a) The solid waste feedstocks, bulking agents, and additives accepted at the facility are consistent in quality and type.
  - (b) The operation of the facility results in consistent quality of cured compost.
  - (c) The quality of the cured compost is consistent, through the submittal of results of any previous sampling and testing cycles.
  - (d) Equivalent protection of human health and safety, and the environment is maintained.
- (3) Test preparation and analytical methodology. The director may approve and condition a request for an alternative test preparation and analytical methodology if the owner or operator can demonstrate to the satisfaction of the director that, at a minimum, the following requirements are met:
- (a) The test preparation and analytical method is scientifically recognized and will provide equivalent or improved test results.
  - (b) Equivalent protection of human health and the environment is maintained.
- (4) The owner or operator who has obtained an approval for an alternative frequency of sampling, an alternative sampling method, or an alternative preparation or analytical method shall immediately notify the director of changes in the feedstocks, bulking agents, or additives composted and simultaneously shall commence complying with applicable requirements found in this rule.
- (K) Product information and availability of test results. The owner or operator shall provide product information for the compost product in accordance with the following requirements. The owner or operator shall also have available the results of testing that demonstrate that the distributed compost product meets the applicable requirements specified in paragraphs (E), (F), and (J) of this rule:
- [Comment: Paragraph (J) of rule 3745-27-45 of the Administrative Code requires that the owner or operator retain all copies of test results for a period of no less than three years.]
- (1) All compost product that is distributed in a bag or packaged form shall be labeled with product information. The label shall be prominently visible and shall contain, at a minimum, the following information in a readable and

conspicuous form:

- (a) Name and address of the composting facility.
  - (b) General type of feedstocks used, including but not limited to: yard waste, source separated vegetative wastes, sewage sludge, paper pulp sludge, manure, dead animals, or any other feedstock authorized by the director.
  - (c) Any bulking agents or additives used, including those authorized by the director as alternative bulking agents or additives.
  - (d) Recommended uses for the compost product.
  - (e) Any owner or operator recommended restrictions on the use of the compost product.
- (2) All compost product that is distributed unpackaged or in bulk (not in a bag or container) is not required to be labeled but shall have the following product information in written form, available upon request by any recipient of the compost product:
- (a) Names and addresses of the composting facility.
  - (b) General type of feedstocks used, including but not limited to: yard waste, source separated vegetative wastes, sewage sludge, paper pulp sludge, manure, dead animals, or any other feedstock authorized by the director.
  - (c) Any bulking agents or additives used, including those authorized by the director as an alternative bulking agents or additives.
  - (d) Recommended uses for the compost product.
  - (e) Any owner or operator recommended restrictions on the use of the compost product.
- (3) The owner or operator of a composting facility who distributes compost product subsequently combined with any other materials shall include the following information on the label in a readable and conspicuous form for bagged or packaged compost product or in written form for unpackaged or bulk

compost product, available upon request by any recipient of the compost product:

"Other materials have been combined with this compost product after required testing was completed."

- (4) Upon the request of the recipient of the compost product, the owner or operator of a composting facility shall provide the recipient a summary of results from testing required in accordance with this rule.
- (5) The owner or operator of a compost facility who distributes compost product mixed with any other materials shall include the following in the summary results: "The results of this summary are only indicators of the compost product and do not include information on any other materials subsequently combined with this compost product after testing."
- (L) Distribution of compost product. Compost product that has been demonstrated to meet the applicable quality standards in accordance with paragraph (C) of this rule, and product information provided in accordance with paragraph (K) of this rule, may be distributed, without limitation, for any use. This authorization for unrestricted use does not ensure that the use of the compost product would be beneficial to all potential compost product applications.
- (M) Authorization for alternative use of cured compost that does not meet applicable standards for compost product. The director may approve and condition a request for an alternative use for cured compost that does not meet applicable quality standards in accordance with paragraph (E) of this rule if in the determination of the director, the alternative use does not cause or threaten to cause an adverse effect to the public health or safety, or the environment. The determination of the director shall be based on the information provided in paragraph (N) of this rule and any other information required by the director. Alternative uses involving agricultural applications shall also be in accordance with accepted agricultural, silvicultural, or horticultural practices.

Request for an alternative use of cured compost where the cured compost does not meet the applicable standards contained in tables 2, 4, or 6 of this rule shall not be considered for use in an agricultural application.

For the purposes of this rule, agricultural application includes, but is not limited to, application to grazing lands or crop fields, plant production, turf-grass production and landscaping.

- (N) Criteria for approval of an alternative use for cured compost. The owner or operator of a composting facility whose cured compost has been sampled and tested in

accordance with this rule and found to exceed any of the applicable concentration limits identified for the type of feedstock may submit a written request, in a form acceptable to the director, for approval for an alternative use for the cured compost in accordance with paragraph (M) of this rule, and include, at a minimum, the following:

- (1) A description of the proposed alternative use.
  - (2) A detailed list of all feedstocks, bulking agents and additives utilized to produce the cured compost.
  - (3) A copy of the test results of the cured compost required in accordance with paragraphs (E), (F), or (J) of this rule.
  - (4) The location of proposed application or incorporation, total acreage to be utilized, total quantity of cured compost, and the application rate of cured compost that the owner or operator proposes for the alternative use, including justification of specific application rates, safe uses, and any applicable restrictions.
  - (5) The results of test(s) of the soil from the proposed location of application or incorporation. The results of the soil test(s) shall include the specific parameter(s) that caused the cured compost to exceed the standards named in this rule.  
  
[Comment: For example, if type I cured compost is to be applied or incorporated, and has met the standard for all parameters except zinc, the results of the soil tests shall include a value for zinc.]
  - (6) A detailed narrative of why the requested alternate use will not adversely affect the public health or safety or the environment, with supporting justification including, at a minimum, scientific documentation, published studies, and current scientific studies.
  - (7) Any other information deemed necessary by the director.
- (O) The owner or operator of the composting facility that has submitted a copy of the information required in paragraph (N) of this rule and obtained authorization for alternative use in accordance with paragraph (M) of this rule must send a copy of the director's approval letter, by certified mail, to the owner of the land that has been approved as the application or incorporation location prior to application or incorporation of the cured compost.

(P) The director or the health commissioner may order that cured compost or compost product be disposed in a licensed solid waste landfill if the director or the health commissioner deem that the cured compost or compost product causes or threatens to cause a nuisance or adversely affects the public health or safety or the environment.

Table 1

Parameter	Concentration limit mg/kg dry weight	Preparation methods	Analytical methods
Arsenic	41	AOAC 975.03(B)(b) or U.S. EPA 3050B or U.S. EPA 3051	U.S. EPA 6010B U.S. EPA 7060A or U.S. EPA 7061A
Cadmium	35	AOAC 975.03(B)(b) or U.S. EPA 3050B or U.S. EPA 3051	U.S. EPA 6010B U.S. EPA 7130 or U.S. EPA 7131A
Copper	1500	AOAC 975.03(B)(b) or U.S. EPA 3050B or U.S. EPA 3051	U.S. EPA 6010B U.S. EPA 7210
Lead	300	AOAC 975.03(B)(b) or U.S. EPA 3050B or U.S. EPA 3051	U.S. EPA 6010B U.S. EPA 7420 or U.S. EPA 7421
Mercury	7.8	AOAC 971.21 or U.S. EPA 3051	AOAC 971.21 U.S. EPA 7471A or U.S. EPA 6010B
Nickel	420	AOAC 975.03(B)(b) or U.S. EPA 3050B or U.S. EPA 3051	U.S. EPA 6010B U.S. EPA 7520
Selenium	100	AOAC 975.03(B)(b) or U.S. EPA 3050B or U.S. EPA 3051	U.S. EPA 6010B U.S. EPA 7740 or U.S. EPA 7741A
Zinc	2800	AOAC	U.S. EPA 6010B

		975.03(B)(b) or U.S. EPA 3050B or U.S. EPA 3051	U.S. EPA 7950 U.S. EPA 7951
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Table 2

Parameter	Concentration limit mg/kg dry weight	Analytical methods
Organic constituents	Practical quantitation limit	U.S. EPA 8260B
Total petroleum hydrocarbons	105.0	U.S. EPA 8015B
PCB	1.0	U.S. EPA 8082A
Benzene	0.006	U.S. EPA 8260B* or U.S. EPA 8021B
Toluene	4.0	U.S. EPA 8260B or U.S. EPA 8021B
Ethyl benzene	6.0	U.S. EPA 8260B or U.S. EPA 8021B
Xylene	28.0	U.S. EPA 8260B or U.S. EPA 8021B

[\*Note: The detection limit is 0.002 mg/kg. In accordance with paragraph (I)(5) of this rule, the sample used for the determination of the level for benzene present must be prepared as if the concentration limit were 0.002 mg/kg to decrease the percent error when using U.S. EPA 8260B for detection at such low concentration.]

Table 3

Parameter	Microbial count	Preparation method	Analytical method
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Fecal coliforms	Preparation and analytical methods with a 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
Salmonella spp.	Preparation and analytical methods with a limit of less than 3 Most Probable Number per 4 grams of total solids (3MPN/4GTS)	Standard method part 9260D	

Table 4

Parameter	Concentration limit/dry weight	Preparation method	Analytical method
Foreign matter	1.0% by weight on No. 5 sieve (4mm screen) and no more than a fourth of this foreign matter may be plastic.	U.S. EPA 160.3	Detailed below

#### Method for determining percent foreign matter

Foreign matter content shall be determined by passing a dried, weighed sample of not less than 100 grams of the cured compost through a U.S. standard No. 5 sieve (4 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 cured compost sample and multiplied by one hundred shall be the percent dry weight of the foreign matter content.

[Comment: Rule 3745-27-01 of the Administrative Code defines foreign matter as "inorganic and organic constituents that were not readily decomposed during composting including, but not limited to: plastics, glass, textiles, rubber, leather, metal, ceramics, styrofoam, sharp objects, and painted, laminated, or treated wood and bark".]

Table 5

Parameter	Analytical method
Boron	AOAC 985.01C and U.S. EPA method 6010B
Maturity	Dewar-flask method test or Solvita test or phytotoxicity and seedling-growth response or O <sub>2</sub> /CO <sub>2</sub> respirometry
pH	North central regional (NCR) publication 221 or U.S. EPA 9045C soil pH or ASTM D 2976-71
Salinity	NCR publication 221
Total nitrogen	Dumas method (N-analyzers)
Total organic carbon	U.S. EPA 9060
Total phosphorus	U.S. EPA 6010B or U.S. EPA 3050B or U.S. EPA 3051 or U.S. EPA 365.2 or AOAC method 985.01C and U.S. EPA 6010B or U.S. EPA method 7610
Total potassium	U.S. EPA 6010B or U.S. EPA 3050B or U.S. EPA 3051 or AOAC method 985.01C and U.S. EPA 6010B or U.S. EPA method 7610

The parameters identified for testing in table 5 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 (mmhos/cm).

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

U.S. environmental protection agency (U.S. EPA) method 160.3 is described in "Methods for Chemical Analysis of Water and Waste", 1979. All other EPA methods referenced in the foregoing tables are contained in EPA SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", 3<sup>rd</sup> edition, 1998. North Central Region (NCR) publication 221 (revised October 1988), entitled "Recommended Chemical Soil Test Procedures for North Central Region" contains methodology for salinity and pH. Association of Official Analytical Chemists (AOAC) methods 975.03, 971.21, and 985.01C are contained in AOAC "Official Methods of Analysis", 1990, 15th edition. Standard methods 9221E, 9222D, and 9260D are contained in "Standard Methods for the Examination of Water and Wastewater", 18th edition, 1992. American Society for Testing and Methods (ASTM), 1997.

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CERTIFIED ELECTRONICALLY

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Certification

02/16/2012

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Date

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Prior Effective Dates: 06/01/1992, 10/31/1993, 06/01/2003, 07/01/2004

## TO BE RESCINDED

3745-27-47

**Closure of composting facilities.**

## (A) Applicability

- (1) The owner or operator of a class I or II composting facility that is required to initiate closure activities in accordance with paragraph (B) of this rule, shall comply with paragraphs (C) to (H) of this rule.
- (2) The owner or operator of class III composting facility that is required to initiate closure activities in accordance with paragraphs (B)(1) or (B)(5) to (B)(7) of this rule, shall comply with paragraphs (C) to (H) of this rule.
- (3) The owner or operator of class IV composting facility that is required to initiate closure activities in accordance with paragraph (B)(1) or (B)(5) to (B)(7) of this rule, shall comply with paragraph (D) and (H) of this rule. In addition, the owner or operator of class IV composting facility that is required to initiate closure activities in accordance with paragraph (B)(1) or (B)(7) of this rule shall comply with paragraph (I) of this rule.
- (4) The owner or operator of a composting facility who is closing the facility for the purpose of changing its registration status to another classification 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 human health and the environment. The written request shall include, at a minimum, a detailed description of the proposed final closure activities, the change in the classification of the facility, the type of feedstocks, bulking agents, and additives currently on site, and information to identify if the facility is publicly or privately owned or operated.

## (B) Final closure activities for a composting facility shall be mandatory if any of the following occurs:

- (1) The owner or operator submits in writing to Ohio EPA that the facility will no longer accept waste by a specified date.
- (2) A solid waste facility license held by the owner or operator of the composting facility expires, and no further license has been applied for in the manner prescribed in Chapter 3745-37 of the Administrative Code.
- (3) A solid waste facility license held by the owner or operator of the composting facility has expired, a further license has been applied for and denied as a

final action of the licensing authority.

- (4) 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.
- (5) The composting facility ceases to be a "registered composting facility" in accordance with rule 3745-27-41 of the Administrative Code.
- (6) The director orders the facility to close and all remedies, including appeals, for such orders have been exhausted or waived by failure to pursue such remedies in a timely manner.
- (7) The composting facility otherwise ceases to receive solid waste. However, closure is not mandatory for a period of one year after ceasing to receive waste if there is a reasonable likelihood that the normal operations will resume at the composting facility during the year.

(C)

- (1) Within seven days after mandatory closure is required, in accordance with paragraph (B)(1), (B)(2), or (B)(7) of this rule, the owner or operator shall provide written notice that the facility has ceased to accept waste to the following:
  - (a) The single or joint solid waste management district, or the regional solid waste management authority in which the facility is located or which is served by the facility.
  - (b) The approved health district within which jurisdiction the facility is located.
  - (c) Ohio EPA.
- (2) Concurrently, for composting facilities that accept waste from or distribute compost product to the general public, notice of closure shall be published in a newspaper of general circulation in the county in which the facility is located by the owner or operator of the composting facility. Such notice shall be similarly published in any other county which has the source of twenty-five per cent or more of the solid wastes received at the facility that has been closed. A copy of the proof of publication shall be included with the written notification to Ohio EPA and the board of health having jurisdiction.

- (D) Compost products, and solid wastes, including but not limited to, curing compost, cured compost, bulking agents, and additives, shall be removed from the composting facility within one hundred eighty days after the date when the facility ceased to accept solid wastes, unless an alternate time period is authorized by the director.
- (E) Not later than thirty days after solid wastes have been removed from a composting facility, all material placement areas and equipment on the premises shall be thoroughly cleaned, in accordance with the following requirements:
- (1) All containers, equipment, machines, floors and composting facility surfaces that were in contact with solid wastes, curing compost, or cured compost at any time during the operation of the composting facility and that are not to be removed during the final cleaning, shall be washed or otherwise subjected to procedures that substantially reduce or eliminate any remaining constituents or contaminants derived from contact with solid wastes, curing compost, or cured compost. This paragraph does not apply to composting or curing surfaces composed of soil, gravel, slag, or other permeable material.
  - (2) Leachate remaining on the site shall be removed and disposed in accordance with all applicable laws and regulations. The leachate collection system shall be thoroughly flushed of all materials derived from or that have contacted solid wastes.
- (F) Not later than ninety days after all solid wastes have been removed from the composting facility, the following actions shall be completed, where applicable:
- (1) The leachate collection system must be modified, removed or sealed, as necessary, to prevent discharges from the system to surface or ground waters of the state unless such discharges are otherwise regulated in accordance with Chapter 6111. of the Revised Code.
  - (2) All land not previously so modified shall be graded and drainage structures provided so as to direct surface water off the closed facility, and not allow ponding of water on the closed facility.
  - (3) The closed facility shall be baited for rodents, and treated for other vectors, if necessary.
  - (4) Signs, stating in letters not less than three inches high that the facility is closed for all solid waste facility activities, shall be posted in such a manner as to be easily visible at all access points into the facility for composting facilities

where the owner or operator accepts waste from or distributes compost product to the general public. These signs shall be maintained in legible condition for not less than two years after closure of the facility, or until the facility re-opens as a new composting facility or is converted to an alternative use. The text of the signs required by this paragraph shall be:

"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 Ohio Revised Code. Whoever recklessly violates Chapter 3734. of the Ohio Revised Code is guilty of a felony, punishable by a fine of at least \$10,000 but not more than \$25,000 or imprisoned for at least two years but not more than four years, or both."

- (G) Within thirty days of completing facility closure as outlined in this rule or before the closed facility may be converted to other uses, whichever occurs first, a notarized statement certifying that the facility has been thoroughly cleaned pursuant to paragraph (E) of this rule must be provided to Ohio EPA and the approved health district having jurisdiction.
- (H) Representatives of Ohio EPA or the approved health department, upon presenting proper identification, may enter any composting facility that has ceased accepting waste, at any reasonable time, for the purpose of determining compliance with this rule.
- (I) Within seven days after mandatory closure is required, in accordance with paragraph (B)(1) or (B)(7) of this rule, the owner or operator shall provide written notice that the facility has ceased to accept waste to the following:
  - (1) The single or joint solid waste management district or the regional solid waste management authority in which the facility is located or which is served by the facility.
  - (2) The approved health district having jurisdiction.
  - (3) Ohio EPA.

Effective: 04/02/2012

R.C. 119.032 review dates: 11/30/2011

CERTIFIED ELECTRONICALLY

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Certification

02/16/2012

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Date

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