

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 paragraph (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 rule 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.

Replaces: 3745-27-40
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CERTIFIED ELECTRONICALLY

Certification

04/01/2003

Date

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Table 1

<u>Class of Composting Facility</u>				
<u>Feedstock Type</u>	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>
<u>A - Yard Waste</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>
<u>B - Agriculture Plant Materials</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	
<u>C - Animal Waste</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	
<u>D - Vegetables, fruits, grains</u>	<u>Yes</u>	<u>Yes</u>		
<u>D1 - Processed vegetables, fruits, grains</u>	<u>Yes</u>	<u>Yes</u>		
<u>E - Dairy and meat</u>	<u>Yes</u>	<u>Yes</u>		
<u>F - Rendering</u>	<u>After Approval*</u>	<u>After Approval**</u>		
<u>G - Domestic Animal Carcasses</u>	<u>After Approval*</u>	<u>After Approval**</u>		
<u>H - Wild Animal Carcasses</u>	<u>After Approval*</u>	<u>After Approval**</u>		
<u>I - Other Source Separated Organic Material</u>	<u>Yes</u>	<u>After Approval**</u>		
<u>J - Non-Source Separated Material</u>	<u>Yes</u>			

* A Class I composting facility must obtain prior approval to accept type F, G, or H feedstocks in accordance with paragraph (H) of Rule 3745-27-40 of the Ohio Administrative Code or in accordance with the permit-to-install.

** A Class II composting facility must obtain prior approval to accept type F, G, H, or I feedstocks in accordance with paragraph (H) of Rule 3745-27-40 of the Ohio Administrative Code.