



Class III Composting Facility Requirements

This guidance document summarizes the requirements associated with Class III composting facilities, including acceptable waste materials and definitions associated with composting.

What is a Class III Composting Facility?

Class III composting facilities are facilities authorized to accept any of the feedstocks, bulking agents and additive listed below, and their materials placement area is limited to a maximum size of 135,000 square feet.

Who should register as a Class III Composting Facility?

Unless exempted by OAC Rule 3745-560-01, any person or business that intends to operate a class III composting facility is required to apply for and obtain a registration prior to commencing operations. Common exempted activities include single-family residential composting of household organic material and any composting that does not exceed 500 square feet.

What is Ohio's Regulatory Definition of Composting?

Composting is defined as the process of biological decomposition of solid wastes under controlled conditions resulting in compost. Controlled conditions include but are not limited to grinding, shredding, chipping, mixing feedstocks, bulking agents and additives, piling, physical turning, aerating, adding moisture, performing procedures to achieve human pathogen reduction, or other processing of solid wastes.

Authorized Feedstocks

- **Yard waste** (leaves; grass clippings; brush; tree trunks and stumps; prunings from trees or shrubs; any plant materials from residential trees and edible gardens; decorative plant materials that do not contain plastic, metal, polystyrene or other non-compostable material, including but not limited to any of the following: pumpkins or gourds, hay or straw bales, holiday trees, discarded or potted flowers, wreaths, and grave blankets. Yard waste does not include materials from industrial processing, agricultural processing, or food processing).
- **Agricultural plant materials** (plant material including but not limited to stems, leaves, vines, or roots from an agricultural operation).
- **Animal waste** (animal excreta, bedding, wash waters, incidental waste feed, and silage drainage).
- **Dead animals** (bodies or parts of a dead animal). Requires compliance with OAC Rule 3745-560-015.
- **Raw rendering material** (body, part of a body, or product of a body of any dead animal that is unfit for human consumption). Requires compliance with OAC Rule 3745-560-015.
- **Alternative materials** (waste that might be suitable for composting but is not listed in rule as a feedstock, bulking agent, or additive). Requires additional approval and compliance with OAC Rule 3745-560-305.

Applicable Rules

Ohio Administrative Code (OAC)
Chapter [3745-560](#): All composting regulations (effective October 1, 2018)
[3745-500-02](#): Solid waste definitions

All current solid waste regulations can be printed from our website at epa.ohio.gov/dmwm

More Information

For more information regarding this document, please contact the Composting Program at (614) 644-2621.

Disclaimer

This guidance document addresses key regulatory requirements and commonly asked questions. It does not include all the regulations that an owner and operator must comply with.

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Authorized Bulking Agents

A bulking agent is a waste material added to the composting process to provide structural support, improve aeration, or absorb moisture. The following are authorized bulking agents:

- Wood chips
- Straw
- Clean untreated wood*
- Shredded newspaper
- Shredded cardboard
- Sawdust
- Shredded brush
- Shredded yard waste
- Compostable containers**
- Stover

* Clean untreated wood means source-separated wood such as sawdust, pallets, and dimensional lumber that has not been treated chemically or with adhesives and coatings including but not limited to paint, glue, or any other visible contaminant.

** Compostable container means a container that meets ASTM D6400 or D6868 compostability standards, including those displaying the Biodegradable Products Institute's "Compostable Logo".

Authorized Additives

An additive is a supplemental material mixed with or otherwise added to feedstocks and bulking agents to create a favorable condition for the composting process. The following are approved additives:

- Urea
- Crushed eggshells
- Source-separated spent coffee and tea grounds
- Bacterial or fungal inoculum

Registration Process

Registration fee: None.

How to Register: You can submit the registration application through Ohio EPA's eBusiness Center portal at (<https://ebiz.epa.ohio.gov/>). Contact the Division of Materials and Waste Management (DMWM) at (614) 644-2621 for assistance with the eBusiness Center portal. You may also complete the paper forms (epa.ohio.gov/dmwm) and mail to Ohio EPA, Division of Materials and Waste Management, Lazarus Government Center, P.O. Box 1049, Columbus, Ohio 43216-1049.

Letter of intent to register: Prior to submitting the registration form, letters of intent to establish a composting facility must be sent to the following entities via certified mail or any other form of mail accompanied by a receipt. Copies of the letters and receipts must be included with the registration application.

- Local government (e.g. county commissioner, board of township trustees, etc.)
- Solid waste management district
- Owner or lessee of any easement or right of way bordering or within the proposed facility boundaries
- Local zoning authority
- Park system administrator and conservancy district
- Local fire department

Plan view drawing: A plan view drawing must be included with the application and it must include the information required in OAC Rule 3745-560-300(B)(2). The plan view drawing information may be contained in more than one map or drawing. It is not required that the plan view drawing is prepared and signed by a professional engineer. Most county auditor websites provide access to property maps with many of the items required and that can be printed. You can hand draw additional information or use additional maps from other sources.

Contact Water and Air programs: It is the applicant's responsibility to obtain information regarding permitting requirements related to water and air. Contact the Division of Air Pollution Control and Division of Surface Water to determine what, if any, permit requirements apply.

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Current Information and Changes: You must ensure that your registration information is current by submitting an amendment/modification request whenever there are changes to any of the information contained in the registration application. To submit an amendment, use the same as registration form (epa.ohio.gov/dmwm) and check the amendment checkbox. You can submit the amendment application through Ohio EPA's eBusiness Center portal at (<https://ebiz.epa.ohio.gov/>) or mail the paper forms to Ohio EPA in Columbus.

Important: An amendment to the registration that involves any proposed change to the materials placement area requires a site inspection and written concurrence from Ohio EPA.

Facility Design and Construction

The facility must be designed to meet the standards below as specified in OAC Rule 3545-560-302. Construction must be completed and verified by Ohio EPA prior to acceptance of waste materials.

- The materials placement area must have a slope of between 1% to 6% to control surface water drainage
- Prevent run-on from reaching the materials placement area
- Prevent ponding and erosion
- Minimize the potential impact to surface water and ground water
- Collect and contain leachate within the boundary of the composting facility and prevent leachate from discharging to waters of the state, unless you obtained a permit from the Division of Surface Water
- Allow facility operation during inclement weather
- Roads within the facility boundary that allow vehicle and equipment traffic at all times
- Post a sign with letters not less than three inches in height at the entrance of the facility with the following statement: "This composting facility only accepts authorized wastes and authorized materials, and will not accept hazardous wastes, asbestos, batteries, or other prohibited materials." You may add to the sign any specific authorized materials that you are interested in or not accepting, as well as other pertinent information.

Facility Operations

Composting methods: Class III composting facilities must use any combination of the following methods: windrows, in-vessel, aerated static pile, static pile or vermicomposting. Construction and turning frequency of the composting mix must enable controlled biological decomposition under predominately aerobic conditions. Other composting methods may be used upon prior approval by the director of Ohio EPA.

Conditioning methods: Class III composting facilities may condition authorized materials prior to composting with any the methods above by performing acidic anaerobic fermentation, also known as bokashi. Other conditioning methods may be used upon prior approval by the director of Ohio EPA.

Dead animals and raw rendering material composting: Class III facilities interested in composting these materials are required to follow the additional training, facility preparations and operational requirements found in OAC Rules 3745-560-015.

Prevent nuisances and health hazards: Conduct operations in a manner that:

- Controls noise, dust, and odors
- Prevents the attraction, breeding, and emergence of insects, birds, rodents, and other vectors
- Prevents fires

Access to the facility: Maintain access roads to allow passage of loaded vehicles during inclement weather conditions with minimum erosion and dust generation and allow access only to employees and other authorized persons when the facility is not in operation.

Equipment: Have fire control equipment, material, and services available to control or extinguish any fire at the facility. Necessary equipment to conduct facility operations must be maintained in the appropriate size and quantity.

Wood Processing: Shred or chip any tree stumps, trunks, limbs and clean untreated wood and remove foreign materials prior to incorporation into the composting process. Tree stumps, trunks, limbs, and clean untreated wood must be processed at a minimum annually or more often if conditions causing a nuisance or safety hazard exist.

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Surface Water Management: Ensure that all design features constructed to manage surface water are maintained in operable condition or improved if they become insufficient.

Leachate Management: Leachate includes liquid that has come in contact or been released from compost products or solid wastes including feedstocks, bulking agents, or additives. The facility operator must take action to minimize the production of leachate. All leachate must be maintained onsite unless authorization is obtained by Ohio EPA Division of Surface Water.

Other Requirements: No unauthorized solid wastes shall be accepted at the facility. If such wastes are found, remove and properly dispose of them as soon as possible. Biodegradable containers must be processed prior to incorporation into the composting mixture to allow for mixing of its content.

Log of Operations: Maintain an operational log on the forms available at epa.ohio.gov/dmwm, or on your customized forms (paper and/or electronic) with written approval by the inspector of the approved board of health. The log of operation must be complete daily unless you have received written approval for an alternative frequency from Ohio EPA or the approved board of health.

The log must be available to the Ohio EPA and board of health representatives during operating hours, and copies or summaries submitted on request.

Annual report: Submit an annual report to Ohio EPA no later than the first day of February of each year. The annual report form can be printed from our website at epa.ohio.gov/dmwm. The annual report can also be submitted electronically through the new Composting Annual Report Service. Information on the new service can be found in our webpage.

Records Retention: Copies of the daily logs and compost testing results must be kept for a minimum of three (3) years.

Testing and Distribution

Distribution: Only compost that meets the definition of compost product can be distributed for unrestricted use. Compost product is compost that was tested and met all the quality standards requirements in OAC Rule 3745-560-330. Untested compost cannot be distributed and must be disposed of at another Class III composting facility or at a permitted sanitary landfill.

When to test: All compost must be sampled following the sampling protocol specified in OAC Rule 3745-560-325. Ohio EPA will accept the use of a more rigorous sampling protocol upon verification. You must sample the compost once you decide the compost is cured or mature enough for the kind of product you want to market. You may sample individual piles (batches) or consolidate various piles, up to a maximum of 10,000 cubic yards, and then sample. If non-tested compost is added to a pile of compost product before or during distribution, the pile must be mixed and re-sampled before beginning or continuing distribution.

Analysis: Analyze the compost according to the quality standards can be found in OAC Rule 3745-560-330. Remember to verify that the analytical laboratory used the appropriate preparation and analytical methods when performing the quality standards testing. Ohio EPA strongly suggests that you provide the laboratory with a copy of the rule.

Product Information: The operator is required to provide information as to the quality of the compost product. When the compost is being distributed in packaged form (bagged), the package must be labeled with the product information. When the compost is being distributed in bulk, the product information must be available in a separate piece of paper or other written form. OAC Rule 3745-560-320 specifies the information that must be included in the label.

Additional Assistance

Ohio EPA District Offices:

Central District Office: (614) 728-3778

Northeast District Office: (330) 963-1200

Northwest District Office: (419) 352-8461

Southeast District Office: (740) 385-8501

Southwest District Office: (937) 285-6357