



## Class IV Composting Facility Requirements

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

### What is a Class IV Composting Facility?

Class IV composting facilities are facilities authorized to accept any of the feedstocks, bulking agents and additive listed below.

### Who should register as a Class IV Composting Facility?

Unless exempted by OAC Rule 3745-560-01, any person or business that intends to operate a class IV 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).
- **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 3745-560-405.

### 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

### 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](http://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.

\* 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:

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

## 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](http://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 3745-560-400(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.

**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](http://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 3545-560-402. 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

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- 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 IV composting facilities must use any combination of the following methods: Windrow composting, 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 IV 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.

**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.

**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](http://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.

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**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](http://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.

### Compost Product Distribution

Compost produced at class IV composting facilities in accordance with the regulations is considered a compost product acceptable for unrestricted distribution, whenever the operator decides the compost is cured or mature enough for the kind of product wanted for marketing or giving away.

### 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