

S403 BMPs for Commercial Composting

Description of Pollutant Sources: Commercial composting facilities, operating outside without cover, require large areas to decompose wastes and other feedstocks. Design these facilities to separate stormwater from leachate (i.e., industrial wastewater) to the greatest extent possible. When stormwater contacts any active composting areas, including waste receiving and processing areas, it becomes leachate. Pollutants in leachate include nutrients, biochemical oxygen demand (BOD), organics, coliform bacteria, acidic pH, color, and suspended solids. Stormwater at composting facilities include runoff from areas not associated with active processing and curing, such as product storage areas, vehicle maintenance areas, and access roads.

NPDES and State Solid Waste Permit Requirements: Composting facilities are regulated under [WAC 173-350-220](#). Solid Waste Regulations require the collection and containment of all leachate produced from activities at commercial composting facilities. Composting facilities that propose to discharge to surface water, municipal sewer system, or groundwater must obtain the appropriate permits. Zero discharge is possible by containing all leachate from the facility (in tanks or ponds) for use early in the composting process or preventing production of leachate (by composting under a roof or in an enclosed building).

Pollutant Control Approach: Consider zero leachate discharge.

Applicable Operational, Structural, and Treatment BMPs:

- See [WAC 173-350-220](#), Composting Facilities
- See *Siting and Operating Composting Facilities in Washington State: Good Management Practices* ([Ecology, 2013](#)) for common sense actions that can be implemented at a facility to help run a successful program.
- See Ecology's Organic Materials Management page for at the following web address for the most up-to-date information:

<https://ecology.wa.gov/Waste-Toxics/Reducing-recycling-waste/Organic-materials>.
- All composting facilities shall obtain the appropriate state and local permits. Contact your local permitting authority and jurisdictional health department or district for more information.
- Apply for coverage under the Industrial Stormwater General Permit (ISGP) if the facility discharges stormwater to surface water or a municipal stormwater system. If all stormwater from the facility properly infiltrates to groundwater, the ISGP may not be required. There are some cases where an Individual State Waste Discharge permit is required. Check with your local Ecology office and jurisdictional health department or district to discuss your permitting options.
- Screen incoming wastes for dangerous materials and solid wastes. These materials may not be accepted for composting and must be properly disposed of.

- Locate composting areas on impervious surfaces.
- Drain all leachate from composting operations to a sanitary sewer, holding tank, or on-site treatment system. Leachate may not go to the storm drain or groundwater.
- Collect the leachate with a dike or berm, or with intercepting drains placed on the down slope side of the compost area.
- Direct outside runoff away from the composting areas.
- Clean up debris from yard areas as needed to prevent stormwater contamination.

Recommended BMPs:

- Install catch basin inserts to collect excess sediment and debris if necessary. Inspect and maintain catch basin inserts to ensure they are working correctly.
- Locate stored residues in areas designed to collect leachate and limit storage time to prevent degradation and generation of leachate.

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