



August 2013

Odor Prevention, Management/Mitigation Plan Requirements

Background

A Plan of Operation is required for all permitted composting facilities. An Odor Management Plan is one component of the Plan of Operation. It must include information on how compost facility operators will prevent or reduce odors created at the facility from migrating beyond the facility's boundaries. For a complete list of all information required in a compost facility Plan of Operation see WAC <u>173-350-</u> <u>220(4)(f)</u>. The Plan of Operation is to be kept at the facility for easy access by facility staff.

The following information is provided to help facilities create an Odor Management Plan that documents efforts to reduce the generation and off-site migration of odors. Facility operators are responsible for the odors generated at their facility and are required to make every effort to keep nuisance odors to a minimum.

Part 1: Odor Prevention

In this part of the plan, describe your facility design and the current operations that keep odors to a minimum. Include how procedures and systems prevent odors from migrating beyond the property boundaries, especially during odor generating activities such as receiving, blending, turning, composting, and while the blended material is in the curing and storage stages.

Describe every on-site effort to reduce or prevent odors including:

- facility design and features with specific attention to odor prevention/retention (for example, buildings, biofilters, aeration system for piles and lagoons, water capture, pile coverage);
- a general description of types of feedstocks (for example, pre-consumer grocery mixed material, residential yard trimmings, woody by-product);
- a general delivery schedule of feedstocks;
- the maximum time new material is allowed to sit in the receiving area before being blended with other feedstocks to achieve ideal composting conditions;
- pile management procedures (for example, maintaining C:N ratio, temperature, moisture, porosity, air circulation);
- the schedule for purging aeration lines and changing biofilter media as appropriate;
- the schedule for cleaning leachate ponds or leachate storage tanks as appropriate;
- the maintenance schedule for all odor reducing systems to sustain proper operation and maintenance log to track repairs and/or upgrades;
- a description of back-up systems in the event the primary system fails;

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- how feedstocks with high moisture or a high potential for odors will be managed to reduce nuisance odors upon receipt, and throughout the composting process;
- how weather conditions affect facility operations; and
- housekeeping procedures for receiving, blending, conveyance, and pile areas.

Part 2: Odor Management/Mitigation/Response Process

In this section, describe the process to be followed in the event that staff detects nuisance odors or if an odor complaint is received from an outside source. Facility staff may want to use Ecology's Odor Complaint Checklist (see below) or use one created by facility management to document that all areas were investigated.

Describe each of the following:

- staff training (planned and completed) that focuses on recognizing/identifying odors (for example, 'nose' training, odor identification checklist, use of olfactory equipment, weather tracking equipment, and other training that includes compost odor detection/management);
- the chain of events/line of command to be followed in the event that unusually strong odors are noticed by staff or if a complaint is received. Include a timeframe within which the odor issue is addressed (note whether it is an internally noticed odor versus an external complaint), how quickly management is made aware of the odor issue, notification of JHD, response to complainant, and type of communication used (for example, via phone calls, e-mails, letters, meetings);
- efforts (if any) to include facility neighbors in the odor detection and identification education;
- the process to be followed to reduce the odor (for example, changes to air flow, feedstocks, housekeeping, increasing/decreasing moisture, porosity, purging lines);
- the process to be followed in the event of a power or equipment failure (for example, use back-up equipment, transfer incoming feedstock to another facility); and
- equipment or operational changes that will be considered in the event that existing efforts to reduce odors are unsuccessful (for example, additional fans in receiving area, changes in aeration schedules, accepting less feedstock or eliminating receipt of problematic feedstocks, and if necessary hiring third party compost experts).

Special accommodations:

If you need this document in a format for the visually impaired, call the [program name] at [program reception number]. Persons with hearing loss, call 711 for Washington Relay Service. Persons with a speech disability, call 877-833-6341.



Part 3: Odors Complaint Documentation Template

This is an example of the type of form, developed in accordance with WAC 173-350-200(4)(f)(A), that facilities may use to document odor complaints and management. A copy of this form or a form developed by a composting facility should be kept in the Plan of Operation for easy access.

Neighbor	Facility staff		
	Time of complaint:	a.m./p.m.	
Geographic location of complainant (actual address if you can get it or a designation of north, south, east or west of facility and approximate distance from facility). Write location information or draw a diagram showing location in relation to the facility.			
Operations that were or might have been occurring at the facility at the time of the complaint:			
	Neighbor	Neighbor Facility staff Time of complaint: actual address if you can get it or a designation te distance from facility). Write location inform to the facility.	

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Actions taken to identify possible source of odor:

Walking tour of facility and conversations with facility staff (summarize findings- for example, *no odors detected*, *no unusual odors detected*, *pronounced odor in receiving area*, *incoming material very wet*, *filter too wet*, *too dry*, *piles too wet*, *too dry*, *blowers clogged*, *mister malfunction*, *ammonia smell*, *sulfur smell*.)

Feedstock receiving area		
Prep area		
Blending area		
Conveyor area		
Aeration systems		
Biofilter(s)		
New compost pile(s)		
Active pile(s)		
Finished pile(s)		
Lagoon(s)		
Other		
If odor source identified, actions taken to reduce or eliminate the odor:		

Final statement as to how the odor complaint was addressed or resolved (additional comments from JHD staff, air quality, resident, etc.)

Form Completed by

Date

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