



State of Mississippi

TATE REEVES

Governor

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHRIS WELLS, EXECUTIVE DIRECTOR

Mississippi Department of Environmental Quality (MDEQ) Guidance for Pilot Composting Facility Operations (April 13, 2023)

The Mississippi Department of Environmental Quality (MDEQ) has developed the following document in response to statewide interest in composting various organic wastes including vegetative debris, manures, food waste, and other feedstock materials. The MDEQ encourages the diversion of these types of wastes from landfills and into uses as renewable resources such as compost. The MDEQ recognizes the complex nature of the permitting process currently required for siting and operating a composting facility and is presently working to revise the Mississippi Nonhazardous Solid Waste Management Regulations to streamline this process. During this revision process, interested persons may request approval to operate under a temporary pilot project status for new, startup composting operations. These pilot phase operations will allow time for the operator to locate feedstock sources, develop a successful compost recipe, and determine facility viability while implementing siting and management practices that protect human health and the environment. After the revisions to our state composting regulations are finalized, each composting facility operating under pilot project status will be evaluated and the need for a more formal permit from the MDEQ will be determined at that time. This document provides guidance for composting facility planning and operation, and instructions on how to apply for authorization to operate a composting facility as a pilot project.

I. Siting Criteria for Composting Vegetative Debris and/or Food Waste, Manure, or Other Organic Wastes

- A. A 200 foot buffer shall be maintained between the composting operation and the property line, any adjacent residences, and any drinking water supply wells, except where otherwise approved by the MDEQ.
- B. A 250 foot buffer shall be maintained between the composting operation and the nearest state water body (e.g. lakes, rivers, creeks, streams, etc.), except where otherwise approved by the MDEQ.
- C. If a chipper, compost turner, or other large equipment is used as part of the composting operation and the facility is outdoors, to attenuate for noise, the area where this equipment is to be used must be located no closer than 1500 feet from the closest single family dwelling unit. If the equipment operating areas are enclosed, this area must be no closer than 500 feet from the closest single family dwelling unit. If the site cannot meet this

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setback, you may alternatively provide the following: written consent for the smaller setback distance from the owner of such dwelling; or you may demonstrate that the facility will be located, configured, designed, constructed, and operated such that the noise level at the neighboring dwelling, caused by the normal waste management operations of the facility, but not by vehicular movement into or out of the facility, will not exceed an eight-hour time weighted average (TWA) of 65 decibels between the hours of 7 a.m. and 7 p.m., and an eight-hour TWA of 55 decibels between 7 p.m. and 7 a.m.

- D. The composting operation shall not be located in wetlands, in flood prone or similar low-lying areas or in natural drainage ways.
- E. Sites with any pre-existing environmental problems, illegal dumping problems, or other similar conditions should be avoided, unless these conditions can be corrected prior to the request for approval.
- F. Sites selected for a proposed pilot project composting operation should be large enough to accommodate the estimated quantities of incoming feedstock materials. In sizing a prospective site, it is important to consider that stockpiles and windrows in the composting operations will be limited by MDEQ to 12 feet in height or less. In addition, the active composting areas of the pilot project site shall generally be limited to 2 acres or less in size, unless otherwise approved by the MDEQ. The operator also may consider selecting a site that provides the opportunity for future expansion once the composting regulatory changes are finalized by the MDEQ.
- G. Sites selected for a proposed pilot project composting operation should be located in an area that does not conflict with local zoning ordinances, the approved local solid waste plan, or other local government requirements. It is the responsibility of the facility owner/operator to insure that these requirements are met prior to submitting a request for authorization to the MDEQ.
- H. Composting operations should be located on property owned by the operator (e.g. individual, private business, local government, university, etc.) where possible. In the event that the property selected is owned by person(s) other than the facility operator, the responsibility for obtaining the right to the use of the property including the access route will be that of the operator. The granting of authorization to operate under temporary pilot project status does not convey any property rights outside the scope of the authority under which the authorization is issued. Any operations proposed on properties that are owned by parties other than the composting facility operator must have the written approval of the property owner.

Sites that do not meet these requirements should not be considered for composting facilities. Operators of composting facilities currently located on sites not meeting the above requirements should consult the MDEQ to determine if the facility should be moved or modified to comply with the above requirements.

II. Requesting Authorization to Operate a Pilot Composting Facility

- A. Parties interested in operating a composting facility under pilot project status should submit a written request to the MDEQ for authorization. The request should include the following:
1. The name and contact information of the operator (including phone numbers, mailing address, e-mail address, etc.);
 2. A written statement summarizing the knowledge, experience, or expertise possessed by the operator or other designated facility personnel of the biological process of composting and of operating a composting facility in accordance with the MDEQ's requirements.
 3. A description of the physical address and directions which identify the site location. Where possible, the MDEQ requests that approximate GPS coordinates also be provided for the site;
 4. A United States Geological Survey (USGS) topographic quadrangle map or similar map of the area, which depicts the location and property boundaries for the site;
 5. A detailed operational map or drawing. This map or drawing should be drawn to scale. The map or drawing may be overlain on aerial photography. The map or drawing must depict the property boundary and the primary operational areas including feedstock unloading areas, composting areas, storage areas (feedstock, finished compost product, etc.), buffer distances to the property lines to composting and storage areas, access roads, and other physical characteristics of the site;
 6. A description of the types and the sources of feedstock materials that will be composted at the site. Such types may include vegetative debris, untreated wood wastes, food wastes (specify pre- or post-consumer), animal manures, agricultural wastes, or other materials. The MDEQ reserves the right to deny authorization of the use of certain feedstock materials in pilot project composting operations;
 7. A description and all necessary documentation of the proposed site's ability to comply with the location restrictions previously identified in Part I of this guidance;
 8. In the event that the property selected is owned by person(s) other than the facility operator, a written statement from the site property owner(s) acknowledging concurrence with the use of the property as a composting operation; and
 9. A description of the manner in which the site will be operated with the following information:

- a. Include the composting method(s) used: active (turned) or passive (static, not turned). If the compost will be managed actively give the active composting method used (in-vessel, windrows, vermi-composting, or other method).
 - b. Include the method(s) of transportation for feedstock materials to the site.
 - c. Include an estimation of how much material is expected to be on site at any given time. This amount should include incoming feedstock materials, composting piles or windrows, and finished compost product.
 - d. Include an explanation of how and when new materials are incorporated into the composting process (e.g. describe equipment used, interim processing areas, compost mixture ratios, etc.).
 - e. Include a description of procedures for preventing unauthorized wastes from entering the site. Also include a description of procedures for managing inadvertent unauthorized wastes or other materials that cannot be processed either due to size or conditions.
 - f. Include the plans for the finished compost product. Depending upon the feedstock materials used and the manner of distribution of the compost, the finished compost product may need to be analyzed to determine the quality of the compost. MDEQ will provide a sample list of analysis parameters to interested parties upon request.
 - g. Include storm water management provisions for the site operations. Depending upon how the site will be operated, you may or may not be required to develop a storm water pollution prevention plan (SWPPP) and obtain storm water permit coverage. You will need to work with the MDEQ to determine the level of ongoing exposure of the incoming feedstock materials, composting piles or windrows, and the outgoing compost product to storm water. For information on obtaining storm water no exposure certification or for storm water permit coverage and development of a SWPPP visit the following MDEQ web site: <https://www.mdeq.ms.gov/permits/environmental-permits-division/applications-forms/>
- B. The request for authorization to operate a composting facility as a pilot project should be transmitted by the prospective operator to the MDEQ:

By Email: tjones@mdeq.ms.gov

By Mail: Attn: Trent Jones
MDEQ - Waste Division
P.O. Box 2261
Jackson, MS 39225

By Delivery: Attn: Trent Jones
MDEQ - Waste Division
515 East Amite Street
Jackson, MS 39201

III. MDEQ Review and Consideration of the Project

- A. Upon receipt of this proposal, MDEQ may conduct an inspection of the site to confirm compliance with the MDEQ siting criteria.
- B. If the request for pilot project status is approved, the MDEQ will issue a letter of authorization to operate the composting facility as a pilot project. This letter will outline the operating requirements, design requirements, additional siting requirements, reporting requirements, and any other guidelines that may apply. If the request is not approved, the MDEQ will issue a letter listing locational, operational, or other deficiencies regarding the proposed composting facility. Once these items have been corrected or resolved, a new request for authorization may be submitted to the MDEQ. In the event that these deficiencies cannot be resolved in a manner consistent with a pilot project operation, the MDEQ will require the owner/operator to apply for a solid waste management permit for the proposed facility.
- C. Upon issuance of the letter of authorization, the MDEQ reserves the right to inspect the composting site at all reasonable times.
- D. Pilot composting operations will be allowed to operate as a pilot project until revisions to the applicable State solid waste regulations are finalized and adopted. At that time, operations authorized under this guidance will be evaluated by the MDEQ to determine the proper application of State regulatory requirements for continued operations.
- E. MDEQ reserves the right to withdraw or modify the approval of the pilot project or to require that a formal solid waste management permit be obtained if problems are encountered in the pilot operations or if the operations expand to the extent that a formal permit is appropriate.

For more information, please contact Trent Jones by email at tjones@mdeq.ms.gov or at (601) 961-5171.