

TWRA Chickasaw Compost Facility

(2) Facility Standards - Unless specifically noted otherwise, the standards of this paragraph shall apply to all compost facilities subject to a permit as provided at paragraph (3) of Rule 0400-11-01-.02 and Tier One permit by rule facilities.

(a) General Facility Design and Operating Standards

1. All compost facilities shall meet the following design standards in order to operate in a manner that is protective of human health and the environment:

(i) The feedstock receiving, processing and storage areas must be clearly defined and the maximum throughput and capacity specified.

The feedstock receiving, processing and storage areas are clearly defined on the master site plan. Please refer to Attachment A. The feedstock receiving areas are clearly defined at the facility with signage. The estimated maximum throughput and capacity for the facility is 100 tons. This amount will arrive over the deer hunting season in different amounts, with the larger amount expected to be received between November and January.

(ii) The composting facility shall have all-weather access roads. The facility shall be designed such that access to the composting facility shall be limited to authorized entrances, which shall be secured from public access when the facility is not in operation.

The composting facility is located in the Chickasaw State Forest. The State Forest roads will be used to access the composting facility. The entire composting facility is fenced and access to the facility is through the gated entry at the front of the facility. Access is controlled via the locked gates during non-business hours and visitors to the facility are accompanied by a facility representative during normal business hours.

(iii) Contact Water Collection

(I) The facility shall have a contact water collection system that is properly managed.

Due to the small size and characteristics of this site and the nature of the composting material, contact water will only be managed by grading the site to minimize its flow and to direct it to the surrounding vegetated/forested areas.

(II) Contact water shall be reused in the process or otherwise properly managed as per all applicable laws and rules.

It's not anticipated that contact water will be reused, however, if it is to be reused, all reuse activities will be done per all applicable laws and rules.

(iv) Litter Control - Fencing and/or other control shall be provided to confine loose waste to the area designated for storage or processing: Accidental dispersal from the designated areas shall be recovered daily.

Fencing, vegetation, and berms immediately adjacent to the compost windrows will be used to confine loose waste to the area designated for storage or processing. Any accidental dispersal from the designated areas will be recovered daily.

(v) Personnel Facilities - There shall be provided:

(I) A building or other shelter which is accessible to facility personnel which has adequate heating and light.

Facility personnel will use the Chickasaw State Forestry headquarters. This building has adequate heating and light.

(III) Potable water for washing and drinking.

Facility personnel will use the Chickasaw State Forestry headquarters. Potable water for washing and drinking is available in this building.

(IV) Toilet facilities.

Facility personnel will use the Chickasaw State Forestry headquarters. This building has toilet facilities.

(vi) Operating Equipment - The facility shall have on-site operational and monitoring equipment capable of maintaining the waste processing as designed.

A front-end loader will be utilized for on-site operation of the composting site. This equipment will be used to move carbon material on-site, building and maintaining windrows, and processing waste materials. Carbon material and waste material will be delivered to the site using dump-trailers. Compost thermometers will be utilized to monitor compost temperature.

(vii) Endangered Species - Facilities shall be located, designed, constructed, operated, maintained, closed, and cared for during the post-closure care period in a manner that does not:

(I) Cause or contribute to the taking of any endangered or threatened species of plants, fish, or wildlife; or

No endangered species are located on the property.

- (II) Result in the destruction or adverse modification of the critical habitat of endangered or threatened species.

No endangered species are located on the property.

(viii) Location in Floodplains- Facilities shall not be located in a 100-year floodplain, unless the demonstration is made to the Commissioner as required at subparagraph (2)(n) of Rule 0400-11-01-.04.

As shown on the Federal Emergency Management Agency Flood Insurance Rate Map attached (titled and date), indicates the facility is not located in a 100-year floodplain. Please refer to attachment B.

(ix) Wetlands - The facility shall not be located in a wetland unless the demonstration is made to the Commissioner as required at subparagraph (2)(p) of Rule 0400-11-01-.04.

As shown on the National Wetland Inventory Map the facility is not located in a wetland. Please see attachment C.

(x) Buffer Zone Standards for Siting New Facilities - All waste management areas shall be located so as to conform to the distance standards at subparagraph (3)(a) of Rule 0400-11-01-.04.

All waste management areas are located so as to conform with the distance standards at subparagraph (3)(a) of Rule 0400-11-01-.04. Please see attachment A.

2. All compost facilities shall meet the following operational standards:

- (i) Contingency operations shall identify proper management of all waste in the event of equipment failure, facility disaster, or receipt of unauthorized material such as oil, hazardous waste, etc.

In the event of facility disaster or other situation requiring contingency operations, facility personnel will dispose of material by utilizing incinerators permitted for use by TWRA for disposal of material remaining from disease sampling. These incinerators are located off-site from Chickasaw, and material will be transported in covered trailers, should the need arise.

(ii) Fire Safety

(I) No open burning is allowed.

Open burning is not permitted at the facility.

(II) The facility shall have, on-site and continuously available, properly maintained fire suppression equipment capable of controlling accidental fires. If available, local firefighting service shall be acquired.

Fire extinguishers are located on site. The State Forest also has fire suppression equipment if needed.

(iii) Communication - The facility shall have available during operating hours equipment capable of summoning emergency assistance as needed.

Cellular telephones are available for emergency communications.

(iv) Dust Control - The operator must take dust control measures as necessary to prevent dust from creating a nuisance or safety hazard to adjacent landowners or to persons engaged in supervising, operating, and using the site. The use of any dust suppressants (other than water) must be approved in writing beforehand by the Department.

If dust becomes an issue, operations will be halted until it settles and/or the use of water will be used to suppress it.

(v) The owner/operator of a compost facility permitted pursuant to paragraph (1) of Rule 0400-11-01-.02 shall file with the Commissioner a performance bond or equivalent cash or securities, payable to the State of Tennessee. Such financial assurance shall be in an amount determined by the Commissioner to be adequate to insure 30 days operation and proper closure of the facility. The types of financial assurance instruments that are acceptable are those which are specified in subparagraph (3)(d) of Rule 0400-11-01-.03. Such financial assurance shall meet the criteria set forth in T.C.A. § 68 211 116 and at subparagraph (3)(b) of Rule 0400-11-01-.03.

Financial assurance is not required for a State of Tennessee operation.

(vi) Facility operations manager, person responsible for the day-to-day operation, must be able to document training in the basics of compost facility operations within the first year of supervising the facility. Training must consist of classroom and hands-on course work and conclude with a certificate of completion that must be kept on site at all times. Appropriate compost operations training must be approved by the Department.

The facility operations managers, person responsible for the day-to-day operation, of the facility will complete a Department approved compost operations training within the first year of supervising the facility. The certificate of completion for the Department approved compost operations training will be kept on site at all times.

(vii) Facilities must follow a Composting Facility Operations Plan (CFOP) — reviewed and approved as part of the permit application — that describes operational procedures (methods and practices) to comply with the intent of regulations to protect human health and the environment and not create nuisances. This includes measures to control nuisance odors, vectors, fires, contact water and stormwater, provisions for the annual maintenance of the all-weather composting pads, as well as provisions for prompt equipment repair or replacement when needed. The CFOP must be internally reviewed annually to ensure it continues to reflect current procedures, equipment and feedstock(s). The CFOP must be updated when there is a change to procedures (including equipment) or the types of feedstocks processed, and reflect how the facility will continue to comply with the intent of the rules. The CFOP must be available to the permitting authority upon request. The Department shall be informed in writing of any proposed changes to the CFOP for approval prior to implementation.

This facility will follow a Composting Facility Operations Plan (CFOP) that addresses this part. The CFOP will be updated if there is a change to procedures or the types of feedstocks processed, and reflect how the facility will continue to comply with the intent of the rules. The CFOP will be available to the permitting authority upon request. The Department will be informed in writing of any proposed changes to the CFOP for approval prior to implementation.

(viii) Facilities shall be maintained in a clean and sanitary condition, e.g., free of unsecured trash at end of each operating day.

The facility will be maintained in a clean and sanitary condition. Please refer to the Compost Facility Operation Plan in attachment D.

(ix) Operators of composting facilities shall comply with all local rules, regulations, and ordinances pertaining to their facilities.

The facility currently complies with applicable local rules, regulations, and ordinances.

(x) Contact water generated shall be directed to a containment, recycling, and/or treatment system sized to handle at a minimum a 24-hr 25-yr storm event.

Due to the small size and characteristics of this site and the nature of the composting material, contact water will only be managed by grading the site to minimize its flow and to direct it to the surrounding vegetated/forested areas.

(xi) Storage of finished compost on site is limited to 12 months of production, unless approved by the Department on a case-specific basis.

Finished compost will be taken to a large-scale incinerator to incinerate the compost. The resulting ash will be taken to a permitted landfill. Storage of finished compost on site is limited to 12 months of production, unless approved by the Department on a case-specific bases.

(xii) No material may be stored in excess of the designated capacity.

No material will be stored in excess of the designated capacity.

(xiii) Non-compostable waste shall be removed or stored in a waste container and/or containment area, and disposed or recycled at a permitted solid waste facility in a timeframe approved in the CFOP.

Non-composted waste will be removed or stored in a waste container and/or containment area and disposed or recycled at a permitted solid waste facility as outlined in the CFOP. Please refer to the Compost Facility Operation Plan in Attachment D.

(xiv) The composting area shall be maintained and repaired, as needed.

The composting area will be maintained and repaired, as needed. Please refer to the Compost Facility Operation Plan in Attachment D.

(xv) Closure - The facility must meet closure requirements described herein. The facility is finally closed by removal of all solid wastes and solid waste residues for proper disposal. The operator must notify the Commissioner in writing of his completion of closure of the facility. Such notification must include a certification by the operator that the facility has been closed by removal of all the solid waste and residues. Within 21 days of the receipt of such notice the Commissioner shall inspect the facility to verify that closure has been completed. Within 10 days of such verification, the Commissioner shall approve the closure in writing to the operator. Closure shall not be considered final and complete until such approval has been made.

As a composting facility, the following alternative schedule for closure is proposed:

Time Frame	Action Item
Day 0-120	The facility operator will notify the Commissioner of their intention to close the facility. The facility will cease to receive new feedstock on Day 0, and continue the processing of the feedstock on site. The composting of all feedstock on site is expected to be complete within 120 days. The removal of all solid waste and solid waste residues for proper disposal will be completed within 120 days. The finished compost will be hauled off-site for proper disposal (e.g., incineration)
Day 120	The facility operator will notify the Commissioner in writing of the completion of closure of the facility. The notification will include a certification by the facility operator that the facility has been closed by removal of all solid waste and residues, and compost.
Day 121-141	The Commissioner will inspect the facility to verify that closure has been completed
Day 121-151	The Commissioner will approve the closure, in writing, to the facility operator

(xvi) The facility shall have a sign at the entrance of the facility that lists the following: name of facility; operating permit number; hours of operation; and emergency contact information.

The facility has a sign at the entrance that lists the following: name of the facility, operating permit number, hours of operation, and emergency contact information.

(xvii) The facility must manage and process feedstocks in a timeframe that minimizes odors, contact water, release of feedstock liquids, fire and scavenging by vectors.

The facility will manage and process feedstocks in a timeframe that minimizes odors, contact water, release of feedstock liquids, fire and scavenging by vectors. Please refer to the Compost Facility Operation Plan in Attachment D.