

Composting in Texas

Municipal Solid Waste Permits Section Texas Commission on Environmental Quality

Agenda

- 1. Overview of Composting
- 2. Tiers of Compost Facilities
- 3. General Requirements for Composting Facilities
- 4. Applications for Composting Facilities by Tier

What is composting?



A process where organic materials break down naturally, becoming a rich, dark, soil-like substance called compost.

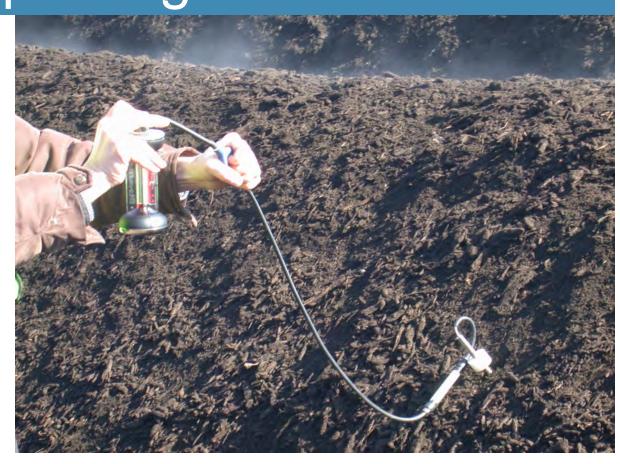
How is compost used?

Compost can be used to nourish plants and improve soil quality.



Fundamentals of Composting

- Feedstocks
- Micro Organisms
- Oxygen
- Moisture
- Temperature
- Pile Mechanics
- Time



Tiers And Feedstock Materials

Exempt

Source-separated yard trimmings, clean wood material, vegetative material, paper, manure

Notification

Exempt-tier materials + meat, fish, animal carcasses, oils and greases (not from grease-trap), dairy materials

Registration

Any lower tier materials + positively-sorted organic materials, disposable diapers, sludge

Permit

Any lower tier materials + mixed municipal solid waste, grease-trap waste

General Requirements

Apply to all composting facilities.

- Compliance with all state and federal laws
- Prevent the discharge of material and the pollution of surface and groundwater
- Prevent nuisance conditions and control dust
- Report contamination incidents
- Obtain air quality and stormwater permits
- Establish Financial Assurance



Notification Applications

Application Process Overview



TCEQ reviews administrative details



Office of Chief Clerk mails notice of the application



TCEQ Regional Investigator inspects the site



TCEQ reviews technical requirements



Compliance History and Fees Check



Final Decision

Application Content

Application must include all required forms and attachments.

- Composting Process Description:
 - Types of material accepted for composting
 - Method used for pathogen reduction
- Method used for dust suppression
- Method used for odor control
- Site map
- List of landowners with bordering properties

Operational Requirements



Aerobic composting is required Methods for pathogen reduction:

- Windrow maintain at 55° Celsius (131° F) or higher for 15 days
- Within vessel Maintain at 55°
 Celsius or higher for 3 days
- Static pile Maintain at 55° Celsius or higher for 3 days

Prohibited Substance

- Feedstocks not specified in the notification
- Fungicides
- Herbicides
- Insecticides
- Other pesticides

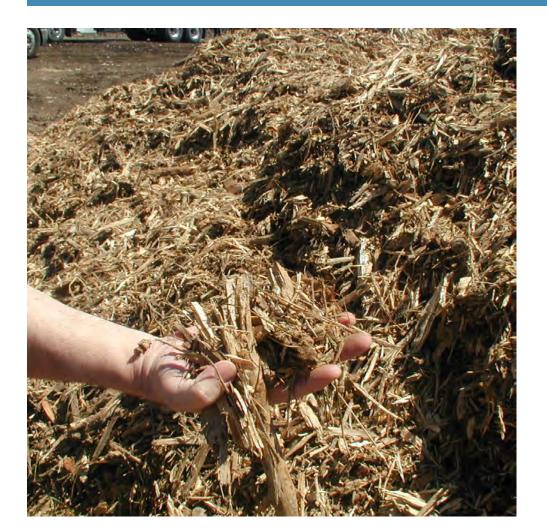


Air Quality Requirements

- 50-foot setback distance from all property boundaries
- Dust suppression on facility roads and vehicle work areas
- Dust suppression for grinding equipment and operations



Odor Control Requirements



- Adequate bulking material to blend or cover material with high odor potential
- Materials must be processed to prevent nuisances

Stormwater Requirements

Coverage under the Multi-Sector General Permit

- Stormwater Pollution Prevention Plan
- Identify pollution sources and apply best management practices
- Address site-specific conditions
- Conduct sampling, inspection, and recordkeeping requirements
- Provide employee training
- Keep SWP3 updated

Material Turn-Over Requirements

Limitations on Storage of Recyclable Materials

- 25% of material is recycled within initial 270 days
- 50% of material is recycled every six months



Reporting and Record Keeping Requirements

- Closure cost estimates and financial assurance
- Fire prevention and suppression plan
- Maintain records and have available upon request



Public Notice Requirements



- Applicant provides a map of the properties bordering the facility
- Applicant provides a list of landowners of the properties bordering the facility
- TCEQ Office of the Chief Clerk mails notice to those on the landowner list

Opportunity for Motion to Overturn

- Any person may file a motion to overturn
- Must be filed no later than 23 days after the date of the final action
- Must explain why the commissioners should review the ED's action
- Commissioners will either hear the motion at an Agenda meeting or not



Permits and Registrations

Application Content

Application must include all forms and attachments.

Maps, plans, and reports must be prepared by a licensed professional engineer

Recordkeeping and reporting regularly submitted to the executive director:

- Monthly final product testing
- Annual written reports input and output quantities, description of end-product distribution, results of required laboratory testing

Operational Requirements

- Licensed MSW Supervisor
- Minimum personnel to conduct operation
- Sampling and Analysis
- Final Product Grades and Labeling



Design Requirements

- Liner Systems
- Groundwater Monitoring Systems
- Access Control
- Site Signage



Visit TCEQ's Webpages

TCEQ Compost Program



Make an Environmental Complaint

