



# 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

