

Legal Requirements

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No Permit Required

- Backyard composting - On-site composting of yard waste from residential property by the owner or tenant for non-commercial use
- **Farming and land clearing (silvicultural) operations where the compost produced from materials grown on the owner's land are reused on the owners land**
- Small Type 1 Facilities that use a Notification Form

Permit Required for Farms

- Composting any organic materials that are not generated on your farm
- Intend to sell your compost product

North Carolina Compost Rules

- N.C. Compost rules can be found in NCGS .1401 et seq
 - Called the 1400 Rules
- Donna Wilson, Permitting Engineer
N.C. DEQ, Division of Waste Management
Solid Waste Section, Composting and Land Application Branch
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North Carolina Compost Rules

- The Compost Rules are at:
<http://deq.nc.gov/about/divisions/waste-management/solid-waste-section/composting>
- The website also has links to:
 - Permit application guidance
 - Compost demonstration guidance
 - Testing facilities for analysis
- Guidance for special cases – composting at residential and summer camps, and composting for urban farms and community gardens

Setbacks/Buffers

- Groundwater
- Surface waters
- Wells
- Property lines
- Airports
- Residences
- Sensitive receptors



Inspections

- Setbacks
- Feedstock locations
- Compost areas
- Runoff control
- Records
- Size of area
- Odors



North Carolina Facility Types

- Full permit
 - Type 1
 - Type 2
 - Type 3
 - Type 4
- Small and large
- Operations not requiring a permit
 - Yard waste notification
 - Compost demonstrations

Small vs. Large Facilities

- Small facilities
 - Receive less than 1,000 cubic yards of material for composting per quarter (with one exception)
 - AND occupy less than 2 acres of land
- Large facilities
 - Receive 1,000 cubic yards or more of material for composting per quarter
 - OR occupy 2 acres or more of land

Type 1 Facility

- May receive:
 - Yard and garden waste
 - Land clearing waste
 - Untreated and unpainted wood waste

Setbacks for Type 1 Facilities

- 100 year floodplain (not within)
- 50 feet to the property line
- 200 feet to residences
- 100 feet to wells
- 50 feet to perennial streams/rivers
- 25 feet to berms or ditches
- Groundwater – Must be at least 12 inches above seasonal high groundwater table



Type 2 Facility

- May receive:
 - Pre-consumer meat-free food processing waste
 - Vegetative agricultural waste
 - Source separated paper
 - Other source separated specialty waste

Type 3 Facility

- May receive:
 - Manure
 - Agricultural waste
 - Meat
 - Post-consumer source-separated food wastes
 - Similar source separated wastes

Type 4 Facility

May receive:

- Municipal wastewater treatment sludges*
- Industrial solid waste sludges*
- Industrial solid waste*
- Mixed municipal solid waste (but this is not likely to happen)

*Each waste source must have analysis approved by Solid Waste Section

Compost Pilots/Demos

- Allowed in the Compost Rules, see 15A NCAC 13B .1409 (b)
- For first time compost operators, recommended applying for a compost demo, instead of a full permit. The application process is easier because a permit is not required, but an approval is required.
- Must be less than 2 acres, and approvals are usually 1 year, but may be extended to 2 years.
- Application is outlined in the Compost Pilots and Demo Guide, on Solid Waste Section's website.

Other Permits

- Agriculture or consumer protection
- Depends on claims
 - Fertilizer, soil amendment or conditioner
 - Fertilizer includes guaranteed analysis of N-P-K
- Label requirements

Testing Compost

- NCDA&CS Agronomic Division Plant/Waste/Solution/Media Section
- Submit as **WASTE Sample**
 - Vermicompost, compost, raw feedstocks
- Cost per sample: \$8 NC; \$25 out-of-state
- \$10 for each optional special test requested
 - Calcium carbonate equivalence (CCE)
 - Heavy metals
 - Inorganic nitrogen (NO₃-N and NH₄-N)
- Results in 7 – 10 days

NCDA Waste/Compost Analysis

- Measures concentrations of 11 essential plant nutrients
 - Nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, zinc, copper, boron, sodium
- pH
- Soluble salts (EC – electrical conductivity)
- Carbon (C)
- Carbon-to-nitrogen ratio (C:N)
- % Dry matter

<http://www.ncagr.gov/agronomi/uyrwaste.htm>