

15A NCAC 13B .1406 OPERATIONAL REQUIREMENTS FOR SOLID WASTE COMPOST FACILITIES

A person who maintains or operates a solid waste compost facility shall maintain and operate the site to conform with the practices and operational requirements of this Rule.

- (1) Plan and Permit Requirements.
 - (a) Approved plans and conditions of the permit shall be followed.
 - (b) A copy of the permit, plans, and operational reports shall be maintained on site at all times.
- (2) Erosion control measures shall be practiced to prevent on-site erosion and to control the movement of silt or contaminants from the site.
- (3) Stormwater shall be diverted from the operations area.
- (4) Leachate shall be contained on site or treated prior to discharge. A National Pollutant Discharge Elimination System (NPDES) permit may be required in accordance with 15A NCAC 02B prior to the discharge of leachate to surface waters.
- (5) Access and Security Requirements.
 - (a) Large facilities as defined in Rule .1402(e)(7) of this Section shall be secured to prevent unauthorized entry by means such as gates, chains, berms, or fences.
 - (b) An operator shall be on duty at the site at all times while the facility is open for public use, and shall prevent unauthorized access to the facility operations area.
 - (c) The access road to the site shall be of all-weather construction and maintained.
- (6) A site shall only accept those solid wastes that it is permitted to receive.
- (7) Safety Requirements.
 - (a) Open burning of solid waste shall be prohibited.
 - (b) Equipment shall be provided to control accidental fires and arrangements made with the local fire protection agency to provide fire-fighting services when needed.
 - (c) Personnel training shall be provided to ensure that all employees are trained in site specific safety, remedial, and corrective action procedures.
- (8) Reporting Fires. Fires shall be reported to the Division orally within 24 hours of the incident and in writing within 15 days of the incident.
- (9) Sign Requirements.
 - (a) Signs providing information on waste that may be received, dumping procedures, the hours during which the site is open for public use, and the permit number shall be posted at the site entrance.
 - (b) Traffic signs and markers shall be provided to direct traffic to and from the discharge area.
 - (c) Signs shall be posted stating that no hazardous waste, asbestos containing waste, or medical waste may be received at the site.
- (10) Monitoring Requirements.
 - (a) Temperature monitoring shall meet the record-keeping requirements in Rule .1408 of this Section.
 - (b) The temperature of all compost produced shall be monitored sufficiently to ensure that the pathogen reduction criteria are met. Onsite thermometers shall be calibrated annually and records of calibration shall be maintained.
- (11) Compost process at Type 1 and Type 2 facilities shall be maintained at or above 55 degrees Celsius (131 degrees F) for three days and aerated to maintain elevated temperatures.
- (12) Vector Attraction Reduction (VAR). Types 2, 3 and 4 facilities shall maintain the compost process at a temperature above 40 degrees Celsius (104 degrees F) for 14 days or longer and the average temperature for that time shall be higher than 45 degrees Celsius (113 degrees F).
- (13) Process to Further Reduce Pathogens (PFRP). The composting process shall qualify as a process to further reduce pathogens for all Type 3 and Type 4 facilities. The following shall be acceptable methods:
 - (a) the windrow composting method, in which the following requirements apply:
 - (i) aerobic conditions shall be maintained during the composting process;
 - (ii) a temperature of 131 degrees F (55 degrees Celsius) or greater shall be maintained in the windrow for at least 15 days; and

- (iii) during the high temperature period, the windrow shall be turned at least five times.
 - (b) the static aerated pile composting method, in which the following requirements apply:
 - (i) aerobic conditions shall be maintained during the composting process; and
 - (ii) the temperature of the compost pile shall be maintained at 131 degrees F (55 degrees Celsius) or greater for at least three days.
 - (c) the within-vessel composting method, in which the temperature in the compost piles shall be maintained at a minimal temperature of 131 degrees F (55 degrees Celsius) for three days.
- (14) Putrescible feedstocks added to the compost process shall be incorporated using methods to minimize odor such as reducing mixing time or the addition of organic material.
- (15) The finished compost shall meet the classification, testing, and distribution requirements in Rule .1407 of this Section.
- (16) The amount of compost stored at the facility shall not exceed the designed storage capacity.
- (17) The site shall be operated to minimize odors at the property boundary by means such as windrow covers, maintaining design process indicator parameters, and maintaining carbon to nitrogen design ratios.
- (18) Odor Corrective Action.
 - (a) If the Odor Control Plan prepared in accordance with Rule .1405(10) of this Section has been followed and the Division determines during a site visit that offsite odors are not being minimized, the owner or operator shall submit to the Division an Odor Corrective Action Report. The report shall contain the following:
 - (i) a summary of the actions taken in the Odor Control Plan;
 - (ii) an identification of onsite odor sources, in order of severity;
 - (iii) an evaluation and identification of odorous feedstocks as they relate to odor complaints;
 - (iv) an evaluation of current operation process indicators including carbon to nitrogen (C:N) ratio, pH, moisture content, oxygen levels, temperature, porosity, and particle size;
 - (v) an evaluation of the compost recipe calculation with C:N ratio testing that is performed by an independent laboratory for each feedstock;
 - (vi) an identification of potential offsite odor receptors based on their proximity to the odor sources and on weather patterns;
 - (vii) a description of new odor reduction methods, if proposed, and an evaluation of their feasibility, in terms of effectiveness, cost, and equipment needs;
 - (ix) an evaluation of the elimination of specific odorous feedstocks; and
 - (x) recommendations for implementing new corrective action measures for odor minimization, including a schedule.
 - (b) The owner or operator shall implement the new corrective action measures for odor minimization recommended in the Odor Corrective Action Report if the Division determines that the new corrective measures will reduce odors outside of the property boundary and will comply with the requirements of this Section. The Division may require the elimination of specific odorous feedstocks if a facility fails to meet the odor minimization required by Item (17) of this Rule. The Division shall provide written notice to the owner or operator of the determination.
 - (c) The owner or operator shall develop and implement additional corrective action measures if necessary to meet the requirements of Item (17) of this Rule to minimize odors at the property boundary.
- (19) Compost Facility Training Requirements.
 - (a) Facilities permitted as Large Type 1, Large Type 2, all Type 3, and all Type 4 shall have an operator, supervisor, or manager trained in accordance with the requirements in G.S. 130A-309.25. No less than one trained operator, supervisor, or manager meeting the requirements of this Sub-item shall be onsite during the facility's operating hours or available at a phone number provided in the facility permit.
 - (i) Training in accordance with G.S. 130A-309.25(c) shall be required every five years.

- (ii) Persons who have achieved and maintain compost operator certification by the US Composting Council Certification Commission or equivalent shall be considered as having met the training requirements in G.S. 130A-309.25 for the permitted facility.
- (b) Owners or operators shall provide annual training for facility staff, including a review of the operations plan and permit documents.
- (c) Documentation of training required in Sub-items (a) and (b) of this Item shall be maintained at the facility and made available to the Division upon request.
- (d) Facilities permitted before the readopted effective date of this Rule shall meet the requirements of Sub-item (a) of this Item within three years of the readopted effective date of this Rule. Facilities permitted after the readopted effective date of this Rule shall meet the requirements of Sub-item (a) of this Item within 18 months of permit issuance.

*History Note: Authority G.S. 130A-294; 130A-309.03; 130A-309.11; 130A-309.29;
Eff. December 1, 1991;
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Amended Eff. June 1, 1996;
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