

**15A NCAC 13B .1405 APPLICATION REQUIREMENTS FOR SOLID WASTE COMPOST FACILITIES**

One paper copy and one electronic copy of a solid waste compost facility permit application shall be submitted to the Division. The following information shall be required for an application for a permit to construct and operate a Large Type 1, Small or Large Type 2 or 3 or all Type 4 solid waste compost facilities:

- (1) the name and contact information of the facility owner and operator;
- (2) documentation of property ownership, including:
  - (a) the property owners;
  - (b) a current property deed; and
  - (c) a notarized acknowledgement letter from the landowner of use of the property as a solid waste facility if the landowner is not the facility owner or operator.
- (3) an aerial photograph or scaled drawing, at a scale of one inch to less than or equal to 400 feet, showing the area within one-fourth mile of the proposed site's boundaries with the following identified:
  - (a) the entire property owned or leased by the person proposing the facility;
  - (b) the location of all homes, wells, industrial buildings, public or private utilities, roads, watercourses, and the topography within 500 feet of the proposed facility; and
  - (c) the land use zoning of the proposed site.
- (4) a letter from the unit of government having zoning jurisdiction over the site that states that the proposed use is allowed within the existing zoning, if any, and that necessary zoning approvals or permits have been obtained;
- (5) an explanation of how the site complies with siting and design standards required by Rule .1404 of this Section;
- (6) a report indicating the following:
  - (a) the waste types, the source and estimated quantity of the solid waste to be composted including the source and expected quantity of any bulking agent or amendment (if applicable), expected recycling of bulking agent or compost, and seasonal variations in the solid waste type or quantity; and
  - (b) for facilities that use natural soils as a pad, a soil evaluation of the site conducted by a licensed soil scientist down to a depth of four feet or to bedrock or evidence of a seasonal high water table, evaluating all physical soil properties and depth of the seasonal high water table;
- (7) a site plan at a scale of one inch to less than or equal to 100 feet that delineates the following:
  - (a) the existing and proposed contours, at intervals appropriate to the topography;
  - (b) the location and elevations of dikes, trenches, and other water control devices and structures for the diversion and controlled removal of surface water;
  - (c) the designated setbacks and property lines;
  - (d) the proposed utilities and structures;
  - (e) the areas for unloading, processing, active composting, curing, and storing of material;
  - (f) the access roads and details on traffic patterns;
  - (g) the wetlands, streams, and 100-year floodplains; and
  - (h) the proposed surface and groundwater monitoring locations, if required.
- (8) an operations plan that includes the following:
  - (a) the name and contact information for the person responsible for the operation of the facility;
  - (b) a list of personnel and the responsibilities of each position;
  - (c) a schedule for operations, including days and hours that the facility will be open, preparations before opening, and procedures to be followed after closing for the day;
  - (d) special precautions or procedures for operating during wind, heavy rain, snow, freezing or other adverse conditions;
  - (e) a description of actions to be taken to minimize noise, vectors, and air borne particulates;
  - (f) a description of the use for the finished compost, the method for removal from the site, and a contingency plan for disposal or alternative use of residues or finished compost that cannot be used in the expected manner due to poor quality or change in market conditions;

- (g) contingency plan describing actions to be taken for equipment breakdown, unauthorized waste arriving at the facility, spills, and fires;
  - (h) a discussion of compliance with the operational requirements listed in Rule .1406 of this Section; and
  - (i) for Large Type 1, Large Type 2, Large Type 3, and all Type 4 facilities, include the following:
    - (i) a description of procedures for incoming material inspections;
    - (ii) a description of procedures to meet the final product sampling and analyses requirements specified in in Rule .1407 of this Section;
    - (iii) a description of procedures to meet the record keeping requirements specified in Rule .1408 of this Section; and
    - (iv) a copy of all applicable local, state, and federal permits and approvals necessary for the operation of the facility.
- (9) a report on the design of the facility, including:
- (a) the design capacity of the facility;
  - (b) a process flow diagram of the entire facility, including the type, size, and location of all equipment used in the compost process, and feedstock flow streams. The flow streams shall indicate the quantity of materials by weight and volume;
  - (c) a description and sizing of the storage facilities for feedstocks, amendments, and finished compost;
  - (d) the means for measuring, shredding, mixing, and proportioning input materials;
  - (e) the anticipated process duration, including receiving, preparation, composting, curing, and distribution;
  - (f) a description of the location of all temperature and any other type of monitoring points within the compost windrow, and the frequency of monitoring;
  - (g) a description of how the temperature control and monitoring equipment will demonstrate that the facility meets the requirements in Rule .1406(11), (12), or (13) of this Section, as appropriate for the feedstock;
  - (h) the method of aeration provided and the capacity of aeration equipment;
  - (i) a description of the method to control surface water run-on and run-off and the method to control, collect, treat, and dispose of leachate generated;
  - (j) the separation, processing, storage, and ultimate disposal of non-compostable materials, if applicable;
  - (k) a description of dust control and other air emission control measures; and
  - (l) a description of recycling or other material handling processes used at the facility.
- (10) Odor Control Plan. Operators of Large Type 2, Large Type 3, and all Type 4 facilities shall prepare, submit to the Division, and implement an odor control plan that details site specific conditions to meet the design requirement in Rule .1404(c)(4) of this Section. Existing facilities permitted prior to the readopted effective date of this Rule shall meet these requirements at the time of permit renewal. The plan shall contain the following:
- (a) an identification of all onsite potential odor sources;
  - (b) a description of onsite weather conditions that may affect odor migration, such as prevailing wind direction, topography, and seasonal variations;
  - (c) a plan to monitor onsite odor and record odor data for the odor sources with the potential to migrate offsite. Data shall include date, time, site specific conditions, weather conditions, wind direction, and characteristics and intensity of odor;
  - (d) a description of the facility's odor complaint protocol, including forms used, odor verification by operator both onsite and offsite, what the response will be, and who will be contacted;
  - (e) a description of complaint record keeping; and
  - (f) a description of odor control design and operating best management practices to be used onsite, including:
    - (i) personnel training;
    - (ii) feedstock characteristics;
    - (iii) the initial mixing of feedstocks to reach targeted carbon to nitrogen (C:N) ratios and moisture levels;

- (iv) maintenance of compost piles for moisture;
  - (v) aeration methods, frequency, and protocol;
  - (vi) leachate and liquids management;
  - (vii) weather monitoring and protocol;
  - (viii) management of airborne emissions; and
  - (ix) windrow covering;
- (11) engineering plans and specifications for the facility, including manufacturer's performance data for all equipment selected; and
  - (12) documentation that the local fire protection authority has been notified of the site use.

*History Note: Authority G.S. 130A-294; 130A-309.03; 130A-309.11; 130A-309.29;  
Eff. December 1, 1991;  
Amended Eff. May 1, 1996;  
Readopted Eff. November 1, 2019.*