

Materials

Compost material

Compost material shall be well de-composed stable, weed free, organic compost meeting AASHTO MP-10, Standard for Standard Specification for Compost for Erosion/Sediment Control (Compost Blankets) derived from a variety of feedstocks including forestry, food, or industrial residuals; bio-solids (treated sewage sludge); leaf and yard trimmings; or tree wood with no objectionable odors or substances toxic to plants. It should meet the following specifications as derived using Test Methods for Examining Composting and Compost (TMECC):

Parameters	Reported as (units of measure)	Compost material to be vegetated
pH	pH units	5.0 - 8.5
Soluble Salt Concentration (electrical conductivity)	dS/m (mmhos/cm)	Maximum 5
Moisture Content	%, wet weight basis	30 – 60
Organic Matter Content	%, dry weight basis	25 – 65
Particle Size (aggregate size)	% passing a selected mesh size, dry weight basis	3” 100% 1” 90% minimum ¾” 65% minimum ¼” 50% maximum
Stability Carbon Dioxide Evolution Rate	mg CO ₂ -C per g OM per day	< 8
Maturity Seed germination	%, compared to control	=/> 80% <i>(Only applicable with erosion control composts to be seeded)</i>
Trace Elements/Heavy Metals	ppm (mg/kg) on dry weight basis	Meets US EPA Part 503 EQ Concentration Limits
Pathogens	MPN/4 grams or MPN/gram of total solids	Salmonella < 3 MPN/4 grams of total solids or Fecal Coliform <1000 MPN/gram of total solids
Inert contamination (man-made)	%, dry weight	< 1.0 %

Compost Processing – Compost material shall be processed through proper thermophilic composting, meeting the US Environmental Protection Agency’s definition for a “process to further reduce pathogens” (PFRP).

Compost Testing – All compost suppliers will participate in the U.S. Composting Council’s Seal of Testing Assurance (STA) Program. The compost supplier will test all compost products within 90 calendar days prior to application. Samples will be taken using the STA sample collection protocol. The sample collection protocol can be obtained from the U.S. Composting Council at 4250 Veterans Memorial Highway, Suite 275, Holbrook, NY 11741, Phone: 631-737-4931, <<http://www.compostingcouncil.org/>>.

The compost sample shall be sent to an independent STA Program-approved lab. A complete list of laboratories can be found on the internet at <<http://www.compostingcouncil.org/programs/sta/labs.php>> or by contacting the U.S. Composting Council directly. The compost supplier will pay for the test. A copy of the approved independent STA Program laboratory test report shall be submitted to the Engineer prior to initial installation of the compost. Seven (7) working days prior to installation, the Contractor shall submit a sample of each type of compost to be used on the project to the Engineer.

Before compost application, the contractor shall provide the Engineer with a copy of the compost producer's compost technical data sheet with reference to NCDOT specifications, a copy of the compost producers Seal of Testing Assurance certification, and appropriate documentation assuring that the source of compost material has been properly permitted by the North Carolina Department of Environment and Natural Resources.

The compost technical data sheet should include:

1. Laboratory analytical test results.
2. Directions for product use.
3. List of product ingredients.