

WSDOT compost specification

9-14.4(8) Compost

Compost products shall be the result of the biological degradation and transformation of plant-derived materials under controlled conditions designed to promote aerobic decomposition. Compost shall be stable with regard to oxygen consumption and carbon dioxide generation. Compost shall be mature with regard to its suitability for serving as a soil amendment or an erosion control BMP as defined below. The compost shall have a moisture content that has no visible free water or dust produced when handling the material.

Compost production and quality shall comply with Chapter 173-350 WAC.

Compost products shall meet the following physical criteria:

1. Compost material shall be tested in accordance with Testing Methods for the Examination of Compost and Composting (TMECC) Test Method 02.02-B, "Sample Sieving for Aggregate Size Classification".

Fine Compost shall meet the following:

	<u>Min.</u>	<u>Max.</u>
Percent passing 2"	100%	
Percent passing 1"	90%	100%
Percent passing ¾"	70%	100%
Percent passing ¼"	40%	75%
Maximum particle length of 6 inches		

Coarse Compost shall meet the following:

	<u>Min.</u>	<u>Max.</u>
Percent passing 3"	100%	
Percent passing 1"	90%	100%
Percent passing ¾"	70%	100%
Percent passing ¼"	40%	60%
Maximum particle length of 6 inches		

2. The pH shall be between 6.0 and 8.5 when tested in accordance with TMECC 04.11-A, "1:5 Slurry pH".
3. Manufactured inert material (plastic, concrete, ceramics, metal, etc.) shall be less than 0.5 percent on a dry weight or volume basis, whichever provides for the least amount of foreign material.
4. Minimum organic matter shall be 40 percent dry weight basis as determined by TMECC 05.07A, "Loss-On-Ignition Organic Matter Method".
5. Soluble salt contents shall be less than 6.0 mmhos/cm tested in accordance with TMECC 04.10-A, "1:5 Slurry Method, Mass Basis".
6. Maturity greater than 80% in accordance with TMECC 05.05A, "Germination and Root Elongation".
7. Stability 8 or below in accordance with TMECC 05.08-B, Carbon Dioxide Evolution Rate".
8. The compost product must originate a minimum of 65 percent by volume from recycled plant waste as defined in WAC 173-350 as "Type 1 Feedstocks." A maximum of 35 percent by volume of other approved organic waste and/or biosolids may be substituted for recycled plant waste. The supplier shall provide written verification of feedstock sources

The compost supplier will test all compost products within 30 calendar days prior to initial application with samples taken from the material stockpiled by the supplier for project use. Samples will be taken using the Seal of Testing Assurance (STA) sample collection protocol. (The sample collection protocol can be obtained from the U.S. Composting Council, 5400 Grosvenor Lane, Bethesda, MD 20814 Phone: 301-897-2715, www.compostingcouncil.org). The sample shall be sent to an independent STA Program approved lab. The compost supplier will pay for the test. A copy of the approved independent STA Program laboratory test report shall be submitted to the Contracting Agency prior to initial application of the compost.

Compost not conforming to the above requirements or taken from a source other than those tested and accepted shall be immediately removed from the project and replaced at no cost to the Contracting Agency.

The contractor shall either select a compost supplier from the Qualified Products List, or submit the following information to the Engineer for approval:

1. A Request for Approval of Material Source.
2. A copy of the Solid Waste Handling Permit issued to the supplier by the Jurisdictional Health Department as per WAC 173-304 (Minimum Functional Standards for Solid Waste Handling).
3. The supplier shall verify in writing, and provide lab analyses that the material complies with the processes, testing, and standards specified in WAC 173-350 and these specifications. The analysis shall be performed by an independent STA Program certified laboratory.
4. A list of the feedstock by percentage present in the final compost product.
5. A copy of the producers Seal of Testing Assurance certification as issued by the U.S. Composting Council.

Acceptance will be based upon a satisfactory Test Report from an independent STA program certified laboratory.