

SECTION 867—COMPOST BLANKET AND COMPOST FILTER BERM

867.1 DESCRIPTION—This work is furnishing, placement, and maintenance of organic compost, water permeable, erosion and sedimentation pollution control systems.

867.2 MATERIAL—

(a) Compost. Well-decomposed, stable, weed-free, organic compost meeting AASHTO MP-9, Standard Specification for Compost for Erosion/Sediment Control (Filter Berms) and AASHTO MP-10, Standard Specification for Compost for Erosion/Sediment Control (Compost Blankets) derived from a variety of feedstocks including agricultural, forestry, food, or industrial residuals; bio-solids (treated sewage sludge); leaf and yard trimmings; manure; or tree wood with no objectionable odors or substances toxic to plants. Material aerobically composted at a DEP, Bureau of Waste Management permitted site and conforming to CFR 503. Test in accordance with U.S. Composting Council's Test Methods for Examining of Composting and Compost (TMECC). Provide compost with the U.S. Composting Council's Seal of Testing Assurance Program (STA) certification and STA product label. Compost having the following physical properties:

TMECC Test Methodologies —

• Moisture content, dry mass (weight) basis	30% - 60%
• pH	5.5 to 8.5
• Soluble salt concentration (electrical conductivity) maximum	5.0 dS/m
• Man-made inert contaminants, dry mass, (weight) basis	Less than 1%
• Organic matter content, dry mass (weight) basis (compost to be seeded)	25%-65%
• Organic matter content, dry mass (weight) basis (compost that will not be seeded)	25%-80%

1. Compost Blanket Material.

Particle size, % passing mesh size, dry mass (weight) basis:

material passing 75 mm (3 inches)	100
material passing 25 mm (1 inch)	90 to 100
material passing 19 mm (3/4 inch)	65 to 100
material passing 6.4 mm (1/4 inch)	0 to 75
150 mm (6 inches) maximum particle length	

2. Compost Filter Berm Material.

Particle size, % passing mesh size, dry mass (weight) basis:

material passing 75 mm (3 inches)	100
material passing 50 mm (2 inches)	99
material passing 9.5 mm (3/8 inch)	30 minimum – 75 maximum
acceptable general particle sizes of 13 mm – 50 mm (1/2 inch – 2 inches)	
150 mm (6 inches) maximum particle length	

(b) Compost Enhancing Additive (Optional). Organic sucrose, hydrophilic powder from natural sources, and cotton seed meal from the plant genus *Gossypium* blended into a product that provides compost stabilization and soil bonding properties. This material provides long-term nutrient resources for the propagation of specific hydrocarbon degrading bacteria and structurally enhancing fungi and actinomycetes.

(c) Seed. Section 804 for the designated seed formula. Soil supplements are not required with these compost systems.

867.3 CONSTRUCTION—

(a) Compost Blanket.

1. Soil Preparation. Roughen/scarify soil surface with appropriate equipment. Remove and dispose of large unworkable soil clumps, debris, large rocks, and undesirable woody matter such as stumps. Track soil surface before compost application with equipment capable of working perpendicular to the slope gradient in order to create soil indentations that will hold compost. Avoid excessive soil compaction during this operation so that the loosened soil surface remains less than the 97% of dry mass (dry weight) density specified in Section 206.3(b)1 for embankment compaction.

2. Compost Application. Uniformly apply compost to the specified depth with approved pneumatic (blower) units, or other appropriate equipment designed to handle and distribute compost material. Do not apply compost in direct-flow drainage channels such as ditches or the centerline of swales.

Apply compost approximately 1 m (3 feet) beyond and overlapping all edges of the bare soil surfaces designated to receive the compost.

2.a Application Rate.

- Surfaces to be seeded up to 1:2 (2:1) slope – 510 cubic meters/hectare (270 cubic yards/acre) or 50 mm (2 inches) depth with \pm 12.6 mm (1/2 inch) tolerance.
- Surfaces not to be seeded up to 1:2 (2:1) slope – 1020 cubic meters/hectare (540 cubic yards/acre) or 100 mm (4 inches) depth with \pm 12.6 mm (1/2 inch) tolerance.

3. Seeding Designated Areas. Apply seed by injection of the appropriate seed formula into the compost flow stream during the compost application, or apply the seed in a separate surface applied operation. Apply seed at twice the seeding rate indicated in Section 804.2(b)2, Table A, for the designated seed formula. Test and verify the specified application rates for the equipment used.

Soil supplements and mulch are not used in this operation. The compost acts as the mulch in this operation and a separate mulch application is not required.

4. Maintenance. Maintain compost blanket depth until the project has been completed or directed otherwise. Routinely inspect blanket for any material dislodgement. Replace and redress any dislodged material and reseed if necessary. Control any noxious weeds with approved herbicides meeting the applicable requirements of Section 804.3(j).

Leave compost blanket in place upon completion of the project unless directed otherwise.

(b) Compost Filter Berm.

- 1. Installation.** Apply approved compost using specially designed pneumatic (blower)

equipment and a berm forming/shaping device, or other appropriate equipment designed to handle compost and form berms. If blower is used, blow compost directly at the soil surface to help settle, compact, and shape the berm. Optional installation technique, inject or add approved compost enhancing additive into the filter berm compost during berm construction at the rate of at least 1.0 kg per 3 m (2.25 pounds per 10 linear feet) of berm. Verify calibration of injection system to ensure proper integration and integration rate of the additive.

Construct a trapezoidal shaped compost filter berm 600 mm high with 1200 mm wide (2 feet high by 4 feet wide) base with 1:2 (2:1) side slopes. Position the berm around the designated disturbed soil areas and parallel to the slope base. Construct berm ends pointing upslope so that the ends are at a higher elevation than the berm body to prevent drainage water from flowing around the ends of the berm.

2. Maintenance. Maintain filter berm in a functional condition. Routinely inspect berm and replace any dislodged compost or reshape any collapsed berm areas. Compost can be replaced by hand and tamped into place. Remove built-up sediment retained by the berm when the sediment reaches 1/3 of the exposed height of the berm. Dispose of sediment as directed. Replace any compost dislodged by this operation. At completion of project or when directed, leave compost in place by pushing over the berm and spreading the compost material over the adjacent ground.

867.4 MEASUREMENT AND PAYMENT—

- (a) **Compost Blanket, Seeded.** Square Meter (Square Yard) for the designated seed formula.
- (b) **Compost Blanket, Unseeded.** Square Meter (Square Yard)
- (c) **Compost Filter Berm – Meter (Linear Foot)**