Erosion Control with Compost

Using compost to meet TESC and Soil Quality requirements on building sites

Washington Department of Transportation specifies compost blankets, for cost-effective erosion control and excellent long-term plant establishment.

EPA-approved Erosion Control BMP's

Compost blankets, berms, and socks are US EPA-approved for temporary erosion and sediment control (TESC) on construction sites. Unlike other erosion BMPs that can be expensive to remove and dispose of, compost can be left on-site to permanently enhance plant growth. Compost can be tilled into the soil before planting to meet the Washington Department of Ecology's "BMP T5.13 – Post Construction Soil Quality and Depth". On sites too steep or sensitive for tilling, seed can be blown in with the compost, or plants can be planted through the compost blanket. This provides much better plant survival, long-term growth, and erosion prevention, even on difficult sites.

"Two for one" – construction erosion control and soil quality BMPs are met with compost at Issaquah Highlands.

Compost Blankets

Compost blankets are usually 1 to 3 inches thick (2 inches is common in Washington). They can be installed by blowing compost onto slopes up to 2:1 (up to 1:1 with additional stabilization), or on shallower slopes by spreading compost with conventional equipment. In general, the compost used for all these erosion control methods has larger particle sizes (usually a 1 inch-minus screened compost, as compared to ½ inch-minus screen for garden compost) to allow more rainfall to be absorbed and filtered rapidly. The compost makes excellent surface contact, prevent rilling underneath.

Compost Berms

Compost berms are a perimeter sediment control, increasingly used instead of silt fence. Berm width is twice its height – 3ft. x 18 inches high or 2 ft.. x 12 inches high are common. They can be blown in place (see photo) or just placed with a front-end loader. Again, the compost is coarser (3/4 or 1 inch-minus screened) to filter a lot of turbid water quickly. Besides sediment removal, compost excels at removing oil and grease, metals, and buffering pH (such as from fresh concrete wash off).

Compost Socks

Compost socks are fast replacing silt fence and straw bales as a cost-effective control for sediment and other pollutants, because they excel at filtration and dependable ground contact. Sock material may be biodegradable, for protection up to six months that can be planted and left in place. If non-biodegradable socks are used, only the light fabric must be removed while the compost is left on-site – still much cheaper than silt fence removal. Socks can be filled in place by compost suppliers, or delivered filled on pallets. Unlike many wattle BMPs, they don't have to be trenched in – just walk down them to ensure good soil contact, and stake through the sock on slopes.

Standard Specifications and Suppliers

- **US EPA's standard specifications for compost blankets, berms, and socks:** See EPA-erosion-control-specs.pdf at www.SoilsforSalmon.org
- Contact your local compost supplier or see "Composting Facilities" on page 20 of the Building Soil manual, at www.SoilsforSalmon.org