

1 Make the following section a part of the Standard Specifications:

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3 **"SECTION 621 – COMPOST FILTER SOCK**

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5 **621.01 Description.** This section describes the use of compost filter  
6 socks as temporary during-construction perimeter control BMP devices. The  
7 socks shall be installed as indicated on the project drawings, or as designated by  
8 the Engineer.

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10 **621.02 Materials.**

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12 **(A) Compost Filtration Media.** The compost used in filter socks  
13 should meet all local, state, and Federal quality requirements. Biosolids  
14 compost must meet the Standards for Class A biosolids outlined in 40  
15 Code of Federal Regulations (CFR) Part 503. Compost used for filtration  
16 media should follow the guidelines contained in **Table 621.02-1**, as  
17 inserted below:  
18

TABLE 621.02-1			
Parameters <sup>a,1,4</sup>	Units of Measure <sup>a</sup>	Vegetated Filter Sock <sup>a</sup>	Unvegetated Filter Sock <sup>b</sup>
pH <sup>2</sup>	pH units	5.0 – 8.5	6 – 8
Soluble salt concentration <sup>2</sup> (electrical conductivity)	dS/m (mmhos/cm)	Maximum 5	Not applicable
Moisture content	%, wet weight basis	30 – 60	30 – 60
Organic matter content	%, dry weight basis	25 – 65	25 – 65
Particle size	% passing a selected mesh size, dry weight basis	3 in.=100% 1 in.=90-100% 0.75 in.=70-100% 0.25 in.=30-75% Max length=6 in. Avoid compost with less than 30% fine particle to	2 in.=100% 0.375 in=10-30%

		achieve optimum reduction of total suspended solids	
		No more than 60% passing 0.25 in. sieve in high rainfall/flow rate situations	
Stability <sup>3</sup> (Carbon Dioxide Rate)	mg CO <sub>2</sub> -C per gram of organic matter per day	<8	(same as vegetated)
Physical contaminants (manmade inerts)	%, dry weight basis	<1	<1

**Sources:** <sup>a</sup>Alexander, 2003; <sup>b</sup>Personal communication, B. Faucette, R. Tyler, N. Goldstein, R. Alexander, 2005

**Notes:** <sup>1</sup> Recommended test methodologies are provided in [Test Methods for the Evaluation of Composting and Compost]. <sup>2</sup> Each plant species requires a specific pH range and has a salinity tolerance rating.

<sup>3</sup> Stability/maturity rating is an area of compost science that is still evolving, and other test methods should be considered. Compost quality decisions should be based on more than one stability/maturity test. <sup>4</sup> Landscape architects and project engineers may modify the above compost specification ranges based on specific field conditions and plant requirements.

**(B) Compost Filter Sock.** Compost filter sock shall utilize a layer of filtration mesh and an inner layer of containment netting. All layers shall collectively enclose the compost filtration media. Compost filter sock shall be installed as 9" nominal diameters as indicated on the project drawings, or as specified by the Engineer. Compost filter socks shall be BioSock™ as manufactured by EnviroTech BioSolutions, or approved equal.

**(C) Wood Anchor Stakes.** Wood anchor stakes shall have a nominal classification of ¾ by ¾ inch and minimum length of 14 inches. Larger sized wood anchor stakes may be installed at the discretion of the installer, or as specified by the Engineer. Do not use rebar or other metal rods.

**(D) Seeds.** If seeds are used to create a vegetated compost filter sock, seeds shall meet the requirements determined by the Engineer.

(E) **Live Cuttings.** If live cuttings are used to create a vegetated compost filter sock, live cuttings shall meet the requirements determined by the Engineer.

### 621.03 Construction.

(A) **Installation Requirements.** Installation personnel are required to satisfactorily complete training by the compost filter sock manufacturer prior to the installation of compost filter socks on the project site. Installation personnel shall follow all manufacturer instructions and guidelines. All installation personnel shall provide evidence of required training upon request of the Engineer.

(B) **Placement.** Compost filter socks shall be installed onsite using a commercial pneumatic bark blower. Alternatively, compost filter socks can be pre-fabricated offsite in pre-determined lengths and then installed onsite. Compost filter socks shall be placed in the areas shown on the project drawings or as designated by the Engineer.

(C) **Overlap.** Where multiple sections of compost filter socks are required to form a continuous run, the sections shall be installed as shown on the plans and shall have a minimum overlap of 6 inches.

(D) **Anchor Method.** The Compost Filter Sock shall be anchored using wooden anchor stakes which meet the minimum requirements set forth in Section 621.02(C). Wooden anchor stakes shall be installed to a minimum depth required to attain effective anchoring. Wooden anchor stakes shall be installed per the contract plan details and according to the guidelines below:

<u>Slope Gradient</u>	<u>Anchor Spacing</u>
<4:1	10'
4:1 to 3:1	10'
>3:1 to 2:1	5' to 10'
>2:1	5'

(E) **Inspection.** Inspect compost filter socks when rain is forecast, following rainfall events, and daily during prolonged rainfall. Repair, modify, or supplement compost filter sock installations as needed or as required by the Engineer at no additional cost to the State.

(F) **Maintenance.** Maintain compost filter socks to provide adequate sediment holding capacity. Sediment should be removed when the sediment accumulation reaches three quarters (3/4) of the barrier height. Removed sediment should be incorporated in the project at locations designated by the Engineer or disposed of properly at no additional cost to the State.

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84 **621.04 Measurement.** Compost filter sock shall be considered incidental to  
85 Section 209 – Temporary Water Pollution, Dust, and Erosion Control.  
86 Measurement for payment will not apply.”  
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**END OF SECTION 621**