

MULCH AND COMPOST FILTER BERMS

WHAT ARE THESE?

Mulch/compost filter berms function on the same principle as a sediment fence by forming a barrier against which sheet-flow/runoff ponds, and coarse sediment particles settle out under gravity. An advantage over sediment fences is that compost berms can provide some filtration of water, and are therefore classed as a Type 2 Control, catching big and medium sized sediment particles. Berms can be designed to be left in place after completion of works, as part of the site landscaping, lowering the cost of materials and creating less waste. It is best to use mulch produced from on-site green waste and to process the vegetation into interlocking fibres, rather than chipping (e.g. with tub grinding rather than chipping).

WHAT DO I NEED TO DO?

Before starting site works:

- ▶ Determine if you have sufficient on-site vegetation approved for clearing which can be mulched for use in mulch berms.
- ▶ Determine the number and size of mulch and compost filter berms based on the catchment area and document the locations and sizes on your ESCP.
- ▶ Note that these berms should be used in small catchments where a 10m length of berm services a maximum area of 250m².
- ▶ Include the function and maintenance of these berms in all site inductions.



Photo credit: Anthony D' Angelo for USEPA, 2012.

Installing the controls:

Mulch and compost filter berms need to be installed prior to the start of site works. They can be shifted, added to, or removed, depending on changes to the site's drainage patterns as works progress.

- ▶ Install mulch and compost filter berms across the contour to maximise the surface area available for ponding and turn up at the ends.
- ▶ For **mulch**, only use on-site vegetation free of weed seed, and mulch by using a horizontal or tub grinder rather than a chipper.
- ▶ For **compost**, ensure material is well-decomposed and 100% organic material.
- ▶ Ensure a moderate moisture content of mulch or compost in the range of 30 – 50%.
- ▶ Ensure berms are appropriately sized and spaced for the catchment; see the Mulch Filter Berms and Compost Filter Berms factsheets (IECA Book 4 Design Factsheets, 2010) for more information.
- ▶ Ensure all vehicle and foot traffic is kept off mulch and compost filter berms.

Note: DO NOT place mulch and compost filter berms across concentrated flow paths, creeks, or major drainage lines. Rock check dams, lined drainage channels, or rock filter dams are the appropriate controls for concentrated flow paths.

Maintaining the controls:

Check the berms at least weekly, as well as before forecast rain and after rain events. Repair or replace any damaged sections to the original configuration. Maintain moderate moisture content of mulch and compost filter berms to stop them from blowing away. Remove sediment from the ponding area if it has accumulated to a depth greater than 100mm or 1/3 of the height of the berm. Collected sediment can be reused on-site or disposed of to landfill.



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