



CATEGORY: Sediment Control

USE GROUP: Temporary

ISSUED: 10-1-2008

SEDIMENT TRAP

DEFINITION AND PURPOSE:

A sediment trap is a temporary containment area that allows sediment in collected storm water to settle out during infiltration or before the runoff is discharged through a stabilized spillway/dewatering pipe.

APPROPRIATE APPLICATIONS:

Sediment traps are commonly used at the outlets of stormwater diversion structures, channels, slope drains, construction site entrances, vehicle wash areas, or other runoff conveyances.

CONDITIONS FOR EFFECTIVE USE:

Type of Flow: Sheet flow and concentrated flow.

Contributing Area: Maximum of 5 acres.

Trap Volume: Silt load of 1800 cf/acre.

WHEN BMP IS TO BE INSTALLED:

Prior to disturbance of natural vegetation.

STANDARDS AND SPECIFICATIONS:

Take care to situate sediment traps for easy access by maintenance crews. Excavate an area for a sediment trap-make sure the side slopes are no steeper than 2:1 and the embankment height no more than 5 feet from the original ground surface. Install dewatering pipe, if necessary. Place and compact fill to construct embankments and the spillway. To reduce flow rate from the trap, line the outlet with rip rap and gravel over the dewatering pipe, if necessary. The spillway weir for each temporary sediment trap should be at least 4 feet long for a 1-acre drainage area and increase by 2 feet for each additional drainage acre added, up to a maximum drainage area of 5 acres. Install monitoring posts in the trap which mark $\frac{1}{2}$ the design depth for sediment accumulation.

OPERATION AND MAINTENANCE PROCEDURES:

Inspect every week and after every $\frac{1}{2}$ " storm event. Remove trash accumulation. Remove sediment accumulations once sediment reaches $\frac{1}{2}$ the design depth, as indicated on monitoring posts. Repair and revegetate any erosion damage. Repair settlement, cracking, piping holes, or seepage at embankment.

SITE CONDITIONS FOR REMOVAL:

Remove after upstream areas are stabilized. Regrade as appropriate and vegetate immediately.

TYPICAL DETAILS:

SC-6.1, SC-6.2, and SC-6.3