

Design Manual

Chapter 7 - Erosion and Sediment Control 7E - Design Information for ESC Measures

Stockpile Management



<u>BENEFI</u>	L M H
Flow Control	
Erosion Control	
Sediment Control	
Runoff Reduction	
Flow Diversion	

Description: Stockpiles are highly susceptible to soil erosion and are a leading contributor to sediment runoff on many construction sites. Stockpile management is employed to control erosion and contain sediment at the source.

Typical Uses: Typical erosion and sediment control best management practices can be employed around construction site stockpiles.

Advantages:

- Ability to employ effective erosion and sediment control practices within a targeted area.
- Address one of the leading causes of sediment runoff at the source.

Limitations:

- Actively graded stockpiles do not provide opportunities for stabilization.
- Small stockpiles may only be present on the site for a short time, making stabilization impractical.

Longevity: Varies depending on the practice

SUDAS Specifications: N/A

A. Description/Uses

Stockpile management practices should be employed whenever topsoil, on-site soils, or imported soils are stored on a construction site. Stockpile management uses regular erosion and sediment control best management practices that are employed to protect the stockpile and contain sediment runoff from the stockpile.

B. Design Considerations

1. Erosion and Sediment Control: In determining which best management practices to employ, consideration needs to be given to the 0 and 14-day rule in the NPDES General Permit Number 2. NPDES requires that stabilization measures be initiated immediately when earth disturbing activities have permanently ceased or if temporarily ceased and will not resume for 14 or more days. Typical stabilization practices include temporary or permanent seeding, straw or hydromulching, or rolled erosion control products.

Since stabilization of actively graded stockpiles is not practical, sediment control measures should be carefully planned and employed around and downslope of the stockpile. Typical sediment control practices may include filter socks, wattles, silt fences, diversion berms, sediment basins and traps, and vegetative filter strips. Sediment control practices should be held away from the toe of the stockpile a minimum of 20 feet to provide an area for water ponding, sediment accumulation, and access for equipment to clean out accumulated sediment.

2. Alternative Protection: For small material stockpiles or very short-term stockpiles, typical erosion and sediment control best management practices may not be practical. For these situations, alternative protection measures may be appropriate.

Manufactured tarp systems designed for stockpile protection can be utilized to cover the surface of small or short-term stockpiles to protect them from erosion. In place of a manufactured system, plastic sheeting or tarps, weighted down to prevent displacement, may also be implemented.



Figure 7E-30.01: Small Material Stockpile with Protective Tarp Cover

C. Application

Erosion and sediment control practices utilized for stockpile management should be designed according to the guidelines provided for those same practices described elsewhere in this manual. Stockpiles, like any other disturbed area, need to be stabilized immediately whenever grading operations have permanently ceased or temporarily ceased and will not resume for a period exceeding 14 days.

D. Maintenance

The maintenance requirements of erosion and sediment control practices implemented on or around stockpiles is the same as for those same practices described elsewhere in this manual.