ILLINOIS URBAN MANUAL PRACTICE STANDARD

Soil Stockpile Management for Erosion & Sediment Control

Code 927



Definition

Temporary or permanent erosion or sediment control practices used to control erosion and sediment associated with the creation and management of a soil stockpile.

Purpose

To control soil loss from a soil stockpile due to wind or water erosion.

Conditions Where Practice Applies

Where temporary soil stockpiles are built as a result of land disturbance activity.

This standard does not apply to a stockpile consisting of contaminated soil.

This standard shall not apply to soil stockpiles that will be built and removed within 24 hours.

Criteria

Soil stockpiles must be located, at a minimum, 25 feet from any wetland, stream, creek, ditch, swale, water conveyance system, lake, pond, etc. The measurement of the buffer zone is to be made from the edge of the protected area nearest the stockpile, to the outside edge of the stockpile perimeter control.

Stockpiles shall not be located within an overland flow path.

Stockpiles shall not be located in a designated floodway.

Timing for the stabilization of the stockpile shall follow soil stabilization guidelines in the current <u>Illinois Environmental</u> <u>Protection Agency</u>, <u>NPDES Permit No. ILR10</u>.

The soil stockpile shall be stabilized in accordance with Practice Standards <u>PERMANENT VEGETATION 880</u>, <u>TEMPORARY SEEDING 965</u>, <u>MULCHING FOR SEEDING AND SOIL STABILIZATION 875</u>, and <u>EROSION CONTROL BLANKET 830</u>.

If a soil stockpile is to remain on site over the winter, the stockpile shall be, at a minimum, temporarily stabilized prior to freezing of the stockpile material.

At minimum, perimeter sediment control shall be installed on the down slope side of the stockpile prior to its creation. Use perimeter control Practice Standard SILT FENCE 920.

Perimeter protection shall be placed a minimum of 8 feet from the toe of the stockpile slope.

The natural angle of repose of the piled soil material shall be designed into the height and slope of the stockpile, to avoid any potential sloughing of the slope.

Perimeter protection practices for soil stockpiles shall be considered as separate practices from site perimeter controls.

The stockpile shall not be built within the drip line, or over the root crown, of adjacent trees.

Considerations

Constructing Soil Stockpiles on impervious surfaces presents challenges for sediment control (limited effectiveness) and should be avoided.

Haul roads constructed for access to a soil stockpile can create a flow path for stormwater runoff. Sediment control practices along the road and/or at the haul road entrance/exit may be required.

The construction or installation of benches, terraces, or slope interrupters may provide additional slope stability and erosion control by shortening slope length and reducing runoff water velocity.

A linear sediment trap (swale or ditch) surrounding the stockpile at the base may be constructed to control sediment. Use Practice Standard <u>TEMPORARY SEDIMENT TRAP 960</u>.

If stabilization of the stockpile is delayed, measures such as <u>SURFACE ROUGHENING 953</u> may temporarily limit soil erosion.

Dust control practices may be required during construction, and after establishment of the stockpile, prior to vegetative stabilization. See Practice Standards <u>POLYACRYLAMIDE (PAM) FOR TEMPORARY SOIL STABILIZATION 893</u> and <u>DUST CONTROL 825</u>.

Plans and Specification

Plans and specifications for soil stockpile management for erosion and sediment control shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose. At a minimum include the following items:

- Plans shall show the locations of all soil stockpiles and proposed erosion and sediment controls
- Plans shall show the location of the stabilized entrance/exit

- Plans should identify all storm sewer inlets within the drainage area of the stockpile
- Plans shall indicate locations and boundaries of any streams, wetlands, conveyance channels, etc.

Operation and Maintenance

Repair, clean-out, or replace perimeter controls, area inlet protection, and stabilization methods per the Illinois Urban Manual specifications.

Repair rills and gullies as needed.

Once the stockpile is removed, restore and/or stabilize the area where the stockpile was located.

References

California Stormwater BMP Handbook, January 2003, New Hampshire Stormwater Manual: Volume 3, rev. 1.0