SOIL STOCKPILING AND TOPSOIL PRESERVATION

Application of silt fencing to control muddy runoff from soil stockpile. Leaving a site with quality soil encourages healthy root growth and reduces time and resources needed to care for turf and landscape plantings.

Photo credit: Barry Tonning, Tetra Tech

Silt fence around soil stockpile.

Provided to you by Calcasieu Parish
Police Jury Environmental Department

USE: Protect soil stockpiles from contact with rainwater and/or runoff, and preserve native topsoil.

LOCATION: Locate stockpiles away from storm inlets, conveyances, or other channelized flow. Locate topsoil stockpiles where they will not erode or block drainage structures, site entrances, or access to waste disposal areas.

DESIGN CRITERIA:

General soil and sediment stockpile criteria:

- Site operator(s) must protect stockpile from contact with stormwater (including water run-on) and/or prevent muddy runoff being discharged from the stockpile using a temporary perimeter sediment barrier. See (ES-2, Silt Fence Sediment Barrier and ES-3, Sediment Filter Log). If stockpile will be left uncovered for more than 14 days, apply temporary mulch or seed. For smaller stockpiles, plastic sheeting or tarps may be used. Unless infeasible, securely protect the stockpile from wind erosion (see ES-5, Dust Control).

Removing topsoil:

- Prior to stripping away topsoil (typically the first 4 to 6 inches of soil), ensure that all downslope erosion and sediment controls and upslope run-on diversions are in place. Avoid stripping topsoil from areas that will not be disturbed by excavation, grading, filling, or road building.

Topsoil storage:

- Where disturbance to native topsoil will occur at your site, unless infeasible, you should stockpile and reuse it in areas that will be stabilized with vegetation. To maximize the native topsoil's continued function, when stockpiling native topsoil, you should mound the soil and cover to prevent soil erosion and weed growth. Uncovered stockpiles should be protected with a sediment barrier (e.g., silt fence, sediment filter log) around the downslope perimeter of the stockpile. As a guideline, soil should be mounded to a height of no higher than 4 feet for less than 1 year, and preferably for less than 6 months.

Reapplying Topsoil:

- Prior to placing topsoil in desired location, verify that subgrade has been graded and is structural stable. Perform pH tests whenever possible prior to soil placement in order to determine whether soil amendments or treatments are necessary to support vegetation growth.
- Loosen subgrade to a depth of 3 inches by disking or scarifying to ensure that topsoil bonds with underlying earth. Apply a minimum of 4 inches of topsoil. Do not spread topsoil when subgrade is wet or frozen.

MAINTENANCE/REMOVAL:

- See perimeter sediment barrier maintenance specifications (ES-2, Silt Fence Sediment Barrier and ES-3, Sediment Filter Log).
- Do not hose down or sweep leftover soil or sediment accumulated on pavement or other impervious surfaces into any storm drains or surface waters.