

Methods of Acceptable Stabilization of Disturbed Soils

The best way to avoid soil erosion is to disturb the least possible amount of soil during grading and construction. If erosion control measures are not functioning properly, causing erosion to occur on the site, the site will not be considered stabilized.

MAINTENANCE IS THE KEY TO PROPER SOIL EROSION CONTROL!

Temporary Stabilization - These measures will temporarily prevent soil erosion.

- 1) **Mulch** - This typically is in the form of straw, spread heavily over a disturbed area to protect the exposed soil from rain and wind erosion. For proper stabilization, the soil must **not** be visible through the mulch. Mulch should be used:
In flat areas with a low amount of water runoff, and/or
In areas with adequate protection from high winds

High velocities of run-off will wash away mulch on moderate to steep slopes. High winds can also carry mulch away. Spreading seed prior to mulching greatly aids in the permanent stabilization of the site.
- 2) **Erosion Blankets** - Consist of straw, coconut fiber or excelsior fiber packed in web netting. Erosion control blankets are suitable for moderate slopes and steep slopes on sites with soil that is susceptible to erosion. The blankets are laid at right angles over a disturbed area, staked in place, and toed in at the top of the slope, with a **6-inch overlap** of all edges. Blankets are also available with seed in them to enhance permanent stabilization of the slope. If rills (narrow-bands) and gullies (wide-bands) are eroding underneath the blankets, the soil will not be considered stabilized.
- 3) **Hydro Seed** - Hydro seed may be used as temporary stabilization on relatively flat areas with low volume of runoff. Hydro seed can wash away easily in heavy rains. It is recommended that hydro seed with a high content of mulch be used to provide a better barrier between the weather and the soil. If cared for properly, hydro seed will grow, stabilize the site, and provide permanent stabilization.
- 4) **Tarps** - These are plastic sheets used to cover stockpiles or small disturbances. They may not be used for large disturbances.

Permanent Stabilization - These measures will permanently prevent soil erosion when they are functioning properly. When all exposed soil at a site is permanently stabilized, the project will receive final approval from the Soil Erosion and Sedimentation Control Program.

- 1) **Established Vegetative Cover** - Any form of vegetation that provides a root base in the soil and a barrier between the soil and the weather can be considered permanent stabilization. Forms of acceptable vegetative cover when properly installed and maintained are sod, grass, native trees, shrubs and ground cover.
- 2) **Woodchips** - As part of landscaping a thick layer of wood chips or other "permanent" mulch is acceptable in non-sloped areas.
- 3) **Stone** - A thick layer of stone is considered permanent stabilization on all areas except steep slopes. This includes gravel drives, stone gardens, and pavers used for foot traffic. Geotextile fabric placed underneath stone in swales and drives is advisable.
- 4) **Pavement** - Roads or driveways are considered permanent stabilization.

It is important to remember that none of the above methods guarantee stabilization. Proper maintenance is the key to good stabilization. The members of the SESC Program staff are happy to answer any questions. Contact us at (906) 753-6343.