Minimum Standards

The state of Virginia requires that **all** land-disturbing activities meet certain Erosion and Sediment control criteria. These criteria are known as the *19 minimum standards* and can be found in the *Virginia Erosion and Sediment Control Handbook*.

The minimum standards are designed to maintain the following:

- To stabilize the exposed soil as soon as possible with vegetation or artificial cover.
- 2. Minimize the changes in the natural drainage patterns and topography.
- 3. Protect and limit activities within and around natural streambeds.
- Protect downstream and adjacent properties from erosion and damage due to flooding.
- 5. Provide for adequate drainage from the site after the land disturbance is completed.

Local county ordinances may have stricter standards regarding erosion and sediment control.

How can I acquire the Erosion and Sediment Control Handbook? Contact DCR.

Virginia Department of Conservation and Recreation (DCR) has online information regarding the Erosion and Sediment Control Handbook, Erosion and Sediment Control Law, minimum standards brochures and land disturbing brochures. Visit DCR's website at www.dcr.virginia.gov/sw/e&s.htm.

Still Thinking about Moving Dirt?

If you are intending to move dirt, contact your county's Planning and Zoning Departments for information on Land-disturbing permit requirements. For technical advice or questions contact the Culpeper Soil and Water Conservation District.

Culpeper County:

Planning and Zoning 540-727-3404

Greene County

Planning and Zoning 434-985-5282

Madison County

Zoning Administration 540-948-6102

Orange County

Planning and Zoning 540-672-4347

Rappahannock County

Zoning Administration 540-675-5330

Culpeper Soil & Water Conservation District 540-825-8591



351 Lakeside Drive Culpeper, VA 22701 Phone: (540) 825-8591 Fax: (540) 645-6624

Culpeper Soil and Water Conservation District

Serving the Counties of Culpeper, Greene, Madison, Orange and Rappahannock

MOVIN' DIRT!

A Landowner's Guide to Implementing Erosion Control Practices



This is an example of a site that lacks good Erosion and Sediment Control measures. Does your site look like this? Look inside to learn how to reduce erosion damage on your site and your neighbors'.

WANT TO MOVE DIRT?

Excavating soil (or movin' dirt) can be an ugly and unpleasant reminder of the impacts of land development. Exposed soil easily erodes and is transported downslope and downstream following rainstorms. Movin' dirt requires preventive measures to minimize soil loss onsite and soil deposition offsite. Erosion and sediment control programs are implemented by local governments in order to regulate land disturbances and to minimize these negative impacts of soil erosion.

UNDERSTANDING EROSION

Erosion is the wearing away of soils due to water, wind and gravity. Erosion occurs when soil is left unprotected from these forces of nature. Water has the greatest impact on erosion due to the frequency and power of rainstorms. There are 5 types of water erosion:

- 1. Raindrop erosion is the initial impact of rain that dislodges soil particles.
- 2. Sheet erosion is the uniform removal of soil in thin layers due to sheet or overland flow.
- Rills are caused by small concentrations of flow, usually a few inches deep, that transports detached soil.
- 4. Gullies are larger concentrations than rills and harder to repair.
- Channel erosion is the removal of soil from the stream bed and bank.



This is an example of Rill Erosion

HOW CAN EROSION BE STOPPED?

Soil movement can be stopped in two ways: Erosion control and sediment control. The combination of both approaches usually provides the best protection.

Erosion control prevents erosion from starting by minimizing the amount of soil exposed and exposure time. Erosion control measures include the immediate use of vegetative and artificial cover to stabilize bare and vulnerable surfaces. Ground cover protects against raindrops and disperses concentrated surface flows.



Stabilization with vegetation and outlet protection

Sediment control reduces the effect of erosion on adjacent areas by trapping sediments onsite that are being transported by runoff. Sediment control measures include filter strips (vegetative or artificial), sediment traps and basins, diversions, dikes and silt fence to divert and filter sediments from entering clean water.



This is an example of diversion dike and silt fence. Note the vegetative stabilization on the dike.

WHAT IS A LAND-DISTURBING ACTIVITY?

Land-disturbing activities are defined as any form of clearing or excavation that changes groundcover characteristics of an area. Usually the groundcover is removed, exposing the soil to the erosive effects of rain, wind and gravity.

Most land-disturbing activities require a landdisturbing permit from the local county and an erosion and sediment control plan. Contact your County planning and development departments for more information.