

PDHonline Course C534 (4 PDH)

Construction Stormwater Runoff – Sediment Controls

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Missouri Department of Natural Resources Manual, "Protecting Water Quality"

Terms and Definitions

Acidic A material with a pH of less than 7.0. Soil nutrients are generally less soluble and less

available to plants in moderately or strongly acid soils.

Alkaline A material with a pH greater than 7.0.

Anchor Trench A long, narrow ditch in which the edges of a material (silt fence, erosion control blanket

or geotextile etc.) are buried in place

Apron Protective material laid on a streambed or ground surface to prevent scour at a culvert

outlet, abutment, and toe of a structure or slope.

BMP (Best Management Practice) The preferred methods and/or products that will correct or

control erosion, sedimentation or water quality degradation on a specific site.

Berm A ridge of earth constructed to direct the flow of water. The embankment at a basin or

pond that may be wide enough for vehicles.

Blanket Rolled materials of coir (coconut fiber), jute, straw, wood fiber, or synthetic materials

used to protect against erosion, trap sediment, protect seed and promote the growth of

vegetation.

Cellular Systems Synthetic grid with open spaces filled with soil, sand, gravel or concrete. Used for

erosion control.

Check Dam Temporary barriers of rock constructed across a swale or drainage ditch.

Coir Organic fiber from the outer shell of the coconut, used as mulch and in the manufacture

of erosion control blankets, geotextiles and coir tubes for scour protection.

Energy Dissipator A structure installed at the outlet of a channel, drop structure or conduit to absorb the

force of high-velocity flow. It may consist of riprap, linings, baffles, staggered blocks,

etc.

Erosion The process by which soil particles are transported and de[posited by wind, water, and

ice. Types of erosion:

Accelerated Erosion: Erosion much more rapid than natural erosion as a result of

human activities.

Gully Erosion: The erosion process whereby runoff water accumulates in narrow

channels, and, over relatively short time periods, removes the soil to considerable depths.

Sheet Erosion: The gradual removal of a fairly uniform layer of soil by runoff water.

Erosion Control The prevention and/or reduction of soil particle movement.

Geotextile A woven or nonwoven water permeable material either natural or synthetic used to filter

liquids and to prevent the movement of sediment.

pH A measure of acidity or alkalinity of a substance.

Piping Movement of soil particles by seepage leading to the development of subsurface voids,

tunnels, etc.

Inflow The water discharged into a point of concern.

Outfall Point where drainage discharges from a conduit to receiving stream.

Overfall A sudden drop in grade, sometimes into a gully.

Sheet Flow Water flowing across a wide, uniform area such as a highway or parking lot.

Silt Fence A temporary barrier consisting of a geotextile which is attached to supporting posts and

trenched into the ground at the base.

Staple A fastening device typically of 8 to 11 gauge wire, "U" shaped with 4" to 10" legs used

to secure erosion control blankets, geotextiles etc. to the ground.

Subsurface Drain A perforated pipe used for subsurface drainage surrounded by aggregate or wrapped in a

geotextile filter fabric.