ENVIRONMENT, HEALTH & SAFETY
UNIVERSITY OF MICHIGAN

Preferred Soil Erosion and Soil Control Best Management Practices

Standard Operating Procedures

Revision Date: 6/28/18

Applies To: University of Michigan departments initiating projects involving earthwork.

Operational Best Management Practices

An operational Best Management Practice (BMP) uses preventative actions that involve operational planning and source controls:

Employee Training	EHS holds training sessions to teach U-M employees about storm water management, soil erosion and sedimentation controls and BMPs. Contact EHS-EP3 if interested in training.
Clean and Maintain Storm Inlets, Catch Basins and Drain Channels	Inlets, catch basins and manholes are periodically inspected and cleaned out using a vacuum truck.
Street Sweeping	Removes sediment on roads and reduces the amount of pollutants entering local waters. To utilize the UM street sweeper, please call the Plant Operations Call Center at 647-2059 and request shop G2008 for service.
Dust Control	Application of water or another dust control product to reduce sediment loss from wind erosion.
Dewatering	All dewatering operations must utilize a filter bag. Groundwater and surface water which is free of sediment may be discharged to a storm drain. Drains must be protected from sediment by using inlet filters.

Vegetative Best Management Practices

A vegetative BMP is a natural process preserving existing vegetation or establishing ground cover to minimize soil erosion.

Permanent/ Temporary Seeding	An inexpensive, yet effective, method to stabilize flat areas and slopes.	Drawing Detail
Sodding	An immediate vegetative cover.	Drawing Detail
Mulch Blanket/High Velocity Mulch Blankets	A process to enhance plant establishment and help hold fertilizer, seed, and topsoil in place in the presence of wind and rain runoff after an earth disturbing activity.	Drawing Detail
Vegetated Buffer Strips	A method to reduce sheet flow velocities which may create rilling and gullying. Also useful to establish permanent vegetative cover and prevent sloughing and loss of seed.	Drawing Detail

Structural Best Management Practices

A structural BMP is a physical device. It is typically designed and constructed to trap or filter pollutants from runoff, or reduce runoff velocities.

Inlet Filter	A permeable barrier that is installed in a catch basin to remove sediment from storm water.	• Drawing Detail • Drawing Detail with Curbside Protection
Straw Wattles	A permeable barrier staked into the ground surrounding disturbed soils for sediment control and diverting storm water runoff	Drawing Detail
Erosion Eels	A permeable barrier constructed of a woven geotextile covering with interior filter materials such as shredded rubber. Can be used for perimeter control or diverting storm water	Drawing Detail
Tracking Grates	Metal grates used to remove dirt, mud and other debris from vehicle tires to reduce trackout.	Product Information
Gravel Access Approach (Anti-tracking Pad)	Coarse aggregate placed onto a geotextile separator and is used to remove dirt, mud and other debris from vehicle tires to reduce trackout.	Drawing Detail
Temporary Aggregate Cover	A 6-inch layer of aggregate placed on top of a geotextile fabric for construction operations, equipment storage, heavy traffic use, or areas that could develop into a soil erosion problem as a result of intense activities or loss of vegetative cover	Drawing Detail
Geotextile Silt Fence	A permeable barrier erected below disturbed areas to capture sediment. A silt fence can also be used to divert small volumes of water to a stable outlet.	Drawing Detail
Check Dam	A device constructed across ditch lines used to reduce velocity of concentrated flows in the ditch.	Drawing Detail
Riprap	A permanent cover of rocks and cobblestone used to stabilize stream banks. It is very effective in protecting soil from high velocity flows	Drawing Detail
Stockpile Cover	A geotextile or plastic cover used to prevent erosion from rain or wind on stockpiled materials or other small erodible areas.	Drawing Detail
Filter Bag (Dewatering Bag)	A nonwoven geotextile fabric used to remove sediment from groundwater or storm water during dewatering operations.	Drawing Detail
Sediment Basin	A device used to intercept concentrated flows and prevent sediment from being transported off-site or into a waterway or wetland.	Drawing Detail
Turbidity Curtain	A silt fence that is oriented vertically in water by being buoyed at the top and weighted at the bottom or anchored down. The purpose of the curtain is to keep sediment and runoff from entering the water body.	Drawing Detail