

### NPDES STORMWATER PERMIT PROGRAM FOR CONSTRUCTION ACTIVITY

# **QUICK-COMPLIANCE TIPS**



## **Erosion Control Practices**

### Vegetation



**Requirements:** If not being actively graded, positive slopes within 200' feet of a stormwater conveyance or water body must be stabilized within one to three weeks, depending on the slope. Temporary vegetation should be combined with mulch, erosion control blanket, or hydraulic soil stabilizers.

**Installation:** MnDot recommended temporary seeding rates for 100B Winter Wheat 110B Oats and 130B Oats, Winter Wheat, Rye Grass, and Alfalfa are 100lbs per acre. **Maintenance:** Reseeding if it fails to grow. May need mowing or spraying to control noxious weeds.

### **Erosion Control Blankets**



## Mulch



## **Energy Dissipation**



## **Temporary Slope Drains**



## Hydraulic Soil Stabilizers



**Requirements:** Erosion control blanket is a recommended practice for stabilizing 3:1 and steeper slopes or the normal wetted perimeters of ditches. **Installation:** Erosion control blanket must be trenched in at the top of the slope and stapled at a rate of 1.5 to 2 staples per square yard depending on slope steepness and blanket type.

Maintenance: Must be inspected weekly and after .5" rainfall events.

**Requirements:** If not being actively graded, positive slopes within 200' feet of a stormwater conveyance or water body must be stabilized within one to three weeks. Mulch is a recommended practice for stabilization.

**Installation:** Mulch can be blown or hand spread at a rate of 2 tons/acre. It must be anchored with either a tackifying agent or by disk anchoring.

Maintenance: Inspect and replace any mulch that has been dislocated or failed.

**Requirements:** Pipe outlets must have energy dissipation within 24 hours of connection to a surface water.

**Installation:** Energy dissipation should be installed in accordance to MNDOT specifications.

**Maintenance:** Energy dissipation must be inspected weekly and after .5" rainfall events.

**Requirements:** Recommended for conveying runoff down sensitive slopes. Temporary slope drains are chutes, hoses, tubes, or pipes used to convey runoff safely down a slope and prevent gully formation. **Installation:** Upslope stormwater runoff is directed to slope drains with diversions.

Slope drain outlets may require hold-down stakes and energy dissipation and must be directed to stabilized vegetated areas or sediment basins.

Maintenance: Slope drains must be inspected weekly and after .5" rainfall events.

**Requirements:** Hydraulic mulches are recommended for temporary stabilization of areas with limited access. They can be after seed application or without seeding. **Installation:** Recommended application rate for hydromulch is 2,500 lbs/acre. Bonded fiber matrix should be applied at 100% coverage. Hydraulic mulches should never be used in areas with concentrated flows.

**Maintenance:** Must be inspected weekly and after each .5" rainfall event.

# **QUICK-COMPLIANCE TIPS**

## **Sediment Control Practices**

### Silt Fence



### **Rock Entrance Pads**



#### Inlet Protection



### Slope Breaks



### **Ditch Checks**



### **Temporary Sediment Basin**



**Requirements:** Perimeter control is required before soil-disturbing activity begins. Silt fence is available as a standard woven geotextile or as a high-flow monofilament. It is designed to temporarily retain runoff and allow some sediment to settle out prior to leaving the site.

**Installation:** Silt fence should be installed along the contour and trenched into the ground at least 6". Posts should be spaced no more than 8 feet apart and securely fastened to posts.

**Maintenance:** Must be inspected weekly or after each .5" rain event. Silt fence must be cleaned out or replaced when silt reaches 2/3 the height of the fence.

**Requirements:** Vehicle tracking of sediment from the construction site must be minimized by BMPs such as stone pads, wash racks, or equivalent systems. **Installation**: Rock pads are constructed by spreading a 6" layer of sediment free rock over geotextile fabric (typically 1.5-3" clear). They must be at least 50' long. **Maintenance:** Periodic top dressing with additional rock may be necessary to prevent tracking onto paved roads.

**Requirements:** All storm drain inlets must be protected by appropriate BMPs until all sources with potential for discharging to the inlet have been stabilized. **Installation**: Reusable drop-in structures are recommended and should fit into the inlet properly. Inlet barrier systems should be secured to the ground and completely cover the inlet.

**Maintenance:** Inlet protection must be inspected weekly or after .5" rain events. Sediment must be removed promptly.

**Requirements:** Slope breaks are required every 75 feet on 3:1 slopes or greater. **Installation**: Slope breaks must be installed on contour to slow runoff velocity. Slope breaks can be fiber logs, compost sock, or compost berms. The use of hay bales and silt fence is discouraged.

Maintenance: Inspect weekly and after .5" rain event and replace as needed.

**Requirements:** Properly placed ditch checks are recommended for slowing water velocity in ditches.

**Installation**: Ditch checks are placed so that the bottom of the outer edges are higher than the tops of the center of the ditch check. Ditch checks can be made from fiber logs,rock or high flow velocity silt fence. The use of hay bales and standard woven silt fence is discouraged.

Maintenance: Inspect weekly or after .5" rain event and replace as needed.

**Requirements:** Temporary sediment basins are recommended to retain sedimentladen runoff and allow sediment to settle out before leaving the site. **Installation**: Temporary Sediment basins require a stabilized emergency overflow, an outlet with energy dissipation, and a protected riser pipe that will allow for complete drawdown for maintenance activities. For each acre draining to the basin it must provide a minimum of 3,600 cubic feet of total storage with a minimum of 1800 cubic feet storage below the outlet pipe.

**Maintenance:** Inspect weekly or after .5'' inch rain event. Basins require maintenance when sediment reaches  $\frac{1}{2}$  the storage volume below the outlet.

For more information please visit the Minnesota Pollution Control Agencies Stormwater Website: http://www.pca.state.mn.us/water/stormwater/ Photo and text sources: Minnesota Erosion Control Association; Carver County SWCD, Dakota County SWCD, Minnesota Pollution Control Agency, U.S. Environmental Protection Agency, Minnesota DOT. Question or comments please call Dakota County SWCD 651-480-7777.