

Measure 4: Construction Storm Water Runoff Control

According to the EPA Fact sheet on Construction Site Runoff Control (<http://www.epa.gov/npdes/pubs/fact2-6.pdf>), “sediment runoff rates from construction sites are typically 10 to 20 times greater than those of agricultural lands, and 1,000 to 2,000 times greater than those of forest lands. During a short period of time, construction sites can contribute more sediment to streams than can be deposited naturally during several decades. The resulting situation, and the contribution of other pollutants from construction sites, can cause physical, chemical, and biological harm to our nation’s waters.”

Construction sites on U of M properties that can potentially impact receiving waters will be subject to sediment and erosion control requirements. In addition, all U of M construction sites that disturb greater than 1 acre are also required to apply for a MPCA NPDES Construction Site Permit. There are many overlaps between these regulatory requirements. For more information on MPCA Construction Site Permitting, see <http://www.pca.state.mn.us/water/stormwater/stormwater-c.html>. **Where these regulatory programs do overlap, the more stringent requirements take precedent.**

Like the NPDES Construction Permit, U of M construction projects are required to have temporary and permanent erosion and sediment control measures incorporated into the design. (*University of Minnesota Standards & Procedures for Construction - Temporary Erosion and Sediment Controls* – Page 12 #7.1) The construction documents must identify specific controls and locations as well as contractor implementation and inspection responsibilities.

As required by the *University of Minnesota Standards & Procedures for Construction*, the A/E will identify temporary and permanent control measures that are site specific and will include them in the construction documents. Temporary controls include, but are not limited to, silt fences, storm inlet protections, entry/exit stabilization as well as site stabilization procedures for exposed soils.

The contractor is required to implement these measures and to inspect weekly, or after each rain (participation) event, for control effectiveness. Any storm water discharge from a construction site must be “sediment free”. The temporary erosion and sediment control measures apply from the start of construction until “final stabilization”. Final stabilization is defined as the time when all soil-disturbing activities at the site have been completed, vegetative cover (with a density of 70 percent of the cover for unpaved areas and areas not covered by permanent structures) has been established or equivalent permanent stabilization measures have been employed.

The 2002 *University of Minnesota Standards & Procedures for Construction* can be found at: <http://www.facm.umn.edu/cons/standards2000.htm>

Specific storm water standards are as follows:
Temporary Erosion and Sediment Controls – Page 12 #7
<http://www.facm.umn.edu/cons/2002/Div102.pdf>
Storm Water Permits and Requirements – Page 3 #3.3
<http://www.facm.umn.edu/cons/2002/Div102.pdf>

Sustainable Design Requirements – Page 8 #7.3.2
<http://www.facm.umn.edu/cons/2002/Prog02.pdf>

A “Storm Water Hotline” has been set up on the UMD storm water web page (www.d.umn.edu/outreach/stormwater) to field storm water comments or complaints. All comments will be seriously considered and the Minnesota Pollution Control Agency’s (MPCA) general permit MN R580000 requires us to summarize all comments made and the actions taken, in our annual storm water report.

There are several excellent resources for construction best management practices.

- Stormwater Practices for Cold Climates - <http://www.cwp.org/cold-climates.htm>
- Metropolitan Council's Urban Small Sites Best Management Practice Manual <http://www.metrocouncil.org/environment/Watershed/bmp/manual.htm>
- MPCA’s Protecting Water Quality in Urban Areas <http://www.pca.state.mn.us/water/pubs/sw-bmpmanual.html>

Construction Storm Water Runoff Control Best Management Practice Summaries

UMD 401 – Erosion and Sediment Control Policy

University of Minnesota Standards & Procedures for Construction addresses the University’s requirements for design and construction. These standards were updated in 2002 and contain much of the phase II requirements. These existing standards will be reviewed and improved upon.

UMD 402 – Construction Site Inspection and Enforcement

Standards and procedures are often overlooked if there is not an enforcement requirement. Inspection requirements will be developed that split the responsibility between the contractor, A/E, and the University. A web site has been set up to accept reports of apparent non-compliance.