



Construction Stormwater Permit Overview

A Technical Summary of Minnesota's NPDES Permit

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This fact sheet provides summary information. Please review the permit itself for more detailed information.

Ecological harm

By following the terms of the construction stormwater permit, Minnesota's construction workers reduce the environmental pressure of earth-moving activities on Minnesota's water.

In days or weeks, construction work has the potential to contribute more sediment to streams than is deposited naturally over several decades. The environmental damage is severe and often permanent. Polluted runoff clouds streams, harming or killing fish and other aquatic organisms.

Severe erosion may change the contours of a river and wipe out valuable habitats-like gravel stream beds which are necessary for fish spawning.

Regulatory mandate

Minnesota's construction stormwater permit is an extension of the National Pollutant Discharge Elimination System (NPDES) Stormwater Program, which is part of the federal Clean Water Act.

NPDES Stormwater Program is a comprehensive national program for addressing polluted runoff. The U.S. Environmental Protection Agency is ultimately responsible for the quality of the nation's water, but in Minnesota, the Pollution Control Agency (MPCA) administers this federal program (as well as the related State Disposal System program).

The state's construction stormwater permit fulfills federal and state requirements by requiring permittees to control runoff.

Enforcement

The federal government requires permit coverage. Owners and operators of construction activity that fail to obtain permit coverage are open to third-party civil suits. Sites that lack permit coverage and/or fail to meet permit terms and conditions will be subject to MPCA enforcement action, civil penalties and/or criminal charges.

Application process

Regulated parties must develop a Stormwater Pollution Prevention Plan (SWPPP) and send MPCA a completed application and the \$400 application fee. Applications and other forms are available online:

www.pca.state.mn.us/water/stormwater/stormwater-c.html

Mailed application

Construction may begin seven days after the application is postmarked for most sites. Permit coverage obtained online is effective in two days.

Sites disturbing more than 50 acres and discharging to outstanding resource value waters or impaired waters must submit their SWPPP and application at least 30 days prior to commencing construction. Please review the permit itself for more detailed information.

Online application

If you choose to use the online construction stormwater permit application, you will find several advantages:

- An authorized party may complete the application for you.
- You may pay your permit fee online with a credit card.
- You will receive permit coverage in only two days.

For more information or to apply online, visit www.pca.state.mn.us/permits and click on Construction Stormwater Permit.

Stormwater pollution prevention plan

A stormwater pollution prevention plan must be completed prior to submitting a permit application and before beginning construction.

Your stormwater pollution prevention plans must:

- Describe the nature of the construction activity.
- Address the potential for sediment and pollutant discharges from the site.
- Identify someone to oversee Best Management Practice (BMP) Implementation.
- Identify chain of responsibility for general contractor and owner.
- Identify temporary sediment basins, if more than ten acres are disturbed and drain to a single point of discharge.
- Identify permanent stormwater management system.
- Identify erosion prevention practices.
- Identify sediment control practices.
- List estimated quantities of all erosion prevention and sediment control BMPs for the life of the project.
- Identify dewatering and basin draining practices.
- Identify trained personnel and training documents.
- Identify inspection and maintenance practices.
- Identify pollution prevention management measures.
- Include a strategy for retaining records.
- Describe the timing of BMP installation.
- Location and type of temporary and permanent BMPs.
- Include standard plates and specifications of BMPs.
- An approval by the Minnesota Department of Natural Resources if the site discharges to a calcareous fen.

Include a site map identifying:

- existing and final grades
- dividing lines and direction of pre and post construction
- stormwater flow and drainage areas
- impervious surfaces and soil types
- location of areas not to be disturbed
- phased construction areas
- surface waters and wetlands within one mile that receive runoff from the site
- methods of final stabilization of exposed soil.
- additional measures needed to protect special water supply management areas.
- additional requirements if the receiving water is impaired for phosphorous, turbidity, dissolved oxygen or biotic impairment, or measures needed to comply with any Total Maximum Daily Load (TMDL) that has been established.

SWPPP amendments

Amendments to your SWPPP are required when:

- inspections indicate BMP ineffectiveness
- general objectives or terms and conditions of permit are not being met
- a TMDL is established for your project's receiving water, in which there is an waste load allocation for construction activities

Permanent stormwater management system

When a project replaces vegetation or other pervious surfaces with one or more acres of cumulative impervious surface, one-half inch of runoff from the new impervious surface must be treated by one of the following methods (consult the permit for specific design requirements):

- wet sedimentation basin
- infiltration/filtration
- regional ponds
- combination of practice
- alternative method, pending MPCA approval. At least 90 days before the start of the project submit:
 - all calculations, drainage areas, plans and specifications
 - two-year monitoring plan
 - mitigation plan if alternative method fails

Best Management Practices

Erosion prevention practices must be installed in an appropriate and functional manner. Regulated parties choose which practices are best for specific sites. Prior to construction, they must identify areas not to be disturbed using items like flags, stakes, and signs.

Possibilities for BMPs include: construction phasing, vegetative buffer strips, temporary seeding, sod stabilization, horizontal-slope grading, minimization of land disturbance, preservation of trees and natural vegetation, mulch or wood-fiber blankets and stockpile covers.

By law, all exposed areas must be stabilized no later than 14 days after the construction activity in that portion of the site where work has temporarily or permanently ceased.

A. Sediment control practices

Sediment control practices must minimize sediment from entering surface waters, curb and gutter systems, and storm sewer inlets. Regulated parties choose which practices are best for specific sites and practices must:

- Established below the planned land disturbance before work begins.
- Protect storm drain inlets.
- Control temporary soil stockpiles.
- Control vehicle tracing with stone pads, concrete, steel wash racks or equivalent.
- Remain until final stabilization.
- specific practices.
- silt fences
- inlet protection
- check dams
- sedimentation traps and basins
- Stabilized construction entrances

B. Dewater and basin draining

Dewatering and basin draining must discharge to a temporary or permanent sedimentation basin whenever possible. Dewatering must:

- prevent erosion and scour
- be dispersed over natural rock rip rap, sand bags, plastic or other energy dissipation
- avoid nuisance conditions in receiving waters
- not inundate wetlands

C. Inspections and maintenance

Inspections and maintenance are conducted by the owner, operator, or designee and must:

- Occur every seven days.
- Occur within 24 hours of a one-half inch storm and seven days afterward.
- Occur once a month on finally stabilized area.
- Be routinely recorded and kept with the SWPPP.
- Ensure the integrity and effectiveness of erosion prevention and sediment control measures.
- Repair or replace nonfunctional BMPs.
- Drain and remove sediment from basins.
- Inspect surface waters, drainage ditches and conveyance systems for sediment.
- Remove sediment deposits and stabilized any exposed soil during sediment removal.
- Inspect and clean vehicle exits.
- Ensure infiltration areas are protected.

D. Pollution prevention management

Pollution prevention management measures include housekeeping practices that help prevent polluted runoff and include:

- proper collection and disposal of solid waste
- proper storage and disposal of oil, paint, gasoline, and other hazardous materials
- establishing a specific truck washing site
- no on-site engine degreasing
- establishing a specific leak-proof concrete washout site

Final stabilization must be ensured by the permittee. This includes establishing a uniform perennial vegetative cover over 70 percent of pervious surface area. For residential construction only, permittees may establish temporary erosion protection and distribute the MPCA fact sheet, *Homeowner Fact Sheet*, to new homeowners.

E. Special waters

Additional BMPs and enhanced runoff controls are required for discharges to these special waters: wilderness areas, portions of the Mississippi River, scenic or recreational river segments, Lake Superior, trout lakes and lake-trout lakes, trout streams, and scientific and natural areas. You can locate these waters using the Special and Impaired Waters Search tool. Find it here:

www.pca.state.mn.us/water/stormwater/stormwater-c.html#specialwaters.

F. Impaired waters

There are specific requirements for projects located within one mile of, and that have stormwater that flows to impaired waters (with or without a United States Environmental Protection Agency approved TMDL) where the identified pollutant(s) or stressor(s) are phosphorous, turbidity, dissolved oxygen, or biotic impairment. A list of impaired waters is at: www.pca.state.mn.us/water/tmdl or use the map tool described above.

G. For sites near special or impaired, waters, additional BMPs may be required

Additional BMPs include:

1. Temporary erosion protection or permanent cover over exposed soil must be completed within seven days after the area is no longer being worked.
2. Temporary sediment basins that drain to a single point of discharge for five or more acres disturbed at one time.
3. Permanent stormwater management system designed to treat one inch of runoff.
4. 100 linear feet buffer zone from special waters.
5. Enhanced runoff controls.
6. Temperature controls for discharges to trout waters.

H. Discharges to wetlands

Permittees must follow a wetland mitigation sequence if the project's stormwater discharge has the potential for adversely impacting a wetland (for example, excavating, or permanently flooding a wetland to create a stormwater pond). Potential adverse impacts may be addressed by:

- Permits or other approvals from an official statewide program United States Army Corps of Engineers, DNR, Wetland Conservation Act, and others)
- Use of appropriate measures to avoid, minimize or mitigate all adverse impacts

I. Special situations

Minnesota's construction stormwater permit does not replace or satisfy any requirements dealing with environmental review, environmental impact statements, environmental worksheets, federal environmental review, endangered or threatened species, and historic places or archeological sites.

Examples

Situation A: Once my project is finished, stormwater from the site will be discharged to special or impaired waters

If so, the project's permanent stormwater management system must handle one (1) inch of runoff from the new impervious surfaces created by the project and, where site conditions allow it, at least $\frac{1}{2}$ inch of the water quality volume must be infiltrated.

Situation B: Ten or more acres are disturbed at once

Temporary sediment basins must provide storage for a two-year, 24-hour storm, but no less than 1800 cubic feet per acre; prevent discharge of floating debris; allow for maintenance; provide emergency overflow; and be built concurrent with start of soil disturbance.

Consider public safety. When site limitations don't allow for temporary sediment basins, you must use equivalent controls. Temporary basins are also recommended for projects with steep slopes or highly erodible soils.

Resources

Stormwater Compliance assistance Tool Kit for Small Construction Operators. MPCA.

www.pca.state.mn.us/publications/wq-strm2-09.pdf.

Minnesota Stormwater Manual. Minnesota Stormwater Steering Committee and MPCA.

www.pca.state.mn.us/water/stormwater/stormwater-manual.html.

Protecting Water Quality in Urban Areas. MPCA.

www.pca.state.mn.us/water/pubs/sw-bmpmanual.html

Summary Guidance. E.P.A.

www.pca.state.mn.us/water/stormwater/CSWpermitApp.cfm

Contact us

Please call the MPCA Stormwater Hotline at 651-757-2119 or 800-657-3804.

For the status of your application, go to:

www.pca.state.mn.us/water/stormwater/CSWpermitApp.cfm