



Minnesota
Pollution
Control
Agency

Municipal Stormwater Program

An Overview

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The Municipal Separate Storm Sewer System (MS4) general permit is mandated by the federal regulations under the Clean Water Act and administered by the Minnesota Pollution Control Agency.

The MS4 permitting program gives owners or operators of municipal separate storm sewer systems approval to discharge stormwater to lakes, rivers and wetlands in Minnesota.

Environmental harm

Urban stormwater frequently contains litter, oil, chemicals, toxic metals, bacteria, and excess nutrients, like nitrogen and phosphorous. Polluted stormwater contributes to swimming-beach closings, fish-eating advisories, excess algae growth and poor water clarity in urban water resources, especially lakes.

In addition to human effects, poorly managed urban stormwater can drastically alter the natural flow and infiltration of water, scour stream banks and harm or eliminate aquatic organisms and ecosystems.

The primary goal of the MS4 general permit is to improve water quality by reducing pollutants in stormwater discharges. Specifically, the program aims to ensure proper management of stormwater discharges into waters of the state.

Defining MS4s

In general terms, MS4s are publicly owned or operated stormwater infrastructure, used

solely for stormwater, and which are not part of a publicly owned wastewater treatment system. Examples of stormwater infrastructure include curbs, ditches, culverts, stormwater ponds and storm sewer pipes. Common owners or operators of MS4s include cities, townships and public institutions.

The MS4 general permit focuses on reducing the pollution that enters these public systems and discharges to wetlands, streams and lakes (“waters of the state”).

Owners and operators of MS4s which are required to get a permit are created in one of three ways: By federal rule, 40 CFR § 122.34 (a) and (b) (the Clean Water Act), state rule (Minnesota Rules Chapter 7090), or by public petition to the Minnesota Pollution Control Agency.

By federal rule, stormwater systems in urban areas are labeled Mandatory MS4s. In addition to these, Minnesota added other stormwater systems (Designated MS4s) to the list. These MS4s are only added if the stormwater system is located in an urban area that meets the criteria established in the State Rule for population and discharge points.

The number of MS4s in Minnesota is growing as urban areas expand. As of April 2008, there were 243 MS4s in Minnesota.

Public Process

After a term of five years, the MS4 general permit is improved and revised, if necessary, and re-issued. Public comment

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is encouraged before the re-issuance of new MS4 general permits and before the creation of new MS4s. In addition, the public is asked each year to share its opinion on plans the owner or operator of their local MS4 has made to manage stormwater. These opinions are shared at local meetings required by the permit.

Requirements of the MS4 General Permit

All owners or operators of MS4s are required to satisfy the requirements of the MS4 general permit; Minneapolis and St. Paul are required to meet customized individual permits, which are similar but which contain additional requirements.

Basically, the MS4 general permit requires the MS4 operator or owner to create a Stormwater Pollution Prevention Program with six important components:

1. Public education and outreach, which includes teaching citizens about better stormwater management
2. Public participation: Include citizens in solving stormwater pollution problems. This includes a required public annual meeting and an annual report.
3. A plan to detect and eliminate illicit discharges to the stormwater system (like chemical dumping and wastewater connections)
4. Construction-site runoff controls
5. Post-construction runoff controls
6. Pollution prevention and municipal "good housekeeping" measures, like covering salt piles and street-sweeping.

Reducing Stormwater Pollution

The MS4 general permit is a requirement, but also a tool in the hands of city, township and county officials who want to improve the quality of lakes and rivers that receive their stormwater discharges. MS4 administrators have can improve the quality of life for their citizens by protecting and restoring local water quality.

Citizens served by an MS4 are invited to encourage the owner or operator (normally their city, township or county) to tackle stormwater pollution problems, but the responsibility for water quality is not left in the hands of public officials.

Public and private spaces contribute to urban stormwater pollution. While MS4 administrators control the public sources of stormwater pollution, it's ultimately in the hands of private citizens to change the way they do small things that will have a dramatic effect on the quality of their favorite fishing spot or swimming beach.

Simple Steps for Better Water Quality

You can make simple changes to reduce stormwater pollution and improve the quality of your local lake or river by following these tips:

- Fertilize established lawns with phosphorous-free fertilizer and don't overspray fertilizer into the street.
- Rake leaves and sweep grass clippings away from curbs. Clean curbs mean clean water.
- When you wash your car or truck, direct water onto your lawn to soak up soap.
- Find attractive alternatives to large, impervious driveways and sidewalks.
- Direct your home's gutters onto your lawn. Water that doesn't make it to the curb can't carry pollutants to lakes and streams.

Detailed Information

For more detailed information about the MS4 general permit or for further information about reducing stormwater pollution, please visit the MPCA stormwater program Web site: www.pca.state.mn.us/stormwater