



Municipal Stormwater Program

An overview

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

The MS4 permitting program gives owners or operators of MS4s approval to discharge stormwater to lakes, rivers, streams and wetlands in Minnesota.

Environmental harm

Urban stormwater runoff 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 our 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 from an MS4.

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.

Owners and operators of MS4s which are required to get a permit are identified in one of three ways: By federal rule, 40 CFR § 122.34 (a) and (b) (the Clean Water Act), state rule (Minn. R. ch. 7090), or by public petition to the MPCA.

By federal rule, stormwater systems in urban areas are labeled Mandatory MS4s. By state rule, applicability is based on urbanized area as defined by the latest decennial census, population density, and proximity to special receiving waters (e.g., trout streams, Outstanding Resource Value Waters, and impaired waters).

The number of regulated MS4s in Minnesota is growing as urban areas expand. As of November 2016, 260 MS4s are regulated for their stormwater discharges under an MS4 permit.

Public process

After a term of five years, the MS4 General Permit is improved and revised, if necessary, and re-issued. Public comment is encouraged before the re-issuance of new MS4 general permits. 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 events 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 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.
3. A plan to detect and eliminate illicit discharges to the storm sewer 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 inspecting and maintaining infrastructure, 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, rivers, streams and wetlands that receive their stormwater discharges. MS4 administrators 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 entirely 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 is also 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 do not 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 does not make it to the curb cannot 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 website: www.pca.state.mn.us/stormwater.