Chapter 46

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMITS

MDT ENVIRONMENTAL MANUAL

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46.1 OVERVIEW

The Montana Department of Environmental Quality (DEQ) administers a permit program for regulating storm water discharges associated with small municipal separate storm sewer systems (MS4). The permit program is authorized by Section 75-5-402 of the *Montana Code Annotated* (MCA) and provisions in the *Administrative Rules of Montana* (ARM) Title 17, Chapter 30 "Water Quality," Subchapters 11 "Storm Water Discharges," 12 "Montana Pollutant Discharge Elimination System (MPDES) Standards," and 13 "Montana Pollutant Discharge Elimination System (MPDES) Permits." The permit program also satisfies requirements of the National Pollutant Discharge Elimination System (NPDES) program under Section 402 of the Federal *Clean Water Act* (CWA). DEQ has issued an "MPDES General Permit for Storm Water Discharge Associated with Small Municipal Separate Storm Sewer System (MS4)" for use in addressing the applicable requirements. The permit is available on the DEQ website.

ARM 17.30.1103(1)(d) requires MPDES permit coverage for Small MS4s that are identified in ARM 17.30.1102(23) (the definition of Small municipal separate storm sewer system) or that are designated pursuant to ARM 17.30.1105 "Permit Requirement." The permit is required for urban areas within Montana that serve a population of at least 10,000 people. As of the date of publication of this Chapter, locations in Montana subject to the MS4 permit requirements include the following:

- Billings Urbanized Area,
- Great Falls Urbanized Area,
- Missoula Urbanized Area,
- Bozeman Area,
- Butte Area,
- Helena Area, and
- Kalispell Area.

Within these areas, storm sewer systems associated with MDT highways are included in the facilities subject to the MS4 permit requirements. This Chapter provides a general summary of the permit requirements and identifies applicable laws and regulations and selected guidance materials.

46.2 LAWS, REGULATIONS AND GUIDANCE

46.2.1 33 USC 1342 "National Pollutant Discharge Elimination System"

This Statute codifies Section 402 of the *Clean Water Act* and authorizes the US Environmental Protection Agency (EPA) and delegated States to administer a program for permitting discharges of pollutants subject to effluent limitations and conditions as EPA determines are necessary to meet the objectives for water pollution prevention and control. The primary EPA regulations for implementing Section 402 are provided in 40 CFR 122-125.

46.2.2 MCA 75-5-101, et seq. "Water Quality"

These Parts of the MCA address water quality issues and are intended to provide adequate remedies to prevent, abate and control the pollution of State waters. They designate the DEQ as the agency responsible for administering the requirements, including permit requirements, in MCA Chapter 75 "Water Quality."

46.2.3 ARM 17.30.1101 "Purpose and Scope"

This Part of the ARM states that Subchapter 11 is intended to be applied together with ARM Title 17, Subchapters 12 "Montana Pollutant Discharge Elimination System (MPDES) Standards" and 13 "Montana Pollutant Discharge Elimination System (MPDES) Permits" to establish a system for regulating discharges of potential pollutants from point source discharges of storm water into surface waters. It also clarifies that Subchapter 11 and Subchapter 13, which regulate storm water discharges through MPDES general permits, permit authorizations and notices of intent, are intended to be compatible with the NPDES as established pursuant to Section 402 of the CWA.

46.2.4 MDT Storm Water Program Website

This website provides useful information on a broad range of topics associated with storm water and related permitting, including MS4 permits. Examples of topics addressed on the website include the following:

- MDT's MS4 Storm Water Management Program;
- Small MS4 Permits,
- Erosion and Sediment Control Best Management Practices Manuals,
- Storm Water Runoff Control and Environmental Compliance,
- Post-Construction Storm Water Management,
- Adopt-A-Highway Program, and
- Maintenance.

46.2.5 DEQ Website for Storm Water – Small Municipal Separate Storm Sewer Systems

This website includes information on the current MS4 general permit, permit fee schedules for applications and annual fees, application forms, maps of Small MS4 coverage areas in Montana

and the NPDES Storm Water Program for Regulated Small MS4s. The website also contains a copy of the MS4 General Permit for Storm Water Discharge Associated with Small Municipal Separate Storm Sewer System (MS4).

46.2.6 EPA NPDES "Storm Water Program" Website

This website includes technical and regulatory information regarding the NPDES storm water program including items on MS4s and associated permit requirements and a National Menu of Storm Water Best Management Practices (BMPs). The website provides access to the EPA publication "MS4 Program Evaluation Guidance." This guidance is intended to assist in the development of MS4 Storm Water Management Programs and in the assessment of their compliance and effectiveness.

46.2.7 AASHTO Practitioner's Handbook 13 *Developing and Implementing a Stormwater Management Program in a Transportation Agency*

This June 2009 handbook provides guidance for State DOT's to develop and implement a storm water management program that satisfies the MS4 permit requirements. It covers issues such as conducting a program effectiveness assessment, developing a storm water management plan, public education and outreach, construction site storm water compliance, integrating BMPs into transportation project delivery and roadway maintenance storm water practices.

46.2.8 Local Ordinances

Many of the communities covered under the MS4 General Permit have enacted, or are developing, rules and regulations to address requirements of the permit (e.g., concerning elimination of illicit discharges to the MS4, control of construction site storm water runoff, management of post-construction storm water discharges in new development and redevelopment).

46.3 REQUIREMENTS OF THE MPDES GENERAL MS4 PERMIT

46.3.1 Storm Water Management Program (SWMP)

The current MPDES General Permit for Small MS4s requires permittees to "…develop, implement and enforce a Storm Water Management Program (SWMP) to reduce the discharge of pollutants from the permitted Small MS4 to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the *Montana Water Quality Act*."

The General Permit stipulates the following six minimum control measures that the permittee must implement. Additional information, permit requirements and program commitments are contained in the General Permit and the MDT SWMP:

1. Public Education and Outreach on Storm Water Impacts. This measure requires the permittee to develop a program for distributing educational materials to the community or conducting equivalent outreach activities about the impacts of storm water discharges on water bodies. The program also should identify steps the public can take to reduce pollutants in storm water runoff.

2. Public Involvement/Participation. This measure requires the permittee to develop and implement measures to involve the public in the development and submission of the permit application and SWMP and in implementing the SWMP.

3. Illicit Discharge Detection and Elimination (IDDE). This measure requires the permittee to develop and implement a program for detecting and eliminating illicit discharges into the permitted Small MS4. It requires the permittee to develop and maintain a storm sewer system map and to also conduct dry weather field screening for non-storm water flows.

4. Construction Site Storm Water Runoff Control. This measure requires the permittee to develop and implement a program to reduce pollutants in any storm water runoff to the permitted Small MS4 from construction activities that result in land disturbance greater than or equal to one acre (4000 m^2). The program also must address reduction of storm water discharges from construction activity disturbing less than one acre (4000 m^2) if that construction activity is part of a larger common plan of development or sale that would disturb one acre (4000 m^2) or more. This minimum control measures requires site plan review and construction site inspections of BMPs.

5. Post-Construction Storm Water Management in New Development and Redevelopment. This measure requires the permittee to develop and implement a program for preventing or minimizing water quality impacts from storm water runoff associated with new development and redevelopment projects that disturb one or more acres (4000 m^2) of land area. It also includes projects disturbing less than one acre (4000 m^2) that are part of a larger common plan of development or sale that disturb one or more acre (4000 m^2) and that discharge into the permitted Small MS4. For new development or redevelopment projects greater than or equal to one acre (4000 m^2), this measure requires implementing low impact development practices, where they are practicable. As discussed in the General Permit, these practices provide for infiltration, evapotranspiration or capture for reuse of a portion of storm water runoff from the new

development or redevelopment project. Other issues that must be addressed in this measure include long-term operation and maintenance of permanent BMPs, and site plan review (MDT projects and system impacts).

6. Pollution Prevention/Good Housekeeping for Municipal Operations. This measure requires the permittee to development and implement a program that includes a training component and provides for preventing and reducing storm water pollution from Department activities and facilities (e.g., highway maintenance, vehicle fleet and building maintenance, snow storage, deicing, waste handling, storm water system maintenance).

The General Permit requires the SWMP to include management practices, control techniques, systems, designs, good standard engineering practices and other provisions necessary for the control of pollutants. The SWMP also must include measurable goals for each of the minimum control measures.

The Storm Sewer System Map shows the location and number of outfalls and the names and locations of all surface waters that receive discharges from these outfalls. In addition, the map would typically include mapping storm sewer system components including: inlets, open channels, subsurface conduits/pipes, dry wells (discharges to ground water directly), and other similar discrete conveyances.

The General Permit includes provisions allowing the owner or operator of a small MS4 to work with the owner(s) or operator(s) of adjacent Small MS4s to develop and implement a shared SWMP in which each permittee is responsible for those activities that are within their area of legal authority and jurisdiction. To the fullest extent practical, MDT will coordinate with governmental entities in the regulated MS4 areas to share responsibilities for developing and implementing SWMPs that address the minimum control measures for MDT facilities and those of the other governmental entities.

As required by the General Permit, MDT will maintain documentation describing how and why each of the best management practices and measurable goals was selected for addressing the minimum control measures in relation to affected MDT facilities. This includes storm sewer systems serving State and Interstate highways, their rights-of-way and thoroughfares, including streets, roads, bridges, maintenance facilities and service areas, that are the responsibility of MDT within the designated MS4 areas.

46.3.2 Annual Reporting

MDT is required to conduct an annual review of the SWMP in conjunction with preparation of an annual report required by the General Permit. The District Environmental Engineering Specialists (DEES) and Environmental Services Bureau (ESB) will coordinate with the owners/ operators of the adjacent MS4s to complete the annual review of the SWMP and compile and organize the information for the annual report(s).

The annual report provides a summary of MDT's progress in implementing the SWMP as proposed. It addresses each of the minimum control measures by including a copy of the Best Management Practices (BMP) summary tables submitted with the SWMP. The tables are to include comments addressing the following items:

- the status of compliance with permit conditions, the appropriateness of the identified BMPs and progress towards achieving the identified measurable goals for each of the minimum control measures;
- information, including monitoring data, if any, collected and analyzed during the reporting period;
- summary of the storm water activities the MS4 permittee plans to undertake during the next reporting cycle;
- description of changes in any identified BMPs or measurable goals for any of the minimum control measures; and
- notification to DEQ if the MS4 permittee is relying on another governmental entity to satisfy some of its permit obligations.

The MDT Chief Operations Officer signs the annual report. The signature page includes the "Certification" statement required by the General Permit. MDT submits the original signed copy of the annual report by March 1st of the year following the one covered in the report.