

Municipal Separate Storm Sewer System General Permit (INR040000)

Section 4.5 Construction & 4.6 Post-Construction



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4.5 SWQMP CONSTRUCTION SITE STORMWATER RUN-OFF MCM



A MS4 operator must develop and administer an erosion and sediment control program. The SWQMP must include a strategy to manage the program, monitor compliance, and, as necessary, enforce violations. MS4s renewing permit coverage, must assess program requirements and goals from the previous permit, modify as necessary, and implement the requirements of this permit. A MS4, at a minimum must:

Develop or **revise and update program** with specific timelines to achieve the requirements of this MCM.

Develop or **revise and update an ordinance** or other regulatory mechanism; which at a minimum must:

Regulate projects with a land disturbance greater than or equal to one **(1) acre**, or disturbances of less than one (1) acre of land that are part of a larger common plan of development or sale when the larger common plan will ultimately disturb one (1) or more acres of land.

Contain the requirements of the Construction Stormwater General Permit with the exception of state permitting process references and submittal deadlines for construction plans and permit applications

Establish a requirement that **any project** within the MS4 area **that meets the applicability of the Construction Stormwater General Permit must submit a Notice of Intent (NOI)** to obtain permit coverage from IDEM in addition to any procedural requirements for submittal to the MS4 or MS4 designated entity.

Establish permitting procedures, internal processes, and timetables for submittal and review of construction plans and applications. At a minimum, the MS4 must:

Establish written procedures to review and determine compliance with the local ordinance or regulatory mechanism for construction plans submitted to the MS4 for privately owned (non-MS4) projects before construction activities commence.

Utilize a **form, checklist, or an alternative document** based on the local ordinance and regulatory mechanism that at a minimum includes:

- A method to notify responsible individuals of the status of the plan.

- Identification of the MS4 or MS4(s) for which the plan review is being conducted, the individual that reviewed the plan including plan reviewer name, affiliation, address, telephone number, and email address

Establish written procedures and internal processes to inspect construction sites to ensure that stormwater quality measures are properly installed and are maintained, to achieve the objectives of the ordinance or regulatory mechanism. At a minimum, the MS4 must:

Utilize a form, checklist, or an alternative, which at a minimum meets the requirements of the Construction Stormwater General Permit **to document inspections** and a method to notify responsible individuals of compliance status.

Identify priority sites for inspection based on the nature and extent of the construction activity, topography, threat to the degradation of water quality, characteristics of soils, and other factors as determined by MS4 priorities.

Inspect one hundred (100) percent of the actively disturbed construction sites **quarterly**. (inspect all active permitted sites quarterly)

Establish written policy and procedures to enforce the local ordinance or regulatory mechanism including, but not limited to:

Legal authority to enforce the ordinance.

Procedural steps and actions that will be used to address violations, including compliance and **escalating enforcement**

Develop and/or **adopt written standards** and specifications for the implementation of stormwater quality measures (BMPs) on construction sites.

Develop written standard operating procedures (SOPs) for receipt, resolution, and **tracking of public inquiries**, complaints, and other information submitted regarding local construction projects.

Submit a signed certification to IDEM according to the following schedule.

A **new MS4** is required to submit the certification once the ordinance or other regulatory mechanism and the program has been developed or **three hundred sixty-five (365) days from the date the initial NOI** submittal was received by IDEM, whichever is earlier. *Prior to submittal of the certification construction plans must be submitted in accordance with the Construction Stormwater General Permit to IDEM or the SWCD when designated by IDEM.*

Perform an evaluation and an assessment of the effectiveness of the program annually (self-audit) and update as necessary. Evaluate and assess the following:

- Regulatory mechanism(s) (i.e. ordinance).

- Plan review process, policy, and procedures.

- Site Inspection process, policy, and procedures.

- Standards and specification manual and/or guidance documents.

- Policy and procedures related to management and compliance of MS4 owned and/or operated projects.

- Assess coordination with other MS4 departments.

- Develop and implement a plan and schedule to address program deficiencies, improvements, and modifications to the program.

Document annual training attended by MS4 staff and/or contractual staff that are specific to the responsibility (i.e. plan review, inspection, compliance, and enforcement) the individual performs for the MS4.

The documentation must at a minimum include:

- Responsibility of staff member.

- Dates and types of training attended.

- List professional certifications MS4 staff have obtained or maintain.

Comply with the requirements of the Construction Stormwater General Permit for projects that are **owned and/or operated by the MS4** and in addition:

Submit construction/stormwater pollution prevention plans **to the SWCD** or if directed to IDEM for review and a determination that the plan meets the minimum requirements of the Construction Stormwater General Permit.

Comply with the provisions of the MS4 ordinance.

Develop policy and procedures to ensure compliance with the Construction Stormwater General Permit that **addresses coordination across departments** within the **MS4 organizational structure**. The policy and procedures at a minimum must include **project self-monitoring**

Maintain an **inventory** (spreadsheet) of all construction site projects that are subject to the Construction Stormwater General Permit, the MS4 ordinance, and those that are owned and/or operated by the MS4. The MS4 is required to:

Track project information, including:

- Project name.

- Latitude and longitude of the project and where applicable the address.

- Receiving water(s).

- Project start date.

- Status of the project (i.e. active, terminated).

- An indication of compliance status, including enforcement actions undertaken (does not apply to projects owned and/or operated by the MS4).

Upon notification, submit an inventory report:

- Within 48 hours of notification.

- On a regular schedule **as designated by IDEM**, but no more frequently than monthly.

Report progress in an annual report (Section 8.0) that at a minimum includes:

Status of measureable goals, program requirements, compliance schedules, and timetables. If objectives are not being met for a specific program element, explain the implementation problems encountered, and changes made to resolve problems identified.

The number of construction **projects owned and/or operated by the MS4** that are active at the time of submittal.

The number of construction sites obtaining a MS4 entity-issued **stormwater run-off permit** or authorization to discharge.

The number of construction **sites inspected**.

The number and type of **enforcement actions** taken.

The number of public **information requests** and/or **complaints** received including the name and location of the construction site and follow-up taken by the MS4.

The number and types of construction stormwater **training opportunities** that were provided **to contractors, developers and builders** during the reporting period.

4.6 SWQMP POST-CONSTRUCTION STORMWATER RUN-OFF MCM



A MS4 operator must develop and administer a comprehensive program to address discharges of post-construction stormwater run-off from new development and redevelopment. The program must include a strategy to **manage the program, **monitor** compliance, and, as necessary, **enforce** violations of the local ordinance. MS4s renewing permit coverage, must assess program requirements and goals from the previous permit, modify as necessary, and implement the requirements of this permit. A MS4, at a minimum must:**

Develop or revise and **update a program** with specific timelines to achieve the requirements of this MCM.

Develop or revise and **update an ordinance** or other regulatory mechanism that at a minimum, addresses post-construction stormwater run-off including, but not limited to: All new development and redevelopment with land-disturbing activities of **one (1) or more acres** of land or disturbances of less than one (1) acre of land that are part of a larger common plan of development or sale when the larger common plan will ultimately disturb one (1) or more acres of land.

New retail **gasoline outlets** and **new MS4 fueling areas** or those that replace their existing tank systems, regardless of size are **required to install appropriate measures to reduce lead, copper, zinc, and polyaromatic hydrocarbons** in stormwater run-off.

Incorporate performance standards into an ordinance and/or other resource documents. The program, at a minimum, must:

Establish design criteria to **reduce pollutants** and manage stormwater quantity that at a minimum meets or exceeds the post-construction requirements as identified in the Construction Stormwater General Permit.

Reference a menu of stormwater management measures and standards that are appropriate for the local community to minimize water quality impacts and attempt to maintain pre-development run-off conditions. The measures **must include** structural, non-structural, and **low impact/green infrastructure principles**.

At a minimum require that stormwater discharges from new development and redevelopment sites is managed in such a way that the **post-development discharge does not exceed the pre-development discharge** based on the two-year, ten-year, and one hundred-year peak events. This is achieved through implementation of site design strategies, control measures, and other practices deemed necessary by the MS4.

Identify MS4 owned and/or operated stormwater measures that are defined as a Class V injection well (large commercial or multi-family septic systems or dry wells) and require they are registered with U.S. EPA. Refer to the U.S. EPA Underground Injection Well Program for the definitions and complete registration process.

Where appropriate, and to the extent of the MS4s authority, the program may also include, but is not limited to:

- Preservation of buffer strip and riparian zones.

- Minimization of land disturbance and surface imperviousness.

- Minimization of inter-connected impervious areas.

- Maximization of open space.

Select and utilize, where appropriate, any combination of practices or controls that promote volume reduction, infiltration, filtering, harvesting, evapotranspiration, vegetative practices or alternative treatment systems. The following standards are required and **must** be utilized in the decision making process:

Infiltration practices will not be allowed in wellhead protection areas as the primary water quality treatment measure, unless the measure is designed to treat the pollutant(s) of concern that originate in the drainage area of the measure.

Discharges from new development and redevelopment sites will not be allowed directly into karst (spring, sinkhole, cave) features without pre-treatment.

Establish standards to reduce outfall scouring and stream bank erosion.

Utilize water quality and watershed protection methods that require implementation of consistent water quality protection measures for new development and redevelopment sites. By the beginning of the fifth year of permit coverage incorporate these elements into MS4 decision making processes, and guidance.

Develop and implement a written operational and maintenance (O&M) plan or requirement for all stormwater structural measures that are owned and/or operated by the MS4 and those within private development to ensure the long-term operation and maintenance of the measures.

The requirements must be enforceable and include one or more of the following:

- The owner/operators signed statement accepting responsibility for maintenance when the property is **legally** transferred to another party.

- Written conditions in a sales or lease agreement that requires the recipient to assume responsibility for maintenance.

- Written conditions for residential properties operated by a homeowners association or other entity.

- Any other **legal** agreement that assigns permanent responsibility for maintenance of structural stormwater management measures.

Develop and administer an **inspection program** to ensure that all post-construction measures are maintained and operational for those owned and/or operated by the MS4 and as appropriate for those measures operated by private entities.

Establish written procedures and internal processes to inspect post-construction measures to ensure the measures are maintained and operational for those owned and/or operated by the MS4 and as appropriate for those measures required to be installed at the direction of the MS4 and operated by private entities. At a minimum, the MS4 must:

Develop a form, checklist, or an alternative **to document inspections** and a method to notify responsible individuals of compliance.

Inspect one hundred (100) percent of all post-construction measures owned and/or operated by the MS4.

Inspect existing post-construction measures as of the permit start date operated by private entities at **20 percent annually** with 100 percent completed by the end of the permit cycle.

Submit a signed certification to IDEM according to the following schedule.

A new MS4 is required to submit the certification once the ordinance or other regulatory mechanism and the program has been developed or **five hundred forty-eight (548) days from the date the initial NOI** submittal is received by IDEM or, whichever is earlier.

Review and assess the program annually (self-audit) and update as necessary.

Evaluate and assess the following:

- Regulatory mechanism(s) (i.e. ordinance).

- Plan review process, policy, and procedures.

- Site Inspection process, policy, and procedures.

- Standards and specification manual and/or guidance documents.

- Policy and procedures related to management and compliance of MS4 owned and/or operated projects.

- Assess coordination with other MS4 departments.

Develop and implement a plan and schedule to address program deficiencies, improvements, and modifications to the program.

Document annual training attended by MS4 staff and/or contractual staff that is specific to the responsibility (i.e. plan review, inspection, compliance, and enforcement) the individual performs for the MS4.

The documentation must at a minimum include:

- Responsibility of staff member.

- Dates and types of training attended.

- List professional certifications MS4 staff have obtained or maintain.

Report progress in an annual report (Section 8.0) that at a minimum includes:

Status of measurable goals, program requirements, compliance schedules, and timetables. If objectives are not being met for a specific program element, explain the implementation problems encountered, and changes made to resolve problems identified.

Updates to the post-construction **ordinance** or regulatory mechanism.

Number of sites requiring post-construction controls.

Number, type, and location of **structural measures installed**.

Number, type, and location of **structural measures modified** to function properly or improve water quality benefits.

Number, type, and location of **structural measures inspected** to ensure each meets design requirements and/or are being maintained.

QUESTIONS?

