

# Industrial Storm Water Rules Necessary To Protect Our Water Resources

While a summer rain may seem like a welcome break from scorching heat, rainfall during any month of the year can pick up hazardous chemicals and contaminants; this polluted water can ultimately degrade the nation's surface and ground waters. In order to minimize the potential for contaminated runoff to impact lakes, rivers, and groundwater and in order to remain in compliance with state and federal rules, owners and operators of industrial sites need to understand and comply with their state-specific National Pollutant Discharge Elimination System (NPDES) industrial stormwater discharge rules. For example, the Minnesota Pollution Control Agency (MPCA) recently reissued the General Storm Water Permit for Industrial Activity; the permit reissuance requires all applicable facilities to apply for permit coverage. The new Minnesota rules went into effect April 5, 2010

Storm water is defined under 40 CFR 122.26(b)(13) as "storm water runoff, snow melt runoff, and surface runoff and drainage." In simple terms, it is the water flow that results from precipitation and that occurs immediately following a rainfall or a snowmelt. Many industrial facilities, especially facilities that handle or store materials outdoors, expose



**Stormwater may be carried in subsurface pipes for long distances before discharge to surface waters.**

storm water to pollutants such as metals, fuel, oil, grease, and salt. When storm water comes in contact with these materials, contaminants can be picked up and transported by the water to the nearby storm sewer (which acts as a conduit to a nearby water body), directly to a surface water, or to the groundwater. The poten-

tial cumulative impact of contaminated storm water on the nation's water resources results in degraded water quality.

## History of Industrial Storm Water Regulation

The Clean Water Act (CWA) and its amendments prohibit the discharge of any pollutant to a water body in the United States unless it has been authorized by a NPDES permit. Point-source pollution from industrial wastewater discharges has been regulated since the CWA enactment in 1972. In 1987, Congress amended the CWA to direct the Environmental Protection Agency (EPA) to implement specific permit programs to increase the regulation of industrial storm water discharges. Phase I went into effect in 1990, and in 2003, Phase II rules went into effect. On September 29, 2008, the EPA published its Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP). The permit

provides general requirements that apply to all facilities requiring a permit, industry sector-specific requirements, and specific requirements for individual states and Indian country lands. Each step in this rulemaking process has increased the number of facilities that are regulated, as



**Benchmark monitoring often occurs at end-of-pipe locations.**

well as provided specific guidance and requirements for necessary inspections, monitoring, and reporting.

The EPA has delegated its authority to implement the storm water NPDES to

most states, and states that have the authority to implement the storm water program may choose to have more stringent rules than the federal regulations. Currently, the EPA is the permitting

authority for Idaho, Massachusetts, New Hampshire, New Mexico, the District of Columbia, and Indian country and/or federal facilities in many of the other 46 states. Additionally, the EPA is the storm water permitting authority for American Samoa, Guam, Johnson Atoll, Midway Island, Northern Mariana Islands, Puerto Rico, and Wake Island.

In Minnesota, the MPCA is the storm water permitting authority. Minnesota's first General Storm Water Permit for Industrial Activity was issued in 1992, and the second General Permit was issued in 1997. In 2002, the second General Permit expired and since that time facilities have been operating under the old, expired permit. **On April 5, 2010, the new NPDES General Permit (Number MN R050000) became effective. The new permit requires all previous industrial storm water general permit holders and facilities with No Exposure Exclusion Certificates to reapply for coverage under the new permit.** This new permit is more comprehensive than the previous permits and requires additional planning and monitoring not previously included in the 1992 or 1997 General Permits.

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**Who needs storm water coverage?**

The federal regulations have identified ten categories of stormwater discharges that are associated with industrial activity that are required to be covered under a NPDES permit (40 CFR §122.26(b)(14) (i)-(ix), (xi)). These categories include, for example, coal and mineral mining, landfills, steam electric power generating plants, metal scrap yards, and light manufacturing. In order to determine if your facility requires coverage, first identify your facility's narrative activity or primary Standard Industrial Classification (SIC) code then compare that to your state's requirements to determine if permit coverage is required (for example, see Appendix D in the EPA permit, also Appendix D in the MPCA permit).

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**How to obtain a Storm Water Permit in Minnesota**

Once it is determined that storm water coverage is necessary, the facility

owner (or his/her designee) must apply for coverage under the state's General Permit or document their exclusion (see No Exposure Exclusion Option below). Prior to applying for a storm water permit, the owner must develop a site-specific

Industrial Storm Water Pollution Prevention Plan (SWPPP). The purpose of the SWPPP is to identify potential sources of contaminants and pollutant discharge and to describe the location and type of structural and non-structural best

management practices (BMPs) at the site. The General Permit has a strong focus on good housekeeping, contaminant cleanup, reducing and eliminating exposure, creating storm water shelters, preventative maintenance, and pollution prevention practices.

The SWPPP itself is a detailed document that describes and assesses facility operations including significant materials used, generated, or stored at the site. Examples of industrial activity and significant activities include fueling, outdoor processing or handling operations, outdoor storage, presence of liquid storage tanks, loading or unloading of bulk materials, waste treatment, particulate-generating processes, and vehicle maintenance. Pollutants are identified based on the findings of the assessment, and storm water control measures are designed and implemented based on the facility operations. Additionally, the SWPPP requires a spill prevention and response procedure, a mercury minimization plan (if applicable), and an employee training program. Furthermore, the EPA and the MPCA have identified 29 Industrial Activity sectors that have specific sector requirements that are listed in the EPA MSGP and the MPCA General Permit. Maps are an integral part of the SWPPP and are used to identify significant facility-specific areas including impervious surfaces, and the locations of industrial activities, significant materials, storm sewer inlets, and impaired waters near the facility.

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Once the SWPPP has been created, the owner or operator must then complete and submit a Notice of Intent (NOI) (in Minnesota called the General Storm water Permit application form) and any required application fee to the permitting authority. In Minnesota, the new permit deadline for application submittal varies by sector, with Sector Group 1 applications due by June 7, 2010; Sector Group 2 applications due by August 6, 2010; and Sector Group 3 applications due by October 5, 2010. For new industrial discharges, the EPA requires NOIs to be filed at least 60 days prior to discharge or a minimum of 30 days prior to discharge if the SWPPP is posted on the internet during that time period. A permit letter and certificate acknowledging permit coverage are sent to the owner from the permitting authority upon receipt and processing of the permit application.

### Once Coverage is Received – Then What?

Both the EPA MSGP and the MPCA General Permit require regular facility inspections. Inspections must evaluate the facility to determine if the SWPPP still accurately reflects site conditions and activities and if BMPs are working effectively. The inspections are also designed to determine if new significant contaminant sources have been added to the facility since the previous inspection. In Minnesota, the permit requires that the facility be inspected at least once each month, and at least one inspection per year must occur during a runoff event. Inspections are summarized in an Annual Report which must be submitted to the MPCA by March 31st of each year.

One of the major differences between Minnesota's 1997 General Permit and the new 2010 General Permit is that the new permit requires "benchmark" monitoring and sampling. Benchmark monitoring is also required in the EPA MSGP. The goal



**Surface water running along roadways may contain contaminants.**

of benchmark monitoring is to determine if the structural and non-structural BMPs are effective. Benchmark monitoring locations are representative sampling points that are down-gradient of BMPs but are prior to discharge from the site, and they provide locations where samples can be collected that represent the concentration of pollutants that discharge from the site.

Minnesota requires that sampling must begin 12 months after the permittee receives coverage under the permit and that sampling must occur every three months and within 30 minutes of a discharge event. In Minnesota, the required chemical

analyses (except chlorine and bromine) must be completed by a laboratory certified by the Minnesota Department of Health. Exceedance of benchmarks does not (yet) constitute a violation under the MPCA General Permit. However, the permittee is required to perform any nec-

essary corrective actions to address each exceedance including the maintenance or implementation of new BMPs. Benchmark monitoring reports are required to be sent to the MPCA by the 21st day of the month following sampling.

In addition to benchmark monitoring (required by all facilities), both the EPA MSGP and the MPCA General Permit require additional storm water monitoring at certain facilities. This additional monitoring is called "effluent" monitoring, and it is required for eight sector groups (including landfills, coal storage piles, wet decking storage areas, phosphate fertilizer manufacturing facilities, asphalt emulsion facilities, cement manufacturing facilities, and sand or gravel mine facilities). Effluent monitoring is required once each year at these facilities.

### No Exposure Exclusion Option

Many facilities may qualify for the No Exposure Exclusion Certification if all industrial materials and activities are sheltered from exposure to rain, snow, snow melt, and runoff. If a facility is eligible for the No Exposure Exclusion, a SWPPP is not required, though it is advisable to continue monthly inspections to document that the conditions of the No Exposure Exclusion continue to be met. Appendix K of the EPA MSGP contains the No Exposure Certification Form and the MPCA General Storm Water Permit Application for Industrial Activity includes questions to determine if the No Exposure Exclusion is a possibility in Minnesota. In Minnesota, no fee is required to obtain the Exclusion Certificate. **L&W**

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*For More Information: The current Industrial Storm Water General Permit and related information are available online at the EPA and most state websites. If you would like additional information regarding how the new Minnesota permit impacts your facility, or if you would like assistance developing a SWPPP or submitting permit applications or No Exposure Exclusion applications, contact Rebecca Forman at (651)487-7013.*