

Storm Water Pollution & Illicit Discharge



An **Illicit Discharge** is the discharge of pollutants or non-storm water materials to storm sewer systems via overland flow or direct dumping of materials into a catch basin. Some examples of illicit discharges include the overland drainage from a carwash or dumping used motor oil in or around a catch basin. These non-storm water discharges occur due to illegal connections to the storm drain system from business or commercial establishments. As a result of these illicit connections, contaminated wastewater enters into storm drains or directly into local waters before receiving treatment from a wastewater treatment plant. Illicit connections may be intentional or may be unknown to the business owner, and often happen due to the connection of floor drains to the storm sewer system. Additional sources of illicit discharges can be failing septic systems, illegal dumping practices, and the improper disposal of sewage from recreational practices such as boating or camping.

Illicit discharge detection and elimination programs are designed to prevent contamination of ground and surface water supplies by monitoring, inspection and removal of these illegal non-storm water discharges. An essential element of these programs is an ordinance granting the authority to inspect properties suspected of releasing contaminated discharges into storm drain systems. Guaranteed "right of entry" to private property is critical to allowing inspectors to identify and take corrective actions on individual sources of illicit discharges. Another important factor is the establishment of enforcement actions for those properties found to be in noncompliance or that refuse to allow access to their facilities. Among the enforcement actions that have been used in ordinances: cease and desist orders, suspension of water or sewer service, and criminal and civil penalties including charging the owner of the property for the cost of abatement. Methods for appeal are often included in these enforcement measures that provide owners with avenues for compliance with the ordinance.

Illicit Discharge Warning Signs:



Dry Weather Flow is noted when it has not rained for at least 72 hours and the storm drain has flow or the drain shows signs of intermittent flow (staining and odor).



Sanitary Sewage may be present if there is black staining inside the drainage pipe; visible evidence of sanitary waste, such as toilet paper; or opaque or gray water. Sewage may originate from septic tank overflow pipes or improperly dumped travel trailer waste.



Suds may be harmful to fish because suds deplete oxygen levels in the water. Suds often enter lakes and streams as a result of improperly connected car washes or washing machines.



Oil/Gas is recognized as a sheen on the water. Natural sheens may be differentiated from an oil\gas sheen by swirling the sheen around in the water. If it re-attaches, the sheen is oil\gas. Natural sheens will remain separated. Oil\Gas enters waterbodies via storm water runoff (spills while topping off at gas stations, oil leaks on pavement, etc.) and illegal dumping.

Guidelines for Developing and Implementing this Measure:

The objectives of the illicit discharge detection and elimination minimum control measure is to have regulated small MS4 operators gain a thorough awareness of their systems. This awareness allows operators to determine the types and sources of illicit discharges entering their systems, and establishes the legal, technical, and educational means needed to eliminate these discharges.

What is a Small MS4?

MS4 is an acronym for "Municipal Separate Storm Sewer System," as defined by the US Environmental Protection Agency (EPA). It is defined as a publicly owned conveyance or system of conveyances from ditches, curbs or underground pipes that divert storm water into the surface waters of the state. Under the Phase II program, the following are considered municipalities: United States, a state, city, town, borough, county, parish, district association or other public body, also military installations, state or federal hospitals, county prison complexes, state colleges or universities, highways and other thoroughfares.

Who is required to apply for a MS4 General Permit in Phase II?

A MS4 is subject to storm water regulation if it is located within an "Urbanized Area" as defined by the U.S. Census Bureau in the 2000 (or later) census. Important note: Small MS4s operators located outside of the urbanized areas may be required to obtain a MS4 General Permit if there exists or there is the potential for significant water quality impairment. The National Pollutant Discharge Elimination System (NPDES) permitting authority (EPA) could make this determination by itself or after receiving a petition from concerned citizens or groups.

What is required for a MS4 under Phase II?

If your MS4 falls within an urbanized area, you must obtain <https://dnr.wi.gov/topic/stormwater/municipal/> .

The general permit requires the submission of a Notice-of-Intent (NOI), which requires general information about who owns and operates the MS4, where the MS4 is located, and to what surface waters the MS4 discharges. In conjunction with the NOI, a detailed storm water management program must be designed and implemented.

Over the five year permit term, the operator is responsible for implementing Best Management Practices and Measurable Goals to address the six minimum control measures that will control pollutants from all of the MS4 discharge points to the "Maximum Extent Practicable."

When do MS4 facilities need to apply for a MS4 General Permit?

The final MS4 General Permit was issued in the Federal Register and became effective on May 1, 2003. The permit requires that all owners and operators of small MS4 file their Notice of Intent applications by July 30, 2003.