



WATER RESOURCE CENTER

## FACT SHEET

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Southwestern Pennsylvania Commission

# WATER RESOURCE CENTER

### Mission

*To promote regional collaboration on water topics; be a leader in facilitating coordination and education; and provide technical assistance to its member governments.*

Two Chatham Center  
Suite 500  
112 Washington Place  
Pittsburgh, PA 15219-3451  
Voice (412) 391-5590  
Fax (412) 391-9160  
www.spcwater.org



# ILLICIT DISCHARGE DETECTION AND ELIMINATION

## Small MS4 Program: Minimum Control Measure #3

**Illicit Discharge Detection and Elimination** is one of the six (6) Minimum Control Measures (MCMs) required under the small MS4 program\*. The goal of the Illicit Discharge Detection and Elimination (IDD&E) is to reduce pollution to our waterways through the removal of non-stormwater contributions to the storm sewer system. Common sources of illicit discharges include sanitary wastewater, improper disposal of auto and household toxins, and car wash wastewaters.

There are six (6) Best Management Practices (BMPs) required under this MCM.

**BMP #1 – Develop and implement a written program for the detection, elimination, and prevention of illicit discharges into your regulated small MS4.** Your program should include dry weather field screening of outfalls for non-stormwater flows, and sampling of dry weather discharges for selected chemical and biological parameters. Test results should be used as indicators of possible discharge sources. The program must include the following:

- ◆ Procedures for identifying priority areas
- ◆ Procedures for screening outfalls in priority areas during varying seasonal and meteorological conditions
- ◆ Procedures for identifying the source of an illicit discharge when a contaminated flow is detected
- ◆ Procedures of eliminating an illicit discharge
- ◆ Procedures for assessing the potential for illicit discharges caused by the interaction of sewage disposal systems
- ◆ Mechanisms for gaining access to private property to inspect outfalls
- ◆ Procedures for evaluation, program documentation, and assessment

### Why are illicit (illegal) discharges important?

Illicit discharges make their way to our waterways untreated. Illicit discharges such as paint or oil dumped into storm drains, septic effluent, car wash wastewater, and wastewater piping connected illegally can cause serious pollution issues. These illicit discharges can carry a variety of pollutants, such as:

- ◆ Heavy metals
- ◆ Bacteria
- ◆ Viruses
- ◆ Nutrients
- ◆ Oil and grease
- ◆ Solvents
- ◆ Toxins



MCM #3 under the MS4 program requires regular screening of stormwater outfalls to detect any illicit discharges. Photo: water.epa.gov

(OVER)



**BMP #2 – Develop and maintain a map of your regulated small MS4. The map must also show the location of all outfalls and the locations and names of all surface waters of the Commonwealth that receive discharges from those outfalls. Surface waters that should be included are creeks, streams, ponds, lakes, basins, swales, and channels that receive stormwater discharges. Outfalls should have unique names to assist in record-keeping.**



Some common sources of illicit discharges include fryer oil from restaurants (above), carwash wastewater (below), and septic tank effluent. Photos: [clemson.edu](http://clemson.edu) & [keepitcleanpartnership.org](http://keepitcleanpartnership.org)

**BMP #3 – In conjunction with the map created under BMP #2, new permittees should map the entire storm sewer collection system including roads, inlets, piping, swales, catch basins, channels, basin, and any other features of the permittees storm sewer system including municipal boundaries and watershed boundaries. New permittees should develop this map by the completion of the fourth year of the permit. Renewal permittees should update and maintain the map annually.**



**BMP #4 – Following the IDD&E program created under BMP #1, the permittee shall conduct outfall field screening, identify the source of any illicit discharges, and remove or correct any illicit discharges using the procedures outlined under BMP #1.**

**BMP #5 – Enact a stormwater ordinance to implement and enforce a stormwater management program that includes the prohibition of non-stormwater discharged to the regulated MS4. Ordinances associated with an Act 167 Stormwater Management Plan that was approved by PA DEP in 2005 or later meet the requirements of BMP #5. You can also meet the ordinance requirement by utilizing PA DEP's model MS4 Stormwater Management Ordinance or by developing an ordinance that meets all applicable requirements outlined in the MS4 Stormwater Management Ordinance Checklist.**



Unusual colors, odors, or flow volumes may be indicators of illicit discharges. Photos: [facilities.vt.edu](http://facilities.vt.edu) & [pwcgov.org](http://pwcgov.org)

**BMP #6 – Provide educational outreach to public employees, business owners and employees, property owners, the general public, and elected officials about the program to detect and eliminate illicit discharges. Educational outreach should be conducted to the target audiences by the methods outlined in MCM #1, Public Education/Outreach. Programs should be developed to encourage and facilitate public reporting of illicit discharges, illegal dumping, or outfall pollution.**



\*Please note that this information is not intended to replace regulatory requirements. Actual individual and/or general permits issued by PADEP should be followed to ensure that MS4 regulatory requirements are met. This information was adapted from Appendix A of PADEP's Stormwater Management Program & EPA's Stormwater Fact Sheet Series).