

A Citizen's Guide to Monitoring Storm Water

Storm water runoff is precipitation from rain or snowmelt that flows over the ground. On its way to the storm drain, water can pick up debris, chemicals, dirt and other pollutants. Any substance entering the storm sewer system gets released untreated into the bodies of water we use for swimming, fishing, and drinking.

A Municipal Separate Storm Sewer System (MS4), refers to the system of pipes, ditches and/ or gullies managed by a government entity. This system serves us by collecting storm water and distributing it into detention/retention ponds and waterways, including local waterways.

Illicit Discharges contain any substances other than storm water that end up in the storm sewer system. Examples of these substances are oil, paint, wastewater and more. These contaminants have a negative effect on the health of our local waterways and the communities of people surrounding them.

Sources of Illicit Discharges

- Sanitary wastewater or water from toilets, sinks, and bathtubs
- Discharge from septic tanks and fields
- Car wash wastewaters (commercial)
- Improper oil disposal
- Radiator flushing disposal
- Laundry wastewaters
- Spills from roadway accidents
- Improper disposal of automobiles and household toxics

How do I Spot a Potential Illicit Discharge?

In a neighborhood or at a commercial site, look for pipes in disrepair or hoses that lead to a storm drain or body of water. Watch for stains, suds, unusual odors, structural damage to streets or gutters, and abnormal vegetative growth in nearby lakes and streams. Sump pumps, irrigation water, and certain other non-storm water discharges are not illicit.

On or near the water, the most obvious way to spot an illicit discharge is during dry weather. Since storm sewer systems exist to carry storm water runoff, they are generally active during rain events. Without the presence of rain, water flowing from storm water outfalls or along swales may carry with it bad news.

Sanitary Sewer Discharge	Staining on pipe, heavy foam, gray or discolored water, odors (sewage, chlorine, rotten eggs, detergents), and sanitary debris such as fecal material and toilet paper.
Illegal Dumping, Spills, or Floor Drain Connection	Oily sheen, trash or unnatural debris, petroleum odors, and stained sediment, rocks, and vegetation.
Industrial Discharge	Discolored water and chemical odor.
Fertilizers or Sanitary Sewer Waste	Algae growth or heavy vegetation at or near the outlet.