FACT SHEET: Finding the Source of an Illicit Discharge

If you find evidence of an illicit discharge in your MS4, or if someone calls to report a suspected illicit discharge, do you know how to find the source? Sometimes it takes a lot of detective work, but there are things you can do to make your job easier. RETTEW can help collect samples of suspected illicit discharges using proper quality control and chain of evidence procedures.

WHAT IS AN ILLICIT DISCHARGE?

An illicit discharge is anything that is not stormwater except:

- ▶ Flows from firefighting activities, fire hydrant flushing, and waterline flushing
- ▶ Non-contaminated irrigation water, stream flow, and springs
- Non-contaminated pumped groundwater from footer drains and crawl spaces, HVAC condensation, and water from geothermal systems
- Residential vehicle wash water where cleaning agents are not used
- Non-contaminated hydrostatic test water discharges.

If someone dumped a substance into the MS4 or made an illegal connection, you may find evidence at the outfall or around an inlet. If there is staining (i.e., from paint), bubbles, an oily residue, a sheen, or toilet paper, it is likely an illicit discharge has occurred. Finding the source can be challenging.

THE IMPORTANCE OF COMPREHENSIVE MAPPING

A comprehensive stormwater system map includes both public and private systems and makes it easier to determine possible sources of an illicit discharge. If you see an oily or sudsy substance discharging into a stream from the end of a pipe, the map can help determine the area where the discharge came from. In addition to mapping all storm facilities, it is important to define the boundary of the drainage area so you can see the land area associated with each outfall. This will limit the area of your search for the source.

Older systems may have underground connections to your MS4 that are not mapped because there is no record and/or because you cannot see the connection by looking in a manhole/inlet. In this case, a video inspection can find illegal connections, such as a homeowner or business incorrectly connecting their wash water pipes. A video inspection will also highlight any cracks, leaking joints, damage, and clogs that may cause leaking septic system discharge to access the MS4. RETTEW has the resources, equipment, and experience to help you track down the source of the illicit discharge.

WE CAN HELP!

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ENLIST THE PUBLIC TO HELP

Municipal staff do not have the time or capacity to inspect the MS4 daily, and it is unlikely a homeowner is doing laundry at the moment the outfall is being inspected. Municipalities should work to educate the community on what an illicit discharge is and promote public reporting of suspected illicit discharges. You may even want to implement an outfall and/or inlet adoption program where a resident is tagged to keep an eye on things.



MAPPING ASSISTANCE

RETTEW has the equipment to locate public and private underground utilities to minimize the potential for conflicts when installing or maintaining stormwater management facilities. Ask how we can work with your municipality to map your infrastructure.

