

City of Valdosta

Illicit Discharge Detection and Elimination Field Guide

An **illicit discharge** is defined by the US EPA's Phase II Storm Water Regulations as "any discharge to an MS4 that is not composed entirely of storm water..." with some exceptions. These exceptions include discharges from NPDES permitted industrial sources and discharges from fire-fighting activities. Illicit discharges are considered "illicit" because MS4s are not designed to accept, process, or discharge such non-storm water wastes.

MS4 means a conveyance or system including: roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains

- (i) Owned or operated by a State, city, township, county, district, association, or other public body including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, that discharges into waters of the state;
- (ii) Designed or used for collecting or conveying storm water;
- (iii) Which is not a combined sewer; and
- (iv) Which is not part of a POTW

Stormwater testing supplies

- Masking tape
- Permanent marker
- Flashlight
- Tape measure
- Camera (w/extra batteries)
- Latex gloves
- Rubber boots and/or waders)
- Watch / phone
- Cooler with ice
- Distilled water
- Laboratory bottles (FC / Surfactants)
- Sanitized container for on-site testing
- Extendable water sampling pole w/bottle
- pH meter
- Surfactants test (indicator)
- Conductivity meter
- Clipboard
- Writing utensils
- Outfall screening form
- Chain of custody form
- Stormwater Map Book
- Hand cleaner
- Bug repellent
- First aid kit
- Waste disposal container

Calibrate

- pH meter (daily)
- Conductivity probe (weekly)

Illicit Discharge Testing Procedure

1. Go to site.
2. Put on flashers.
3. Locate the outfall.
4. Watch for snakes.
5. If outfall is at rear of property, notify resident of your presence.
6. Make visual observations about the pipe, its condition.
7. Take a picture of the outfall.
8. If no discharge is found, proceed to next location. (Complete necessary paperwork)
9. If water sample will be collected, put on gloves.
10. Gather equipment.
11. Note water color, odor, turbidity, and floatables.
12. Collect a water sample in a laboratory supplied bottle for analysis or sanitized container for on sight testing.
13. Put sample for lab in cooler with ice.
14. For on-sight testing, rinse test tubes / meters with the water to be tested.
15. Run water quality tests on sample.
16. Rinse probes with distilled water.
17. Complete necessary paperwork.
18. Check to make sure all equipment is collected before leaving the site.

Water Quality Test Parameters and Uses

Water Quality Test

- | | |
|---|---|
| 1. Conductivity..... | Indicator of dissolved solids |
| 2. Bacteria (FC and <i>E. Coli</i>)..... | Indicates presence of sanitary sewer |
| 3. Surfactants..... | Indicates presence of detergents (e.g. laundry and car washing) |
| 4. pH..... | May indicate commercial or industrial discharge |
| 5. Temperature..... | May indicate industrial cooling/sanitary sewer |
| 6. Fluoride..... | Indicator of inflow from potable water source |

Use of Water Quality Test

Outfall Materials



Polyvinyl Chloride (PVC)



High Density Polyethylene (HDPE)



Vitrified Clay Pipe (VCP)



Reinforced Concrete Pipe (RCP)



Ductile Iron Pipe (DIP)



Corrugated Metal Pipe (CMP)



Watershed Names (HUC 8)	
	Withlacoochee (03110203)
	Alapaha (03110202)