First, let us explain an outfall and an illicit discharge.

An outfall is a pipe, open ditch or conveyance that transports stormwater from a municipal separate storm sewer system (MS4) to a creek, river, or lake.
An illicit discharge is any discharge to a municipal separate storm sewer system (MS4) that is not composed entirely of stormwater with some exceptions as defined by the EPA.

We test for an illicit discharge at the outfall if the liquid that is being discharged has obvious signs of pollutants like foam, odor, sheen, color, and clarity. To do this, we complete a number of steps. Learn more here.

Step 1: Identify the creeks, rivers and lakes that are waters of the state in the four MS4 Townships: Springfield, Washington, Madison, and Mifflin in Richland County

Step 2: We identify the outfalls in each township by making sure they meet the definition above then assigning them a specific name and GPS location.

Step 3: Each outfall must be re-visited within at least 72 hours after the last rainfall of a half inch or less, once a permit term which is every five years to see if there are any fluids that are currently being discharged.

Step 4: If the discharged fluid appears to have pollutants (foam, odor, sheen, color, and clarity) present, a sample of the discharge from the outfall is taken

Step 5: The sample is tested for the pollutant we think may be present. We will test for ammonia, e-coli, nitrates, phosphorus, potassium, nitrates, and dissolved oxygen to name some of them. All of which give us clues as to what may be causing the pollution. If the sample tests positive, we return to the outfall and begin tracking back up stream until the source of the pollutant is located.

Step 6: We work toward eliminating the pollutant by finding where it has originated and taking the appropriate steps to terminate the source.