ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

Stroudsburg Borough

Stormwater Management Program

(Last Updated 6/21)

Purpose

Stroudsburg Borough is working jointly with the Pennsylvania Department of Environmental Protection (PA DEP) to reduce the quantity of stormwater and increase the quality of stormwater runoff. The Borough is located within a US Environmental Protection Agency (EPA) designated urban area; therefore, the Borough is required to have a Small Municipal Separate Storm Sewer System (MS4) Permit. The MS4 Permit includes the development of a Stormwater Management Program. As part of this program, each MS4 permittee is required to develop and implement an *Illicit Discharge Detection and Elimination Program* (IDD&E) which is outlined in this document.

Background

Discharges from MS4s often include wastes and wastewater from non-stormwater sources. Illicit discharges enter the system through either direct connections (e.g., wastewater piping either mistakenly or deliberately connected to the storm drains) or direct connections (e.g., infiltration into the MS4 from cracked sanitary systems, spills collected by drain outlets, or paint or used oil dumped directly into a drain). The result is untreated discharges that contribute high levels of pollutants, including heavy metals, toxics, oil and grease, solvents, nutrients, viruses and bacteria to receiving bodies of water. Pollutant levels from these illicit discharges have been shown in EPA studies to be high enough to significantly degrade receiving water quality and threaten aquatic, wildlife and human health. Examples of illicit discharges are: sanitary wastewater, effluent from septic tanks, car washes, improper oil disposal, radiator flushing disposal. Laundry grey water, spills from roadway accidents and improper disposal of auto and household chemicals.

Program

In accordance with the Stormwater MCM #3, Illicit Discharge Detection & Elimination, the following is the program to detect and eliminate illicit discharges (BMP #1).

1) ***Procedure for Identifying Priority Areas***.

These are areas with a higher likelihood of illicit discharges, illicit connections or illegal dumping. Priority may include areas with older infrastructure, a concentration of high-risk activities or past history of water pollution problems.

Identified priority areas include areas north of McMichael Creek that are the drainage areas for both McMichael and Brodhead Creeks. These are areas of old infrastructure and are much more likely to be contributing illicit discharge to waterways.

2) ***Procedure for Screening Outfalls***.

Borough staff will visually screen outfalls during dry weather at least annually during the permit cycle. Dry weather is considered to be at least 48 hours without a rain event. If dry weather flow is present during the outfall inspection, the discharge and surrounding areas should be visually screened for color, odor, turbidity, sheen, floating or submerged solids and adverse effects of nearby plants and animals.

Should the visual inspection indicate that an illicit discharge may be occurring, the dry weather flow is to be tested for appropriate biological and/or chemical pollutant. Biological and chemical testing parameters may vary and are to be appropriate for the suspected pollutant (i.e., testing for fecal coliform where a sanitary sewer cross connection is suspected). Common parameters for dry weather flow which may contain pollutants include, but

are not limited to: pH, conductivity, E. Coli bacteria, fecal coliform bacteria, metals, suspended solids, dissolved solids, oils, ammonia, detergents, chlorine and fluoride.
The IDD&E Manual developed by the EPA and the Center for Watershed Protection is to be used as guidance. Additional outfall screenings may be necessary based on the results of the first inspection, or is biological/chemical testing indicates pollutants are present. Laboratory analysis is to be required for some biological and chemical testing.

If dry weather flow is not present, sampling and testing is not required.

Outfall screening records are to be retained for inclusion in the Borough's annual MS4 Report.

3) ***Procedure for Identifying the Source***.

When an illicit discharge/contaminated flow is detected, Borough staff begins to trace the source using maps of the Borough's stormwater system, cross-referencing maps of the sanitary sewer and water distribution systems.

After determining the drainage area to the outfall, the following procedures may be utilized as needed to track an illicit discharge to its source.

(a) *Storm Drain Investigation*. Using the storm sewer map, begin at the outfall and follow the storm sewer upstream. Depending on the extent of the drainage area, multiple sections of the storm sewer may need to be investigated for a particular outfall. Manholes and/or inlets are to be inspected for indicators of pollution. Biological and/or chemical testing/sampling will be performed as needed to isolate the source of the illicit discharge.

(b) *On-Site Investigations.* To pinpoint the exact source of an illicit discharge within the storm sewer system, additional testing may be necessary, including dye testing, camera testing or smoke testing. The Borough should select the appropriate testing method based on drainage area, frequency of the illicit discharge, location and accessibility.

4) ***Procedure for Eliminating an Illicit Discharge.***

Methods used to remove/correct illicit connections/discharges will be site specific. If the source of the discharge is the responsibility of the Borough, appropriate repairs must be completed to eliminate the source of pollution. If the source of discharge is a private property holder, then the Code Enforcement Office and Borough solicitor will be contacted to develop a plan for eliminating the illicit discharge.

5) ***Procedure for Program Documentation, Evaluation & Assessment.***

As a final step, all actions undertaken will be documented. Doing this will illustrate that continuous progress is being made to eliminate illicit discharges and connections. This data will also be used as one of the measurable goals achieved in the required MS4 required report.

Information documented will include: number of outfalls screened; flows observed; results of field screening and testing; any complaints received and corrected; and other follow-up investigations and corrective action work performed.

6) ***Procedures for Illicit Discharges Reported to the Borough***.

When an illicit discharge is reported to the Borough, Borough personnel will conduct a site visit to determine if an illicit discharge is present. If an illicit discharge has occurred, the Brough is to identify the source per written procedures. In all cases, whether an illicit discharge was confirmed or not, a report is to be completed providing the date. Location and field observations and be included in the Annual MS4 Report to DEP.

7) ***Procedures for Assessing the Potential for Illicit Discharges Caused by Interaction with Sanitary Sewer***

Stroudsburg Borough has many sections of the municipality that have extremely old infrastructure. Terra Cotta pipes are used extensively in the wastewater system which increases the likelihood of leaking; laterals are not recorded on any Borough mapping, which could result in sewer laterals being connected to the stormwater system.

In the Historic District, and the downtown area North of McMichael Creek and West of Brodhead Creek, if illicit discharge is found to be originating from these areas, and if testing points towards raw sewage contamination, efforts will be made to pinpoint the potential location of the contamination. Once the general area is located, further testing will be done to pinpoint the location as well as potential use of the Borough's camera truck and smoke testing. Once located, the source of illicit discharge will be remediated immediately.

8) ***Procedures for Gaining Access to Private Property to Inspect Outfalls***

Currently, Borough Code Enforcement Officials are allowed access to any property as part of their duties to investigate potential violations of the Borough Code. The Code also allows for administrative search warrants to be procured to assist in investigations when property owners are not responsive to requests from officials. This general investigative ability will be cited, if needed, to gain access to private property to inspect outfalls.

Land easements and consent agreements will be considered for access in the future, as well as a general ability for the MS4 Official to enter properties to inspect outfalls as well as the ability to procure administrative search warrants when appropriate and necessary.