

Illicit Discharge Detection & Elimination Program (IDD&E)

BASIS FOR THE PROGRAM

Our MS4 consists of a series of stormwater management facilities, inlets, pipes, swales, and outfalls; collecting and conveying stormwater from impervious areas and discharging them into various locations. Because much of the runoff flowing through the system ultimately makes its way into surface waterways like the Little Cocalico Creek and Harnish Run, the quality of that water must be monitored.

The IDD&E Program lays out cost-effective strategies to find, correct, and even prevent discharges to the MS4 that contain pollutants; in other words, illicit discharges. This Program is focused on monitoring discharges within the current MS4 area, maintaining consistency with the Pennsylvania Department of Environmental Protection's (PA DEP) NPDES permit. Best Management Practice #1 under Minimum Control Measure #3 requires that we perform the following as part of our local Stormwater Management Program:

BMP #1: You shall develop and implement a written program for the detection, elimination, and prevention of illicit discharges into your regulated MS4s. Your program shall include dry weather field screening of outfalls for non-stormwater flows, and sampling of dry weather discharges for selected chemical and biological parameters. Test results shall be used as indicators of possible discharge sources. The program shall include the following:

- *Procedures for identifying priority areas. These are areas with a higher likelihood of illicit discharges, illicit connections or illegal dumping. Priority areas may include areas with older infrastructure, a concentration of high-risk activities, or past history of water pollution problems.*
- *Procedures for screening outfalls in priority areas during varying seasonal and meteorological conditions.*
- *Procedures for identifying the source of an illicit discharge when a contaminated flow is detected at a regulated small MS4 outfall.*
- *Procedures for eliminating an illicit discharge.*
- *Procedures for assessing the potential for illicit discharges caused by the interaction of sewage disposal systems (e.g., on-lot septic systems, sanitary piping) with storm drain systems.*
- *Mechanisms for gaining access to private property to inspect outfalls (e.g., land easements, consent agreements, search warrants).*
- *Procedures for program documentation, evaluation and assessment.*

ILLICIT DISCHARGE & COMPLAINT TRACKING

Policing each and every property's runoff into the MS4 every day is not a realistic expectation of the Township Public Works Department. Therefore, a combination approach is needed to inspect for chronic illicit discharges with a field monitoring program (discussed later) and to call upon the community to keep an eye out for anything unusual. This type of public participation is also identified in the Township's *Integrated Public Education and Outreach & Public Involvement and Participation Programs* as a way for residents in neighborhoods and developments to become involved, specifically:

“Awareness of how the storm sewer system works, where it drains to, and why dumping any substance into it has a negative impact on waterways is needed; creating this awareness can reduce pollution.”

Through our public awareness campaign, we intend to “recruit” citizens to notice any telltale signs of illicit discharges in the storm sewer system, especially during dry weather conditions. Township Staff will ensure that any reported incidents are communicated between the administrative staff and the Public Works Department (and vice versa) for reporting purposes. A prompt visual inspection of the site will take place, resulting in an assessment of the perceived illicit discharge through photo-documentation and tracking it back to a potential source. If pollutants are suspected, the subsequent process will mirror that which is used in the Township's recurring field monitoring regimen, detailed later in this document.

FIELD MONITORING FOR DISCHARGES

Other than the Priority Areas, all stormwater outfalls regulated by the Township's MS4 NPDES permit must be inspected at least once per five-year permit term, as specified by BMP #4 under MCM#3 of Pennsylvania's MS4 General Permit. IDP Priority Areas, however, will be monitored no less frequently than once per year for illicit discharges.

Such discharges conveying water from a private facility into the public conveyance system are important to monitor since the ultimate downstream outfall into a waterway may be our responsibility. Cross-drainage culverts under Township roads will not be monitored as part of this program, consistent with Section 11.3 of the Center for Watershed Protection's guidance document.

Appendix C contains the Outfall Reconnaissance Inventory/Sample Collection Field Sheet (ORI) to be used during this process. Use of the ORI will standardize our operations and reporting throughout the upcoming years. Field monitoring consists of Township Staff visiting the selected outfalls and observing current conditions, using generally-accepted practices to look for dry weather flows and/or evidence of illicit discharges. Photo-documentation of the outfall will supplement the ORI, and the field inspector will attempt to trace the discharge back to a probable source, when possible. If an illicit discharge is recognized and a laboratory analytical test confirms the presence of pollutants in the sample, follow-up action is warranted.

Follow-up is initiated by contacting the landowner and/or operator of the facility suspected of producing the illicit discharge, with the intent of eliminating ongoing or future prohibited discharges into the storm

sewer system per §22-610.K of the Township's Code of Ordinances. Subsequent inspections of the affected area will be conducted to ensure that the issue has been eliminated. If conditions persist, actions will be taken pursuant to §§22-803 and 22-804.

PREVENTION

In large part, prevention of illicit discharges into the MS4 and our waterways begins with an informed citizenry. This is the foundation of the Township's *Integrated Public Education and Outreach & Public Involvement and Participation Programs*, which address a broad spectrum of ideas and techniques used to promote awareness and inspire positive behavioral change. That document established a set of goals, which include the following:

- *Promote awareness of the storm sewer system as an essential piece of municipal infrastructure, and how household or business pollutants must be eliminated from the system.*
- *Make a stronger, fact-based connection between pollution reduction and decreased costs of treating the public drinking water supply.*

In order to achieve these goals, the Township must utilize an effective outreach campaign based on a core set of principles such as:

- *Improvement to water quality is made on both large and small scales by individual residents, farmers, and business operators.*
- *Watershed awareness leads to a stronger connection between people and water resources.*
- *Stopping current sources of pollution and sedimentation to waterways and surface water supplies is the first step in improving water quality.*
- *When armed with good information, many individuals will choose to make decisions that benefit the common good.*

Simple actions like proper use of lawn fertilizers, elimination of anything poured into the storm sewer system, and maintaining a "clean shop" can lead to broad improvements in the watershed and the region. Distributing this message through the Township website, newsletter, and other outreach methods will continue.

ANNUAL PROGRAM EVALUATION

At the conclusion of each calendar year, beginning with 2015, an activity report will be produced to detail that year's work under the IDD&E Program. West Cocalico Township's overarching SWMP has established a process for logging annual reporting into that document, which encompasses this Program. The IDD&E annual report will consist of recapping the following aspects:

1. Outfall Reconnaissance Inventory Activity (includes results from any lab testing)
2. Citizen Complaints/Reports and Follow-Up
3. Outfall Mapping & IDP Priority Area Updates (i.e. new outfalls and changing land uses)

