

# Standard Operating Procedure

## Illicit Discharge Detection Plan

The City of Dayton (COD) has a permit to operate a Municipal Separate Storm Sewer System (MS4) issued by the Ohio Environmental Protection Agency. This permit authorizes COD to discharge storm water to waters of the State in accordance with the approved Storm Water Management Program, monitoring requirements and other conditions as specified in the current NPDES permit. Water entering the storm drain system flows directly to local streams, rivers and lakes untreated. An illicit discharge to the MS4 is generally defined as any discharge that is not composed entirely of storm water. COD's MS4 Program "shall include all procedures developed by the operator to detect, identify, and address non-storm water discharges to the MS4."

### 1.0 Purpose

The purpose of this procedure is to identify and address any illicit discharges detected during storm sewer outfall inspections or otherwise reported illicit discharges impacting the storm sewer system.

### 2.0 Scope

This procedure applies to any municipal employee who as a part of their job responsibilities come into contact with or observe an illicit discharge or connection to the storm sewer system and improper disposal activities.

### 3.0 Responsibility

All COD staff are responsible for preventing illicit discharges from their operations and for reporting illicit discharges noted in the field.

3.1 City of Dayton Department of Water is responsible for responding to any illicit discharges discovered during outfall inspections and/or complaints. All reportable spills are reported to the appropriate agencies. Major spills are reported to the Fire Department and the Dayton Regional Hazardous Materials Team (HAZMAT).

DEM is responsible for ensuring employees are properly informed of and trained on how to prevent illicit discharges from their operations and/or understand how to trace an illicit discharge upon discovery.

### 4.0 Procedures

#### 4.1 Initial notification

DEM will be notified of any illicit discharge detected.

4.1.1 Any time DEM are notified of an illicit discharge follow up should immediately occur.

#### 4.2 Discharge Identified

If the source of the discharge can be immediately identified, the cause of the illicit discharge should be immediately ceased and contained for proper cleanup, if possible.

#### 4.3 Discharge Not Identified

If the source of the discharge is not immediately obvious, use strategies to test the discharge and locate the source of contamination.

4.3.1 Use GIS software to strategically check manholes in the upstream storm sewer system for contamination.

4.3.1.1 Visual observations should be used to look for presence of flow, colors, odors, floatable materials, or deposits or stains. The GIS map can then be used to trace the path of manholes back to the potential source.

4.3.1.2 Manholes closest to the outfall should be investigated first, with staff progressively moving up the sewer network and inspecting manholes until it can be determined either where the source is coming in or between which two manholes the source is coming in. (See illicit discharge investigation sampling procedure diagram)

4.3.2 Dye testing can be conducted to determine if there are any improper connections between the sanitary sewer and the storm sewer. Dye tests can also provide valuable information as to whether stormwater systems are malfunctioning, and can confirm water flow direction.

4.3.3 Camera equipment can be used to locate the source of contamination, by exploring the storm sewer system and looking for pollution between manholes.

#### 4.4 Follow-up

Confirm that the illicit discharge has been eliminated that additional issues have not occurred as a result of clean-up efforts. Follow up should be documented.

### 5.0 Training

DEM is responsible for organizing annual training. Training will occur in the Fall of every year. Training will cover the identification of an illicit discharge connection, the proper procedures for reporting and responding to an illicit discharge, connection ,or disposal. DEM will provide car cards for Fleet vehicles for handy reference.

All new employees will be trained within 6 months of their hire date.