

6. Illicit Discharge Elimination Program BMPs

6.1. Overview

The purpose of this chapter is to describe the strategy that MDOT will use to fulfill Permit requirements involving the Illicit Discharge Elimination Program (IDEP) and its application to MDOT roadways, facilities, and other property.

An illicit discharge is the discharge or seepage that is not composed entirely of storm water into the drainage system, except for discharges specified in Parts I.A.1.b. and c. of the Permit. Illicit discharges include dumping of motor vehicle fluids, household hazardous wastes, grass clippings, leaf litter, domestic animal wastes, litter or unauthorized discharges of sewage, industrial waste, restaurant wastes, or any other non-storm water waste into the drainage system.

An illicit connection is a physical connection to the drainage system that primarily conveys illicit discharges into the drainage system or is not authorized or permitted by MDOT.

The illicit discharge elimination program's purpose is to find illicit connections and discharges. The program involves the following major components:

- A program to find, prioritize, and eliminate illicit connections and minimize illicit discharges to the permitted drainage system from commercial, industrial, institutional, public, and residential sources
- The legal authority to prohibit discharges into the drainage system operated by MDOT

This chapter is organized as follows:

- Section 6.2. describes the BMPs that MDOT will use in the illicit discharge program, and the measurable goals associated with each BMP.
- Section 6.3. describes the schedule for illicit discharge program BMP implementation.

6.2. BMP Identification and Measurable Goals

To ensure that there are no illicit connections to the MDOT storm drainage system nor illicit discharges draining into the MDOT drainage system, the following BMPs will be implemented.

6.2.1. Dry Weather Field Screening

The presence of flow in storm water systems when it has not rained in several days may be an indicator that there is an illicit connection. As the presence of dry weather flow is such a valuable indicator, field screening may be conducted during dry weather flow conditions.

A consultant contractor working for MDOT already has completed a dry weather screening program for the outfalls located in the five Phase I communities.

A copy of the MDOT NPDES Storm Water IDEP Field Protocol Manual is attached in Appendix D for complete details on how dry weather screening is performed. In brief, the following steps are performed to determine whether an illicit connection/discharge exists at a specific site:

1. Check/confirm locations of outfalls.
2. Observe the outfall for presence of dry weather flow.
3. Estimate the flow rate if flow is present.
4. Observe and record information on odor, color, clarity, floatables, deposits, vegetation condition, structural condition, and biological factors.
5. Perform field measurements of water temperature and pH.
6. Collect samples for further laboratory testing.
7. Record data on a field screening data sheet.
8. As needed, track the potential pollutant source upstream, using steps 3 through 7, to isolate the source of the potential pollutant.
9. Compile and summarize all data.

To ensure that quality work is being performed, certain measurable goals have been established in the dry weather screening process. These measurable goals include:

- Number and location of confirmed outfalls
- Total number of suspected illicit connections/discharges identified

The October 1, 2002 Annual Report will include the total results of this program, and subsequent reports will include internal training efforts for the job related public to eliminate illicit discharges and connections.

6.2.2. Follow-Up Identification and Elimination Program

When an alleged illicit discharge or connection is identified during the field screening process, a consultant firm working under contract to MDOT will undertake a program to identify and correct the source, when possible. In brief, the consultant performs the following steps.

- Work systematically upstream on a manhole-to-manhole basis during dry weather flow investigation to establish where suspected illicit discharge or connection first enters the system.
- Perform further testing as appropriate (refer to Appendix D).
- Conduct additional investigations to identify the source of the illicit connection or discharge, as appropriate.
- If the source is within MDOT's right-of-way and is not from an active permitted discharge, then actions will be initiated to eliminate the illicit connection or discharge using MDOT's legal procedure for removal of an encroachment.

- If the illicit discharge or connection source is outside of MDOT's right-of-way, then the MDEQ and the City's storm water manager will be contacted to coordinate efforts to locate, identify, and notify the owner.

These tasks have been completed by MDOT on the five Phase I cities.

The measurable goals associated with this BMP are as follows:

- Number and location of manholes tested for each suspected illicit discharge/connection
- Results of sample measurements
- Description and number of illicit connections/discharges identified
- Description of corrective measures

The descriptions of this BMP implementation and results will be included in the October 1, 2002 Annual Report with subsequent reports focusing on internal training methods.

6.2.3. Preventing Future Illicit Connections and Discharges

The most important task in preventing or minimizing future illicit connections and discharges is public and internal education programs, and effective guidance and policies. MDOT is conducting an extensive, public and internal education effort, as described in Chapter 4 of this document.

MDOT has the legal authority to prevent or minimize future illicit connections derived from state statutes. This legal authority provides MDOT with the legal mechanisms to:

- Regulate the contribution of pollutants to its MS4
- Prohibit illicit discharges and control spills and dumping
- Assure that appropriate cleanup measures were undertaken
- Coordinate with other entities that are covered by the NPDES storm water permitted systems to control the contribution of pollutants to MDOT's drainage system
- Control construction site and other industrial discharges to the MS4
- Require compliance with all regulations and statutes
- Carry out inspections, surveillance, and monitoring procedures

MDOT has formed a focus group to work on legal requirements to prevent future sewer tap-ins or cross connections into the MDOT's storm sewer system. To update project requirements and assist with preventing future illicit connections, MDOT is presently working on compiling drainage information now included in many separate manuals into one drainage manual to be used on all MDOT projects. This manual will contain specific criteria for the identification, elimination, and prevention of any cross-connections between sanitary and storm sewer systems.

Changes are also currently being made to Sections 14.01 and 14.02 of the MDOT's Construction Permit Manual in an effort to update MDOT's current tap-in process. These changes include:

- Addition of language addressing water quality
- The checklist in section 14.02 will be modified to reflect water quality
- The certification in section 14.02 will be incorporate water quality concepts

While these changes are being made, MDOT is also examining legal methods and options for notification of permit changes. After these tasks have been completed, the focus group will work to identify changes in data entry, reporting, and develop a new description of the permit process.

To evaluate the progress the focus group is making on changing legal requirements for the tap-in process, the following measurable goals will be recorded in the annual reports:

- Report status of the changes on the Construction Permit Manual
- Report status on the development of a new description of the permit process

These steps will help to eliminate the possibility of tap-ins to MDOT MS4s in the future.

6.3. Implementation Schedule

The strategy that MDOT will use in the fulfillment of permit requirements involving the IDEP and its application to MDOT roadways, facilities, and other property is summarized in Table 6-1.

Table 6-1 Illicit Discharge Elimination Program Summary

ID No.	BMP	Measurable Goals
6.2.1	Dry Weather Field Screening	<ul style="list-style-type: none"> • Number and location of confirmed outfalls • Total number of suspected illicit connections/discharges identified
6.2.2	Follow Up Identification and Elimination Program	<ul style="list-style-type: none"> • Number and location of manholes tested for each suspected illicit discharge/connection • Results of sample measurements • Description and number of illicit connections/discharges identified • Description of corrective measures
6.2.3	Preventing Future Illicit Connections and Discharges	<ul style="list-style-type: none"> • Report status of the changes on the Construction Permit Manual • Report status on the development of a new description of the permit process

MDOT will continue to implement these BMPs and will begin work on any other necessary tasks upon instruction by MDEQ and the availability of funds. The following

Table 6-2 is an estimated implementation schedule for all of the actions needed to fulfill the BMPs discussed in this chapter for illicit discharge elimination program.

Table 6-2 Implementation Schedule for Illicit Discharge Elimination Program BMPs

ID No.	Action	Completed for Phase I Communities	Year of Implementation			
			2002	2003	2004	2005
6.2.1	Dry Weather Field Screening					
	Complete initial screening of outfalls	X				
6.2.2	Follow-Up Identification and Elimination Program					
	Follow-up Investigation	X				
6.2.3	Preventing Future Illicit Connections and Discharges					
	Completion of the Drainage Manual		X	X		
	Update MDOT's Construction Permit Manual		X	X		
	Examine legal methods and options for notification of permit changes		X	X		
	Choose appropriate legal methods and options		X	X		
	Identify changes in data entry and reporting		X	X		
	Implement changes in data entry and reporting		X	X		
	Develop new description of permit process		X	X		
	Distribute new description of permit process		X	X		