

## Michigan Municipal Separate Storm Sewer System (MS4) Permit Illicit Discharge Elimination Plan/Program (IDEP)

### Overview

The IDEP is a program designed to detect and eliminate illicit discharges and connections to the permittee's separate storm sewer system. This compliance assistance document addresses four permit requirements and the key components relating to these requirements, which are considered necessary in an approvable IDEP. Each component includes a list of required activities and a list of recommended activities that are often used to meet these requirements. Alternatives are allowed for any standard permit requirements under the MS4 Watershed General Permit; however, alternatives are only allowed for the plan and procedures to perform dry-weather screening under the MS4 Jurisdictional General Permit. Additional information on submitting an alternative can be found in the compliance assistance document titled *Storm Water Pollution Prevention Initiative and Storm Water Management Program – Alternative Approaches*.

The term separate storm sewer system includes both open and enclosed drainage systems owned or operated by the permittee and discharge either directly to a surface water of the state, or a separate storm water drainage system owned or operated by another public body.

An MS4 can be waters of the state; however, not all MS4s are waters of the state and vice versa. The Michigan Water Quality Standards define surface waters of the state to include lakes, rivers, streams, open drains, and wetlands. There are areas where both the definition of an MS4 and waters of the state may be met. The Department of Natural Resources and Environment (Department) staff is available to provide assistance when evaluating the applicability of the definitions. An example of when both definitions may apply is a designated county drain. An open county drain that is considered part of the county's MS4 may also be considered surface waters of the state. In this example, if the open county drain has portions that are enclosed downstream, the county drain would be considered an MS4 and surface waters of the state for the entire reach beginning with the first designation as surface waters of the state.

The appropriate IDEP activities for these drains are the same as they would be for any part of the MS4. Appropriate activities include identifying the discharge points where the permittee's separate storm sewers discharge to surface waters of the state, and performing dry-weather screening at those discharge points. This includes discharge points where an enclosed county drain discharges to surface waters of the state and where an open county drain ultimately discharges to surface waters of the state. Privately owned and operated drainage systems that discharge directly to surface waters of the state do not have to be included in the IDEP. See Appendix A for an example of where IDEP activities are required.

For the Watershed General Permit, the IDEP shall be designed and implemented to carry out actions where the permittee owns and operates MS4s in the regulated area. For the Jurisdictional General Permit, the IDEP shall be designed and implemented to carry out actions where the permittee owns and operates MS4s in the urbanized area. Additional information on the geographic extent of the IDEP requirements can be found in the compliance assistance document titled *Scope of the Storm Water Pollution Prevention Initiative and Storm Water Management Program*.



## **Ordinance/Other Regulatory Mechanism Requirement**

### Required

In accordance with Watershed General Permit, Part I.A.4.b.3)a), page 12, and Jurisdictional General Permit, Part I.A.7.a., page 8, the permittee shall develop and implement an ordinance or other regulatory mechanism where an ordinance is not feasible or appropriate to effectively prohibit illicit discharges into the MS4 owned or operated by the permittee and implement enforcement actions. Examples of non-ordinance regulatory mechanisms include internal policies or procedures.

A number of factors may influence the appropriateness of an ordinance or other regulatory mechanism including whether the permittee has the MS4 Watershed General Permit or the MS4 Jurisdictional General Permit and whether the permittee has ordinance authority. A combination of an ordinance and other regulatory mechanism may also be appropriate. In addition, as long as the IDEP requirements are fully addressed, the requirements may be distributed throughout a combination of several ordinances and/or regulatory mechanisms.

For the Watershed General Permit, in most cases, cities, villages, and townships will have an ordinance to prohibit illicit discharges and implement enforcement actions. This ordinance may be supported by policies and procedures for municipal staff to implement IDEP activities. County entities and public institutions such as school systems and universities that do not have ordinance authority may use a regulatory mechanism. These regulatory mechanisms could include the use of the county's environmental health code and internal policies or procedures.

For the Jurisdictional General Permit, cities, villages, and townships with more complex MS4s or a higher potential for illicit discharges (e.g., a municipality that owns or operates roads) should use an ordinance to prohibit illicit discharges. Cities, villages, and townships with less complex MS4s (e.g., those limited to buildings and parking lots) may use an internal policy or procedure. County entities and public institutions such as school systems and universities may use the same mechanisms described above for the Watershed General Permit.

The ordinance or regulatory mechanism shall fulfill the following requirements for the MS4 owned or operated by the permittee:

1. Regulate the contribution of pollutants
2. Prohibit illicit discharges
3. Establish the authority to investigate, inspect, and monitor suspected illicit discharges
4. Require and enforce elimination of illicit discharges and connections

The Watershed General Permit, Part I.A.4.b.3)a), page 12, and Jurisdictional General Permit, Part I.A.7., page 8, include the following list of non-storm water discharges that do not need to be prohibited by the permittee unless the permittee identifies them as significant contributors of pollutants.

- Water line flushing and discharges from potable water sources
- Landscape irrigation runoff, lawn watering runoff, and irrigation waters
- Diverted stream flows and flows from riparian habitats and wetlands
- Rising groundwaters and springs
- Uncontaminated groundwater infiltration [as defined by 40 CFR 35.2005(20)]
- Pumped groundwaters (except for groundwater cleanups not specifically authorized by NPDES permits), foundation drains, water from crawl space pumps, footing drains, and basement sump pumps

- Air conditioning condensates
- Waters from non-commercial car washing
- Residual street wash waters
- Discharges or flows from emergency fire fighting activities
- Dechlorinated swimming pool waters from single, two, or three family residences. A swimming pool operated by the permittee shall not be discharged to a separate storm sewer or to the surface waters of the state without specific National Pollutant Discharge Elimination System (NPDES) permit authorization from the Department.

Example Implementation

- Permittees may use an existing ordinance/regulatory mechanism or multiple ordinances/regulatory mechanisms as long as they demonstrate specifically how permit requirements are met. Examples include adopting standard plumbing or Michigan building codes; using existing ordinances, such as planning or zoning ordinances; and adopting the county's environmental health codes. If the MS4 is owned or operated by a drain commissioner the existing Drain Code, PA 40 of 1956 and Chapter 18, section 280.423, is applicable where discharge of certain sewage and waste matter is prohibited.
- Develop a new ordinance to fulfill the requirements above. Permittees may want to collaborate with other permittees to develop ordinance or other regulatory mechanism language and legal authority.

**Finding and Eliminating Illicit Connections and Discharges**

A program shall be developed to find and eliminate illicit connections and discharges to the MS4 from commercial, industrial, private educational, public, and residential sources. The program shall include the following requirements:

**1. Storm sewer system map**

Required

In accordance with the Watershed General Permit, Part I.A.4.b.3)b)(1), page 13, and Jurisdictional General Permit, Part I.A.7.b.1), page 9, a map showing the storm sewer system with the location of all discharge points the permittee owns or operates and the names and location of the surface waters of the state that receive the discharge from the permittee's MS4. A separate storm sewer system includes: roads, catch basins, curbs, gutters, parking lots, ditches, conduits, pumping devices, and man-made channels.

Permittees shall have this information available by the date specified in the Certificate of Coverage. This information shall be retained by the permittee and made available to the Department upon request. Storm sewer system information shall be maintained and updated as discharge points are identified or added.

Example Implementation

- The map requirement may be a series of maps which identify the entire system. Maps may include available diagrams, such as certification maps, road maps showing rights-of-way, as built-drawings, diagrams, or other hard copy or digital representation of the storm sewer system. Maps may be accompanied by narrative descriptions for portions of the system. Further information on mapping the storm sewer system and discharge points is available in the compliance assistance document titled *MS4 Discharge Point Location and General Mapping Guidance*.

- When mapping discharge points, include enough detail for staff to easily locate discharge points. This may necessitate one general overview map and several detailed maps. Only include the discharge point identification name/number on the maps. Narrative information about the discharge point can accompany the maps to allow the user to further understand the characteristics of the discharge point.

## **2. Prioritizing areas for dry-weather screening**

### Required

In accordance with the Watershed General Permit, Part I.A.4.b.3)b)(2), page 13, and Jurisdictional General Permit, Part I.A.7.b.2), page 9, permittees shall identify and prioritize areas for dry-weather screening or other investigation methods for the purpose of maximizing the detection and elimination of illicit discharges. Permittees shall consider the criteria below when prioritizing. The highest priority criteria are generally listed toward the top; however, a permittee's priority order may vary and some criteria may not be applicable.

- Poor dry weather water quality
- Density of aging On-Site Disposal Systems (OSDS)
- Aging or failing sewer infrastructure
- Discharge complaints and reports
- Age and density of industrial operations
- Age of development
- Sewer conversion areas
- Historic combined sewer systems
- Type of commercial activity
- Other potential pollutant generating sites

### Example Implementation

Permittees may choose to conduct a desktop analysis by ranking each subwatershed or discharge point as a high, medium, or low risk for illicit discharge potential. Based on the ranking, permittees can develop a five-year plan that investigates discharge points in the highest risk areas first followed by medium and then low risk areas. Permittees can delineate groups of discharge points according to the year that they will be surveyed. Additional detail on performing a desktop analysis can be found in the Environmental Protection Agency guidance manual titled *Illicit Discharge Detection and Elimination – A Guidance Manual for Program Development and Technical Assessments*. To access this document go to [www.epa.gov/npdes](http://www.epa.gov/npdes) and enter the title in the search box.

## **3. Performing dry-weather screening**

### Required

In accordance with the Watershed General Permit, Part I.A.4.b.3)b)(3), page 14, and Jurisdictional General Permit, Part I.A.7.b.3), page 10, permittees shall develop a plan and procedures to perform dry-weather screening of each MS4 discharge point. All discharge points shall be screened every five years beginning on the due date of the Storm Water Pollution Prevention Initiative (SWPPI) or Storm Water Management Program (SWMP) submittal unless an alternative is approved or the elective option is selected.

Dry-weather screening is recommended at least 48 hours after any precipitation. Dry-weather screening shall include observations of the MS4 discharge point flows, receiving water characteristics, and discharge structure characteristics, as applicable. The following observations shall be conducted:

- MS4 discharge point flow and receiving water characteristic observations include: water clarity, color, and odor; presence of suds, oil sheens, sewage, floatable materials, bacterial sheens, algae, and slimes; staining of the banks and unusual vegetative growth.
- MS4 discharge structure observations include: unusual vegetative growth, staining, undocumented connections, and integrity of the structure.

If flow is observed from an MS4 discharge point, then the permittee shall do one of the following:

Source	Action	Sampling/Analysis Required
Obvious	Eliminate illicit discharge	None
Not Obvious	Conduct field assessment	Analyze at a minimum: pH, ammonia, surfactants, and temperature. Field kits may be used.

Example Implementation

- Focus efforts in priority areas first.
- Once efforts are completed in priority areas, move to lower priority areas and consider integrating dry-weather screening of the remaining discharge points with other watershed or stream assessments.
- Create a template for performing dry-weather screening to prompt staff to record specific information. Staff can then enter the data into a database to address illicit discharges and generate reports.

Watershed Permit Elective Option

Permittees operating under the Watershed General Permit may choose to comply with this requirement by working collaboratively with the other MS4 permittees in a jointly-operated MS4 to perform dry-weather screening at the discharge points that directly discharge to surface waters of the state. An example elective option write-up is available in Appendix B.

Alternative Option

Permittees can propose alternative methods of detection and elimination of illicit discharges to the Department for approval. An alternative shall be based on the priority areas determined using the criteria above and demonstrate that other methods will be at least as effective as dry-weather screening of each MS4 discharge point every five years.

**4. Illicit discharge source identification**

Required

In accordance with the Watershed General Permit, Part I.A.4.b.3)b)(4), page 14, and Jurisdictional General Permit, Part I.A.7.b.4), page 10, if an illicit discharge is detected and the source has not been identified further investigation is required. The source shall be confirmed by one or more of the following methods:

- Indicator parameter testing (chemical and bacterial sampling)
- Dye testing (Department approval is required – see Appendix C)
- Video testing

- Smoke testing
- Documented visual observation or physical indicators
- Homeowner surveys and surface condition inspections for on-site sewage disposal systems
- Drainage area investigations

Example Implementation

Illicit discharge source identification can be completed in various manners including a combination of a desktop analysis and field verification. There are four basic types of investigations, which may be used independently or in combination.

- MS4 Investigation – Field crews perform an investigation by either strategically inspecting or testing manholes or by moving systematically upstream or downstream within the storm drain network.
- Drainage Area Investigation – An initial desktop analysis is performed to determine potential generating sites by reviewing land uses followed by inspections or testing in areas where the illicit discharge appears to be specific to a certain type of land use or generating site.
- On-Site Investigation – Dye, video, or smoke testing can isolate segments of the storm drain network to allow for focused on-site investigations. Discharges of tracer dyes shall be authorized by the Department in accordance with Appendix C.
- On-Site Sewage Disposal System Investigation – On-site investigations may be necessary in areas with the potential for failing septic systems and illegal dumping.

**5. Eliminating illicit discharges and pursuing enforcement action**

Required

In accordance with the Watershed General Permit, Part I.A.4.b.3)b)(5), page 14, and Jurisdictional General Permit, Part I.A.7.b.5), page 10, procedures shall be created to expeditiously eliminate illicit discharges, including responding to spills and emergency situations, and pursue enforcement actions, if needed. The procedures shall specify measures for the expeditious response to, and elimination of, each identified illicit discharge, spill, and emergency situation.

Permittees shall also have a system to track the identification and elimination status of illicit discharges and enforcement actions. The system shall also track confirmation that illicit connections are removed and the discharge permanently ceased.

Example Implementation

A procedure is developed and implemented to identify response actions for various types of illicit discharges (e.g., illegal dumping, illicit sanitary connection, soil erosion measures failing, large quantity spill), what enforcement tools are available to address illicit discharges (e.g., ordinances, regulatory mechanisms, procedures), and information on HAZMAT first responders (local, county, state, private clean-up companies).

Also, once an illicit discharge has been detected or reported a log of the type of illicit discharge, identification information, elimination status, and enforcement actions completed shall be maintained. This can be as simple as a hard copy information log or a more complex geographical information system database. The following is an example log.

Discharge Type	Identification Information	Contact List	Response	Enforcement Type	Enforcement Actions	Elimination Status
Illicit Connection	Call received via hotline (Include date)	Local Department of Public Works  County Health Department	Confirmed Source; Contacted Owner; Required Correction within 30 days	Plumbing Code	Violation written allowing for a period of corrective action	Discharge permanently ceased (Include date)
Fuel Spill (HAZMAT)	Notified by State Police (Include date)	Local Police/Fire  County Environmental  DNRE/PEAS	Contact First Responders; Control Issue; Clean-Up Problem; Review Environmental Impacts	Emergency Response Procedure	Spill response charged to company in accordance with municipal procedure	Discharge terminated (Include date)

## Training Staff

### Required

In accordance with the Watershed General Permit, Part I.A.4.b.3)c), page 14, and Jurisdictional General Permit, Part I.A.7.c., page 10, permittees shall have a program to train staff who are involved in illicit discharge-related activities, or who have field jobs with the potential for witnessing illicit discharges and connections. The training shall be implemented according to the program and include the following:

- The definition of illicit discharges and connections
- Techniques for finding illicit discharges, including field screening, source identification, and recognizing illicit discharges and connections
- Methods for eliminating illicit discharges and the proper enforcement response
- A training schedule and requirement for training during the term of the permit

### Frequency of Training

- Under the Watershed General Permit training is required for all staff described above during the five-year permit cycle in accordance with the training schedule in the SWPPI.
- Under the Jurisdictional General Permit initial training is required for appropriate staff as well as refresher training for all staff described above every three years in accordance with the training schedule in the SWMP.
- Training refreshers are recommended when IDEP related policies and procedures are updated, or in response to program evaluation findings

### Example Implementation

Who should be trained?

- Staff or a representative that will participate in:
  - IDEP activities to find and eliminate illicit discharges and connections
  - Spill response and response to emergency IDEP situations
  - Ordinance/regulatory mechanism enforcement
- Staff or a representative that may have the opportunity to identify illicit discharges and connections in day-to-day activities

- Staff or a representative, such as building and engineering department staff, that have the opportunity to identify cross-connections and drainage issues in processes such as plan review
- Municipal officials who oversee IDEP related work, as appropriate

#### Content of Training

All municipal staff and consultants that have responsibility for any IDEP related program activities, including spill and IDEP related emergency response, and observation of illicit discharges in the course of their daily work, should receive training on:

- The definitions of illicit discharges, illicit connections, and sanitary seepage
- Contact information for staff that has emergency response responsibility
- General recognition of illicit discharges, and where to report them when they are observed
- Common types of illicit discharges that occur in the local area and the types of illicit discharges that are commonly associated with local land uses
- Recognition of naturally occurring phenomena and their sources (mineral deposits, bacterial sheens, slimes and films, bryozoans, pollen, blue-green algae and green algae, tannins and foams)
- The municipal ordinance/regulatory mechanism/procedures, including the requirements and authority given to the municipality to eliminate illicit discharges
- The authority of other agencies that may also be involved in local spill response
- The municipality's storm water infrastructure, and where to obtain municipal storm sewer maps and/or electronic storm sewer datasets
- Illicit discharge preventative measures

Staff that will participate in the municipal program to find and eliminate illicit discharges should also be trained on:

- The methodology that will be utilized by the municipality to find, prioritize and eliminate illicit discharges and connections to the MS4
- The IDEP investigation history for the municipality
- Desktop analysis of illicit discharge potential within the municipality, including assessment of the highest priority investigation areas based on the prioritization criteria
- Investigation planning and preparation for field work
- Field techniques that can be used to detect and identify the sources of illicit discharges/connections

Staff that will participate in enforcement of the IDEP ordinance/regulatory mechanism/procedures should also be trained on:

- The requirements of the ordinance/regulatory mechanism/procedures
- The authority established by the ordinance/regulatory mechanism/procedures
- Mechanisms that will be used by the municipality to prohibit and eliminate illicit discharges, including ordinance enforcement mechanisms
- Tracking illicit discharge elimination status and enforcement actions

Accidental and intentional spills and releases that reach MS4s are illicit discharges and can have detrimental impacts on surface waters. Staff that has responsibility for IDEP related spill response and environmental emergency response should also be trained on:

- The municipal spill response protocols and responsibilities
- The municipal authority during spill response
- Protocols for release/spill reporting to other agencies, and response coordination with other agencies
- Methods to prevent further migration of materials through a storm sewer system
- Methods to prevent materials from entering storm sewer systems
- Recordkeeping
- Tracking illicit discharge elimination status and enforcement actions
- A number of other regulations may also apply to spill and emergency situations. These may require additional training and reporting related to spill response.

#### Additional Training Topics

Additional training topics for municipal staff and consultants may include:

- Conducting internal audits of the IDEP program
- Mock incidents for response practice
- Case history review
- Local and regional spill response debriefings – assessing what worked, what should be improved
- Training of other, non-IDEP, municipal staff
- Training on safety issues associated with IDEP activities

#### IDEP Training Programs and Resources

There are a number of existing training resources and programs available. Additionally, county level IDEP staff is often very experienced and can offer assistance. Regional level organizations may be able to offer assistance as well. Some existing training programs and resources are listed below:

- The Wayne County Illicit Connection/Discharge Elimination Training Program – Contact the Department of Environment (734-326-4483) for more information about upcoming classes
- Environmental Protection Agency Illicit Discharge Detection and Elimination Resources including guidance manuals, archived webcasts, and many other resources:  
<http://cfpub.epa.gov/npdes/stormwater/idde.cfm>
- Environmental Protection Agency Emergency Management Program Guidance:  
<http://www.epa.gov/emergencies/programs.htm>
- Michigan Department of Natural Resources and Environment Guidance for Emergency Response for Releases to Water:  
[http://www.michigan.gov/deq/0,1607,7-135-3313\\_23420---,00.html](http://www.michigan.gov/deq/0,1607,7-135-3313_23420---,00.html)

## **Illicit Discharge Elimination Program Effectiveness**

### Required

Permittees are required to identify methods or measurable goals for determining the effectiveness of IDEP actions. Additionally, in accordance with the Watershed General Permit, Part I.A.4.b.3)d), page 15, and Jurisdictional General Permit, Part I.B.1.b.1), page 18, permittees are required to describe a method for determining the overall effectiveness of the IDEP, which considers all actions.

### Example Implementation

Overall program effectiveness assesses how well implementation is working to determine the success of the program in detecting and eliminating illicit connections and discharges to the MS4. The appropriate method of determining effectiveness will depend on the IDEP approach.

Permittees should focus on an effectiveness evaluation that provides results to meet permit requirements. The following are examples of evaluation methods:

- Evaluate the prioritization process to determine if efforts are being maximized in areas with high illicit discharge potential
- Evaluate the effectiveness of using different detection methods
- Evaluate the number of discharges and/or quantity of discharges eliminated using different enforcement methods
- Evaluate ambient water quality monitoring data to measure changes in the receiving water
- Evaluate program efficiency and staff training frequency

## **Progress Reporting**

### Required

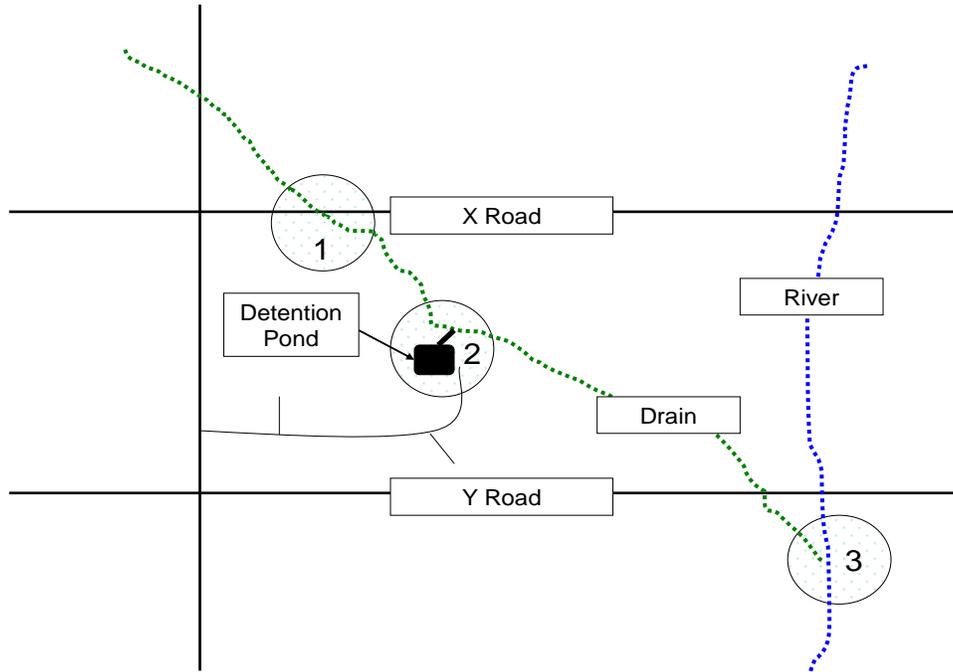
For the IDEP, in addition to evaluating its effectiveness, provide documentation of the actions taken to eliminate illicit discharges. For identified illicit discharges, the permittee shall summarize the total estimated volume and pollutant load eliminated for the main pollutants of concern, and the locations of the discharges into both the permittees MS4 and the receiving water.

For illicit discharges identified under the elective option coming from other participating operators of the MS4, the permittee performing dry-weather screening at the discharge points to surface waters of the state shall provide documentation of the notifications to the other participating operators and the information given to them with the notifications.

### Example Implementation

This type of information can be included in the example log described above or maintained separately for inclusion in the progress reports.

**Appendix A**



As noted in the overview on page one of this compliance assistance document, a determination needs to be made as to whether or not the receiving water for the MS4 discharge point is considered surface waters of the state. In the example above, dry-weather screening is required at the location where the discharge point first discharges to surface waters of the state.

Dry-weather screening shall be performed based on the following factors in the above example:

- The drain is owned and operated by a drain commissioner. The Department has determined that this designated county drain is an MS4 and surface waters of the state.
- The drain is initially open followed by portions that are enclosed and open. The drain is considered surface waters of the state throughout the open and closed portions.
- The detention pond discharges to the drain and is not surface waters of the state.

**Location 1**

- If X Road is owned or operated by a road commission or city who has their own permit (i.e., not nested under another permit) and a discharge point to the drain, then dry-weather screening shall be performed by the road commission or city.
- If X Road is owned or operated by a road commission who is nested under a drain commissioner's permit, then dry-weather screening is required by the drain commissioner.

**Location 2**

- If the detention pond is owned or operated by a permittee, including the drain commissioner, then dry-weather screening shall be performed by the permittee.

**Location 3**

- If the drain commissioner owns or operates the drain with a discharge to the river, then dry-weather screening shall be performed, when possible, at the discharge point to the river.

**Appendix B**

Example of Dry Weather Screening Elective Option

*Each participating MS4 watershed permittee shall fill in the specific details for the italicized placeholders below and include this document in their Storm Water Pollution Prevention Initiative (SWPPI). Delete remaining italicized text.*

**Activity:** Elective option for dry-weather screening of Municipal Separate Storm Sewer System (MS4) discharge points that discharge directly to surface waters of the state

**Permit Requirement:** Watershed General Permit, Part I.A.4.b.3)b)(3), page 14

**Responsible Permittees:** [*List Watershed Permittees Participating*] certify a commitment and participation in this elective option.

*NOTE: A Jurisdictional Permittee interested in pursuing the elective option would need to submit an alternative plan for review and approval by the Department of Natural Resources and Environment (Department).*

**Method of Implementation:** [*List Responsible permittees*] (responsible permittees) have agreed to work collaboratively to perform dry-weather screening on discharge points that discharge directly to surface waters of the state within the [*Define the scope of the jointly-operated MS4 and direct discharges to surface waters of the state*] (see attached map). If an illicit connection or discharge is detected, the responsible permittees will work collaboratively to identify and eliminate the source.

The responsible permittees have agreed that [*List Primary Permittee*] will be the primary contact for the jointly-operated MS4. Additional permittees not included with this agreement, but who own or operate storm sewer systems within this MS4 area include, but are not limited to, [*List Permittees*].

The [*Primary Permittee*] will take responsibility for completing dry-weather screening at all discharge points directly discharging to surface waters of the state within the jointly operated MS4 defined above at a minimum of once every five years beginning on [*Insert the SWPPI submittal due date*]. The [*List Primary Permittee*] agrees to complete this task no later than [*Insert date not to exceed five years from the SWPPI submittal due date*]. The [*List Primary Permittee*] may choose to complete this task using a consultant or internal staff.

Prior to field observations, discharge points will be identified, given a unique ID and the owner/operator identified by the responsible permittees. If unknown discharge points are identified in the field, they will be noted and observed by the [*List Primary Permittee*]. The discharge point owner or operator will be traced wherever possible by [*Choose either the responsible permittees or primary permittee*]. If the discharge point is considered an orphan drain, information will be given to the Department and local health department for further follow-up, if required.

Dry-weather screening will be completed in accordance with the prioritized areas identified for the purpose of maximizing the detection and elimination of illicit discharges [*Insert or attach prioritized list based on Table 1 (page 13) of the Watershed General Permit*]. Dry-weather screening will be completed, at a minimum of 48 hours after any precipitation, and include observations of the receiving water characteristics, discharge pipe characteristics and discharge point flows. The observations will

include: water clarity, color, and odor; presence of suds, oil sheens, sewage, floatable materials, bacterial sheens, algae, and slimes; and staining of the banks and unusual vegetative growth. MS4 discharge structures will be observed for unusual vegetative growth, staining, undocumented connections and integrity of the structure.

If flow is observed from the discharge point, then the responsible permittees commit to do one of the following:

1. If by observation it is obvious that an illicit discharge is present and the source is obvious, the [Primary Permittee] will document the observations and source for follow-up by the responsible permittees. The [Primary Permittee] will notify the responsible permittees in writing within 30 days of detection and provide all applicable observation information, including the date and location where the illicit discharge was detected and the obvious source. The illicit discharge will be eliminated.
2. If flow is observed and the source is not obvious, the [Primary Permittee] will conduct a field assessment of the dry-weather flow to analyze at a minimum: pH, ammonia, surfactants, and temperature. Field observations will be conducted at a minimum of two times within two-weeks of the initial observation to determine if flow is intermittent or constant. The [Primary Permittee] will notify the responsible permittees in writing within 30 days of detection and given all applicable field information, including the date and location where the illicit discharge was detected. All responsible permittees where the illicit discharge was detected will perform dry-weather screening of their discharge points in the jointly-operated MS4 within 13 months of detection, unless the illicit discharge is eliminated or identified in a portion of the MS4 not influenced by discharges from the responsible permittees' discharge points.

**Optional:** *The [Primary Permittee] will perform dry-weather screening of all discharge points within the jointly-operated MS4 where the illicit discharge was detected within 13 months of detection, unless the discharge is eliminated or identified in a portion of the MS4 not influenced by discharges from the responsible permittees' discharge points. The [Primary Permittee] will provide all applicable information to the responsible permittees for illicit discharge elimination.*

If an illicit discharge is detected, but the source has not been identified, the source will be confirmed by the [responsible permittees OR primary permittee] by performing one or more of the following methods, unless the Department approves an alternative plan: indicator parameter sampling, which may include chemical and bacterial sampling; dye testing; video testing; smoke testing; documented visual observation or physical indicators; homeowner surveys and surface condition inspections for on-site sewage disposal systems; and drainage area investigations.

The responsible permittee with legal authority to eliminate the illicit discharge and pursue enforcement will follow their ordinance and procedures for the expeditious response to and elimination of each identified illicit discharge.

If it is determined that the potential source is coming from an MS4 that is not a party to this agreement then that non-participating MS4 permittee will be notified within 30 days of discovery of the suspected illicit discharge and where applicable all parties will work together to address the problem.

**Schedule:** Complete by [Insert same date from above]

**Progress/Reporting Methodology:**

Each responsible permittee will include actions completed within their regulated area in the progress reports. These actions include the following:

- Number of discharge points observed for dry-weather screening
- Number of illicit discharges identified
- Location of the illicit discharge into the permittee's MS4 and the receiving water
- Documentation of the illicit discharge notification and information provided with the notification by [Primary Permittee]
- Number of illicit discharges corrected. If an illicit discharge is not corrected provide a schedule for elimination.
- Summary of the total estimated volume and pollutant load eliminated for the main pollutants of concern for the illicit discharge

Each responsible permittee shall keep detailed records of progress/implementation that shall be provided to the Department during audit inspections.

### **Appendix C**

In compliance with the provisions R323.1097 of Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), the Department of Natural Resources and Environment has regulatory jurisdiction over projects involving the application of tracer dyes to surface waters of the state.

An entity is authorized to apply tracer dyes to surface waters of the state by following the provisions under the appropriate certification. The certifications are as follows:

1. For applications or discharges of tracer dyes appearing on the Acceptable Michigan Tracer Dye List to surface waters of the state, coverage under the General Rule 97 Certification of Approval Authorizing Tracer Dyes in Surface Waters is necessary (Certification R97-09/004). This process is initiated by submittal of a Notification of Intent by the applicant. Upon acknowledgement from the Department that a Notification of Intent has been received, the applicant is authorized to commence tracer dye study in compliance with the certification. Acknowledgement of receipt of the Notification of Intent can be determined at [www.michigan.gov/dnre](http://www.michigan.gov/dnre) or by contacting Ms. Renee Comage at 517-241-8714 or by e-mail at [comager@michigan.gov](mailto:comager@michigan.gov).
2. For any application or discharge of tracer dyes to waters of the state that is not authorized by Certifications R97-09/004, an Individual Rule 97 Certification of Approval is necessary. Upon receipt of approval by the Department, the applicant is authorized to commence treatment under the individual Rule 97 approval.

Additional information on tracer dye studies can be found at [www.michigan.gov/dnre](http://www.michigan.gov/dnre). On the left side of the screen, click on "Water," followed by "Rule 97 Certifications," then "Tracer Dye Studies." This website includes the Acceptable Michigan Tracer Dye List and Notification of Intent.

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