

Department Note: As MS4 Permittees demonstrate compliance differently and MS4 Permittees may have different MS4 permit conditions, the following written program procedure is intended to provide ideas on various formats. Therefore, please note the provided example may not be appropriate, as is, for your community. Additionally, the following is a written program procedure that has been submitted to the Department by a MS4 Permittee. However, the MS4 Permittee name have been removed to keep them anonymous.

Village of ABC
2.3 Illicit Discharge Detection & Elimination Program
WPDES Permit No. WI-S050075-3
Effective May 1, 2019 – April 30, 2024

The Village of ABC maintains its illicit discharge detection and elimination program using the methods listed in the WPDES Permit No. WI-S050075-3 below. The document below outlines detailed information on how the Village intends to maintain compliancy with section 2.3 of the WPDES permit. Permit language below is shown in italics.

2.3 Illicit Discharge Detection and Elimination (IDDE)

The permittee shall continue to implement and enforce its program to detect and remove illicit connections and discharges to the MS4. The permittee shall implement the following measurable goals:

2.3.1 IDDE ordinance. *An ordinance or other regulatory mechanism to prevent and eliminate illicit discharges and connections to the MS4. At a minimum, the ordinance or other regulatory mechanism shall:*

- a. Prohibit illicit discharges and the discharge, spilling or dumping of non-storm water substances or materials into waters of the state or the MS4.*
- b. Identify non-storm water discharges or flows that are not considered illicit discharges. Categories of non-storm water discharges that are not considered illicit discharges include water line flushing, landscape irrigation, diverted stream flows, uncontaminated groundwater infiltration, uncontaminated pumped groundwater, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, fire-fighting and discharges authorized under a WPDES permit. However, the occurrence of a discharge listed above may be considered an illicit discharge on a case-by-case basis if the permittee or the Department identifies it as a significant source of a pollutant to waters of the state.*
- c. Establish inspection and enforcement authority.*

The Village of ABC adopted a stormwater runoff ordinance in 2016 in order to reflect Wisconsin Administrative Code NR 151. Items (a)-(c) listed above can be found in Chapter XXX Article IV of the Village's Code of Ordinances. An excerpt of Article IV is attached to this program.

2.3.2 IDDE field screening. *On-going dry weather field screening shall be conducted at 100% of the total major outfalls at least once during the term of the permit. Additionally, the permittee shall select minor outfalls for annual on-going dry weather field screening during the term of the permit. The permittee shall develop a prioritization procedure to assist with selecting minor outfalls and consideration shall be given to hydrological conditions, total drainage area of the site, population density of the site, traffic density, age of the structures or buildings in the area, history of the area and land use types when selecting outfalls for annual field screening. At a minimum, field screening shall be documented and include:*

- a. Visual Observation - A narrative description of visual observations including color, odor, turbidity,*

oil sheen or surface scum, flow rate and any other relevant observations regarding the potential presence of non-storm water discharges or illicit dumping.

- b.** *Field Analysis - If flow is observed, a field analysis shall be conducted to determine the presence of illicit non-storm water discharges or illicit dumping. The field analysis shall include sampling for pH, total chlorine, total copper, total phenol and detergents, unless the permittee elects*

instead to use detergent, ammonia, potassium and fluoride as the indicator parameters. Other alternative indicator parameters may be authorized by the Department in writing.

- (1) Field screening points shall, where possible, be located downstream of any source of suspected illicit activity.*
- (2) Field screening points shall be located where practicable at the farthest manhole or other accessible location downstream in the system. Safety of personnel and accessibility of the location shall be considered in making this determination.*

The Village Engineer/support staff will complete a dry weather field screening at all major outfalls at least once during the term of the permit as well as an annual screening of 7 selected priority outfalls as required in their WPDES permit. The 7 priority outfalls were determined based on hydraulic conditions, size of the drainage area, land uses, population densities, past complaints, and age and condition of structures and buildings draining to the respective outfall. Outfall location exhibits have been attached to this program document. The program will include the following:

1. Visual inspection during dry weather periods (June through August).
2. An inspection will be performed by Village consultants on an annual basis.
3. Data will be recorded in the field at the time of the visual inspection by means of an inspection form. A photograph will also be taken of the outfall. Copies of the inspection forms have been attached to this program.
4. Inspection forms will be compiled into a binder for easy access while out in the field. Copies of the previous year's inspection forms will be included for reference.
5. Following completion of field inspections, the data will be scanned in electronically for record keeping and annual reporting. The results of the inspections will be discussed with and managed by the Village Engineer.

In addition, Village staff will be educated on the importance of recognizing illicit discharges and reacting properly to occurrences through the continuing education aspect of the Village's public education and outreach requirements.

2.3.3 IDDE source investigation and elimination. *Written procedures for responding to known or suspected illicit discharges, including an assessment of risks and the establishment to response times. At a minimum, procedures shall be established for:*

- a. Investigating portions of the MS4 that, based on the results of field screening or other information, indicate a reasonable potential for containing illicit discharges or other sources of non-storm water discharges.*
- b. Responding to spills that discharge into and/or from the MS4 including tracking and locating the source of the spill if unknown.*
- c. Preventing and containing spills that may discharge into or are already within the MS4.*
- d. Promoting, publicizing, and facilitating public reporting of illicit discharges or water quality impacts associated with discharges into or from MS4s through a central contact point, including a form, website, email address, and/or telephone number for complaints and spill reporting, and publicize to both internal permittee staff and the public.*
- e. Notifying the Department immediately in accordance with ch. NR 706, Wis. Adm. Code, in the event that the permittee identifies a spill or release of a hazardous substance, which has resulted or may result in the discharge of pollutants into waters of the state. The Department shall be notified via the 24-hour toll free spill hotline at 1-800-943-0003. The permittee shall cooperate*

with the Department in efforts to investigate and prevent such discharges from polluting waters of the state.

- f.** Detecting and eliminating cross-connections and leakage from sanitary conveyance systems into the MS4.
- g.** Providing the Department with advanced notice of the time and location of dye testing within an MS4. Department notification prior to dye testing is required due to the likelihood that dye observed in waterways will be reported to the Department as an illicit discharge or spill.
- h.** Documentation of the following information:
 - (1)** Dates and locations of IDDE screenings conducted in accordance with section 2.3.2.
 - (2)** Reports of alleged illicit discharges received, including dates of the reports, and any follow-up actions taken by the permittee.
 - (3)** Dates of discovery of all illicit discharges.
 - (4)** Identification of outfalls, or other areas, where illicit discharge have been discovered.
 - (5)** Sources (including a description and the responsible party) of illicit discharges (if known).
 - (6)** Actions taken by the permittee, including dates, to address discovered illicit discharges.

The six basic elements of the program to isolate and fix individual illicit discharges are as follows:

- 1. Pollution Concern Contact:** The Village Hall telephone number [REDACTED] will be provided in informational brochures/newsletters and on the Village's website to allow citizens to easily report illicit discharge and pollution concerns. The number is answered during normal Village hours and there is voice mail if nobody is at the office. The Village Clerk or designated staff member will log all concerns on the Illicit Discharge Concern List, attached to this program document. The Village Superintendent, [REDACTED], will work with the Village Engineer, [REDACTED], to review the entries of the inventory within 72 hours of notification and direct the appropriate Village staff to field investigate the concern. Initial field investigation will consist of visual inspection of the surface waters and storm water conveyance system for evidence of discharge in the highlighted area. If visual inspection confirms the possibility of an illicit discharge, a sample shall be collected of the polluted discharge for further laboratory analysis. Results of this field investigation will be reported to the Village Superintendent and Engineer for further action.
- 2. Drainage Area Investigations:** If the Village Engineer determines that there is reasonable evidence of an illicit discharge, the next step will be a drainage area investigation. This process can be performed by, and with input from, a number of Village staff, such as the DPW staff, the Building/Plumbing Inspector, or the Village Engineer. This investigation may consist of a parcel by parcel analysis of potential generating sites within the drainage area of a problem outfall. Techniques used to investigate the drainage area include:
 - Land Use Investigations
 - Building Permit Review
 - As-built Construction Plan Review
 - Property Ownership Certification

The results of the drainage area investigation will be reported to the Village Superintendent and Engineer and it will be determined whether Storm Drain Network Investigations are necessary or if the Village should proceed directly to On-Site Discharge Investigations.

3. Storm Drain Network Investigations: When a drainage area is identified, storm drain investigations can narrow the source of a discharge problem to a single segment of a storm sewer or conveyance ditch. The investigation should start at the outfall and work progressively up the trunk sewer, culvert or ditch lines. If necessary, the Village Engineer will coordinate with any outside contractors, to perform the following tasks:
 - Smoke Testing
 - Video Testing
 - Dye Testing

The results of the Storm Drain Network Investigation will be reported to the Village Superintendent and Engineer and it will be determined whether On-Site Discharge Investigations will be necessary.

4. On-Site Discharge Investigations: Once the illicit discharge has been isolated to a specific area, an on-site investigation can be performed. On-site investigations are typically performed by dye testing the plumbing systems of households and buildings. The Building Inspector shall perform the on-site investigations and report findings to the Village Superintendent and Engineer for enforcement action.
5. Correction and Enforcement: Whenever the Village has identified a person who has violated a prohibition or failed to meet a requirement of the Illicit Discharge Ordinance as determined through the procedures above, the Village shall notify the owner of the property from which the discharge is coming from and require that they take measures to minimize or remove the illicit discharge. The Village may order compliance by verbal and/or written notice of violation to the responsible person. Such notice may require without limitation, actions to eliminate the illicit discharge through various methods, including immediate disconnection of discharge and reconnection to a sanitary sewer. If no action is performed by the violator, the Village will take the necessary steps as guided by legal counsel to correct the violation. The Village will notify the WDNR of detection of an illicit discharge.
6. Notify the WDNR: Immediately notify the Department in accordance with ch. NR 706, Wis. Adm. Code, in the event of a known illicit discharge. The Department shall be notified via the 24-hour toll free spill hotline at 1-800-943-0003.

Submit inspection reports and follow-up summaries to the Department on outfalls that had flow observed or that were a known or suspected illicit discharge source within 30 days of inspection. Provide the Department with 24 hours advance notice of the time and location of dye testing within a MS4 (the dye may get reported to the Department as an illicit discharge or spill).

The procedures noted above have been derived from the following reference manuals:

New England Interstate Water Pollution Control Commission, 2003. *Illicit Discharge Detection and Elimination Manual, A Handbook for Municipalities.*

Center for Watershed Protection and Robert Pitt, 2004. *Illicit Discharge Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments.*

2.3.4 *The permittee shall take appropriate action to remove known illicit discharges from its MS4 system discovered under section 2.3 as soon as possible. If it will take more than 30 days to remove an illicit connection or if the potential illicit discharge is from a facility with WPDES permit coverage, the Department shall be contacted to discuss an appropriate action and/or timeframe for removal. Notwithstanding this 30-day timeframe and notification of the Department, the permittee shall be responsible for any known illicit connections to its MS4 system that are a significant risk to human health and the environment.*

2.3.5 *In the case of interconnected MS4s, the permittee shall notify the appropriate municipality within one working day of either of the following:*

- a.** *An illicit discharge that originates from the permittee's permitted area that discharges directly to a municipal separate storm sewer or property under the jurisdiction of another municipality.*
- b.** *An illicit discharge that has been tracked upstream to the interconnection point with or outfall from another municipality.*

The Village Superintendent and Engineer will notify neighboring communities within one working day if an illicit discharge originating from the Village leaves the Village's permitted area or if an illicit discharge has been tracked upstream from one of those communities.

2.3.6 *The name, title and phone number of the individuals responsible for responding to reports of illicit discharges and spills shall be included in the illicit discharge response procedure.*

As mentioned previously, the Village Superintendent, John Cole (262-949-5583), will work with Village Engineer, [REDACTED] to review the entries of the Illicit Discharge Concern List within 72 hours of notification.

IDDE Ordinance Excerpt

- H. Compliance with the provisions of this ordinance may also be enforced by injunction in any court with jurisdiction. It shall not be necessary to prosecute for forfeiture or a cease-and-desist order before resorting to injunctive proceedings.

ARTICLE IV
PROHIBITED ILLICIT DISCHARGE AND CONNECTION

FOREWORD.

The intent of this ordinance is to provide for the health, safety, and general welfare of the citizens through the regulation of non-storm water discharges to the storm drainage system to the Maximum Extent Practicable as required by federal and state law. This ordinance establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process. The objectives of this ordinance are:

1. To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by stormwater discharges by any user.
2. To prohibit Illicit Discharges and Connections to the municipal separate storm sewer system.
3. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this ordinance.

§. 231-30 DISCHARGES PROHIBITED.

No person shall discharge, spill or dump substances or materials which are not entirely composed of storm water into receiving bodies of water, storm sewers, or other drainage facilities, or onto driveways, sidewalks, parking lots or other impervious or pervious areas that drain into the storm drainage system.

§. 231-31 CONNECTIONS PROHIBITED.

The construction, use, maintenance or continued existence of illicit connections to the storm drainage system is prohibited. This prohibition expressly includes, without limitation, illicit connections made prior to the adoption of this ordinance, regardless of whether the connection was permissible under law or practice applicable or prevailing at the time of connection.

§. 231-32 EXEMPTIONS.

The following activities are exempt from the provisions of this section unless found to have an adverse impact on the storm water:

- A. Discharges authorized by a permit issued by the Wisconsin Department of Natural Resources.
- B. Discharges resulting from firefighting activities.

- C. Discharges from uncontaminated ground water, potable water source, roof drains, foundation drains and sump pumps, air conditioning condensation, lawn watering, water main and hydrant flushing, and swimming pools if the water has been reasonably dechlorinated.
- D. Discharges from individual automobile washing by automobile owners.
- E. Facility maintenance activities undertaken by any federal, state, county, or municipal agency, such activities, however, being subject to construction erosion control measures.

§. 231-33 ENFORCEMENT.

- A. Whenever the Village finds a person has violated a prohibition or failed to meet a requirement of this section, the Village may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:
 - (1). The elimination of illicit connections or discharges;
 - (2). That violating discharges, practices, or operations shall cease-and-desist;
 - (3). The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property;
- B. In the event the person fails to eliminate the illicit connections or discharge, fails to cease-and-desist in discharges, practices or operation in violation of this section or fails to abate or remediate the storm water pollution or combination hazards, that person may be subject to forfeiture as provided in the Village of ABC ordinance §. 1-5. Each day that the violation exists shall constitute a separate offense.

Illicit Discharge Concern List

Outfall Exhibits & Inspection Forms

**Village of ABC Visual
Inspection Form
For Illegal Connection/Illicit Discharge
WPDES Permit No. WI-S050075-3**

Outfall ID	NBNC-40			
Date of Last Rainfall				
Date Inspection Performed				
Name of Inspector				
Receiving Water	<i>ABC stream</i>			
M.H. or Outfall (Circle One)	M.H.		<u>Outfall</u>	
Pipe Size	36"			
Pipe Material (Circle One)	<u>RCP</u>	CMP	PVC	HDPE
	Steel	DI	VCP	Other
Color (Circle One)	Clear	Yellow	Gray	Orange
	Brown	Green	Red	Other
Turbidity (Circle One)	Clear	Slightly Cloudy	Cloudy	Opaque
Surface Sheen (Circle One)	None	Oil	Gasoline	
	Scum	Unknown		
Odor (Circle One)	None	Oil	Decaying Vegetation	SO ₂
	Fuel	Sewage	Methane	Unknown
Pipe Active (Circle One)	No	Trickle	Moderate	Substantial

IF FLOW IS OBSERVED, WATER SAMPLING MUST BE CONDUCTED TO DETERMINE IF AN ILLICIT DISCHARGE IS PRESENT.

Parameter	Expected Range	Actual Parameter Reading
pH Level*	6.0 – 9.0	
Total Chlorine Level*	< 0.2 mg/L	
Total Copper Level*	< 0.1 mg/L	
Total Phenol Level*	< 0.5 mg/L	
Detergents Level*	< 0.5 mg/L	
Ammonia Level*	< 0.1 mg/L	
Water Temperature	-	°F

*Expected ranges represent readings suggested by the March 2012 memo from WDNR titled "Illicit Discharge Detection Elimination"

NOTES



