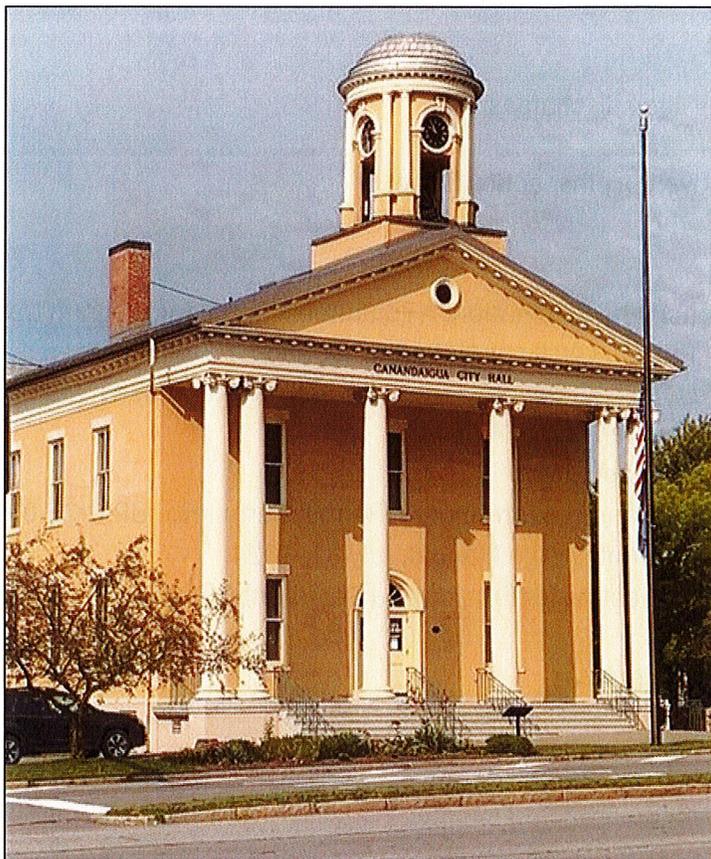


City of Canandaigua

Illicit Discharge Detection and Elimination (IDDE) Program

Minimum Control Measure (MCM) 3



City of Canandaigua
Canandaigua Department of Public Works
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Canandaigua, NY 14424

Created November 2024
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Table of Contents

1. Introduction
2. Definitions
3. Components of Illicit Discharge Program
4. Responsibility & Authority
5. Goals
6. Education programs on the hazards associated with illicit discharge
7. Training
8. Prevention
9. Detection
10. Eliminating the Discharge & Corrective Actions
11. Audits & Continual improvements

Appendices

- A. City Ordinance prohibiting illicit discharges
- B. Outfall Inventory
- C. Outfall Reconnaissance Inventory Inspection Sheet

References:

- Illicit Discharge Detection and Elimination: A guidance Manual for Program Development and Technical Assessments. Robert Pitt, University of Alabama. October 2004.
- Final Permit for NYS DEC SPDES General Permit for Stormwater Discharges from MS4, Permit No. GP-2-24-001. Effective Date January 3, 2024.
- 2024 MS4 General Permit Fact Sheet
- Final Permit for NYS DEC Construction General Permit, Permit No. GP-0-25-001.
- NYS Stormwater Management Design Manual, July 31, 2024.
- NYS Standards and Specification for Erosion and Sediment Control (Blue Book), November 2016.
- Cicacenter.org
- NYS DEC website, various articles

1. Introduction

Illicit discharges generally include any discharge into a municipal separate storm sewer system (MS4) permitted storm drain that does not consist entirely of stormwater. Illicit discharges are an issue because, unlike wastewater that flows to a treatment plant, stormwater generally flows to waterways without any additional treatment. These waterways empty into sources of drinking water or themselves are drinking water for their surrounding communities. Illicit discharges can contain pathogens, nutrients, and various toxic chemicals. Common examples of illicit discharges include concrete or paint washout, waste from restaurants and mechanics, trash, and sewage.

In rare occasions, there are exceptions referred to as “allowable discharges,” and each MS4’s permit outlines what these exceptions are. They typically include water from firefighting activities, and residential car washes, potable water, and discharges from facilities already under a National Pollutant Discharge Elimination System permit.

As the name “Illicit Discharge Detection & Elimination, (IDDE)” suggests, detecting and addressing illicit discharges are the main goals of an IDDE program. Illicit discharges have two modes of entry into the MS4: direct or indirect entry. Direct entry means the source connects directly to the MS4 through a pipe or drain-type conveyance. Examples of direct discharges are sanitary sewer cross connections or straight pipes intentionally connected to the MS4. Indirect entry occurs when the source of the illicit discharge flows into the MS4 via storm drain inlets or infiltration through cracks or joints in the storm sewer network. Indirect entry is far more common than direct entry. Examples of sources of indirect entry include failing septic systems, sanitary sewer overflows, groundwater seepage, spills and dumping, irrigation, and washing activities.

Sewage has the greatest potential to produce direct illicit discharges within any urban sub-watershed, regardless of the diverse land uses that the sub-watershed may be comprised of. The most common sewage-related direct discharges are broken sanitary sewer lines, cross connections and straight pipe discharges. There are a variety of techniques to locate and eliminate illegal sewage connections, including tracing sewage flows from the stream or outfall back up the sewer system or conveyances to reach the problem connection. Sewage can also be linked to significant indirect illicit discharges in the form of sanitary sewer overflows, sewage infiltration/inflow and sewage dumping from recreational vehicles.

Illicit discharges can contribute high levels of pollutants to waterbodies. Common pollutants found in illicit discharges include raw sewage (bacteria, viruses), heavy metals, oil/grease, solvents, and nutrients. EPA studies have shown that pollutant levels in these discharges are high enough to significantly degrade water quality, close beaches, and negatively impact aquatic, wildlife, and human health.

2. Definitions:

Illicit Discharge - Federal regulations define an illicit discharge as “...any discharge to an MS4 that is not composed entirely of stormwater...” with some exceptions. These exceptions include discharges from NPDES-permitted industrial sources and discharges from fire-fighting activities. Illicit discharges (see Table 1) are considered “illicit” because MS4s are not designed to accept, process, or discharge such non-stormwater wastes. Illicit discharges are defined as a storm drain that has measurable flow during dry weather containing pollutants and/or pathogens. A storm drain with measurable flow but containing no pollutants is simply considered a discharge. Each illicit discharge has a unique frequency, composition and mode of entry in the storm drain system.

Pollutants of Illicit Discharge – Total Suspended Solids (TSS), Total Volatile Suspended Solids (TVSS), Total Organic Carbon (TOC), Nitrogen, Phosphorus

Discharges that are allowed

- Water line flushing
- Landscape irrigation
- Foundation or footing drains
- Air Condition condensation
- Street wash water
- Dechlorinated swimming pool discharges
- Residential car washing
- Lawn watering
- Firefighting actions
- Springs

Discharges that are not allow and therefore are Illicit Discharges may include:

- Sanitary wastewater
- Effluent from septic tanks
- Commercial car wash wastewater
- Improper oil disposal
- Laundry wastewater
- Spills from roadway accidents
- Improper disposal of auto & household toxics
- Non-dechlorinated swimming pool water
- Illegal dumping

Illegal Dumping - is the disposal of waste in an unpermitted area, such as in the back of a yard, along a stream bank, in an alley, in a public right-of-way or at some other off-road area. Pouring liquid wastes or disposing of trash down storm drains is a form of illegal dumping that can also qualify as an illicit discharge. Because illegal dumping often happens in open areas along roadsides, late at night, other names for it are “open dumping,” “fly dumping” and “midnight dumping.” People often dump waste illegally to avoid paying disposal fees or to avoid expending the time and effort required for proper disposal.

Sanitary sewer overflows (SSOs) - are releases of raw sewage from a separate sanitary sewer system before it has reached a treatment facility. Raw sewage contains bacteria and nutrients that endanger both human health and

the environment. SSOs occur when flow into the sewer system exceeds the design capacity of the conveyances or the treatment plant, resulting in discharges into storm sewers, basements, streets and waterbodies. While SSOs can occur in any system due to flooding or temporary blockages, chronic overflows indicate a deteriorating system or a system where flow has exceeded capacity.

Storm Drain - can be either an enclosed pipe or an open channel, that moves stormwater through a system.

Cross Connection - These occur when a drain pipe is improperly connected to the storm drain system producing a discharge of wash water, process water or other inappropriate flows into the storm drain pipe. An example is a floor shop drain that is illegally connected to the storm drain system. These are more common in older industrial areas, that were built prior to enactment of current regulations.

Point Source Pollution – Pollution which comes from any single, identifiable source, such as a pipe, ditch or factory.

Nonpoint Source Pollution – Pollution which can not be traced back to a single source.

3. Illicit Discharge Detection & Elimination Program

The City of Canandaigua is a regulated traditional land use, small MS4 located within an urbanized area as of the year 2010 Census. The City of Canandaigua has a State Pollutant Discharge Elimination System (SPDES) number of NYR20A545. The City's stormwater permit directed the City to develop a Stormwater Management Program Plan (SWMPP). As part of this plan, Minimum Control Measure 3 (MCM) specifies the creation of an Illicit Discharge Detection & Elimination program. This document represents that effort.

Minimum Requirements as per SPDES:

- Develop, implement and enforce a program
- Develop and maintain an outfall map
- Have ordinances prohibiting illicit discharge
- Inform public employees, business and public of requirements
- Develop measurable goals and "Best Management Practices" (BMPs)

4. Responsibilities & Authority

- 4.1 The City of Canandaigua has ordinance 568 which prohibit any illicit discharges to the City's storm sewer system within the City of Canandaigua. This code may be found in Appendix A
- 4.2 Through the permitting process, the City of Canandaigua City Council has the authority to approve all construction within the City. Any disturbance of the soil becomes subject to the City's rules and guidelines for stormwater management
- 4.3 The City has appointed its Code Enforcement Officers to inspect all new construction
- 4.4 The City has appointed its Code Enforcement Officers to inspect all homes and all rental properties
- 4.5 The City has appointed its Fire Department to inspect all commercial businesses within the City of Canandaigua
- 4.6 The City has appointed its Department of Public Works to inspect all MS4 infrastructure and to ensure compliance with the City's SWMPP
- 4.7 The City has appointed the Code Enforcement Officers the power to enforce compliance with the City's regulations and issue fines as necessary

5. Goals

Through this program, The City of Canandaigua aims to prevent, find, and fix illicit discharges occurring within the City's geographic boundaries that have the potential to endanger the surface waters of the City.

5.1 The City of Canandaigua's goal is to have 100% compliance with all SWMPP regulations and to have zero illicit discharges within the City. While this is the City's goal, it is recognized that this goal may not be easily reached and compliance is a dynamic situation where 100% compliance with the program today does not equal 100% compliance tomorrow.

5.2 The City will keep all raw or poorly-treated sewage, chemicals and other pollutants out of streams or other water bodies

5.3 When illicit discharges are detected, City staff will quickly work to identify the source of the discharge. When an illicit discharge is detected, the City will initiate an investigation within one week. Ideally the illicit discharge will be identified and remediated within 30 days

5.4 The City of Canandaigua will follow best management practices (BMPs) as established by the United States Environmental Protection Agency (USEPA) and the New York State Department of Environmental Conservation (NYSDEC)

These BMPs may include:

- The development of a IDDE Program
- Stormwater Management Programs
- Ordinances prohibiting:
 - Illicit discharges to the stormwater system
 - Illicit trash dumping
 - Dumping of illicit material
 - Dumping into stormwater management areas (e.g. swales, retention ponds)
- Recreational vehicle dumping

5.5 The City of Canandaigua will engage with and educate the citizens of Canandaigua on BMPs, pollution prevention and illicit discharge detection and eliminations.

6. Educational Programs

6.1 The City will establish an educational point of contact to lead all necessary educational programs. This position is currently held by the Coordinator of Public Works, and may be held by others as necessary. All educational programs will be conducted under the direction of the Director of Public Works.

6.2 Education of the City staff:

6.2.1 Educate code enforcement and fire inspectors on cross contamination and what to look for during inspections

6.2.2 Educate City staff on stormwater outfall reconnaissance & inspection, including frequency, location and inspection techniques

6.2.3 Educate City staff on stormwater management best practices (BMPs)

6.2.4 Educate City waste water plant staff on the danger of sanitary sewer overflows (SSOs)

6.2.5 Work in combination with the Ontario County Soil & Water Conservation District Watershed Inspector who acts as the septic tank inspector on the importance of proper septic system function and maintenance

6.2.6 Educate the City's fire department on the importance of a spill management and response plans in protecting the stormwater sewer system

6.3 Educate the public & business

6.3.1 The City will create via in-house effort, or work with interested third parties to create educational brochures and other information easily disseminated to the public

6.3.2 The City will post information regarding its IDDE program onto the City's website – www.canandaiguanewyork.gov

6.3.3 Storm drain marking or stenciling is an effective method to raise public awareness of the effects of stormwater on water quality. Stenciling neighborhood storm drains helps all neighbors realize that throwing their trash down the storm drain could negatively affect their local waterbodies. It also reminds car owners not to dump their motor oil down the drain.

6.3.4 Educate the public to potential consequences of illicit discharges. Not only the negative impact on the environment, but also potential fines and legal consequences to illicit dumping.

7. Trainings

Trainings related to the City of Canandaigua's IDDE program will be closely related to the education material established in section 5 of this document.

- 7.1 The City will establish a training lead to facilitate all necessary training programs. This position is currently held by the Coordinator of Public Works, and may be held by others as necessary. All trainings will be conducted under the direction of the Director of Public Works
- 7.2 The City's training lead will annually attend, both in person and virtually, continuing educational trainings
- 7.3 Trainings of City staff will be conducted annually. Attendance at all trainings will be documented and records retained for at least five years. This training may be performed by City staff or third-party organizations
- 7.4 Code enforcement officers are certified by New York State. These officers will perform the necessary continuing education requirements necessary to maintain their license. These trainings will be performed by third-party organizations
- 7.5 City Fire Inspectors are certified by New York State. These officers will perform the necessary continuing education requirements necessary to maintain their license. These trainings will be performed by third-party organizations
- 7.6 The City Fire Department will train its staff on its spill response and spill management plans
- 7.7 Public trainings for city residents and businesses will be conducted. These trainings may be conducted by City staff or by interested third-party organizations
- 7.8 IDDE & Stormwater educational materials will be disseminated to interested parties

8. Prevention of Illicit Discharge

8.1 Many common neighborhood behaviors can cause transitory discharges that are seldom defined or regulated as illicit discharges by most communities. Individually, these behaviors cause relatively small discharges, but collectively, they can produce significant pollutant loads. Most communities use outreach and education to promote pollution prevention practices, and some of the more effective practices to influence these behaviors are described in this section:

- Storm drain stenciling
- Septic system maintenance
- Vehicle fluid changing
- Car washing
- Household hazardous waste storage and disposal
- Swimming pool draining

8.2 Generating Sites – The City of Canandaigua considers nearly all non-storm water discharges from generating sites to be illicit, and takes a more regulatory approach. These matters will be handled through code enforcement.

9. Detection of Illicit Discharge

Finding illicit discharges can be a challenge. Many indirect or transitory discharges are extremely difficult to catch through outfall screening.

9.1 Due to the ubiquity of the public and their round-the-clock observations, the City will employ their help in detecting illicit dumping into the City's stormwater sewer system. There are many more "eyes" within the public watching the City's stormwater system than City staff can provide.

9.1.1 The City has an email address: stormwater@canandaiguanewyork.gov and a phone number of: 585-337-2149 listed on the City's website that the public can use to report illicit dumping or other concerns with the City's stormwater sewer system.

9.1.2 The City has a website function that allows residents to report illicit dumping and other similar concerns. This form is available on the City's website.

9.1.3 The City will track complaints from the public. Tracking may identify repeat problem areas or individuals. Tracking may also allow patterns in the complaint data to be observed. Increased inspection of the storm sewer system will be performed in areas effected by illicit discharges. See section 8.2 for additional information on inspections.

9.2 The City of Canandaigua has identified approximately to 70 Stormwater Outfalls within the City of Canandaigua. The City will inspect at least 20% of these outfalls per year. Ideally, the City will inspect all of the outfalls annually. For the exact location of these outfalls and the City's stormwater sewer system, *refer to Appendix B.*

9.2.1 Inspections will be performed by trained City personnel or authorize third-party groups. Inspectors will have a general familiarity with the location of each outfall prior to the investigation, and will be provided with all maps/forms to perform inspections.

9.2.2 Inspectors will note the presence of dry weather flows. Dry weather flows are interpreted as weather conditions with no significant rainfall for the last 48 hours. Inspectors will note the amount of water present, the condition of the pipe and the pool. Inspectors will note if the pipe is submerged or if sediment is present. Inspectors will look for unusual odors, colors, sheens, suds or discharges. Inspectors will note the presence of floatables, which are trash and debris. Inspectors will note these characteristics on the outfall inspection sheet – *see Appendix C.*

9.2.3 Inspections with a suspicious outflow water can be sampled for various contaminants. The Canandaigua Water Treatment Plant's laboratory can analyze samples by testing their turbidity, pH, fluoride or chlorine levels, conductivity, TSS, fecal or *e. coli* levels among other things. Additional parameters such as ammonia, boron, potassium, hydrocarbons (*e.g. volatile, semivolatile, pesticides, etc.*), surfactants and detergents can be sent to a third-party, ELAP certified laboratory for analysis.

9.2.4 Baseline components such as bacteria load, turbidity, *etc.* of individual outfalls may be tested to determine a baseline profile of that outfall. This will it make easier to detect anomalous flow characteristics in the future. Unusual flow characteristics will result in additional sampling. Outfalls will not be automatically sampled unless conditions merit sampling.

9.2.5 GPS locations of each outfall will be established and entered into the City's GIS archive. Once established, GPS locations will not need to be verified with each annual inspection.

9.2.6 Photographs of each outfall will be taken and stored within the City's GIS archive. Once photographed, each outfall will not necessarily be photographed with each annual inspection unless unusual conditions are present that warrant the need for additional photographs.

9.2.7 Records of outfall inspections will be analyzed and retained for at least five years.

9.3 Once the detection of a suspicious storm flow is detected, an illicit discharge detection search will be initiated. This search will be initiated immediately if the discharge poses a significant threat to human or environmental health. Typically, discharges should be stopped within seven days of notification by the City, and illicit connections should be repaired within 30 days of notification.

9.4 Several techniques can be employed to determine the source of the discharge:

- Whenever possible it should be determined if the illicit discharge is a one-time occurrence or a persistent/reoccurring problem. It should be determined if the pollution is a point or non-point source. This will help eliminate some potential discharge sources from consideration.
- The City has mapped its stormwater sewer system, by consulting these maps, it will allow the search area to be narrowed down in the search for the illicit discharge source. Once it is determined which catch basins or drain inserts are on this line, they can be investigated.
- Testing the bacterial load of the outfall flow will help to determine if the origin of the outflow is the sanitary sewer system. Fecal coliform loads exceeding 1000 MPN/100mL are indicative of sewage contamination.
 - Also indicative of sanitary sewer contamination are ammonia levels exceeding 0.30 mg/L and total phosphorus exceeding 0.40 mg/L.
 - There are many flow charts available on the NYS DEC's website and other locations to help interpret the source of a contaminate based on its associated chemical composition. These will be consulted, should this type of analysis be necessary.
- Smoke and dye testing may be used to aid in determining the existence of cross contaminations or other issues

9.5 The City of Canandaigua maintains a separate sanitary sewer system. During heavy rain events, this system may become inundated with infiltration and inflowing water. This pushes a volume of water through the City's waste water plant that cannot be adequately treated at the time of inflow. The result of this is a sanitary sewer overflows (SSOs). The City's sewer plant's SPDES permit number is NY0025968. SSOs can be a significant source of water pollution and coordination between the MS4 program and sanitary sewer authorities can lead to improved stormwater quality for communities.

9.5.1 In order to minimize SSOs, the City of Canandaigua works to prevent infiltration and inflow (I & I) of rainwater into its sanitary sewer system.

9.5.2 Several factors contribute to a sanitary system's vulnerability to failure and overflows. The age of the pipe system is an important factor. In older systems, deteriorating main and lateral pipes and their joints can cause cracks and holes in the sewer line. The type of material the pipe system is made of uses can also impact deterioration and failure. For example, vitrified clay pipes can be more susceptible to cracks compared to concrete or plastic. Poor bedding or inferior installation techniques are other contributors to sanitary system failure. Sewer lines depend on support from the surrounding earth. When ground shifts occur, sewer lines crack

or misalign, causing open joints. Subsequently, this can lead to sanitary sewage flowing into storm sewers through groundwater or, in some cases, surface flow. The inadequate sizing of existing sewer pipes may be another factor. New sewer hook-ups; underground water infiltration and inflow; and incorrect inputs from roof, yard drains, and sump pump connections can combine to cause increases in wet weather discharges.

9.5.3 The City's sanitary sewer system is periodically inspected for broken, cracked, or collapsing sanitary sewer lines. This is accomplished by CCTV or "camera-ing" the sewer system or performing visual inspections. Damaged sanitary sewer lines leaking into storm sewers can represent significant sources of storm water pollution. Rocks or roots obstructing or damaging sewer lines will be removed.

9.5.4 City Code officers who inspect businesses and residences will look for cross contaminations between the sanitary sewer system and the storm sewer system.

9.6 The City of Canandaigua has one home within its geographic boundaries, located on Ontario Street, that has a septic system.

9.7 Spills may be associated with Motor Vehicle Accidents (MVAs) or industrial accidents.

9.7.1 The City of Canandaigua Fire Department is the City's primary responder to all spills, including MVAs. The fire department's normal procedure is to place spill controls on leaking vehicles and keep fluids out of the sewers/environment. They use stay-dry absorbents, and different types of booms and absorbent pads. If the Fire Department feels that a reportable quantity has spilled, they will initiate a DEC response, and if the spill has entered the storm or sanitary sewers, the City's waste water treatment plant would be notified.

9.7.2 Industrial spills will be reported to NYS DEC and the response would be handled by the industrial facilities' emergency response plan.

10. Eliminating the Discharge & Corrective Actions

Once an illicit discharge is detected at an outfall or stream, one of four types of illicit discharge investigations is triggered to track down the individual source. These investigations are often time consuming and expensive, require special training and staff expertise, and may result in legal action. They include: Storm drain trunk network investigations, drainage area investigations, onsite investigations and septic system investigations.

10.1 Storm drain or “trunk” investigations attempt to narrow the source of a discharge problem down to a single segment of a storm sewer. The investigation starts at the outfall, and the field crew must decide how it will explore the upstream pipe network. The three options include: work progressively up the trunk from the outfall and test manholes along the way; split the trunk into equal segments and test manholes at strategic points of the storm drain system; or work progressively down the trunk (i.e., from the headwaters of the storm drain network and move downstream). The decision to move up, split, or move down the trunk depends on the nature of the drainage system and the surrounding land use. The three options also require different levels of advance preparation. Moving up the trunk can begin immediately when an illicit discharge is detected at an outfall, and only a map of the storm drain system is required. Splitting the trunk requires a little more preparation to examine the storm drain system and find the most strategic manholes to sample. Moving down the trunk requires even more advance preparation, since the most upstream segments of the storm drain network may be poorly understood. Once crews choose one of these options, they need to select the most appropriate investigative methods to track down the source. Common methods include: visual inspection at manholes, sandbagging or damming the trunk, dye testing, smoke testing, and or video testing.

10.2 Drainage area investigations are initially conducted in the office, but quickly move into the field where a windshield survey is conducted. Driving through the drainage area to determine if anything looks amiss, a technician can survey the area around to try to narrow down the location, and effects of the discharge. Following an initial survey, a parcel-by-parcel analysis of potential generating sites within the drainage area of a problem outfall can be initialized. These types of investigations are most appropriate when the drainage area to the outfall is large or complex, and when the flow type in the discharge appears to be specific to a certain type of land use or generating site. These investigations may include the following techniques: land use investigations, permit reviews, as-built plan review, or aerial photography analysis.

10.3 Once the illicit discharge has been isolated to a specific section of storm drain, an on-site investigation can be performed to find the specific source of the discharge. In some situations, *such as subwatersheds dominated by industrial land uses or many generating sites*, on-site investigations may be immediately pursued. On-site investigations are typically performed by dye testing the plumbing systems of households and buildings. Where septic systems are prevalent, inspections of tanks and drain fields may be needed. On-site investigations are excellent opportunities to combine IDDE efforts with industrial site inspections that target review and verification of proper Storm Water Pollution Prevention Plans.

10.4 Septic tank & leach line inspections will be conducted in coordination with Ontario Country Soil & Water Coalition.

11. Audits & Continual Improvements

11.1 Program Audit

11.1.1 The City should periodically review and audit its entire SWMPP including its IDDE Program to determine its compliance with the program as well as the performance of the program.

Components Evaluated during an IDDE Audit:

- Illicit discharge reporting hotline
- Repeat reported discharges
- MS4 Infrastructure – what currently exists & its condition
- Outfalls & miles of stormwater pipe
- Total streams & channel miles
- Total area serviced by storm drains
- Existing Legal Authority
- City code
- Enforcement authority & technique
- Mapping: GIS, digital or analog
- Staffing
- Access to testing laboratories or other testing methodology
- Education and outreach of IDDE program
- Discharge Removal Capability
- Program Budget

Appendix A IDDE Ordinance

City of Canandaigua Code can be accessed at ecode360.com

City's IDDE Ordinance

ORDINANCE #2025-002

AN ORDINANCE ADOPTING CHAPTER 568 OF THE MUNICIPAL CODE TO PROHIBIT ILLICIT DICHARGES, ACTIVITIES AND CONNECTIONS TO SEPARATE STORM SEWER SYSTEM

WHEREAS, the City of Canandaigua is committed to protecting the general health, safety, and welfare of its residents and visitors; and

WHEREAS, the City may adopt restrictions regarding pollutants to the municipal separate storm sewer system that are not designed to accept, process or discharge non-stormwater wastes; and

THEREFORE, BE IT ENACTED by the City Council of the City of Canandaigua, that:

Section 1 A new Chapter 568 entitled Illicit Discharges, Activities and Connections to the Separate Storm Sewer System is hereby adopted as follows (*new language shown in italics, omitted language shown with strikethrough*):

Chapter 568

Illicit Discharges, Activities and Connections to the Separate Storm Sewer System

Chapter 568-1: Legislative Intent and Purpose

The purpose of this law is to provide for the health, safety, and general welfare of the citizens of the City of Canandaigua through the regulation of non-stormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This law establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with requirements of the SPDES General Permit for Municipal Separate Storm Sewer Systems. The objectives of this law are:

- A. To meet the requirements of the SPDES General Permit for Stormwater Discharges from MS4s, Permit no. GP-02-02 or as amended or revised;*
- B. To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge non-stormwater wastes;*
- C. To prohibit Illicit Connections, Activities and Discharges to the MS4;*
- D. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this law; and*
- E. To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4.*

Chapter 568-2: Definitions and Word Usage

Whenever used in this law, unless a different meaning is stated in a definition applicable to only a portion of this law, the following terms will have meanings set forth below:

Best Management Practices (BMPs)

Schedules of activities, prohibitions of practices, general good house keeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

Clean Water Act

The Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto.

Construction Activity

Activities requiring authorization under the SPDES permit for stormwater discharges from construction activity, GP-02-01, as amended or revised. These activities include construction projects resulting in land disturbance of one or more acres. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

Department

The New York State Department of Environmental Conservation.

Design professional

New York State licensed professional engineer or licensed architect.

Hazardous Materials

Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Illicit Connections

Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the MS4, including but not limited to:

- 1. Any conveyances which allow any non-stormwater discharge including treated or untreated sewage, process wastewater, and wash water to enter the MS4 and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency; or*
- 2. Any drain or conveyance connected from a commercial or industrial land use to the MS4 which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.*

Illicit Discharge

Any direct or indirect non-stormwater discharge to the MS4, except as exempted in Section 6 of this law.

Individual Sewage Treatment System

A facility serving one or more parcels of land or residential households, or a private, commercial or institutional facility, that treats sewage or other liquid wastes for discharge into the groundwaters of

New York State, except where a permit for such a facility is required under the applicable provisions of Article 17 of the Environmental Conservation Law.

Industrial Activity

Activities requiring the SPDES permit for discharges from industrial activities except construction, GP-98-03, as amended or revised.

MS4

Municipal Separate Storm Sewer System.

Municipal Separate Storm Sewer System

A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- i. Owned or operated by the City of Canandaigua;*
- ii. Designed or used for collecting or conveying stormwater;*
- iii. Which is not a combined sewer; and*
- iv. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40CFR 122.2*

Municipality

The City of Canandaigua

Non-Stormwater Discharge

Any discharge to the MS4 that is not composed entirely of stormwater.

Person

Any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner or as the owner's agent.

Pollutant

Dredged spoil, filter backwash, solid waste, incinerator residue, treated or untreated sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast discharged into water; which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards.

Premises

Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

Special Conditions

- i. Discharge Compliance with Water Quality Standards. The condition that applies where a municipality has been notified that the discharge of stormwater authorized under their MS4 permit may have caused or has the reasonable potential to cause or contribute to the violation of an applicable water quality standard. Under this condition the municipality must take all necessary actions to ensure future discharges do not cause or contribute to a violation of water quality standards.*
- ii. 303(d) Listed Waters. The condition in the municipality's MS4 permit that applies where the MS4 discharges to a 303(d) listed water. Under this condition the stormwater management program*

- must ensure no increase of the listed pollutant of concern to the 303(d) listed water.*
- iii. *Total Maximum Daily Load (TMDL) Strategy. The condition in the municipality's MS4 permit where a TMDL including requirements for control of stormwater discharges has been approved by EPA for a waterbody or watershed into which the MS4 discharges. If the discharge from the MS4 did not meet the TMDL stormwater allocations prior to September 10, 2003, the municipality was required to modify its stormwater management program to ensure that reduction of the pollutant of concern specified in the TMDL is achieved.*
 - iv. *The condition in the municipality's MS4 permit that applies if a TMDL is approved in the future by EPA for any waterbody or watershed into which an MS4 discharges. Under this condition the municipality must review the applicable TMDL to see if it includes requirements for control of stormwater discharges. If an MS4 is not meeting the TMDL stormwater allocations, the municipality must, within six (6) months of the TMDL's approval, modify its stormwater management program to ensure that reduction of the pollutant of concern specified in the TMDL is achieved.*

State Pollutant Discharge Elimination System (SPDES) Stormwater Discharge Permit

A permit issued by the Department that authorizes the discharge of pollutants to waters of the state.

Stormwater

Rainwater, surface runoff, snowmelt and drainage.

Stormwater Management Officer (SMO)

An employee, the municipal engineer or other public official(s) designated by the City Manager to enforce this ordinance. The SMO may also be designated by the municipality to accept and review stormwater pollution prevention plans, forward the plans to the applicable municipal board and inspect stormwater management practices.

303(d) List

A list of all surface waters in the state for which beneficial uses of the water (drinking, recreation, aquatic habitat, and industrial use) are impaired by pollutants, prepared periodically by the Department as required by Section 303(d) of the Clean Water Act. 303(d) listed waters are estuaries, lakes and streams that fall short of state surface water quality standards and are not expected to improve within the next two years.

TMDL

Total Maximum Daily Load.

Total Maximum Daily Load

The maximum amount of a pollutant to be allowed to be released into a waterbody so as not to impair uses of the water, allocated among the sources of that pollutant.

Wastewater

Water that is not stormwater, is contaminated with pollutants and is or will be discarded.

Chapter 568-3: Applicability

This law shall apply to all water entering the MS4 generated on any developed and undeveloped lands unless explicitly exempted by an authorized enforcement agency.

Chapter 568-4: Responsibility for Administration

The Stormwater Management Officer(s) (SMO(s)) shall administer, implement, and enforce the provisions of this ordinance. Such powers granted or duties imposed upon the authorized enforcement

official may be delegated in writing by the SMO as may be authorized by the City Manager.

Chapter 568-5: Severability

The provisions of this law are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this law or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this law.

Chapter 568-6: Discharge Prohibitions

A. Prohibition of Illegal Discharges.

No person shall discharge or cause to be discharged into the MS4 any materials other than stormwater except as provided in this ordinance. The commencement, conduct or continuance of any illegal discharge to the MS4 is prohibited except as described as follows:

- i. The following discharges are exempt from discharge prohibitions established by this local law, unless the Department or the City has determined them to be substantial contributors of pollutants: water line flushing or other potable water sources, landscape irrigation or lawn watering, existing diverted stream flows, rising ground water, uncontaminated ground water infiltration to storm drains, uncontaminated pumped ground water, foundation or footing drains, crawl space or basement sump pumps, air conditioning condensate, irrigation water, springs, water from individual residential car washing, natural riparian habitat or wetland flows, dechlorinated swimming pool discharges, residential street wash water, water from firefighting activities, and any other water source not containing pollutants. Such exempt discharges shall be made in accordance with an appropriate plan for reducing pollutants.*
- ii. Discharges approved in writing by the SMO to protect life or property from imminent harm or damage, provided that, such approval shall not be construed to constitute compliance with other applicable laws and requirements, and further provided that such discharges may be permitted for a specified time period and under such conditions as the SMO may deem appropriate to protect such life and property while reasonably maintaining the purpose and intent of this local law.*
- iii. Dye testing in compliance with applicable state and local laws is an allowable discharge, but requires a verbal notification to the SMO prior to the time of the test.*
- iv. The prohibition shall not apply to any discharge permitted under an SPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Department, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the MS4.*

B. Prohibition of Illicit Connections.

- i. The construction, use, maintenance or continued existence of illicit connections to the MS4 is prohibited.*
- ii. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.*
- iii. A person is considered to be in violation of this ordinance if the person connects a line conveying sewage to the City's MS4, or allows such a connection to continue.*

Chapter 568-7: Prohibition Against Failing Individual Sewage Treatment Systems

No persons shall operate a failing individual sewage treatment system in areas tributary to the City's MS4. A failing individual sewage treatment system is one which has one or more of the following conditions:

- i. *The backup of sewage into a structure.*
- ii. *Discharges of treated or untreated sewage onto the ground surface.*
- iii. *A connection or connections to a separate stormwater sewer system.*
- iv. *Liquid level in the septic tank above the outlet invert.*
- v. *Structural failure of any component of the individual sewage treatment system that could lead to any of the other failure conditions as noted in this section.*
- vi. *Contamination of off-site groundwater.*

Chapter 568-8: Prohibition Against Activities Contaminating Stormwater

- A. *Activities that are subject to the requirements of this section are those types of activities that:

 - i. *Cause or contribute to a violation of the City's MS4 SPDES permit.*
 - ii. *Cause or contribute to the City being subject to the Special Conditions as defined in of this ordinance.**
- B. *Such activities include failing individual sewage treatment systems as defined in Section 568-7, improper management of pet waste or any other activity that causes or contributes to violations of the municipality's MS4 SPDES permit authorization.*
- C. *Upon notification to a person that he or she is engaged in activities that cause or contribute to violations of the City's MS4 SPDES permit authorization, that person shall take all reasonable actions to correct such activities such that he or she no longer causes or contributes to violations of the City's MS4 SPDES permit authorization.*

Chapter 568-9: Requirement to Prevent, Control and Reduce Stormwater Pollutants by the Use of Best Management Practices

- A. *Best Management Practices*
Where the SMO has identified illicit discharges as defined in Section 568-2 or activities contaminating stormwater as defined in Section 568-8 the municipality may require implementation of Best Management Practices (BMPs) to control those illicit discharges and activities.
 - i. *The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the MS4 through the use of structural and non-structural BMPs.*
 - ii. *Any person responsible for a property or premise, which is, or may be, the source of an illicit discharge as defined in Section 568-2 or an activity contaminating stormwater as defined in Section 568-8, may be required to implement, at said person's expense, additional structural and non-structural BMPs to reduce or eliminate the source of pollutant(s) to the MS4.*
 - iii. *Compliance with all terms and conditions of a valid SPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this section at the completion of construction of the repair or replacement system.*

Chapter 568-10: Suspension of Access to MS4 – Illicit Discharges in Emergency Situations

- A. *The SMO may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, to the health or welfare of persons, or to the MS4. The SMO shall notify the person of such suspension within a reasonable time thereafter in writing of the reasons for the suspension. If the violator fails to comply with a suspension order issued in an emergency, the SMO may take such steps as deemed necessary to prevent or minimize damage to the MS4 or to minimize danger to persons.*
- B. *Suspension due to the detection of illicit discharge. Any person discharging to the municipality's MS4 in violation of this law may have their MS4 access terminated if such termination would abate*

or reduce an illicit discharge. The SMO will notify a violator in writing of the proposed termination of its MS4 access and the reasons therefor. The violator may petition the SMO for a reconsideration and hearing. Access may be granted by the SMO if he/she finds that the illicit discharge has ceased and the discharger has taken steps to prevent its recurrence. Access may be denied if the SMO determines in writing that the illicit discharge has not ceased or is likely to recur. A person commits an offense if the person reinstates MS4 access to premises terminated pursuant to this Section, without the prior approval of the SMO.

Chapter 568-11: Industrial or Construction Activity Discharges

Any person subject to an industrial or construction activity SPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the municipality prior to the allowing of discharges to the MS4.

Chapter 568-12: Access and Monitoring of Discharges

- A. Applicability. This section applies to all facilities that the SMO must inspect to enforce any provision of this Law, or whenever the authorized enforcement agency has cause to believe that there exists, or potentially exists, in or upon any premises any condition which constitutes a violation of this Law.
- B. Access to Facilities.
 - i. The SMO shall be permitted to enter and inspect facilities subject to regulation under this law as often as may be necessary to determine compliance with this Law. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to the SMO.
 - ii. Facility operators shall allow the SMO ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records as may be required to implement this law.
 - iii. The City shall have the right to set up on any facility subject to this law such devices as are necessary in the opinion of the SMO to conduct monitoring and/or sampling of the facility's stormwater discharge.
 - iv. The City has the right to require the facilities subject to this law to install monitoring equipment as is reasonably necessary to determine compliance with this law. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated to ensure their accuracy.
 - v. Unreasonable delays in allowing the municipality access to a facility subject to this law is a violation of this law. A person who is the operator of a facility subject to this law commits an offense if the person denies the municipality reasonable access to the facility for the purpose of conducting any activity authorized or required by this law.
 - vi. If the SMO has been refused access to any part of the premises from which stormwater is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this law, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this law or any order issued hereunder, then the SMO may seek issuance of a search warrant from any court of competent jurisdiction.

Chapter 568-13: Notification of Spills

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into the

MS4, said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, said person shall notify the municipality in person or by telephone or email no later than the next business day. Notifications in person or by telephone shall be confirmed by written notice addressed and mailed to the municipality within three business days of the telephone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

Chapter 568-14: Enforcement

A. Notice of Violation.

When the municipality's SMO finds that a person has violated a prohibition or failed to meet a requirement of this law, he/she may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

- i. The elimination of illicit connections or discharges;*
- ii. That violating discharges, practices, or operations shall cease and desist;*
- iii. The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;*
- iv. The performance of monitoring, analyses, and reporting;*
- v. Payment of a fine; and*
- vi. The implementation of source control or treatment BMPs. If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator.*

B. Penalties

In addition to or as an alternative to any penalty provided herein or by law, any person who violates the provisions of this local law shall be guilty of a violation punishable by a fine not exceeding three hundred fifty dollars (\$350) or imprisonment for a period not to exceed six months, or both for conviction of a first offense; for conviction of a second offense both of which were committed within a period of five years, punishable by a fine not less than three hundred fifty dollars nor more than seven hundred dollars (\$700) or imprisonment for a period not to exceed six months, or both; and upon conviction for a third or subsequent offense all of which were committed within a period of five years, punishable by a fine not less than seven hundred dollars nor more than one thousand dollars (\$1000) or imprisonment for a period not to exceed six months, or both. However, for the purposes of conferring jurisdiction upon courts and judicial officers generally, violations of this local law shall be deemed misdemeanors and for such purpose only all provisions of law relating to misdemeanors shall apply to such violations. Each week's continued violation shall constitute a separate additional violation.

Chapter 568-15: Appeal of Notice of Violation

Any person receiving a Notice of Violation may appeal the determination of the SMO to the City Manager within 15 days of its issuance, which shall hear the appeal within 30 days after the filing of the appeal, and within five days of making its decision, file its decision in the office of the municipal clerk and mail a copy of its decision by certified mail to the discharger.

Chapter 568-16: Corrective Measures After Appeal

- A. If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or, in the event of an appeal, within 5 business days of the decision of the municipal authority upholding the decision of the SMO, then the SMO shall request the owner's permission for*

access to the subject private property to take any and all measures reasonably necessary to abate the violation and/or restore the property.

- B. If refused access to the subject private property, the SMO may seek a warrant in a court of competent jurisdiction to be authorized to enter upon the property to determine whether a violation has occurred. Upon determination that a violation has occurred, the SMO may seek a court order to take any and all measures reasonably necessary to abate the violation and/or restore the property. The cost of implementing and maintaining such measures shall be the sole responsibility of the discharger.*

Chapter 568-17: Injunctive Relief

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this law. If a person has violated or continues to violate the provisions of this law, the SMO may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

Chapter 568-18: Alternative Remedies

- A. Where a person has violated a provision of this Law, he/she may be eligible for alternative remedies in lieu of a civil penalty, upon recommendation of the Municipal Attorney and concurrence of the Municipal Code Enforcement Officer, where:*

- i. The violation was unintentional*
- ii. The violator has no history of previous violations of this Law.*
- iii. Environmental damage was minimal.*
- iv. Violator acted quickly to remedy violation.*
- v. Violator cooperated in investigation and resolution.*

- B. Alternative remedies may consist of one or more of the following:*

- i. Attendance at compliance workshops*
- ii. Storm drain stenciling or storm drain marking*
- iii. River, stream or creek cleanup activities*

Chapter 568-19: Violations Deemed A Public Nuisance

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this law is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be summarily abated or restored at the violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

Chapter 568-20: Remedies Not Exclusive

The remedies listed in this law are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the authorized enforcement agency to seek cumulative remedies.

Section 2 This ordinance shall be effective thirty (30) days following its enactment. All prior laws and parts of law in conflict with this law are hereby repealed.

Appendix B

Definitions

CMP	Corrugated Metal Pipe
CMPA	Corrugated Metal Pipe Arch
CPP	Corrugated Polyethylene Pipe
RCP	Reinforced Concrete Pipe
HDPE	High Density Polyethylene Pipe
SLCPP	Smooth Lined Corrugated Polyethylene Pipe
SWCPP	Smooth Wall Corrugated Polyethylene Pipe
SICPP	Smooth Interior Corrugated PE Pipe
VCP	Vitrified Clay Pipe

MS4 Stormwater Outfalls

Outfall

	ID	Size (inches)	Material	Location
Ward 1 (NE)	1-1	18x24	RCP	East of Canandaigua Ave/Cayuga Rd
	1-2	41	SWCPP	Between Cdga Ave & Stewart Place
	1-3	18x24	RCP	End of Tamarack
	1-4	24	RCP	Kennedy St end (retention pond)
	1-5	36	HDPE	Sibley end (retention pond)
	1-6	24	CMP	Chapel St, across from middle school
	1-7	24		Fort Hill (south side) Barlow Brook
	1-8			Is in the town and no longer tracked, starting 2025

Ward 2 (SE)	2-1	36	CMP	Ontario St, south side, by Moose Lodge
	2-2A	48x28	CMP	Ontario St, south side, drains from North
	2-2B	24	RCP	Ontario St, South side, drains from east
	2-3	79-49	CMPA	Saltonstall, north side
				Ontario St, North side, between Moose lodge, East St
	2-4	30	RCP	Feeder Canal, S of 5&20, West side, Northmost
	2-5W	24	CMP	Feeder Canal, S of 5&20, West side, Southmost
	2-5E	18	CMP	Feeder Canal, S of 5&20, East Side
	2-6	15	HDPE	Feeder Canal, N of Lakeshore Drive
	2-7	30		Feeder Canal, N of Lakeshore Drive
	2-8	18	HDPE	Muar Street, South of 5&20
	2-9	12	CMP	Muar Street, East side, between 5&20 and Lakeshore
	2-10	12	RCP	Lakeshore, north side, east of Muar Street
	2-11	30	RCP	Lakeshore Muar house, North side
	2-12	30	HDPE	Muar House
2-13	30	RCP	Lakeshore Lagoon Park	
2-14	27	RCP	Lakeshore Lagoon Park	
2-15	30	HDPE		

2-16		??
2-17	RCP	

Ward 3
(SW)

3-1	38x60	RCP	West Ave, south side, west of Sucker Brook
3-2	24	CMP	South of Chapin, West side of Brook
3-3	15"	CMP	South of Chapin, East side of Brook
3-4		RCP	End of Ellis Place
3-5	24x36	RCP	Between Ellis & Bristol St, walk the creek bed
3-6	24	RCP	Bristol St, north side, West of Thad Chapin
3-7	12	CMP	Bristol St, north side, West of Thad Chapin
3-8	16	SWCPP	South of Bristol St
3-9	24	CPP	South of Bristol St
3-10	8	SWCPP	Clark St, SW corner
3-11	24	CMP	Clark St, SE corner
3-12	18	CMP	Parrish St, under the bridge
3-13	24	CMP	Parrish St, SE corner
3-14	30	CMP	In DOT compound, SW corner by 5 & 20
3-15	24	CMP	West Lake Rd, under road, inside road culvert
3-16	15	CMP	West Lake Rd, east side, south of creek
3-17	18	CMP	Parrish St, under west side of the bridge
3-18	36-48	RCP	Parrish St, SW corner

Ward 4
(NW)

4-1	18	HDPE	North St, North Bloomfield Rd Intersect
4-2	12	CPP	Looks to be in the Town of Cdga
4-3	24	CPP	Frame & grate @ 203 North St??
4-4	21 x 14	RCP	203 North Street along RR tracks
4-5	41 w x 24H	RCP	Midlakes Drive, Middle
4-6	15		Midlakes Drive, Southern most
4-7	30	CMP	Arlington Park, Northern end of loop
4-8	24	CMP	Arlington Park & Pickering St
4-9	24	CMP	Arlington Park & Douglas Dr
4-10	18	CPP	Buffalo & Arlington, North of Buffalo
4-11	18	CPP	Buffalo & Arlington, South of Buffalo
4-12	18	CMP	Buffalo St, West, by winery
4-13	21		Buffalo St, East, by winery
4-14	15	CMP	South of Keuka Lane
4-15	20	CMP	All long winery train tracks
4-16	12	CMP	Holiday Lane Cul-de-sac
4-17	18	RCP	N. Pearl, north of Holiday, at emergency squad?
4-18	15	CPP	End of Academy Drive
4-19	12	SICPP	South of end of Scotland, northern most
4-20	18	VCTP	South of end of Scotland, middle
4-21	12	CIP	South of end of Scotland, southern most
4-22	18	CMP	Behind emergency squad?
4-23	18	CMP	North Pearl, between Cemetry & bus garage

4-24	18	RCP	Sucker Brook at N. Pearl St
4-25	10	PVC	School property, leg from winery, Northern pipe
4-26	18	CMP	School property, leg from winery, Southern pipe
4-27	18	CPP	Highland Terrace Dead End
4-28	18	CPP	Sucker Brook at West Gibson, West Side
4-29	48	CPP	Sucker Brook at West Gibson, East Side
4-30	12	CMP	Sucker Book, Park Ave Dead End,Northern Pipe
4-31	18	CMP	Sucker Book, Park Ave Dead End, Southern Pipe
4-32	24	RCP	West Ave & Highland Terrace
4-33	36	CMP	Sucker Brook, 100 ft N of West Ave
4-34	24	CIP	West Ave - north side at Sucker brook

Appendix C

Outfall Reconnaissance Inventory Inspection Sheet

City of Canandaigua Stormwater Outfall Record

Section 1: Background Data

		Completed by:	
Northing	Easting	Outfall ID:	Subwatershed:
Location Notes		GPS Unit:	GPS LMK#:
Land Use in Drainage Area <i>(check all that apply)</i>			
<input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban <input type="checkbox"/> Commercial <input type="checkbox"/> Other		<input type="checkbox"/> Open Space/Check <input type="checkbox"/> Institutional <input type="checkbox"/> Suburban Known Industries: _____	
Notes (e.g. origin of outfall, if known):			

Section 2: Outfall Description

(check all that apply)

Location	Material	Shape	Dimensions (In.)
D Closed Pipe	<input type="radio"/> RCP <input type="radio"/> CMP <input type="radio"/> PVC <input type="radio"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other _____	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="radio"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/ Dim.: _____
D Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen Drip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____
Submerged?	In Water: <input type="checkbox"/> No	<input type="checkbox"/> Partially	<input type="radio"/> Fully
	With Sediment: <input type="checkbox"/> No	<input type="checkbox"/> Partially	<input type="radio"/> Fully
Flow Present?	Oves <input type="checkbox"/> No	<i>If No, Skip to Section 3D</i>	
Flow Description (If present)	<input type="checkbox"/> Trickle	<input type="checkbox"/> Moderate	<input type="checkbox"/> Substantial

Section 3A:

Inspection

(Fill in and check Y/N)

Date	Time	Name	Weather	Recent Rain?	Photos Taken?
				<i>Yes or No</i>	<i>Yes or No</i>

Section 3B:

Qualitative Characterization

(check flow# and fill in information)

Field Data for Flowing Outfalls				
	Parameter	Result	Unit	Equipment
D Flow#1	Volume		Liter	
	Time to Fill		Sec	
D Flow#2	Flow Depth		In	
	Flow Width		Ft, In	
	Measured length		Ft, In	
	Time of travel		Sec	

City of Canandaigua Outfall Reconnaissance Inventory Field Sheet

Section 3C: Physical Indicators for flowing Outfalls Only

Are physical indicators that are not related to flow present?

Yes

No

(if No, skip to section 3E)

Indicator	Check if Present	Description	Relative Severity Index (RSI)
Color	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/ gas <input type="checkbox"/> Other	<input type="checkbox"/> 1- Faint <input type="checkbox"/> 2- Easily detected
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other	<input type="checkbox"/> 1- Faint colors in sample <input type="checkbox"/> 2- Clearly visible in sample
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1- Slight cloudiness <input type="checkbox"/> 2- Cloudy
Floatables (includes trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (T.P. etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/> 1- few/ slight; origin not obvious <input type="checkbox"/> 2- Some; indications of or (e.g. possible suds or oil slick)

Section 3D: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are Any Physical Indicators Present in the flow?

Yes

No

(if No, skip to section 3E)

Indicator	Check if Present	Description	Comments
Outfall Structure	<input type="checkbox"/>	<input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion <input type="checkbox"/> Spalling, Cracking or Chipping	
Deposits/Slimes	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Paint <input type="checkbox"/> Excessive <input type="checkbox"/> Flow Line <input type="checkbox"/> Other	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Water Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Floatables <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other	
Substrate Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other	

Section 3E: Overall Potential for Illicit Discharges at this Outfall

Unlikely

Potential (presence of two or more indicators)

Suspect (1 or more indicators w/ a severity of 3)

Obvious

Section 4: Any Non-Illicit Discharge Concerns (e.g. trash or needed infrastructure repairs)?
