

Provincial Officer's Order

Order Number

1-142403769

Order Issued To

THE CORPORATION OF THE CITY OF HAMILTON
71 MAIN ST W , HAMILTON, ON, L8P 4Y5

Site

Woodward Ave Wastewater Treatment Plant
700 WOODWARD AVE, HAMILTON, ON, L8H 6P4

Refer to the Definitions section in the Provincial Officer's Report, Part B of this Order, for the meaning of all the capitalized terms that are used in this Order.

PART A - WORK ORDERED

Pursuant to my authority under **EPA | 157.1, OWRA | 16.1, OWRA | 16.2**, I order you to do the following:

Item No. 1 **Compliance Due Date:** 02/06/2023

Retain the services of a Qualified Person(s) that has the experience and qualifications with the following order items.

Item No. 2 **Compliance Due Date:** 02/06/2023

Submit to the undersigned Provincial Officer written confirmation that the Qualified Person(s) has been retained to carry out the work specified in this Order, that a copy of the Order has been given to the Qualified Person(s) and that the Qualified Person(s) has the experience and qualifications to carry out the work.

Item No. 3 **Compliance Due Date:** 03/17/2023

Develop a sampling program within the sewage works of the City of Hamilton that discharges to the Natural Environment. The program shall include at a minimum but not limited to:

i. Identifying Spill(s) and unauthorized discharges of untreated sewage within the City of Hamilton storm and combined sewer system that discharges or potentially discharges to the Natural Environment.

ii. In-pipe representative sampling of storm and combined sewers that discharge to the natural environment during Dry Weather Flow(s), where

upstream, downstream samples cannot be collected at the receiving water body.

iii. Trigger conditions, parameters, and/or limits to initiate further investigation to identify Spill(s) and unauthorized discharges of untreated Sewage.

iv. Investigation procedures for identifying Spill(s) and unauthorized discharges of untreated Sewage.

v. Timelines to implement the sampling program.

Item No. 4 **Compliance Due Date:** 03/17/2023

A copy of the sampling program referred to in Item No. 3 shall be submitted to the undersigning Provincial Officer for acceptance by the Ministry.

Item No. 5 **Compliance Due Date:** 05/12/2023

Identify recommendations for enhancements to the City's sewer inspection programs to better identify identifying Spill(s) and unauthorized discharges of untreated sewage within the City of Hamilton sewer system. These recommendations shall include at a minimum but not limited to:

I. An analysis of the feasibility of conducting a detailed in-pipe inspection of the City of Hamilton's sewer system.

II. An analysis of the feasibility of conducting risk-based inspections of the City of Hamilton's sewer system.

III. The Terms of Reference for an assignment to complete a gap-analysis review of current programs, procedures, and measures to inspect, monitor and identify Spill(s) and unauthorized discharges from the City of Hamilton's sewer system.

IV. A review of additional physical and analytical inspection programs to identify Spill(s) and Spill(s) and unauthorized discharges from City of Hamilton sewage system.

V. Procedures for updating City of Hamilton's current digital mapping system when discrepancies are determined.

Item No. 6 **Compliance Due Date:** 05/12/2023

A copy of the recommendations referred to in Item No. 5 shall be submitted to the undersigning Provincial Officer for acceptance by the Ministry.

Item No. 7 **Compliance Due Date:** 06/30/2023

Document the City's programs and processes for identifying Spill(s) and unauthorized discharges of untreated sewage within the City of Hamilton sewer system, including the program enhancements identified on the findings of order Items No. 3 and No. 5 in a suitable operating procedure, guidance document or report.

Item No. 8

A copy of the standard operating procedure, guidance document or report referred to in Item No. 7 shall be submitted to the undersigning Provincial Officer within eight (8) weeks of acceptance of order Items No. 3-6, or such other date approved by the undersigning Provincial Officer

PART B - PROVINCIAL OFFICER'S REPORT

This Order is being issued for the reasons set out below.

Definitions

For the purposes of this Order, the following capitalized terms shall have the meanings set out below:

"Dry Weather Flow(s)" means sewage flow resulting from both, Sanitary wastewater (combined input of industrial, domestic and commercial flows); and Infiltration and inflows from foundation drains or other drains occurring during periods with an absence of rainfall or snowmelt.

"EPA" means the Environmental Protection Act, R.S.O. 1990, c. E.19.

"Flow Regulator" means a any structure that in dry weather permits the passage of all flows to treatment and in wet weather permits discharge to an outfall or relief sewer of all flows in excess of some specific flowrate.

"Ministry" or "MECP" means the Ontario Ministry of the Environment, Conservation and Parks.

"Natural Environment" has the same meaning as defined in section 1 of the EPA.

"OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40.

"Provincial Officer" means the undersigned provincial officer or, if the undersigned is unable to act, any other provincial officer authorized to act pursuant to the EPA and OWRA.

"Qualified Person" means a person who has obtained the appropriate education, training and credentials and has demonstrated experience and expertise in the areas relating to the work required to be carried out in this Order.

"Sewage" has the same meaning as defined in section 1 of the OWRA.

"Sewage Works" has the same meaning as defined in section 1 of the OWRA.

"Spill" has the same meaning as defined in section 91 of the EPA.

"Waters" has the same meaning as defined in section 1 of the OWRA.

"Wet Weather Flows" Means the combined sewage flow resulting from, Sanitary wastewater; and Infiltration and inflows from foundation drains or other drains resulting from rainfall or snowmelt; and Stormwater runoff generated by either rainfall. or snowmelt that enters the combined sewer system.

Description of Person(s) Subject to the Order

The Corporation of the City of Hamilton, herein referred to as 'The City', is a single tier municipality located in Ontario. The geographic area is approximately 1,118 km² comprised of rural and urban land uses.

Description of the Site and/or System/Facility

The Corporation of the City of Hamilton, herein referred to as 'The City', owns and operates a Sewage Works, namely a wastewater collection system, comprised of combined, separated and partially separated sewer infrastructure. In addition to the wastewater collection system, The City also owns and operates a Sewage Works, for the conveyance, treatment and discharge of Sewage, namely storm water.

Reasons for the Order

On November 22, 2022 at approximately 12:14, the Ministry's Spills Action Centre (SAC) received a report from a City of Hamilton, Wastewater Collection Supervisor. The City indicated that while reviewing sewer videos on November 22, 2022 as part of a infrastructure renewal project in the area of Burlington Street East and Wentworth Street North there appeared to be a *Spill of combined sewage into the Hamilton Harbour via a storm sewer*. Later that day, The City confirmed to SAC that a Spill was observed. The City indicated emergency contractors have been dispatched to bypass the storm sewer in question by vacuuming to stop the spill. The City explained they will be coordinating repairs in the morning of November 23, 2022.

On November 22, 2022, at 17:00 I responded to the Spill. I arrived at the intersection of Burlington Street East and Wentworth Street North. I met with a City of Hamilton Wastewater Collection Operator. The operator stated he is a certified, level I wastewater collection operator. The City operator and I reviewed The City's digital sewer maps . The City operator explained that combined sewage flows north down Wentworth Street North in a combined sewer, which then discharges Sewage into a storm sewer. The storm sewer then transmits and discharges untreated Sewage from the combined sewer directly into the Hamilton Harbour. The City operator was unaware as to why it was configured that way. The City operator indicated his supervisor would have that information.

The City operator and I inspected the combined manhole. I observed a vacuum truck actively vacuuming the combined manhole to stop the spill of combined sewage. I observed sandbags in the manhole to further prevent combined sewage from entering the storm sewer. The City operator stated the vacuum truck has been on-site since approximately 16:00. The City operator explained that we would be unable to view where the combined sewer discharged into the storm sewer due to the vacuum truck being parked over the manhole.

I inspected the outfall location of the impacted storm sewer for impacts. The outfall is known in the collection system as the Wentworth combined sewer overflow Outfall. The outfall is located near Hamilton Port Authority pier 14 docking slip, at the North end of Wentworth Street North. I was unable to observe the outfall location, possibly due to the night conditions or that the outfall is submerged under water. I observed the receiving waterbody (Hamilton Harbour) by walking up and down the docking slip. I did not observe any signs of sewage or impacts to the receiving waterbody.

At 19:25 I collected five samples. I collected the samples from the storm sewer manhole located at Land Street and Wentworth Street North, down gradient of the combined sewer connection. I collected the samples using a stainless-steel bucket attached to a rope. I tripled rinsed the stainless-steel bucket and triple rinsed the PET500 bottles. I affixed legal seals to the sample bottles. The storm sewer had liquid material in the pipe. The storm sewer did not appear to be flowing at this location.

At 20:10 a City of Hamilton Wastewater Collection Supervisor arrived on site. The City Supervisor stated he is a class III wastewater collection operator. The City Supervisor and I reviewed past drawings. The City Supervisor explained a 1996 issued for tender drawing by Parker Consultant, where it shows the storm sewer in question discharges into a manhole. At this manhole there is a note indicating "break into top of existing box culvert with 15" storm sewer". The City Supervisor indicated that the storm sewers are misidentified, and they are in fact combined sewers. The City Supervisor explained where the "break into top of existing box culvert with 15" storm" is where combined sewage discharges downward into the top of a storm sewer. The City Supervisor stated prior to the City noticing this, combined sewage flowed from combined manhole to the storm manhole where, the top of the storm sewer was chipped out allowing combined sewage to enter the storm sewer. The City Supervisor showed me a CCTV video taken earlier that day by City Operators. In the video I saw where combined sewage entered the storm sewer. The City Supervisor confirmed the storm sewer flows to the North, down Wentworth Street North, ultimately discharging into the Hamilton Harbour at the Wentworth CSO Outfall.

At 21:30 I collected five samples. I collected the samples from the storm sewer manhole down gradient of the combined sewer connection, at the intersection of Burlington Street East and Wentworth Street North. I collected the samples using a stainless-steel bucket attached to a rope. I tripled rinsed the stainless-steel bucket and triple rinsed the PET500 bottles. I affixed legal seals to the sample bottles. The storm sewer did not appear to be flowing at this location.

At 21:50 I left the site. Later that evening I followed up with the City Supervisor requesting The City sample results, inspection videos, drawings, number of connections discharging to the storm sewer and a log of the volume collected by the vacuum truck that was discharged to the sanitary sewer as discussed with City staff earlier that day.

On November 23, 2022, repairs were conducted and completed to the storm water sewer, such that no untreated Sewage from the combined sewer would enter the storm sewer and discharge to the Hamilton Harbour. The combined sewer was modified to discharge into a nearby sanitary sewer.

On November 24, 2022, I submitted the samples collected on November 22, 2022 to the MECP Laboratory for analysis.

On December 1, 2022, at 10:00 I had a meeting with City of Hamilton representatives, Director of Hamilton Water/Wastewater Operations, Manager of Compliance and Regulations, Manager of Wastewater Collection, and Manager of Infrastructure Renewal to follow up with the Spill. During the meeting the City representatives explained past drawings of the sewer infrastructure in the area of the spill. City of Hamilton representatives indicated that during a construction

project tender in 1996 drawings were mislabeled as storm sewers when they were combined sewers, conveying combined Sewage. The City indicated that this project would have been initiated following the drawings, likely around 1996-1997. The City confirmed that combined Sewage would have been discharging into the storm sewer since approximately 1996-1997. The City indicated this Spill was identified during a infrastructure renewal project, where City staff observed an anomaly in the system. The City indicated the infrastructure renewal project was conducted to determine if replacement is required. The City indicated CCTV inspections were conducted by third party contractors in the area of the spill in 2009 and 2013. The City indicated, City staff do not review these inspections unless there is an identified need or prompt from the contractor. The City indicated these CCTV inspections focus on assets management, not identifying spills. The City indicated there are no proactive programs to assess unauthorized connections in the combined sewer sections of the collection system. The City indicated that only reactive work is conducted (ex. sewer back-up). The City indicated that the cross-connection program to identify where sewage is being directed to storm sewers does not apply to combined sewers. The City indicated other techniques such as smoke or dye testing is not proactively conducted in combined sewers. The City explained their surface water monitoring program implemented in 2021 to identify issues within their sewer system. The City indicated they have approximately 14 months of sampling. The City indicated the sampling in the area of the Spill in is in the Hamilton Harbour, not directly in the boat slip. I explained that I do not believe that sampling in the Hamilton Harbour is representative of what is being discharged from The City sewer infrastructure due to environmental conditions found in the Hamilton Harbour, and other industrial discharges to the Hamilton Harbour. I indicated that trigger conditions need to be implemented to determine further investigations instead of waiting to review trends in the data. During the meeting I requested several documents discussed during the meeting. The City indicated they would provide that information as soon as possible via email.

December 9, 2022, I had a meeting with MECP staff and City of Hamilton representatives, Director of Hamilton Water, Director of Hamilton Water/Wastewater Operations, Manager of Compliance and Regulations, Manager of Wastewater Collection, Manager of Infrastructure Renewal, Sr. Project Manager, Infrastructure Renewals and Senior Regulatory Coordinator, Compliance and Regulations. The City indicated they cannot be assured there are not more unauthorized connections similar to the one found at Burlington Street East and Wentworth Street North. The City also noted they observed flow regulators used to trigger overflows, that they were unaware of until the November 22, 2022 Spill was discovered. They are reviewing the accuracy of this flow regulator inventory. The City indicated they are currently reviewing and conducting field inspections of high-risk manholes with similar infrastructure configurations of where the event occurred. This is focused on the North end of Hamilton, where this type of infrastructure predominantly exists within The City. The City also discussed proposed potential new programs and reviewing their inspection programs and surface water monitoring program to identify unapproved discharges of Sewage from City of Hamilton's Sewage Works.

After reviewing the information, I collected during my inspection, such as, drawings, sewer inspection videos, sample results, along with my on-site observations, I confirmed that untreated combined Sewage was discharging into Hamilton Harbour via a City of Hamilton storm sewer, which was not authorized by the MECP or approved under the OWRA. The City estimated that 337,000,000 litres of combined Sewage from 50 mixed use service connections

was discharged into the Hamilton Harbour over 26 years due to this spill. The current City reactive inspection programs were unable to detect this Spill for the duration of the Spill, and it is my opinion the reactive inspection programs would not have identified this Spill. It is my opinion that the City of Hamilton does not have adequate programs to inspect, monitor and identify unauthorized connections causing Spills from City of Hamilton's Sewage Works infrastructure. With the absence of adequate programs, it is in my opinion that additional Spills, similar to this event could be currently occurring, and thus result in the unauthorized discharge of sewage from the works into the Natural Environment, including Waters such as the Hamilton Harbour.

Furthermore, On January 9, 2023, Ministry's Spills Action Centre (SAC) received a report from The City, Wastewater Collection Supervisor that another sewage Spill was discovered during a pilot proactive inspection program implemented as an outcome of the November 22, 2022, sewage Spill. The City determined a combined sewer was directly connected, and transmitted sewage to a storm sewer. Through this connection, untreated sewage from 11 residential homes was transmitted to a storm sewer that then discharges to the Hamilton Harbour from the Wentworth combined sewer overflow outfall.

On January 10, 2023, I responded to the sewage Spill. I collected samples and information regarding the Spill. It is my preliminary findings that this spill is similar to the November 22, 2022, where unauthorized connections were made from a combined sewer into the storm sewer. The storm sewer conveyed Sewage to the Hamilton Harbour. This inspection is currently on-going, and I am awaiting further information from the City of Hamilton and sample results from the MECP Laboratory.

During my January 10, 2023, inspection it was also communicated by The City, Wastewater Collection Supervisor that several flow regulators unknown to the City of Hamilton have been identified during the pilot proactive inspection program implemented as an outcome of the November 22, 2022, sewage spill.

Under certain emergency conditions, Sewage Works may be authorized to discharge untreated Sewage to the Natural Environment with no to minimal treatment typically during Wet-Weather Flows. These authorized discharges are necessary to prevent storm water and wastewater from backing up and causing basement flooding, surface flooding, and potential damage to wastewater treatment plants. The two sewage Spills discovered by the City, are not authorized as the Spills would have been discharging to the Natural Environment during Dry Weather Flows.

I reasonably believe the requirements specified in this Order are in the public's interest as untreated Sewage often contains high levels of floatables, pathogenic microorganisms, suspended solids, oxygen-demanding organic compounds, nutrients, oil and grease, toxic contaminants and other pollutants. Untreated sewage discharged to the Natural Environment represent a potential health hazard and can have adverse effects on aquatic life, recreational uses and water supplies.

Authority to Issue the Order

I am issuing this Order under my authority as a Provincial Officer under the following legislation, which also includes the authority to take intermediate action and/or procedural steps:

This Order is being issued pursuant to my authority under section 157.1 of the EPA and Section 16.1 and 16.2 of the OWRA.

I reasonably believe that the requirements specified in this Order are necessary or advisable so as to prevent or reduce the risk of a discharge of a contaminant, namely Sewage into the Natural Environment from the undertaking or the property.

AND

I further reasonably believe that the requirements in this Order are in the public interest in order to prevent a discharge of Sewage into Waters in the area of the City, such as but not limited to the Hamilton Harbour that may impair the quality of water.

AND

I further reasonably believe that the requirements in this Order are in the public interest.

Attachments

The attachments listed below, if any, form part of this Order:

ISSUING OFFICER

Name: Tyler Kelly

Job Title: Senior Environmental Officer

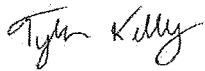
Badge Number: 1887

Officer Email: tyler.kelly@ontario.ca

Office Email: Environment.Hamilton@ontario.ca

Date: 2023/01/18

Signature:



REVIEW AND APPEAL INFORMATION

REQUEST FOR REVIEW

You may request that this Order be reviewed by the Director. Your request must be made in writing or orally with written confirmation. Your written request or written confirmation of your oral request must be received by the Director within 7 days after the date this Order was served on you and must be given to the Director as indicated in the Contact Information below.

In your written request or written confirmation, you must:

- specify the portions of this Order that you wish to be reviewed;
- include any submissions to be considered by the Director with respect to issuance of this Order to you or any other person and with respect to the contents of this Order;
- apply for a stay of this Order, if necessary; and
- provide an address for service by one of the following means, in person, by mail, by commercial courier, by fax, or by email.

In response to your request, the Director may confirm, alter/amend or revoke this Order. As an intermediate step, the Director may stay this Order by providing written notice to you that additional time is required to make a decision.

The Director will serve you with a copy (written notice) of the decision to revoke this Order or of an order, a Director's Order, to confirm or alter/amend this Order, together with reasons.

DEEMED CONFIRMATION OF THIS ORDER

If within 7 days of the Director receiving your request for review you do not receive written notice of a stay, or oral or written notice of the Director's decision on your request for review, this Order is deemed (considered) to have been confirmed by Order of the Director and deemed to have been served upon you at the expiry of those 7 days.

APPEAL INFORMATION (REQUIRE A HEARING)

A. If this Order is deemed confirmed as explained above, you may require a hearing by the Ontario Land Tribunal on the deemed confirmed Order within 15 days of the deemed service date:

- you must serve as indicated in the Contact Information below, written notice of your appeal on the Ontario Land Tribunal and the Director within those 15 days of the deemed service date;

- your notice must state the portions of the deemed confirmed Order for which a hearing is required and the grounds on which you intend to rely at the hearing;
- unless you have leave (permission) of the Ontario Land Tribunal, you are not entitled to appeal a portion of the deemed confirmed Order or to rely on grounds of appeal that are not stated in your notice requiring the hearing; and
- written notice requiring a hearing must be served on the Ontario Land Tribunal and the Director as indicated in the Contact Information below.

B. If this Order is confirmed or altered/amended by the Director by a written order served upon you (as opposed to the deemed confirmation noted above), such Director's Order will include the appropriate instructions for appealing that order to the Ontario Land Tribunal.

CONTACT INFORMATION

The contact information for the Director and the Ontario Land Tribunal is the following:

Registrar
Ontario Land Tribunal
655 BAY STREET, 15th FLOOR
TORONTO, ON M5G 1E5
OLT.Registrar@ontario.ca

and

Director (Provincial Officer's Orders)
Ministry of the Environment,
Conservation and Parks
Hamilton District Office
119 KING ST W, 9TH FLR
HAMILTON, ON L8P 4Y7
Office Email: Environment.
Hamilton@ontario.ca
Fax: (905) 521-7806

The contact information of the Ontario Land Tribunal and further information regarding its appeal requirements can be obtained directly from the Tribunal at:

Tel: (416) 212-6349, Toll Free: 1(866) 448-2248 or www.olt.gov.on.ca

SERVICE INFORMATION

Service of the documentation referred to above can be made personally, by mail, by fax (in the case of the Director only), by commercial courier or by email in accordance with the legislation under which this Order is made and any corresponding Service Regulation.

ADDITIONAL INFORMATION

Unless stayed by the Director or the Ontario Land Tribunal, this Order is effective from the date of service.

Failure to comply with a requirement of this Order constitutes an offence.

The requirements of this Order are minimum requirements only and do not mean that you are not required to comply with any other applicable legal requirements, including any:

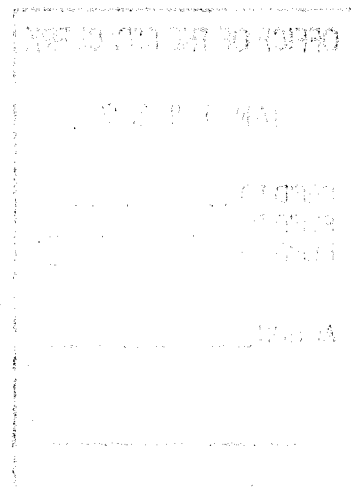
- statute, regulation, or by-law;
- federal, provincial, or municipal law; or
- applicable requirements that are not addressed in this Order.

The requirements of this Order are severable. If any requirement of this Order, or the application of any requirement to any circumstance, is held invalid, such finding does not invalidate or render unenforceable the requirement in other circumstances. It also does not invalidate or render unenforceable the other requirements of this Order.

Further orders may be issued in accordance with the legislation as circumstances require.

This Order is binding upon any successors or assignees of the persons to whom this Order is issued.

The procedures to request a review by the Director or require a hearing and other information provided above are intended as a guide. The legislation should be consulted for additional details and accurate reference. Further information can be obtained from e-Laws at www.ontario.ca/laws.



OFFICE OF THE CITY CLERK

JAN 18 2023

REF'D TO _____

REF'D TO _____

REF'D TO _____

ACTION _____

Ministry of the Environment, Conservation and Parks
Tyler Kelly, Senior Environmental Officer/Provincial Officer
Badge #1887 Tyler.Kelly@ontario.ca
Hamilton District Office - West Central Region
119 King Street West, 9th floor
Hamilton, ON L8P 4Y7
Tel 905-515-2152 Fax 905-521-7806
Provide feedback on my visit at 1-800-565-4923 (Individuals) or
1-888-745-8888 (Businesses) or ontario.ca/inspectionfeedback

Spills Action Centre: 1-800-268-6060
Pollution Hotline: 1-866-663-8477
ontario.ca/reportpollution

Ontario 

