

## **Procedures to Address the Burlington Street Combined Sewage Discharge Incident**

The following are programs and processes for identifying potential spill(s) and unauthorized discharges of untreated sewage within the City’s sewer system, including program enhancements. The following procedures were submitted to the Ministry on Thursday June 29<sup>th</sup>, 2023 in response to Items No. 7 and 8 of the Provincial Officer’s Order Number 1-142403769 issued to the City on January 18, 2023:

<b>Scope of Process / Procedure</b>	<b>Name of Process / Procedure</b>
Sampling & Monitoring	<ul style="list-style-type: none"> <li>Unauthorized Discharges of Untreated Sewage – Identification, Monitoring and Control Framework (PW-WW-L-013-009)</li> <li>Dry Weather Sampling (PW-WW-P-013-012) Note: Release of procedure is pending council approval for resources</li> </ul>
Maintenance	<ul style="list-style-type: none"> <li>Infrastructure Maintenance, Rehabilitation and Renewal (PW-WW-P-026-001)</li> <li>Updating Asset Information Using WIMS Red Lining (PW-WW-P-011-014) Spill Response</li> <li>Spills Response Notification, Coordination and Corrective Actions (PW-WW-P-12-003)</li> </ul>
Communications	<ul style="list-style-type: none"> <li>External Regulatory and Other Communications (PW-WW-P-008-002)</li> <li>Process for Issuing External Communications with the Public (PW-WW-P-008-10)</li> <li>Sewage Spills Communication Plan (PW-WW-P-012-018)</li> </ul>

Communication Update HW.23.05 - Provincial Officer’s Order #1-142403769 notified Public Works Committee that the above requested procedures and guidance documents were submitted to the Ministry prior to the June 30, 2023 deadline.

### **Sampling & Monitoring Procedure:**

The new list entitled Unauthorized Discharges of Untreated Sewage – Identification, Monitoring and Control Framework (PW-WW-L-013-009) describes programs and processes for identifying spill(s) and unauthorized discharges of untreated sewage within the City’s sewer system. The list includes program enhancements identified by addressing the items in Provincial Officers' Order Number 1-142403769 dated January 18, 2023.

The new procedure entitled Dry Weather Sampling (PW-WW-P-013-012) was released in draft for review by Hamilton Water management in June 2023 and is pending Council approval for resources. The procedure describes how stormwater collection system dry

weather sampling testing and monitoring will be undertaken. The procedure also describes how the results of the sampling testing will be communicated to stakeholders. Report PW22088(b)) provides recommendations on additional full-time staff required to support the in-pipe sewage inspection and sampling programs.

The sampling schedule and locations for the In-Pipe Storm Program will be developed once Hamilton Water receives confirmation on the resources available to conduct the work. Staff from the Environmental Monitoring & Enforcement Unit be responsible for the In-Pipe Storm Sewer Inspection and Sampling Program.

The proposed approach is to begin inspections at the visible outfalls move upstream to maintenance holes until a maintenance hole is not influenced by Lake levels can be identified and sampled. If flow is observed during Dry Weather in a maintenance hole not influenced by Lake levels, it will be sampled along with upstream maintenance holes. This sampling continues systematically within the storm sewer outfall catchment area. Sample analytes and their triggers will evolve and change over time. Initial analytes include metals, total mercury, caffeine, biological oxygen demand, E.coli, pH, O-Phosphate, chloride and temperature. The City's Environmental Laboratory staff will manage the analysis of the samples

#### **Maintenance Procedure:**

The Infrastructure Maintenance, Rehabilitation and Renewal (PW-WW-P-026-001) procedure describes how Hamilton Water implements infrastructure maintenance, rehabilitation, and renewal programs. Infrastructure maintenance, rehabilitation and renewal depends on the condition of infrastructure, the life-cycle costs of various rehabilitation options, redundancy of equipment and the related operational risk.

The procedure entitled Asset Information Using Water Information Management System Red Lining (PW-WW-P-011-014) outlines the process for Hamilton Water staff to use the redline function in the Water Information Management System to indicate changes to water, stormwater and sewer assets. The redline edits are reviewed by the Water Information Management System Unit who updated the Hansen software. The redline process ensures Hamilton Water staff have current information regarding water, stormwater and sewer assets.

The Spill Response Notification, Coordination and Corrective Actions (PW-WW-P-12-003) procedure describes the protocol for notification and coordination of spill response among Hamilton Water staff. The spill response procedure ensures that immediate and sufficient corrective actions are implemented in a consistent and effective manner. The procedure applies to spills originating from Hamilton Water infrastructure or spills that could have an impact on Hamilton Water infrastructure. The procedure was updated to include a link to the new Sewage Spills Communication Plan (PW-WW-P-012-018) which is under development.

**Communications Procedure:**

The External Regulatory and Other Communications (PW-WW-P-008-002) procedure outlines Hamilton Water's communication processes related to water, stormwater and wastewater programs or processes with external regulatory and other external stakeholders. The external regulatory stakeholders include MECP. The procedure defines the responsibilities for the Director, Hamilton Water, other Hamilton Water Directors and Managers and Manager of Compliance and Regulations who is the System Management Representative for the Wastewater Quality Management System and Drinking Water Quality Management System. The scope of the procedure includes regulatory orders, inspections, approvals, and other legal instruments. The procedure was updated to reference the Distribution of Federal and Provincial Orders (PW-WW-P-008-002) procedure which is in development and Sewage Spills Communication Plan (PW-WW-P-012-018) which is pending release.

The procedure entitled Process for Issuing External Communications with the Public (PW-WW-P-008-10) is a generic communications procedure outlining the roles and responsibilities of Hamilton Water staff with regards to external communications of multiple types of external communications including public notices, direct mail, advertisements, brochures, policies and reports to residents or industrial, commercial or institutional customers. The procedure was updated to identify the Wastewater Quality Management System web page and annual drinking water systems reports.

In June 2023, Hamilton Water developed the new procedure entitled Sewage Spills Communication Plan (PW-WW-P-012-018) which is currently under review by Hamilton Water management. The purpose of the Communications Plan ([included as Appendix "F" to Report PW22088\(a\)](#)) is to assist in keeping Council, Senior Leadership, the community, media and other stakeholders informed in an open and transparent manner, including publishing a webpage dedicated to providing information relating to sewage spills originating from City wastewater infrastructure that have been identified through Hamilton Water's risk-based inspection pilot program, or through other means. The Communications Plan was outlined in Communication Update HW.23.03 - Spills from Hamilton Water Infrastructure Webpage. In addition, the Communications Plan was presented to [Public Works Committee on February 13, 2023](#).

In the event of a spill from Hamilton Water infrastructure, staff notify MECP of the potential spill through the Spills Action Centre and the City's Spills Reporting Line. Hamilton Water staff will then investigate the incident to confirm if there is a spill from Hamilton Water infrastructure or from a private cross-connection. If the investigation determines that there is a private sewer lateral cross-connection the staff will follow established processes of the Sewer Lateral Cross-Connection Program to address the incident. The procedure identifies different response protocols for different levels of cross-connections and/or the estimated volume of the sewage spill.

As the severity of the incident increases the types of communication channels also increase. Examples of communication channels include notification to Public Health Services, resident notifications, posting on the City's website, notification to the Senior Leadership Team and Council, media notes and releases, press conferences and others. The procedure also identifies additional stakeholders who will be identified the higher severity cross-connections and/or sewage spills.

The Communication Update HW.23.03 - Spills from Hamilton Water Infrastructure Webpage also announced the dedicated [Sewer Inspection Program](#) webpage which provides an overview of the pilot program's approach and progress to date, as well as a mapping tool that allows users to view a registry of all sewage spills originating from City of Hamilton wastewater infrastructure. Using the interactive map, web users can view the location of a spill, date of discovery, cause, corrective actions, spill volume and more.