




**CITY OF HAMILTON**  
**PUBLIC WORKS DEPARTMENT**  
**Hamilton Water Division**

<b>TO:</b>	Chair and Members Public Works Committee
<b>COMMITTEE DATE:</b>	April 22, 2022
<b>SUBJECT/REPORT NO:</b>	Sewer Use By-law No. 14-090 Amendments PW19029(a) (City Wide)
<b>WARD(S) AFFECTED:</b>	City Wide
<b>PREPARED BY:</b>	Susan Girt (905) 546-2424 Ext. 2671 Hector Quintero (905) 546-2424 Ext.5087
<b>SUBMITTED BY:</b>	Nick Winters Acting Director, Hamilton Water Public Works Department
<b>SIGNATURE:</b>	

**RECOMMENDATION**

- (a) That the amending By-law attached as Appendix “A” attached to Report PW19029(a), which amends By-law 14-090, being a By-law to regulate the discharge of any matter into the sewer works, including the sanitary, combined and storm sewer systems of the City of Hamilton and which has been prepared in a form satisfactory to the City Solicitor, be enacted and effective immediately;
- (b) That applicable sewer discharge fees as outlined in Appendix “B” attached to Report PW19029(a) be approved effective immediately;
- (c) That the City Solicitor be authorized and directed to prepare for Council approval, all necessary by-laws to amend the sewer discharge fees to the Water and Wastewater/Storm Fees and Charges By-law 21-234; and,
- (d) That the Director of Hamilton Water be authorized and directed to apply to the Senior Regional Judge for approval of set fines for offences under the Sewer Use By-law when the By-law amendment has been enacted.

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OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

## **EXECUTIVE SUMMARY**

The purpose of Report PW19029(a) is to summarize the results of two (2) Public Engagement Consultation processes, including minor administrative updates of Sewer Use By-law No. 14-090 (SUB), and to seek approval and enactment of By-law No. 22-XX, attached as Appendix “A” attached to Report PW19029(a) to amend the SUB. It is recommended that the proposed updates to the SUB come into force immediately. These updates address three (3) issues;

1. Amendments to some of the parameter limits in the SUB; the rationale for which was outlined in Report PW19029 presented to Public Works Committee on April 1, 2019.
2. Amendments to implement Construction Dewatering provisions into the SUB.
3. Other administrative changes.

The Public Works Committee at its meeting of April 1, 2019, received the Sewer Use By-law Proposed Amendments Report (PW19029). In addition to proposing the amendments, the report informed Committee of staff’s intent to hold Public Information Centres (PIC) regarding the outcome of the 2018 consultant’s review (CH2M Hill Canada Ltd.). City of Hamilton (City) Staff held two (2) PICs on October 24 and October 29, 2019, seeking input from various stakeholders who indicated general support for the proposed changes.

The current SUB contains no provisions to control groundwater or surface water discharges to combined sewers, which means enforcement of construction dewatering activities with discharges to combined sewers cannot take place. Monitoring and enforcement of these discharges is important because they make their way to the Woodward Avenue Wastewater Treatment Plant and can impact combined sewer and treatment plant capacity. These discharges can also increase City liability with respect to wastewater collection system surcharges, basement flooding and combined sewer overflows. Staff worked with a consultant (Jacobs Engineering Group Inc.), to help the City better understand the needs of industry partners when it comes to the development of a Construction Dewatering permitting program and associated modifications to the existing SUB. Public consultation on the Construction Dewatering permitting program and associated changes to the SUB took place between August 6 and October 15, 2021 through the Engage Hamilton platform where developers, business owners, members of the public and internal staff were invited to share their feedback and questions. All comments were received and taken into consideration during the amendment of the SUB attached as Appendix “A” attached to Report PW19029(a).

The minor administrative changes were identified from gaps during use and implementation of the SUB through consultation with users and staff.

**Alternatives for Consideration – See Page 10**

**FINANCIAL – STAFFING – LEGAL IMPLICATIONS**

**Financial:** The City’s Sewer Use By-law No. 14-090 (SUB) and its associated enforcement program is fully funded through fees and charges collected from users of the program. The new Construction Dewatering permitting program and the associated fees will provide additional revenue to support the expansion of the program. In 2021, a total of \$130,010 was invoiced through Surcharge or Temporary Sewer Discharge Permits associated with construction dewatering activities, but staff were not able to recover costs for discharges to the combined sewer system.

**Staffing:** There are no staffing impacts as a result of the recommendations. Council has previously approved two (2) Full Time Equivalent (FTE) staff for the administration of the Construction Dewatering permitting program. The costs for these FTEs will be fully recovered from the permitting fees annually.

**Legal:** Once By-law No. 22-XX, attached as Appendix “A” attached to Report PW19029(a), is enacted by Council, the City Solicitor will prepare for Council approval, all necessary by-laws to amend the sewer discharge fees to the 2022 Water and Wastewater/Storm Fees and Charges By-law as outlined in Appendix “B” attached to Report PW19029(a).

**HISTORICAL BACKGROUND**

The City’s Sewer Use By-law No. 14-090 (SUB) regulates discharges to the City storm, sanitary, and combined sewers from industrial, commercial and institutional (IC&I) facilities, and residential units. It also regulates the conveyance and disposal of hauled sewage. It establishes limits for common pollutants and prohibited substances, and details requirements that users need to meet to discharge to the City’s sewer infrastructure.

The current SUB is an administrative re-write from the original 1988 SUB. In 2009, the Canadian Council for Ministers of Environment (CCME) produced a new model Sewer Use By-law (CCME Model By-law) to assist municipalities with addressing sources of contaminants in wastewater and the inclusion of provisions considered industry standards. In response, the current SUB was written by Hamilton Water (HW) and Legal Services staff to promote clarity and ease of use, as well as fair and consistent administration and enforcement. The environmental impacts would be significant without regulating dischargers through enforcement of the SUB. Examples include:

- Clogged or damaged sewers and pipes;

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- Risk of impairment of the sewage treatment processes;
- High nutrients contributing to eutrophication of water bodies through algal blooms; and,
- Heavy metals and emerging contaminants that are toxic and can bioaccumulate in the food chain.

The mandate of the Environmental Monitoring and Enforcement (EME) Unit in the Hamilton Water Division of Public Works is to ensure a healthy environment and elevate trust and confidence in HW's services through innovative risk assessment, mitigation and compliance programs. The unit is responsible for the administration and enforcement of the SUB, which is in place to protect the City's sewer infrastructure, wastewater treatment facilities and the natural environment.

This is achieved via the following activities and programs:

- Sewer Discharge Permitting Program
- 24/7 Spills Response Program
- IC&I Inspection and Risk Assessments
- Enforcement Action
- Sampling and Monitoring
- Hauled Sewage Monitoring Program
- Community Outreach
- Sewer Use By-law Updates

Since its inception, the current By-law has been amended several times to accommodate changes to departmental structure and current industry practices and technologies. Public Works Committee, at its meeting of April 1, 2019, received the Sewer Use By-law Proposed Amendments Report (PW19029). The purpose of the report was to inform Committee of staff's intent to hold Public Information Centers (PIC) regarding the outcome of a consultant's (CH2M Hill Canada Ltd.) review of the SUB Parameter Review study completed in 2018. This high-level study consisted of a comprehensive and scientific review of the parameters and limits to ensure they are appropriate and effective for the upgrades to the Woodward Wastewater Treatment Plant. The study also supported the Hamilton Harbour Remedial Action Plan: Urban Runoff Hamilton Harbour Report recommendation that the SUB include a limit for total phosphorous discharged to the storm sewer system. City Staff held two (2) PICs in October 2019 to seek input from stakeholders. Both PICs were well attended and the feedback that was received on the proposed changes was supportive.

The current SUB contains no provisions to control groundwater or surface water discharges to combined sewers, which means enforcement of construction dewatering activities with discharges to combined sewers cannot take place.

Monitoring and enforcement of these discharges is important because they make their way to the Woodward Avenue and Dundas Wastewater Treatment Plants and can impact combined sewer conveyance and treatment plant capacity. These discharges also increase City liability with respect to collection system surcharges, basement flooding and increased sewer overflows. Staff worked with a consultant (CH2M Hill Canada Ltd.), to assist in developing recommendations for implementing a program for control and monitoring of discharges from Construction Dewatering, as well as to help the City better understand the needs of industry partners when it comes to the development of a Construction Dewatering permitting program and associated modifications to the existing SUB. Public consultation on the Construction Dewatering permitting program and associated changes to the SUB took place between August 6 and October 15, 2021 through the Engage Hamilton platform where developers, business owners, members of the public and internal staff were invited to share their feedback and questions. All comments were received and taken into consideration during the amendment of the SUB.

By-law 22-XX attached as Appendix “A” attached to Report PW19029(a), incorporates the proposed amendments from report PW19029 and the changes to support the Construction Dewatering permitting program into the SUB. The incorporation of the proposed amendments from report PW19029 were delayed while staff worked to develop the Construction Dewatering permitting program, and there have been some additional delays due to the COVID 19 Pandemic.

## **POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS**

Not Applicable.

## **RELEVANT CONSULTATION**

In updating the SUB, HW staff undertook a number of activities to communicate and consult with local municipalities, industry stakeholders, environmental consultants, members of the public and other interested parties.

Parameter Review:

On April 1, 2019, the Public Works Committee received the Sewer Use By-law Proposed Amendments Report (PW19029). A public consultation process was initiated to communicate the outcome of the consultant (CH2M Hill Canada Ltd.) review and proposed amendments. Two (2) PICs were held on October 24 and October 29, 2019. The results of the consultation process were as follows:

- I. Two (2) PICs were held at different City facilities:
  - a. 700 Woodward Avenue, Administration Building

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b. Hamilton City Hall

II. Over 200 email invitations for the PICs were sent to:

- a. Industries currently monitored by the Sewer Use program
- b. Current SUB permit holders
- c. Septic haulers and generators
- d. Local government and non-government agencies

III. Advertising for the PIC was included on:

- a. City Website
- b. Local Newspapers

The PICs were held as open houses where poster boards displayed information on the proposed parameter amendments and City staff were at the event to answer any questions from businesses and residents about the proposed amendments. Copies of the consultant report were made available for attendees to review during their time at the PIC and attendees were encouraged to take a copy of the Information Report (PW19029), which summarized the proposed parameter amendments.

A breakdown of the attendees is summarized below:

Area of Interest	Number of Attendees
Industrial Facilities	15
Restaurants or Food Service Facilities	7
Vehicle Service Facilities (car washes, auto shops)	1
Property Owners/ Managers	1
Septic/Waste Haulers	4
Associations/ Consulting Companies	3
Residents/ Other	8
Total	39

Following the public consultation process, there were 10 pieces of correspondence received from various stakeholders in the form of emails, letters, and completed feedback forms.

The feedback indicates that attendees were pleased that the proposed changes were in line with CCME model SUB, which has been adopted by other municipalities.

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Construction Dewatering Permitting Process and Administrative Updates:

To assist HW in developing a Construction Dewatering permitting process, staff worked with a consultant (Jacobs Engineering Group Inc.) to assist in developing recommendations for implementing a program for control and monitoring of discharges from Construction Dewatering. This review included updates to the SUB and the development of modifications to help the City better understand the needs of industry partners. Upon completion of the consultant review, a Public Consultation process was initiated to communicate the outcome of the consultant review and proposed amendments including the minor administrative updates.

A Public Engagement period took place between August 6 and October 15, 2021 through the Engage Hamilton platform where developers, business owners, members of the public and internal staff were invited to share their feedback and questions. The results of the consultation process were as follows:

- I. Over 200 email invitations for the Public Engagement period were sent to:
  - a. Developers/builders
  - b. Building associations
  - c. Construction groups
  - d. Local businesses
  - e. The Development Industry Liaison Group (DILG)
  - f. Hamilton Oshawa Port Authority
  - g. Mayor Eisenberger and Members of Council
  - h. City staff
  
- II. Advertising for the Public Engagement was included on:
  - a. Local news outlets (The Hamilton Spectator)
  - b. Social Media Blast
  - c. Digital advertising

Visitor summary during this period is illustrated below:

Total Visits	679
Maximum visitors per day	23
Engaged Visitors	8
Informed Visitors	133
Aware Visitors	572

The visitors ranged from Water industry professionals, Developers, Contractors, Residents, City Staff and Other. Following the Public Consultation process,

there were 10 pieces of feedback received from various stakeholders in the form of emails and completed feedback forms.

83% of visitors felt confident/somewhat confident in understanding the changes that were coming to the SUB. Additional feedback requested clarification on the implementation of the upcoming changes and requested adequate notice upon approval of the changes. All comments were received and taken into consideration during the amendment of the SUB and will be considered during the implementation of the operational changes to the program. The Construction Dewatering Program and associated timeline was also presented to the DILG on June 14, 2021, January 10, 2022 and March 14, 2022 as an avenue to keep the development community aware of the approval timelines for the amended SUB the next steps following Council approval.

Corporate Services Department, Legal Services Division staff reviewed the proposed updates and drafted By-law No. 22-XX, attached as Appendix "A" attached to Report PW19029(a).

Corporate Services Department, Financial Planning, Administration & Policy Division staff were consulted regarding the revised sewer discharge fees outlined in Appendix "B" attached to Report PW19029(a) and the necessary changes to the Water and Wastewater/Storm Fees and Charges By-law 21-234.

## **ANALYSIS AND RATIONALE FOR RECOMMENDATION**

The underlying framework for the amended SUB remains unchanged from the current By-law but there are several amendments. The amendments (summarized below) support the following five (5) guiding principles:

- Improved Protection of Infrastructure and the Environment
- Improved Clarity and Transparency
- Improved Enforcement Capabilities
- Improved/Equitable Cost Recovery
- Improved Risk/Liability Mitigation

### **1. Parameter Review:**

The rationale behind the parameter limit amendments were outlined in Report PW19029 and received by Public Works Committee on April 1, 2019. The parameter limit amendments are summarized in Appendix "C" attached to Report PW19029(a). Details of the Public Engagement period can be found in the Relevant Consultation section above. The feedback obtained during the engagement period indicated that stakeholders were pleased that the proposed changes were in line with CCME model SUB, which has been adopted by other municipalities. Stakeholders appreciated the



way information was laid out and that City staff attended the event to provide perspective.

In some cases, the proposed amendments were seen as beneficial to companies who struggle to stay in compliance with the current SUB (e.g. for pH). There was some mild concern that the newly proposed Sulphide parameter may lead to non-compliance situations due to lack of historical discharge monitoring for this parameter. The feedback questioned why Hamilton is adopting the Sulphide limit, which is included in the CCME Model By-law, but not adopted by other Ontario municipalities. Staff are recommending that the City SUB follow the CCME model SUB with a Sulphide limit of 1 mg/l due to the variety of the industrial dischargers to the City's sewer system. However, the addition of sulphide to the parameter list is not anticipated to negatively impact current IC&I dischargers.

## 2. Construction Dewatering Permitting Process:

The current SUB contains no provisions to control groundwater or surface water discharges to combined sewers, which means enforcement of construction dewatering activities with discharges to combined sewers cannot take place. Monitoring and enforcement of these discharges is important because they make their way to the Woodward Avenue and Dundas Wastewater Treatment Plants and can impact combined sewer and treatment plant capacity. These discharges also increase City liability with respect to collection system surcharges, basement flooding and increased sewer overflows.

EME staff sought assistance from a consultant (Jacobs Engineering Group Inc.) with the primary goal of providing the EME group with an integrated framework for review, approval, monitoring, and enforcement of Construction Dewatering discharges to the City's sanitary, combined and stormwater conveyance systems. Construction Dewatering permits are required to manage capacity of the combined sewer system and the wastewater treatment plants, to manage the quality of the discharges with the overall goal of protecting City infrastructure and avoiding regulatory violations, and to recover costs for treatment of the discharges. Currently, the City's SUB does not specifically include requirements for construction dewatering discharges to stormwater or combined sewers, which means that Construction Dewatering activities with discharges to stormwater or wastewater collection systems are uncontrolled.

Details of the Public Engagement period can be found in the Relevant Consultation section above. Results from the survey illustrated an understanding of the need for the program. Some questioned why this program had not been implemented earlier considering the risks presented by a lack of oversight on dewatering discharges. The Temporary (6 month) or Surcharge Permits that were in use for these construction dewatering situations were not adequate to address the separated and combined sewer

systems and the need for a comprehensive Construction Dewatering Program was warranted. Additional feedback requested clarification on the implementation of the upcoming changes and requested adequate notice upon approval of the changes. This feedback was addressed through emails and three DILG presentations to the development community.

### 3. Administrative Changes:

The minor administrative changes were identified from gaps during use and implementation of the SUB through consultation with users and staff with the goal of improved administrative flexibility as well as improved clarity and transparency.

## **ALTERNATIVES FOR CONSIDERATION**

1. No updates to the Sewer Use By-law 14-090; this option would continue to utilize the current By-law that was enacted in 2014. This would mean that there would be no improvements to the protection of the infrastructure and environment; administrative flexibility, oversight from construction dewatering activities to combined and storm sewer systems, equitable cost recovery, risk and liability mitigation, or enforcement capabilities. This is not recommended as uncontrolled risks to the City's sewer works, including the Woodward Avenue and Dundas Wastewater Treatment Plants would continue to exist.

**Financial:** If the amendments related to the construction dewatering program are not approved, cost recovery will continue for discharges to the sanitary sewer system only. Discharges to the combined and storm sewers would continue to have no cost recovery.

**Staffing:** Not Applicable

**Legal:** If the amendments related to the parameter limit update are not approved there will be no improvements to existing risk and liability exposure for the City. In addition, some IC&I discharges will continue to be challenged to comply with the limits in the existing SUB.

2. The scope of the proposed draft SUB amendment could be reduced.

One means to reduce the scope of the By-law amendment is to remove the provisions for the parameter limit update or for the construction dewatering program. However, this would limit staff's ability to enforce the By-law with respect to the substances or type of discharges of concern and continue to pose risk and liability for the City's sewer works and the environment.

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**Financial:** If the amendments related to the construction dewatering program are not approved, cost recovery will continue for discharges to the sanitary sewer system only. Discharges to the combined and storm sewers would continue to have no cost recovery.

**Staffing:** Not Applicable

**Legal:** If the amendments related to the parameter limit update are not approved there will be no improvements to existing risk and liability exposure for the City. In addition, some IC&I discharges will continue to be challenged to comply with the limits in the existing SUB.

## **ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN**

### **Community Engagement and Participation**

Hamilton has an open, transparent and accessible approach to City government that engages with and empowers all citizens to be involved in their community

### **Economic Prosperity and Growth**

Hamilton has a prosperous and diverse local economy where people have opportunities to grow and develop.

### **Clean and Green**

Hamilton is environmentally sustainable with a healthy balance of natural and urban spaces.

### **Built Environment and Infrastructure**

Hamilton is supported by state-of-the-art infrastructure, transportation options, buildings and public spaces that create a dynamic City.

## **APPENDICES AND SCHEDULES ATTACHED**

Appendix “A” to Report PW19029(a) - Proposed Updated Sewer Use By-law 22-XX

Appendix “B” to Report PW19029(a) - Summary of Proposed Sewer Use By-law Fees and Charges

Appendix “C” to Report PW19029(a) - Summary of Proposed Parameter Limit Amendments