

Committee of the Whole (1) Report

DATE: Tuesday, May 5, 2026

WARD(S): ALL

TITLE: DEWATERING AND DISCHARGE ACTIVITY POLICY AND
TECHNICAL AMENDMENT TO SEWER USE BY-LAW 025-2024

FROM:

Vince Musacchio, Deputy City Manager, Planning and Infrastructure Development

ACTION: DECISION

Purpose

To request Council approval of the City's Dewatering and Discharge Activity Policy and Technical Amendment to Sewer Use By-law 025-2024, Schedule A Table 2 – Limits for Storm Sewer Discharge.

Report Highlights

- Temporary and Permanent dewatering discharge that is directed to City Infrastructure requires a Discharge Approval under Sewer Use By-law 025-2024.
- Discharge water quality and quantity is monitored through compliance checks and oversight by a Professional Geoscientist or Engineer.
- The submission of a Letter of Understanding ensures subsequent owners of dewatering systems understand the responsibilities and obligations of the Discharge Approval, prior to transfer, ensuring a smooth transition of ownership.
- The Dewatering and Discharge Activity Policy proposed in this report formalize processes already in use to review, issue and manage Discharge Approvals.
- The Technical Amendment to Sewer Use By-law 025-2024, Schedule A Table 2 – Limits for Storm Sewer Discharge aligns the City's storm sewer discharge limits with those of York Region, improving consistency and increasing operational efficiency for Discharge Approval applicants.

Recommendations

1. The City's Corporate Policy for Dewatering and Discharge Activity be approved; and
2. The Technical Amendment to Sewer Use By-law 025-2024, Schedule A Table 2 – Limits for Storm Sewer Discharge be approved.

Background

Land Development, Groundwater, and Dewatering Requirements

“Groundwater” can be defined as water that resides and flows beneath the surface of the earth through voids and fractures in soil and bedrock. The subsurface depth at which groundwater is reliably measured is referred to as the “water table”. “Dewatering” is the process of removing groundwater from a subsurface excavation to lower the water table in that location. Dewatering and groundwater management is an important consideration when reviewing development opportunities in the City as the local geology promotes shallow groundwater levels and the potential for pressurized groundwater conditions. If groundwater is present above the desired depth of excavation or construction, dewatering, both during construction activities and over the life of the building(s), may be required.

During construction, Temporary (Short-Term) dewatering may be required to facilitate construction activities and prevent groundwater from accumulating within the excavation or disrupting the installation of building foundations, subsurface utilities, or other below-grade infrastructure. Once construction is complete, Permanent (Long-Term) dewatering may be required to prevent structural flooding in below grade structures. Water collected through dewatering activities can be discharged to the natural environment, disposed of off-site, or directed to City infrastructure.

City of Vaughan Sewer Use By-law

The City's authority for the management of dewatering activities is based on Sewer Use By-law 025-2024, as amended. In accordance with Sections 5.0 to 6.1, developments that propose directing Temporary or Permanent dewatering-related discharge to City infrastructure require Discharge Approval from the City. Sewer Use By-law 025-2024 further outlines equipment requirements and water quality limits that require applicants to install and maintain dewatering infrastructure to ensure compliance with their respective Discharge Approvals.

Sewer Use By-law 025-2024 currently governs decision-making related to dewatering discharges to City infrastructure; the Dewatering and Discharge Activity Policy is

intended to formalize and document the City's existing practices. The purpose of this Dewatering and Discharge Activity Policy is to enhance transparency, awareness, and accountability in the review and management of Discharge Approval applications, while emphasizing risk mitigation, management of infrastructure capacity, and environmental responsibility. The purpose of the proposed Technical Amendment to Sewer Use By-law 025-2024, Schedule A Table 2 – Limits for Storm Sewer Discharge is to align the City's storm sewer discharge limits with those of York Region, improving consistency and operational efficiency for Discharge Approval applicants. In combination, the Dewatering and Discharge Activity Policy and Technical Amendment to Sewer Use By-law 025-2024, Schedule A Table 2 – Limits for Storm Sewer Discharge establish a clear and standardized approach for how the City approves, manages, transfers, and enforces Discharge Approvals.

The objectives of this Dewatering and Discharge Activity Policy and Technical Amendment to Sewer Use By-law 025-2024, Schedule A Table 2 – Limits for Storm Sewer Discharge are to:

- Formalizing the existing framework that evaluates the suitability of discharge to City infrastructure in accordance with Sewer Use By-law 025-2024.
- Implement a process to assess the compliance of dewatering and discharge activity in terms of water quality and quantity.
- Ensure an effective transition of discharge approvals to the subsequent owner.
- Align the City's Sewer Use By-law 025-2024, Schedule A Table 2 – Limits for Storm Sewer Discharge with York Regions Sewer Use By-law, Schedule A Table 2 – Limits for Storm Discharge.

Previous Reports/Authority

[City of Vaughan - Dewatering Discharge Approval Website.](#)

[City of Vaughan - Sewer Use By-Law 025-2024](#)

Analysis and Options

Review Framework

Development Engineering reviews Discharge Approval applications to ensure compliance with Sewer Use By-law 025-2024 by evaluating discharge water quality, water quantity, and overall design of the proposed dewatering infrastructure. With respect to quality, the discharge must meet the water quality standards outlined in Sewer Use By-law 025-2024 and the discharge infrastructure must include appropriate treatment measures, if necessary, to prevent adverse impacts to the environment or

City infrastructure. From a water quantity perspective, the proposed dewatering volumes and discharge rates must remain within the approved limits to ensure that existing system capacity is not exceeded and that downstream infrastructure can safely convey proposed flows without risk of surcharge or infrastructure damage. In addition, the design of dewatering infrastructure is assessed to confirm that it provides adequate monitoring and control during discharge. This includes the installation of flow meters to accurately measure and report discharge volumes, sampling ports to facilitate water quality testing, and other any other controls deemed necessary to verify ongoing compliance and allow timely response should discharge conditions change.

Sewer Use By-law Compliance Assessment

The review and assessment of Discharge Approval applications include compliance checks to be completed by a Professional Geoscientist or Engineer, to ensure independent oversight and to confirm all conditions associated with the Discharge Approval are being satisfied. These compliance checks are intended to verify adherence to Sewer Use By-law 025-2024 and to confirm that discharge activities are being conducted in a manner that protects downstream receiving bodies and City infrastructure.

The first of these compliance checks is a Certificate of Conformance which is required during the renewal of all Discharge Approvals. The Certificate of Conformance serves as a formal, documented declaration that the discharge has complied with all conditions specified in the approval. This includes confirmation that both the quality and quantity of discharged water have been in compliance over the applicable reporting period, based on verified monitoring data and evaluation by the Professional Geoscientist or Engineer.

In addition, a Groundwater Quality and Quantity Management Program is required in support of applications for Permanent Discharge Approvals. The Groundwater Quality and Quantity Management Program establishes a long-term, systematic approach to groundwater monitoring and management and must clearly describe the proposed water quality sampling frequencies, and methods for collecting, recording, and evaluating water quantity data. The Groundwater Quality and Quantity Management Program must also include defined procedures for identifying, reporting, and managing instances of non-compliance, including corrective actions taken to ensure timely mitigation of potential impacts. Collectively, these requirements provide a robust framework for ongoing compliance assurance while mitigating potential impacts to the environment or City infrastructure.

Transfer of Discharge Approvals

Discharge Approvals must be formally conveyed when a transfer of ownership occurs to ensure continued compliance with Sewer Use By-law 025-2024. Typically, this occurs when the Developer transfers ownership and operational responsibility of the site to the Condominium Corporation or designated successor through a renewal application.

Prior to transfer, it is imperative that the current owner undertakes and completes any necessary modifications or upgrades to the dewatering system to ensure the system remains fully operational and continues to meet all conditions outlined in the Discharge Approval. The system's compliance status must be thoroughly verified and documented through a Certificate of Conformance before the transfer can be finalized, thereby mitigating the risk of non-compliance or environmental harm post-transfer.

As part of the transfer of ownership process, a formal Letter of Understanding must be prepared and signed by the new owner. This document serves as an acknowledgment that the new owner is aware of the existing Discharge Approval, understands the associated obligations, and accepts responsibility for compliance and any ongoing operational requirements. This is an essential step to clearly define accountability and prevent any uncertainty regarding responsibilities following transfer. The implementation of these measures ensures the dewatering system will remain effective throughout the transition of ownership, supporting effective site management and adherence to Sewer Use By-law 025-2024.

Technical Amendment to Sewer Use By-law 025-2024

Discharge Approval applicants are required to meet the water quality limits outlined in Schedule A of Sewer Use By-law 025-2024 to prevent adverse effects to the environment or City infrastructure. Where discharge is directed to City and York Region storm sewer infrastructure, Discharge Approval must be obtained from both agencies, which requires applicants to comply with each agencies respective water quality limits. This has resulted in inconsistencies and operational limitations put on applicants and approval holders across the City with respect to discharge water quality. In addition, certain parameters within the City's existing storm limits were found to exceed applicable environmental guidelines and had the potential to create conditions that are cost-prohibitive to building or maintaining residential units in the City. The proposed Technical Amendment to Sewer Use By-law 025-2024, Schedule A Table 2 – Limits for Storm Sewer Discharge would align the City's storm sewer discharge limits with those of York Region, improving consistency across jurisdictions by providing one set of storm sewer discharge limits for Discharge Approval applicants. A complete summary of the City's and York Region's current storm sewer discharge limits, along with the proposed new limits, is provided in the table below.

Proposed Limits for Storm Sewer Discharge				
Parameter	Units	Vaughan	York Region	New Proposed Limits
Biochemical Oxygen Demand (BOD)	mg/L	15	15	15
Total Kjeldahl Nitrogen	mg/L	1	1	1
Phenolics (4AAP)	mg/L	0.008	0.008	0.008
Phosphorus (Total)	mg/L	0.400	0.400	0.400
Suspended Solids (Total)	mg/L	15	15	15
Cyanide (Total)	mg/L	0.020	0.020	0.020
Fluoride	mg/L	1.0	-	-
Sulphate	mg/L	150	-	-
Chlorides	mg/L	150	-	-
Chlorine	mg/L	0.010	-	-
Aluminum (Total)	mg/L	5.0	-	-
Antimony (Total)	mg/L	0.5	-	-
Arsenic (Total)	mg/L	0.020	0.020	0.020
Cadmium (Total)	mg/L	0.008	0.008	0.008
Chromium (Total)	mg/L	0.080	0.080	0.080
Cobalt (Total)	mg/L	0.5	-	-
Copper (Total)	mg/L	0.050	0.050	0.050
Lead (Total)	mg/L	0.120	0.120	0.120
Manganese (Total)	mg/L	0.150	0.150	0.150
Mercury (Total)	mg/L	0.0004	0.0004	0.0004
Molybdenum (Total)	mg/L	0.500	-	-
Nickel (Total)	mg/L	0.080	0.080	0.080
Selenium (Total)	mg/L	0.020	0.020	0.020
Silver (Total)	mg/L	0.120	0.120	0.120
Tin (Total)	mg/L	5.0	-	-
Titanium (Total)	mg/L	0.500	-	-
Zinc (Total)	mg/L	0.040	0.040	0.040
Benzene	ug/L	2.0	2.0	2.0
Chloroform	ug/L	2.0	2.0	2.0
1,2-dichlorobenzene	ug/L	5.6	5.6	5.6
1,4-dichlorobenzene	ug/L	6.8	6.8	6.8
Cis-1,2-dichloroethylene	ug/L	5.6	5.6	5.6
Trans-1,3-dichloropropylene	ug/L	5.6	5.6	5.6
Ethylbenzene	ug/L	2.0	2.0	2.0
Methylene chloride	ug/L	5.2	5.2	5.2
1,1,2,2-tetrachloroethane	ug/L	17.0	17.0	17.0
Tetrachloroethylene	ug/L	4.4	4.4	4.4
Toluene	ug/L	2.0	2.0	2.0
Trichloroethylene	ug/L	8.0	8.0	8.0
Xylenes (Total)	ug/L	4.4	4.4	4.4
Di-n-butyl phthalate	ug/L	15.0	15.0	15.0
Bis(2-ethylhexyl) phthalate	ug/L	8.8	8.8	8.8
PCBs	ug/L	0.4	0.4	0.4
Methyl Ethyl Ketone	ug/L	2.0	-	-
Styrene	ug/L	20.0	-	-
Nonylphenols	ug/L	2.0	-	-
Nonylphenol ethoxylates	ug/L	20.0	-	-
Total PAHs	ug/L	2.0	-	-

(-) Parameter Not Included

Financial Impact

There are no anticipated financial impacts to the City as a result of the recommendations included in this report.

Operational Impact

The Dewatering and Discharge Activity Policy relates to Development Engineering's review and issuance of Discharge Approvals within the City. As these documents are formalizing the existing processes, there are no anticipated operational impacts to other departments. The Technical Amendment to Sewer Use By-law 025-2024, Schedule A Table 2 – Limits for Storm Sewer Discharge will update the storm discharge limits to reflect current engineering standards and regulatory guidance. As a result, the revised limits will support enforcement activities and provide greater clarity for By-law Enforcement Officers to interpret and apply these requirements in the field.

Broader Regional Impacts/Considerations

The recommendations included in this report are not anticipated to have an impact on other municipalities, York Region or other governmental agencies.

Conclusion

It is recommended that Council approve the City's Dewatering and Discharge Activity Policy and Technical Amendment to Sewer Use By-law 025-2024, Schedule A Table 2 – Limits for Storm Sewer Discharge to ensure clear and transparent guidance and standards in the City's process of reviewing Discharge Approval applications, while emphasizing risk mitigation, infrastructure capacity and environmental responsibility. Additionally, formalizing our current processes into this Dewatering and Discharge Activity Policy provides greater clarity around submission requirements, review criteria, and approval processes. By clearly defining and improving requirements related to discharge quality and quantity, the Dewatering and Discharge Activity Policy and Technical Amendment to Sewer Use By-law 025-2024, Schedule A Table 2 – Limits for Storm Sewer Discharge will support effective development planning and reduce approval timelines.

For more information, please contact: Lauren Crawford, Director, Development Engineering, ext. 8255

Attachments

1. Dewatering and Discharge Activity Policy.
2. Technical Amendment to Sewer Use By-law 025-2024 Schedule A, Table 2 - Limits for Storm Sewer Discharge.

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