



Report to: General Committee

Meeting Date: **October 24, 2023**

SUBJECT:	Sewer Use By-law Update
PREPARED BY:	Rebecca Fei, Compliance Engineer – Ext 2687 Shumin Gao, Manager, System Engineering – Ext 6230

RECOMMENDATION:

1. THAT the report entitled “Sewer Use By-law Update”, dated October 24 2023, be received;
2. AND THAT the current Sewer Use By-law (No. 2014-71) be repealed and replaced with the amended Sewer Use By-law, as described in this report and in the form set out in Attachment “A”;
3. AND THAT Council receive the information that Markham participates in a collaborative Sewer Use Compliance Program with the Regional Municipality of York;
4. AND THAT Staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

This report provides Council with the update on the City of Markham’s participation in a collaborative Sewer Use Compliance Program with the Regional Municipality of York (“Region of York”).

This report provides Council with the rationale for updating the current Sewer Use By-law (No. 2014-71) and also seeks Council’s approval of the proposed amended Sewer Use By-law.

BACKGROUND:

Markham is in a collaborative Sewer Use Compliance Program with Region of York
Within the Region of York’s two-tier governance system, responsibility for sewage management is divided. Markham is responsible for the sewage collection system. The Region of York is responsible for the sewage trunk system and the wastewater treatment plant.

Markham’s Sewer Use Compliance Program was established in 2010, and focuses on industrial and commercial discharges into the sewer system. The Program covers areas such as sampling, monitoring, notifications, investigations, laying charges and recovering costs.

In order to enhance the effectiveness and efficiency of Sewer Use Compliance Program delivery, Markham and the Region of York developed a responsibility matrix in 2012. This matrix outlines key areas of collaboration, such as: communication, stakeholder management and monitoring as well as enforcement.

In that responsibility matrix, Markham is responsible for management and enforcement of issues relating to pH, Oil & Grease and Solids, which have a significant impact on the

sewage collection system. Meanwhile, the Region of York is responsible for other parameters such as: BOD, TKN, Metals and Organic parameters which have a direct impact on the wastewater treatment plant.

Since 2012, the Matrix and Program have been a success and avoided duplicate sewer compliance service to the businesses in Markham and also have assisted Markham and Region of York to focus on managing sewage issues directly impacting their sewer infrastructure.

Since Markham is responsible for management and enforcement of issues relating to pH, Oil & Grease and Solids, Staff are developing a FOG source control program to further enhance management and enforcement of these issues, and have included related provisions in the amended Sewer Use By-law.

Sewer Use By-law Update

The last update of Markham's Sewer Use By-law was in 2014.

Staff propose to update the Sewer Use By-law to achieve the following objectives:

1. To support Markham's upcoming Fat, Oil and Grease (FOG) Source Control Program through clarifying various types of interceptors and their application as well as their installation & maintenance requirements.
2. To clarify Markham's policies on installation of municipal sewer connections.
3. To raise residents' awareness of Markham's policies on maintenance of municipal sewer connections".
4. To raise residents' awareness on how to properly discharge the water from their private residential swimming pools.
5. To add Administrative Penalty provisions to enhance the effectiveness and efficiency of Sewer Use By-law enforcement.
6. To introduce other administrative and housekeeping revisions required since the last Sewer Use By-law update.

OPTIONS/ DISCUSSION:

Sewer Use By-law Update

The updates from the current to the proposed Sewer Use By-law are outlined in Attachment "B" of this Report. The highlights of this proposed By-law include:

1. Interceptor Installation & Maintenance Requirements for specific Business Sectors
Grease and solids blockage are identified as main issues for a sewage collection system. To effectively deal with these issues, grease and solids must be controlled at the source. The following Parts of the By-law have been updated to detail the requirements for specific businesses in order to control grease and solids at the source.
 - Part 14 "Grease Interceptors for Food Sector Establishment"
 - Part 15 "Oil Interceptors for Vehicle and Equipment Service Operation"
 - Part 16 "Grit Interceptors for Vehicle Wash Operation"

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- Part 17 “Sediment Interceptors for Storm Sewer”
These specific requirements intend to help businesses better control grease & solids generated from their business processes and prevent them from entering into their plumbing system and eventually going into Markham’s sewage collection system.
2. The City’s policies on Installation of Municipal Sewer Connections
To clarify the City’s policies related to installation of municipal sewer connections, the following sections have been updated:
 - Section 20.8.2 “Municipal Sewer Connection” installation by the owner
 - Section 20.8.3 “All Private Sewers & their Connection to Municipal Sewer Connection - installation by the owner”
 3. The City’s policies on Maintenance of Municipal Sewer Connections
To ensure that customers are aware of the City’s policies related to maintenance of municipal sewer connections, the following new sections have been added to the By-law:
 - Section 20.14.1 Maintenance of Municipal Sewer Connections
 - Section 20.14.2 Blockages in Private Sewers
 - Section 20.14.3 Blockages caused by Oil & Grease, food waste or other solids
 - Section 20.14.4 Blockages caused by Structural Defects or Damages
 - Section 20.14.5 Blockages caused by Tree Roots
 4. New Section 20.15 “The Private Residential Swimming Pools or Hot tubs/Spas or Wading pools” has been added to the By-law intends to require residents to discharge the water from their private residential swimming pools in compliance with City requirements.
 5. To align with the City’s Administrative Monetary Penalty System (AMPS) implementation plan, a new Section 27 “Administrative Penalties” has been added to the By-law. This allows for the use of AMPS approach to enforce our Sewer Use By-law more effectively and efficiently.
 6. Regular housekeeping of the By-law
Several housekeeping items have been taken to ensure clarity and consistency within the By-law, including:
 - Added new definitions in Part 1 of the By-law - “Definitions & Interpretation”.
 - Added sub-section titles to those By-law Parts with many sections and subsections.
 - All terms defined in Part I are highlighted in bold font in the By-law
 - Updated some terms to be consistent with the Region of York’s Sewer Use By-law.

Future FOG Source Control Program

Grease blockage is the main issue in Markham’s sewage collection system. Those oil & greases originate from some business processes, however, Markham is currently responsible for managing the issue and doing the cleanup in the sewage system.

This issue has been addressed by other municipalities in Ontario, including the City of Toronto, and the City of London, through implementing a comprehensive FOG source control program 10 years ago. The establishment of these programs has mitigated the impact of FOG related issues on their aging sewer infrastructure.

Along with the establishment of FOG source control program, it is essential to ensure that the businesses are fully aware of the necessary requirements (i.e. install grease interceptors as required by Ontario Building Code, have regular service on those installed grease interceptors as required by Canadian Standard Association) to effectively control FOG generated from their business process at the source and to prevent FOG from entering into our sewage collection system. As a result, we can minimize the occurrence of grease blockages in our sewer system and prevent sewer backups to the residents' basements.

While Markham has not yet implemented the FOG source control program, staff have included provisions in of the amended Sewer Use By-law which will support the establishment of our FOG Source Control Program in the near future.

FINANCIAL CONSIDERATIONS

Markham's participation in the Sewer Use Compliance Program and establishing the future FOG Source Control Program can be managed by existing staff without the need for additional resources.

HUMAN RESOURCES CONSIDERATIONS

Not Applicable

ALIGNMENT WITH STRATEGIC PRIORITIES:

Markham's Sewer Use By-law aligns with the strategic priority of Municipal Services/Excellence Markham. By ensuring that businesses follow good sewer use practices, Markham's Sewer Use By-law promotes behavioral changes that protect Markham's sewer infrastructure from premature repairs and replacement.

BUSINESS UNITS CONSULTED AND AFFECTED:

Building Standards, Engineering and Legal Services

RECOMMENDED BY:

Eddy Wu, P.Eng.
Director, Environmental Services

Morgan Jones
Commissioner, Community and Fire Services

ATTACHMENTS:

Attachment A - Sewer Use By-law (2023-XXX) and Schedule A

Attachment B - Summary of Sewer Use By-law Updates