



Committee of the Whole Report

Report Number:	WWW2024-004
Meeting Date:	June 4, 2024
Title:	Extra Strength Surcharge Program
Description:	Program aiding in offsetting operational and maintenance costs associated with discharges into the municipal sewer works that are extra strength.
Author and Title:	Ben Leggo, Water and Wastewater Technician

Recommendation(s):

That Report WWW2024-004, Extra Strength Surcharge Program, be received;

That the policy entitled Extra Strength Surcharge Policy appended to Report WWW2024-004 be adopted, numbered and inserted in the Corporate Policy and Procedure Manual;

That the Extra Strength Surcharge Management Directive be received; and

That these recommendations be brought forward to Council for consideration at the next Regular Council Meeting.

Department Head: _____

Financial/Legal/HR/Other: _____

Chief Administrative Officer: _____

Background:

In sewage treatment, there is a direct correlation between the level of contaminants or nutrient levels in the sewage and the associated costs of treatment. These contaminants or high levels of nutrients must be reduced to permissible levels for the treated waste to be released into the watershed once processed. Ensuring discharge effluent that will not have detrimental effects on the surrounding natural environment fosters ecological integrity and promotes sustainability. Such detriments can include toxic load or bioaccumulation in organisms, harmful algal blooms, disturbance of physiological processes and more. Mitigating these potential effects require a more intensive treatment process, incurring higher operational expenses, surpassing what is considered typical or expected. The source of this can be from any person, company or property (a "Discharger") which regularly or intermittently discharges wastewater into the Sewer Works and can vary dramatically from place to place. The greatest contributors of which being large-scale commercial and industrial production facilities. It is imperative the operating authority hold these Dischargers financially accountable for their waste to promote economic sustainability and further environmental protection efforts.

At the Council Meeting of January 12th, 2016, Council adopted By-law 2016-006 that establishes management of the City Sewer Works through the following resolution:

Moved by Councillor Elmslie, seconded by Councillor Jilesen,

RESOLVED THAT the By-laws shown in Section 15.1 of the Agenda and prefaced with a 'C', namely: Items 15.1.1 to and including 15.1.13 be read a first, second and third time, passed, numbered, signed and the corporate seal attached, namely:

15.1.6 A by-law to establish the management and use of the sewer works in the City of Kawartha Lakes

CARRIED CR2016-031

Within By-law 2016-006 "*A By-law to Establish The Management And Use Of The Sewer Works In The City Of Kawartha Lakes*", Section 2 & 5 relate to the Sewer Works restrictions and discharge agreements, respectively. The By-law specifically outlines a subset of parameter limits that, if exceeded, will require the Discharger to enter into a discharge agreement with the City. Adopting this program allows for better enforcement and support for the objectives set out in the By-law, and ensure any Dischargers releasing non-compliant wastewater are held financially accountable for the incremental operating expense incurred by the City. The program will require Dischargers to permit continued access to their effluent stream (i.e. through a service manhole), maintenance of the appropriate area for City staff to safely access/sample the waste and pay applicable surcharges should the waste exceed the relevant parameters stated in the By-law. Surcharges will be calculated by a pre-set formula that includes the City's annual operating costs, the Discharger's quarterly water usage and the level of parameter exceedance.

Initiatives such as this have been integral in regulating sanitary sewer users, thus offsetting operational costs, and decreasing pollutant loading for many municipal Sewer Works across Ontario since the Ministry of Environment posed the framework in 1988. It has seen extensive and continued use in areas such as Peterborough County, Township of Wellington North, Town of the Blue Mountains, City of Toronto and more, with many setting criteria and stipulations unique to their population. It is the goal of the Water and Wastewater Division to compile a comprehensive list of commercial Dischargers which have the potential to release effluent beyond City limits and perform investigative sampling to confirm effluent quality.

Rationale:

Since 2016, the By-law has allowed enforcement and the ability to enter into discharge agreements with dischargers who exceed effluent limits, however, the program has not been fully documented as a Council Policy and Management Directive. There are currently only two Extra Strength discharge agreements in place within the City, both with commercial production facilities. Documenting an official program through adopting a Council Policy and Management Directive will help to clearly define the program's objectives and implementation which will ensure the City's Sewer Works will be financially supported by any non-compliant Dischargers and aid to mitigate the economic and ecological risks associated with extra strength sewage. The corresponding Management Directive and Council Policy clearly outline the

responsibilities of City staff and a Discharger connected to the Sewer Works. These documents will ensure the following:

- That increased operating costs due to non-compliant sewage are mitigated through discharge agreements and applicable surcharges;
- Promotion of ecological sustainability and stewardship, reducing abatement costs, along with providing incentives for sewage pretreatment;
- Adequate monitoring and enforcement of By-law 2016-006 Section 2 "Sewer Use Works Restrictions and Limits" through tracking effluent composition and, where applicable, in accordance with Section 5 "Discharge Agreements";
- A list of current and previous non-compliant Dischargers be maintained with appropriate agreements in place;
- Effluent sampling is standardized within Discharger types and regularly performed; Accurate representation of the Dischargers current and previous sewage composition;
- Consistency for all Dischargers in the execution of a Discharge Agreement and application of a surcharge fee where applicable; and
- Promote and garner awareness for the program through education of Dischargers about wastewater treatment processes and potential risks of high-contaminant effluent.

Other Alternatives Considered:

The program was created using the Ministry of Environment, Conservation and Parks "Water and Energy Conservation Guidance Manual for Sewage Works" and in accordance with By-law 2016-006 and its statutes.

Council may choose not to adopt this Policy and no formal program would be documented to offset Sewer Works operational and maintenance cost due to extra strength sewage. The requirements of the program would still be contained within the By-law. This option does not align with the objectives of the By-law, guidelines set by the Ministry of Environment, Conservation and Parks or the provincially legislated

Sustainable Water and Sewage Systems Act, 2002 or Ontario Water Resources Act, 1990.

Alignment to Strategic Priorities

This Report addresses the following Goals within the 2024-2027 Strategic Plan:

1. A Healthy Environment

This program relates to Action 2 “Protect and preserve natural areas including greenspaces, waterways, parks, trails and farmland” as the surcharges provide an expanded operating budget for efficient and effective wastewater treatment in the present and moving forward. It also incentivizes Discharger to implement pre-treatment technologies prior to discharging to the municipal sewer system, reducing effluent exceedances and resulting in less treatment needs at the sewage treatment plant, which will reduce the energy consumption and subsequent greenhouse gas emissions through municipal operations. Water quality is protected and enhanced through this as less pollution is produced, which by extension preserves source water quality.

4. Good Government

This program relates to Action 2 “Provide accountable government and responsible management of resources” because it ensures assets such as the City Sewer Works are appropriately compensated for treatment costs, properly maintained with the funding to repair and expand, and allows part of the infrastructure to be managed through enforcing the By-law. This will directly improve/maintain the efficiency of treatment and collection facilities.

Overall, adopting this program will lend well to the goals set out in this Strategic Plan. It sustains the vision of a thriving community with a healthy surrounding environment while working to continually deliver the highest standard of service to the people of Kawartha Lakes.

Financial/Operation Impacts:

The implementation and management of this program is currently accounted for within the Water and Wastewater Division programming. There are minor costs associated with sampling and testing and there may be additional equipment needed to support sampling at multiple Discharger properties, but otherwise current City resources remain satisfactory for officiating the program.

The enforcement of discharge agreements and the accompanying surcharges gives the Water and Wastewater Division the opportunity to offset incremental operational costs within the Sewer Works specifically due to the wastewater quality. This allows for existing funding within the budget to be allocated towards continued improvement, maintenance and operation of the associated infrastructure and controls annual budget increases. Since there are likely several extra strength dischargers not currently accounted for under this program, this would provide an expansion to the budget and a buffer for unforeseen or unplanned expenditures.

Revenues generated through the Discharger Agreements are site specific and dependent on several factors which include: water consumption, ratio of parameter exceedance to by-law allowance and the treatment facility specific operating costs, which are calculated on an annual basis, based on the preceding year's expenses.

In 2023, approximately \$243,000 was received in revenues through the existing Discharger agreements. This revenue is used to offset increased operating and maintenance costs required to appropriately treat the high strength wastewater which includes increased chemical usage, hydro consumption, etc.

Consultations:

Director, Public Works
Manager, Water & Wastewater
Manager, Municipal Law Enforcement
Director, Corporate Services

Attachments:

Appendix A Extra Strength Surcharge Management Directive



Appendix A

Appendix B Extra Strength Surcharge Council Policy



Adobe Acrobat
Document

Department Head email: brobinson@kawarthalakes.ca

Department Head: Bryan Robinson