The Corporation of the City of Kawartha Lakes Committee of the Whole Report

Report Number WWW2020-002

Meeting Date:	March 10, 2020			
Title:	Septage Disposal Rate Review			
Description:	A review and comparison of hauled liquid waste disposal fees across Ontario			
Ward Number:	All			
Author and Title:	Robert MacPherson, Water and Wastewater Technician			
Recommendation	on(s):			
That Report WWW	2020-002, Septage Disposal Rate Review, be received;			
That Staff be directed to prepare the necessary amendments to Schedule B of By-law 2018-039 "A By-law to Regulate Water and Wastewater Services in Kawartha Lakes", attached as Appendix A to Report WWW2020-002.;				
That staff review rates in five (5) years and report to Council if any adjustments are recommended; and				
That this recommendate Regular Council	ndation be brought forward to Council for consideration at the cil Meeting.			
	: R/Other:			
Chief Administrative Officer:				

Background:

In addition to traditional sewage flows, the Lindsay Water Pollution Control Plant (WPCP) currently receives and treats four (4) waste streams from within the City of Kawartha Lakes (CKL) boundaries: septage waste, holding tank waste, abattoir waste and leachate waste from City landfill sites. As part of a 2014 Green Belt Lean Six Sigma initiative, the Water and Wastewater Division reviewed 27 municipalities fee structure's across Ontario for the disposal of septage, holding tank waste, and abattoir waste.

Septage waste: a general term for the contents removed from septic tanks, portable toilets, privy vaults, very small wastewater treatment plants, or semi-public facilities (i.e. schools, motels, mobile home parks, and campgrounds) from domestic sources. This does not include drinking water treatment residuals that may be held in a holding tank or industrial waste.

Holding Tank waste: defined as a closed, water-tight tank designed for the total retention of all sewage from a facility. It cannot discharge any liquid it receives, unlike septic tank waste, except through being pumped out intermittently by a septic hauler for disposal at another site.

Abattoir waste: defined as the high strength waste from a meat processing plant which significantly contributes to the organic load of raw sewage treated at wastewater treatment plants.

Leachate waste: defined as water which has percolated through solid landfill waste and leached soluble constituents from within. This rate only applies to the Solid Waste Division as there is a cost to treat the leachate collected from the City Landfill and sent to the Lindsay WPCP.

The intent of this benchmark study was to determine how CKL's rate structure compared with neighbouring municipalities while taking into consideration cost recovery for infrastructure renewal, wastewater treatment costs, and other related municipal rates. It was determined that the City's septage and holding tank rates were approximately 40% and 80% lower respectively than the neighbouring municipalities. The concerns generated by this report were two fold, the first being that the appropriate disposal fees were not being charged, preventing the required revenue to properly maintain the liquid waste receiving station and associated equipment from being generated. The second issue was that an unsustainable amount of waste was being brought to the Lindsay WPCP from outside City boundaries from haulers based off of the financial incentives associated with hauling the waste to Lindsay at a significantly lower disposal rate.

It was agreed by Council that over the course of 2015-2019 the rates would increase to account for ongoing maintenance and capital upgrades associated

with the treatment of the liquid waste. At the end of the five years' time staff were directed to review Ontario based municipal rates again to determine if any further increases were required or if CKL was in line with provincial averages.

At the Council Meeting of July 8, 2014 Council adopted the following resolution:

RESOLVED THAT Report WWW2014-004, **Septage Disposal Rate Review**, be received;

THAT the Septage Disposal Rates at Wastewater Treatment Facilities be set as per Table 2 in Report WWW2014-004;

THAT the necessary by-law be forwarded to Council for adoption to set the above rates;

THAT By-law 2006-164 be repealed; and

THAT staff review rates in five (5) years and report to Council if any adjustments are recommended.

CR2014-679

This report addresses that direction.

Rationale:

It should be clarified that the revenues generated from processing of septage, holding tanks and abattoir waste are collected to offset the operational cost of treatment. The charges are not intended to generate revenue to offset general system operating costs. Materials received impact operational capacity of the plant and often concentrated materials received cause operational challenges to meet effluent criteria under the Environmental Compliance Approval (ECA).

A current benchmark comparison has been reviewed for 20 municipalities in Ontario, many which are bordering or close to bordering with the City of Kawartha Lakes and can be seen in Table 1 below.

Table 1: A comparison of twenty Ontario based liquid waste fees (2019 rates)

NA contains a lite o	Standard septage	Holding tank waste	Abattoir Waste
Municipality	(per m³)	(per m³)	(per m³)
City of Kawartha	\$16.35	\$16.35	\$16.35
Lakes ⁶			
Belleville	\$20.90	\$20.90	-
Brockville	\$12.00	\$12.00	-
Barrie	\$26.00	\$26.00	-
Cobourg	\$12.48	\$12.48	\$35.00

	Standard septage	Holding tank waste	Abattoir Waste
Municipality	(per m³)	(per m³)	(per m³)
Collingwood	\$18.50	\$18.50	-
Hamilton ¹	\$11.04 – \$33.12	\$8.50	-
Leamington	\$23.78	\$23.78	\$23.78
London	\$14.52	\$14.52	-
Muskoka ⁴	\$22.03	\$22.03	-
Orillia ²	\$31.00	\$31.00	-
Ottawa	\$16.77	\$3.60	-
Oxford County	\$12.00	\$1.65	-
Peterborough	\$22.77	\$22.77	-
Port Hope	\$11.00	\$11.00	-
Quinte West	\$36.50	\$36.50	\$36.50
Region of Durham	\$19.56	\$19.56	\$19.56
Sarnia ³	\$26.67 - \$40.66	\$26.67	-
Sudbury ⁵	\$32.00	\$16.00	-
York	\$23.93	\$23.93	-
Average	\$22.49	\$19.34	\$26.24

- 1 = Block rate based on total monthly volume (\$11.04 if under 15.9 m³, \$22.08 if between 15.9 m³ and 22.7 m³, \$33.12 if over 22.7 m³)
- 2 = Plus an additional 15% administration fee based on total volume of single load
- 3 = Block rate based on single load volume (\$26.67 if under 2.25 m³, \$36.15 if between 2.25 and 4.5 m³ and \$40.66 if over 4.5 m³)
- 4 = Operating at a loss, costs \$46.92 per m³ to treat but reduced rates due to lobbying
- 5 = Only get holding tank rate if effluent meets Sudbury Sewer Standards and is pre-approved prior to disposal.
- 6 = All loads containing abattoir waste are subject to an additional environmental fee of \$100 per load.

Based on the results from the municipal review, the average rates for septage waste is \$22.49 per m³, holding tank waste is \$19.34 per m³, and abattoir waste is \$26.24 per m³. These averages are higher than CKL's liquid waste disposal fees by 27.3%, 15.5%, and 37.7% respectively. It is important to note that only 4 of the 20 municipal by-laws separated the streams due to the resources required to maintain such a program. As CKL also does not differentiate between the waste streams an average was taken of the three separate waste streams averages in order to determine a uniform rate adjustment to bring the City's rate to the provincial benchmark. The average cost of treatment for all three waste streams across Ontario is \$22.69 per cubic meter, which is ~28% higher than what the City's rate is. Also, not many municipalities accept abattoir waste due to its high organic concentrations which can significantly affect the treatment process, or if they do accept the waste, do not differentiate between the streams. There is an additional \$100 environmental disposal fee per load for abattoir waste brought to CKL's disposal facility not included in the per cubic meter rate due to its high strength (approximately 94% stronger than sewer effluent) and additional sampling requirements (~ \$85 per load).

Disposal fees need to be comparable with neighbouring municipalities otherwise haulers can overload wastewater plant capacities due to the financial incentives of bringing all of their waste streams to one location. The rate review has shown that CKL's liquid waste disposal fees are still substantially lower compared with neighboring municipalities and that of the province. Although it has been determined that the rates need to increase to remain competitive, the Division recognizes the immediate impact it can have on local properties and businesses. It is with that in mind that Staff recommends that **Schedule B** of By-law 2018-039 "A By-law to Regulate Water and Wastewater Services in Kawartha Lakes" is adjusted to increase by \$1.27 per cubic meter per year over a 5 year (Appendix A) span in order to ensure City infrastructure is sustainable while taking into account the economic viability of businesses within CKL. This phase increase will bring CKL's rate in line with the current average rate charged by neighbouring municipalities across all three waste stream (\$22.69) and represents an average increase of 6.7% per year.

As mentioned in the background, there is also the cost of disposing of leachate waste from the Lindsay Landfill which is treated at the Lindsay Water Pollution Control Plant. While this rate does not need to be adjusted like the other waste streams, staff is also recommending that the Leachate Disposal Fee increases on par with the annual water and sewer rate increase each year. This represents an increase of 1% to the rate to become effective April 1, 2020. The rate increase will occur in a fair and consistent manner with the rest of the division rates. It will also increase the efficiencies of the Division as the rate can then be increased each year with the user rate, requiring one less report to Council.

Another review will be completed in five years to ensure that rates are still comparable to surrounding municipalities.

Other Alternatives Considered:

Do nothing alternative:

A 'do nothing" approach is not recommended due to the long term operating and capital costs associated with the handling of plant sludge. The study was first conducted in 2014 as part of a larger program to ensure that the City's water and wastewater infrastructure is sustainable. If Council chooses not to approve the rate structure to be consistent with the other water and wastewater rates, the structure will become outdated and in time will not accurately reflect the resources required to maintain the system.

Match User Rate Increases:

Another alternative considered is to have the disposal rates be adjusted each year on par with the user rate increase, if required, as proposed in the general

water and sewer rates presented and approved by Council each year at budget time. For 2020, the approved increase to the general sewer rate (combined increase for consumption and fixed rate) was 1%. The same 1% increase would be applied to all septage rates. The same percentage increase on the current septage rates would be an increase of \$0.16/m³ for standard septage, holding tank and abattoir waste. The Lindsay WPCP receives 14,000 m³ of hauled liquid waste on average. This represents a projected additional revenue of \$2,240 per year.

This rate structure will also become outdated and in time will not reflect the resources required to maintain the system and CKL's rates will fall further behind comparable market rates thereby causing increase pressure on the wastewater treatment plant.

Raise Rates on par with Highest Rates:

The last alternative considered is to adjust the disposal rates to be on par with the municipality with the highest disposal rates (\$36.50 per m³), which represents an increase of 223 % compared to CKLs current disposal rate. This strategy is not recommended as it does not take into account the actual cost of treating the liquid waste within CKL. This also places an unfair cost on the businesses that dispose of their waste at our facilities and would also significantly decrease the amount of waste brought to, and revenue generated by, the Lindsay WPCP.

Financial/Operation Impacts:

The following tables represents the liquid waste cost adjustments as recommended by staff (additional years are provided as part of Appendix A):

Proposed 2020 Liquid Waste Disposal Fees

	Standard Septage Waste	Holding Tank Waste	Abbatoir Waste
Rate per 1000 gal	\$80.17	\$80.17	\$80.17
Rate per m ³	\$17.62	\$17.62	\$17.62

2020 Leachate Disposal Fees

	Leachate
Rate per 1000 gal	\$7.05
Rate per m ³	\$1.55

On average, 14,000 m³ of liquid waste is disposed of at the Lindsay WPCP by haulers. The proposed disposal fees increase of \$1.27 per m³ each year for 5

years will result in the following additional revenue generated compared to the current rate:

Year	Additional Projected Revenue
2020 (only 9 months as increase begins April 1st, 2020)	\$13,335.00
2021	\$31,115.00
2022	\$48,895.00
2023	\$66,675.00
2024	\$84,455.00

The increased revenue will be used to support the ongoing operation, maintenance, and capital projects of CKL's wastewater facilities.

Relationship of Recommendation(s) To The 2020-2023 Strategic Plan:

The recommendation to Council is consistent with the Council Adopted Strategic Plan in the following ways:

"Vibrant and Growing Economy" – will be met through the proper servicing and collection of appropriate user fees to fund the maintenance, capacity and growth of the municipal water and wastewater systems.

"Healthy Environment" - will be met by through community preparedness by ensuring that the necessary funds are secured in order to sustain water and wastewater infrastructure necessary to protect the health of the environment.

"Good Government" – will be met through increasing the efficiency and effectiveness of service delivery by streamlining rate adjustments within the bylaw and ensuring that the municipal assets are well maintained and managed.

This Report is also in line with the City's values as the by-law aids in the sustainability of the municipal drinking water systems and wastewater systems in an transparent and accountable way. It also provides excellent, efficient, and safe services for the public of Kawartha Lakes.

Consultations:

Supervisor, Water & Wastewater Operations Director, Public Works

Attachments:



Appendix A -Schedule B Bylaw 201

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