

# Report to Council



**Date:** October 2, 2017  
**File:** 1845-01  
**To:** City Manager  
**From:** Kevin Van Vliet, Utility Services Manager  
**Subject:** Solid Waste Management Regulation Bylaw Amendments

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## **Recommendation:**

THAT Council receives for information, the report from the Utility Services Manager, dated October 2, 2017, pertaining to amending Solid Waste Management Regulation Bylaw No. 10106;

AND THAT Bylaw No. 10741 being amendment No. 9 to the Solid Waste Management Regulation Bylaw No. 10106 be given reading consideration.

## **Purpose:**

To seek Council's approval to amend the Solid Waste Management Regulation Bylaw to set solid waste disposal fees for 2018 through 2020 and address other administrative items.

## **Background:**

The Glenmore Landfill is a self-sufficient City of Kelowna business unit which is funded through its user fees and charges. The City of Kelowna Glenmore Landfill opened in 1966. Over the last 50 years the landfill has seen a lot of change. Recent highlights include:

- 1990-2000 Development of a comprehensive landfill plan including management of landfill gas
- 2004-2005 installation of landfill gas flare and micro turbines to generate electricity.
- 2013-2016 Replacement of micro turbines with biogas processing plant owned and operated by FortisBC with revenues to City
- Disposal volumes continuing to rise from approximately 90,000 tonnes in 2000 to 150,000 tonnes in 2016.

Since 1966 significant land has been acquired both north and south of the original landfill at sole cost to Kelowna. Much of this land was purchased to increase the buffer zone between the landfill and residential properties. Recently the Bredin lands to the north of the landfill and the Tutt lands to the south were acquired at a cost in the order of \$12.1 million, all funded by the landfill reserve. The

Glenmore Landfill also contributed to the construction of the first phase of John Hindle Drive at a cost of \$3 million.

In 2016 / 2017 staff engaged the community with a new draft Landfill Fill Plan that would see an additional 18 million cubic metres of air space added to the landfill's capacity, extending the life of the landfill by an estimated 25 years to 2090. Once Council adopts a Fill Plan the next step is to renew the Design, Operating and Closure Plan (DOCP) for the landfill. This is critical work to identify the optimal fill sequencing and minimize significant operating, closure and post closure costs. An updated DOCP is a requirement of our landfill permit and is one of the outstanding items that needs to be addressed as part of the annual audit.

Public Sector Accounting Standards require that the estimate for total closure and post-closure costs for the landfill be updated every three years and these estimates be built into the financial models and financial statements. During 2016 and 2017 the financial model was updated to reflect some of the estimated additional costs, such as estimates on capital expenditures resulting from the work being done to update the Landfill Fill Plan, and anticipated disposal increases. With completion of the DOCP staff will also address these long term landfill closure costs in the financial models.

The 2017 financial model that includes necessary short and medium term capital expenditures required to continue to operate for the next 10 years, shows the city moving into an operating deficit position based on the current disposal tipping fees. Fees need to be increased to fund the required activities including infrastructure and capital works that will allow the City to continue landfill operations over the coming 5-10 years.

Ownership and operation of the Glenmore Landfill, as a facility that also serves the Region, includes costs and risks for the citizens of Kelowna. These include:

1. Cost of closure and post closure. If sufficient funds are not reserved from tipping fees, additional costs will need to come from Kelowna taxpayers. Should the landfill be forced to close earlier than planned, the unfunded closure costs could be very significant. This issue will be better understood with completion of the DOCP update.
2. Impact on infrastructure. Regional traffic including heavy garbage trucks, clean fill trucks, and roll-off bins heading to and from the landfill have a significant impact on roadway infrastructure and its deterioration. Currently landfill user fees support short and long term landfill operations. We are recognizing there are financial impacts on other related infrastructure due to regional traffic to and from the landfill.
3. Environmental and nuisance impacts. The operation of the landfill and related facilities, including landfill traffic, has an environmental impact on the lands around the landfill. This necessitates the City ensuring that nearby land use considers the impacts and that land uses remain compatible with the long term viability and operation of the landfill. This burden and the costs of this impact rests solely with the City of Kelowna and not our regional partners.

Therefore, a significant strategic shift is proposed to establish an Infrastructure Asset Renewal Reserve (IARR). Revenues generated by the landfill are firstly used to fund daily operations and capital improvements as explained above, and then make the required contribution towards any long term expenses identified in the DOCP. The IARR reserve would be funded through any landfill surplus that may not be required for directly operating the landfill and would be used to fund the indirect impacts of the landfill such as the wear and tear on our roadway and bridge infrastructure plus any direct or indirect costs to Kelowna. Today roadway infrastructure renewal is funded for the most part through

taxation. This new reserve would be funded through those revenues exceeding current and projected costs including costs identified by the completed DOCP while maintaining minimum balances (currently estimated at \$5-6M) in the Landfill Operating Reserve to fund its operating and capital requirements. Based on the capital expenditures proposed by the Landfill Master Plan and included in the Landfill Financial Model, significant funds that can flow to the IARR are not anticipated until 2025 because of the significant landfill capital costs that are planned within that period

Staff will work to better understand the financial costs of the above risks and impacts and will include suggested ways to address these costs when we return to Council with the completed DOCP.

The Glenmore Landfill disposal fees are significantly lower than the disposal fees in neighbouring municipal landfills as shown in the following table:

Location	Tipping fee for refuse (\$/Tonne)	Difference to Kelowna
Kelowna (Glenmore Landfill)	\$65	\$0
Regional District of North Okanagan	\$100	+\$35
Summerland	\$110	+\$45
Penticton (Campbell Mountain)	\$110	+\$45

This tipping fee differential provides significant incentive for haulers from the RDNO and RDOS to haul to the Glenmore Landfill. Our permit only allows waste from the RDCO and Big White areas. Furthermore, we are seeing disposal quantities grow significantly faster than the growth of our regional population. Part of this growth is due to the robust construction economy. Some of this growth may also be due to in-migration of waste from outside the RDCO. The most practical way to eliminate non-compliant waste is to eliminate the financial incentive and bring our fees in line with neighbouring landfills.

Tipping fees, when reasonable, also provide some incentive to recycle, reuse or donate items instead of simply throwing them out as garbage. Higher tipping fees will improve the business case for recycling, which will also spur entrepreneurs to develop more recycling alternatives for some things that remain in our waste stream.

At this time staff know that our current tipping fees are inadequate to fund known short and medium term costs and our expected long term costs. The DOCP update will be completed in late 2018. It is prudent to amend landfill rates at this time to address these known issues. A full review of the rates and other long term landfill community risks and costs will be undertaken with the completion of the DOCP.

In order to avoid an operating deficit, to ensure sustainable funding through the life of the landfill and eliminate the incentive for out of region waste to come to Kelowna tipping fee increases are being recommended as part of the bylaw amendment:

Year	Tipping fee (\$ / tonne)
2018	\$85.00
2019	\$95.00

2020	\$100.00
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Any rate adjustment will affect the municipal disposal costs of RDCO municipalities. Staff will inform regional municipal clients and private sector customers of any approved rate adjustments to allow time to make necessary adjustments for the 2018 budget year.

#### Other Bylaw administrative changes

Mattresses are a significant operational challenge at the landfill. The springs get tangled in heavy equipment tracks and wheels, they do not compact and therefore occupy one cubic meter per mattress which has a value of \$55 at the current disposal fee of \$65/tonne. In 2016, staff implemented a mattress recycling program at the landfill. Currently this is funded through existing tipping fees, however this does not fully cover the cost of the program. A new recycling fee of \$12.50 per mattress brought to the landfill is required to cover the cost of the program.

Automated scale terminals were installed to ease the queue size of patrons awaiting access to the landfill and to reduce on-site delays for commercial refuse haulers. A bylaw amendment is required to reference the administrative details for the system operation. This includes identification of qualified users, costs/expectations for use, and providing a framework for compliance and enforcement for unauthorized use of the automated scale system. Enforcement measures for violations of the bylaw are graduated and include escalating loss of use, re-activation fees, and ultimately suspension of the cards. Landfill staff work with Financial Services accounts receivable staff to monitor account balances for credit customers and timely payment of their invoices.

The proposed bylaw amendment addresses International Waste (refuse left at the Kelowna International Airport from origins outside of Canada) which requires specialized handling at a cost not currently reflected in the disposal fees.

Penalties for offences in the current bylaw were outdated and did not adequately protect staff against reckless or dangerous behavior by landfill patrons. The amendment sets realistic and enforceable penalties to address unsafe conduct. The amendment also clarifies the term of any landfill ban, depending on whether or not violations are being repeated.

The bylaw makes other administrative changes to reflect current site practices and to ensure that the fees charged are consistent with the per tonne rates proposed in this report.

#### **Internal Circulation:**

Divisional Director, Financial Services  
 Divisional Director, Infrastructure  
 Financial Planning Manager  
 Community Communications Manager  
 Landfill Supervisor

#### **Financial/Budgetary Considerations:**

Maintaining our current \$65 per tonne rate, given the necessary capital program over the next 8 years, places the landfill in an operating deficit that will see our reserve drop by over \$7 million to below zero by 2020. Implementing the proposed rate increases through 2020, will ensure funding for capital infrastructure on a financially sustainable basis. The reserve balance is expected to slightly increase

from its current balance through 2025. This provides some assurance that we will be able to address the other risk items (closure costs and risk costs) beginning in 2021 with modest rate adjustments.

**Communications Comments:**

**Considerations not applicable to this report:**

Legal/Statutory Authority:

Legal/Statutory Procedural Requirements:

Existing Policy:

Personnel Implications:

External Agency/Public Comments:

Alternate Recommendation:

Submitted by:

K. Van Vliet, Utility Services Manager

**Approved for inclusion:**



J. Creron, Deputy City Manager

cc:

Divisional Director, Financial Services

Divisional Director, Infrastructure

Financial Planning Manager

Community Communications Manager

Landfill Supervisor