



Committee of the Whole Report

Report Number: CA2023-003

Meeting Date: May 9, 2023

Title: **Future Waste Disposal Options Study**

Description: This report seeks Council endorsement of a study of various options regarding the future of the City's waste disposal service.

Author and Title: Adam Found, Manager of Corporate Assets

Recommendation(s):

That Report CA2023-003, **Future Waste Disposal Options Study**, be received;

That the Future Waste Disposal Options Study, prepared by Dillon Consulting and attached to Report CA2023-003 as Appendices A, B and C, be adopted; and

That this recommendation be brought forward to Council for consideration at the next regular Council meeting.

Department Head: _____

Financial/Legal/HR/Other: _____

Chief Administrative Officer: _____

Background:

At its meeting of February 22, 2022, Council adopted the following resolution:

CW2022-028

That Report CA2022-001, **Future Waste Management Options Study**, be received;

That a public consultation for future options regarding the City's waste management service be conducted; and

That Staff report on the results of the public consultation by the end of Q3, 2022.

This report addresses that direction, which flowed from Report CA2022-001 (Future Waste Management Options Study). Due to the 2022 municipal election, staff are tabling this report later than originally expected to ensure that the report's recommendations, which are critical to shaping the future of the City's waste disposal service, are considered by the new Council.

One of the initiatives identified by the Integrated Waste Management Strategy is completion of an Environmental Assessment (EA) to determine future options for waste disposal as the City's approved landfill capacity approaches exhaustion at certain landfills. Based on legislation and other municipalities' experiences, that EA, inclusive of its terms of reference, is expected to require up to 7 years (roughly 2022-2029) to be completed.

In order to streamline and reduce the cost and duration of the waste disposal EA, the City retained Dillon Consulting in 2020 to undertake a Future Waste Disposal Options Study designed to inform the EA by narrowing the myriad of potential options down to a viable subset recommended for further examination. That study, which has at times been informally referred to as the "Pre-EA Study", was completed in late 2021 and is attached hereto as Appendix A (main report), Appendix B (report appendices) and Appendix C (engagement summary).

As recommended by the Ministry of Environment, Conservation and Parks and as directed by Council Resolution CW2022-028 above, staff and Dillon Consulting conducted thorough public consultation in 2022 on the final draft of the Future Waste Disposal Options Study, particularly its recommendations. The study has been updated through the addition of an engagement summary to account for the public consultation, the results of which reinforce the study's recommendations. If the Future Waste Disposal Options Study is adopted by Council as recommended by staff and Dillon Consulting, it will inform the waste disposal EA terms of reference project, which was

approved as part of the 2022 Special Projects Budget and will be led by Infrastructure Division.

Rationale:

Based on existing approved landfill capacity, projected waste generation rates and other factors, the Lindsay-Ops Landfill is expected to fill up by 2031, with the Fenelon and Laxton Landfills filling up even earlier. That would leave in service only the Eldon and Somerville Landfills, which, given their locations and relatively small sizes, are incapable of meeting City-wide demand for waste disposal. Respectively, the Lindsay-Ops, Fenelon and Laxton Landfills currently receive approximately 73%, 10% and 3% of the City's waste, according to 2022 data. Redirection of 86% of the City's waste to the Eldon and Somerville Landfills is simply infeasible.

Through the 2022 Tax-Supported Capital Budget, Council directed staff to seek approval for minor expansions of the Fenelon and Laxton Landfills. With those expansions being at most 40,000 cubic metres each, their applications will not trigger an EA and are thus expected to be processed and approved by the end of 2023. If approved by the Ministry of Environment, Conservation and Parks, the expansions are planned for 2024 and expected to defer closure of the Fenelon and Laxton Landfills by 3 and 5 years, respectively, thereby deferring the inevitable redirection of waste from those landfills to the Lindsay-Ops, Eldon and Somerville Landfills.

Critically, that deferral will in turn extend the remaining life of the Lindsay-Ops Landfill's existing approved capacity. Specifically, the last two currently approved cells to be constructed there will then be expected to serve five instead of four years each, thereby buying the Lindsay-Ops Landfill another two years of life (from 2031 to 2033). If the waste disposal EA is not completed until 2029, that extension is essential to ensuring adequate time for the City to plan and complete major capital works emanating from the EA in order to avoid a break in its waste disposal service. Of course, the actual remaining site life at the Lindsay-Ops Landfill, whether extended or not, will depend on several factors: (i) rates of waste generation and diversion; (ii) composition of waste; (iii) degree of landfill compaction and settlement; (iv) distribution of redirected waste among the Lindsay-Ops, Eldon and Somerville Landfills; (v) regulatory changes.

To reduce the scope, cost and duration of the waste disposal EA, the City retained Dillon Consulting in 2020 to prepare the Future Waste Disposal Options Study, which is attached hereto as Appendices A, B and C. As indicated by the study, after considering nine potentially feasible and reasonable alternatives, Dillon Consulting recommends that landfill expansion be the only option examined by the waste disposal EA. With such a

focused scope, the EA will be more streamlined, cost-effective and timely than it would otherwise be. Having the EA examine options which are demonstrably infeasible for technological, financial or other reasons would be a waste of resources and would unnecessarily prolong the EA process.

As recommended by the Ministry of Environment, Conservation and Parks and as directed by Council, the draft Future Waste Disposal Options Study was subjected to thorough public consultation in 2022. As indicated by Appendix C, that consultation revealed broad public support for focusing the waste disposal EA on landfill expansion as the primary means by which to continue the City's waste disposal service. As completion of the waste disposal EA is expected to require several years, the Future Waste Disposal Options Study should be adopted as soon as possible to enable the EA terms of reference project to commence.

During finalization of the Future Waste Disposal Options Study, staff became aware of an emerging initiative to assemble a consortium of eight single-tier and upper-tier municipalities in eastern Ontario for the purpose of exploring the feasibility of a central incinerator which would produce electricity by burning waste from the following municipalities: City of Kawartha Lakes, County of Peterborough, City of Peterborough, County of Northumberland, County of Prince Edward, County of Hastings, City of Quinte West and City of Belleville. To the knowledge of staff, however, the initiative remains very much in its infancy and is presently exploratory at best.

Accordingly, the waste disposal EA terms of reference should encompass only landfill expansion at this time, as recommended by the Future Waste Disposal Options Study and as supported by Kawartha Lakes residents based on the 2022 public consultation results. As the central incinerator would require a firm, substantial and coordinated commitment by eight municipalities and as it is lacking a feasibility study, it is not a viable option for consideration by the waste disposal EA at this time.

In the event that a central incinerator develops into a viable option for consideration during the course of the waste disposal EA, staff will then revisit the matter and make recommendations to Council deemed advisable based on the circumstances of that time. Even if the EA focuses on and ultimately recommends only landfill expansion, such an outcome would not preclude or undermine the City's ability to pursue an inter-municipal partnership for a central incinerator in future, in part because approved landfill capacity is constructed incrementally in cells as needed rather than entirely upfront.

Even if a central incinerator eventually comes to fruition, it would be prudent of the City to retain landfill capacity for at least two reasons. Firstly, ash leftover from incineration would need to be landfilled. Secondly, in the event that a central incinerator fails or ceases to best serve the City's interests in future, the City would be able to fall back onto landfilling to avoid a break in waste disposal service. These reasons reinforce the recommendations of this report.

Other Alternatives Considered:

As the Future Waste Disposal Options Study identifies landfill expansion as the only sensible option for examination by the waste disposal EA, as the public consultation reinforces that finding, and as it is essential that the EA terms of reference project proceed forthwith, no alternatives to the recommendations of this report are being considered by staff at this time.

Alignment to Strategic Priorities:

One of the four Strategic Priorities of the Plan is "A Healthy Environment", and one of the main initiatives under that category is "Increase Waste Reduction and Diversion". That initiative is supported in part through implementation of the Integrated Waste Management Strategy. Completion of an EA for future waste disposal options is an essential component of that strategy.

Financial/Operation Impacts:

As indicated by the Long-Term Financial Plan, the waste disposal EA (inclusive of its terms of reference) is expected to cost the City \$7.2M over 2022-2029. As the estimated cost and completion time of the EA are based on the assumption that landfill expansion will be the only option included in the EA terms of reference, the recommendations of this report are not anticipated to result in changes to the Long-Term Financial Plan. Once the EA terms of reference are substantially completed in 2024 as expected, staff will revise the estimated cost and completion time of the EA as needed and advise Council accordingly.

Consultations:

Manager of Environmental Services

Director of Engineering and Corporate Assets

Asset Management Coordinator

Dillon Consulting

Attachments:

Appendix A: Future Waste Disposal Options Study – Main Report



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Appendix B: Future Waste Disposal Options Study – Appendices



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Appendix C: Future Waste Disposal Options Study – Engagement Summary



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