

The Regional Municipality of York

Regional Council
Environmental Services
December 19, 2019

Report of the Commissioner of Environmental Services

York Durham Sewage System Operating Agreement Extension

1. Recommendations

1. Council authorize extending the York Durham Sewage System Operating Agreement under the existing terms with Durham Region for six months commencing January 1, 2020 until June 30, 2020 to allow for finalization of a new operating agreement and the Commissioner of Environmental Services be authorized to execute the necessary documents to extend the Operating Agreement.

2. Summary

This report recommends extension of the York Durham Sewage System Operating Agreement for six months commencing January 1, 2020.

Key points:

- Current York Durham Sewage System Operating Agreement with Durham Region expires on December 31, 2019
- Council authorization is requested to extend York Durham Sewage System Operating Agreement for six months commencing January 1, 2020 to allow for finalization of a new operating agreement
- York and Durham staff have been working collaboratively on a revised long-term York Durham Sewage System Operating Agreement to be authorized by Council

3. Background

Province transferred ownership of York Durham Sewage System to York and Durham in 1997

The Province originally planned and constructed the York Durham Sewage System to service the wastewater needs of both York and Durham Regions. The York Durham Sewage System began operation in 1975. In 1997, ownership of the York Durham Sewage System assets was transferred from the Province to both York Region and Durham Region. In conjunction with the ownership transfer by the Province, the York Durham Sewage System Co-Owners Agreement was executed on November 28, 1997 and is administered by a

Management Committee consisting of equal representation of staff from Durham and York Regions.

Previous Agreement Extension approved by Council in June 2017

The June 29, 2017 [York Durham Sewage System Operating Agreement Extension Council report](#) authorized an extension of the Operating Agreement from January 1, 2018 to December 31, 2019.

Duffin Creek Plant currently services 1.2 million residents in York and Durham

Under the York Durham Sewage System Co-Owners Agreement, York and Durham Regions share the cost of operating and maintaining the co-owned assets, and investment in new assets to service growth. This partnership benefits both York and Durham Regions as cost efficiency is realized through economy of scale. The Duffin Creek Plant was planned to be expanded in four stages to increase capacity to 727 megalitres per day (MLD). Today, the Duffin Creek Plant serves approximately one million York Region residents across eight local municipalities and approximately 200,000 Durham Region residents in the Town of Ajax and City of Pickering.

Since the original execution of the Agreement, York Region has initiated and completed major expansions to address capacity and regulatory needs including:

- In 2005 through optimization and rehabilitation the liquid capacity of the Duffin Creek Plant was increased by 56 MLD by investing approximately \$35 million
- In 2010 the Stage 3 expansion of Duffin Creek Plant was completed which increased liquid treatment capacity by 310 MLD with complementary solids handling capacity, and enhanced phosphorus removal process by investing \$625 million. The Stage 3 expansion of the Duffin Creek Plant increased the liquid treatment capacity to 630 MLD. However, the plant was only permitted to operate up to 520 MLD until the Duffin Creek Plant Outfall Class Environmental Assessment was approved
- Duffin Creek Plant Stages 1 and 2 upgrades included critical work that had to be completed to satisfy conditions of the Environmental Compliance Approval for the Duffin Creek Plant Stage 3 Expansion. Final demolition and restoration works were completed in 2018. This project is currently in the warranty phase

Successful working partnership allows Duffin Creek Plant to outperform other large treatment plants on Lake Ontario

The Duffin Creek Plant has been expanded and upgraded over the last 15 years to install enhanced phosphorus removal technology removing over 94% of raw sewage phosphorus loading entering the plant. The Duffin Creek Plant has one of the highest quality effluents of all large wastewater plants discharging to open waters of Lake Ontario, consistently at or below discharge parameters set out by the Ministry of the Environment, Conservation and Parks, and below discharge limits of comparable large plants discharging to Lake Ontario. Furthermore, unlike most comparable plants, the Duffin Creek Plant provides full treatment of all wastewater flows even during extreme high-flow rainfall events and has zero bypass

discharges. It is one of the few wastewater treatment plants on Lake Ontario to follow this environmental practice.

The successful working partnership between both Regions in co-owning and operating the facility results in a high standard of wastewater treatment that meets strict effluent requirements demonstrating environmental leadership in the industry.

Current Operating Agreement expires on December 31, 2019

Under the existing Operating Agreement, Durham Region is responsible for operations, maintenance and monitoring of the Duffin Creek Plant. The Operating Agreement expires on December 31, 2019.

Discussion between York and Durham staff around amending the Operating Agreement has been undertaken as part of the overall discussion of amending the Co-Owners Agreement, which is also due for renewal.

4. Analysis

Approval of the Duffin Creek Outfall Environmental Assessment was received November 7, 2019

Approval for the Environmental Assessment for outfall works was received from the Minister of Environment, Conservation and Parks on November 7, 2019. As Approval has just been received, it is recommended that the current Operating Agreement, under existing terms with Durham Region, be extended for six months commencing January 1, 2020 to allow for finalization of a new long-term Operating Agreement within the context of the overall Co-Owners Agreement and the recently received outfall approval.

The new long-term Operating Agreement will continue to be built on principles of transparency, enhanced reporting and achieving operational excellence. It will take into account industry best practices, research and innovation. Staff from both Regions will continue to work together to finalize the new long-term Operating Agreement which will be brought to Regional Council for approval in Q2 2020.

5. Financial

2019 Duffin Creek Plant capital and operation costs are included in the approved budget

Sufficient funding has been allocated in the approved 2019 budget to cover the capital and operation costs for Duffin Creek Plant. The 2019 operating budget for Duffin Creek is \$35.2 million (York Region's share is \$28.2 million).

6. Local Impact

The Duffin Creek Plant services approximately one million people across eight local municipalities in York Region and approximately 200,000 people across two municipalities in Durham Region. Extending the Operating Agreement reflects the long-term partnership between York and Durham in co-owning and managing the facility to serve their respective residents.

7. Conclusion

It is recommended that Council authorize the extension of the York Durham Sewage System Operating Agreement under existing terms with Durham Region for six months from January 1, 2020 to June 30, 2020 to allow for finalization of a new operating agreement.

A report seeking authorization of a new Operating Agreement will be brought before Council in 2020 subject to finalization of terms with Durham Region.

For more information on this report, please contact Roy Huetl, Director, Operations, Maintenance and Monitoring at 1-877-464-9675 ext. 75323. Accessible formats or communication supports are available upon request.

Recommended by: **Erin Mahoney, M. Eng.**
Commissioner of Environmental Services

Approved for Submission: **Bruce Macgregor**
Chief Administrative Officer

December 11, 2019
#10058787