

Clause 9 in Report No. 10 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on June 29, 2017.

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### York Durham Sewage System Operating Agreement Extension

Committee of the Whole recommends adoption of the following recommendations contained in the report dated May 31, 2017 from the Commissioner of Environmental Services:

- 1. Council authorize the extension of the York Durham Sewage System Operating Agreement under the existing terms with Durham Region for an additional two years commencing January 1, 2018 and the Commissioner of Environmental Services be authorized to execute the necessary documents to extend the Operating Agreement.
- 2. Subject to the final approval of the Duffin Creek Plant Outfall Class Environmental Assessment on terms consistent with the published Environmental Study Report, Council approve the terms of settlement contained in the private Memorandum of Understanding dated November 2, 2015 between York Region and Durham Region and authorize the Regional Chair and Regional Clerk to execute the necessary documents to give effect to the terms of settlement, including any amendments to the existing York Durham Sewage System Co-Owners' Agreement dated November 28, 1997.

Report dated May 31, 2017 from the Commissioner of Environmental Services now follows:

#### 1. Recommendations

It is recommended that:

Council authorize the extension of the York Durham Sewage System
Operating Agreement under the existing terms with Durham Region for an
additional two years commencing January 1, 2018 and the Commissioner
of Environmental Services be authorized to execute the necessary
documents to extend the Operating Agreement.

2. Subject to the final approval of the Duffin Creek Plant Outfall Class Environmental Assessment on terms consistent with the published Environmental Study Report, Council approve the terms of settlement contained in the private Memorandum of Understanding dated November 2, 2015 between York Region and Durham Region and authorize the Regional Chair and Regional Clerk to execute the necessary documents to give effect to the terms of settlement, including any amendments to the existing York Durham Sewage System Co-Owners' Agreement dated November 28, 1997.

### 2. Purpose

This report seeks authorization to extend the York Durham Sewage System (YDSS) Operating Agreement between Durham Region and York Region under the existing terms for an additional two years to provide time to negotiate a new Operating Agreement with Durham Region, once the Duffin Creek Plant Outfall Environmental Assessment is approved. This report also seeks authorization to amend the YDSS Co-Owners' Agreement subject to the terms outlined in this report.

This report contains two attachments that are private pursuant to subsection 239(2) of the *Municipal Act, 2001* because the subject matter involves potential litigation.

### 3. Background

## Province transferred ownership of YDSS to York and Durham in 1997

The York Durham Sewage System was originally planned and constructed by the Province to service the wastewater needs of both York and Durham Regions. The YDSS began operation in 1975. In 1997, ownership of the YDSS assets was transferred from the Province to both York Region and Durham Region.

In conjunction with the ownership transfer by the Province, the YDSS Co-Owners Agreement was executed on November 28, 1997 and is administered by a Management Committee consisting of equal representation of staff from both Durham and York Regions.

### Today, the Duffin Creek Plant services 1.2 million residents in York and Durham

Under the YDSS Co-Owners Agreement, York and Durham share the cost of operating and maintaining the existing co-owned assets, and investing new assets to service growth. This partnership benefits both York and Durham as cost efficiency is realized through economy of scale. 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 three major expansion works to address capacity and regulatory needs including:

- Optimization and rehabilitation of Duffin Creek Plant increasing the facility's liquid capacity by 56 MLD at a cost of approximately \$35M in 2005;
- The Stage 3 expansion of Duffin Creek Plant increasing the facility's liquid treatment capacity by 310 MLD with complementary solids handling capacity, and enhanced phosphorus removal process at a cost of approximately \$625M in 2010, and;
- Addition of a new Southeast Collector Trunk Sewer to provide additional conveyance capacity to the system at a cost of approximately \$600M in 2015.

The Duffin Creek Plant was originally conceived to be expanded in four stages, with an ultimate capacity of 727 MLD. Stage 3 expansion of the Duffin Creek Plant completed in 2010 increased the liquid treatment capacity to 630 MLD, but the plant is currently only permitted to operate up to 520 MLD until the Duffin Creek Plant Outfall Class Environmental Assessment is approved.

## The Duffin Creek Plant is considered one of the top performing plants on the shores of Lake Ontario

The plant has the most stringent phosphorus requirements of any treatment plant discharging to the open waters of Lake Ontario, and was identified as one of the top performing plants discharging to Lake Ontario by EcoJustice in 2013. New treatment systems have been installed as part of the expansion and upgrade of the Plant that reduce phosphorus and nitrate to levels that are the lowest of all large plants currently discharging to the open waters of Lake Ontario.

The plant does not have treatment bypass capability to release raw sewage into Lake Ontario, even during times of heavy flow, which is extremely rare among wastewater treatment plants. All wastewater entering the plant is fully treated under all weather conditions. 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 set by the Province of Ontario and makes the Duffin Creek Plant an environmental leader in the industry.

#### **Current Operating Agreement expires on December 31, 2017**

Under the existing Operating Agreement, Durham Region is responsible for operations, maintenance and monitoring of the Duffin Creek Plant. The current Operating Agreement expires on December 31, 2017 and a new long-term agreement would be advantageous.

Under provisions of the Co-Owners Agreement, Management Committee has the responsibility to monitor operation of the co-owned assets including providing direction to the Operator of the plant under an Operating Agreement. As the Operating Agreement is approaching expiry in six months, the Management Committee is responsible to review the Operating Agreement, and amend the Agreement as required.

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 in December 2017.

# York and Durham staff have been in discussion on amending the Co-Owners Agreement

The initial term of the Co-Owners Agreement was set at 20 years with the current Agreement set to renew for an additional 20-year period on December 31, 2017. The Agreement permits both Regions to initiate a review on the fifteenth anniversary of the effective date of the Agreement (June 30, 2012) to provide a sufficient period of time to address any concerns prior to the renewal date. The Agreement is deemed to be automatically renewed for a further period of 20 years on its existing terms unless the Co-Owners agree to amend the Agreement.

York and Durham staff have been in discussion over the last several years to review and identify required amendments to the Co-Owners Agreement that will improve management of shared infrastructure, especially in light of recent capital expansions at the plant and other administrative matters that have emerged over the last 20 years. As part of this review process, a number of items were

identified as key elements to be addressed through the amendment of the Co-Owners Agreement:

- 1. Administration cost quantum and escalation
- 2. Cost Attribution to operating the Stage 3 Influent Pumping Station
- 3. Cost sharing of repair and replacement projects
- 4. Guidelines for borrowing Primary System capacity
- 5. New Operating Agreement
- 6. Reallocation of Asset Ownership and de-rating of Stage 1 and Stage 2 liquid treatment capacity

### 4. Analysis and Implications

## A Memorandum of Understanding was signed by staff on November 2, 2015

On November 2, 2015, York and Durham staff signed a Memorandum of Understanding (see Private Attachment 2) subject to approval of each Council. The Memorandum of Understanding is based on the plant operating at full capacity of 630 MLD. This is contingent on approval and implementation of the works identified in the Environmental Study Report for the Duffin Creek Plant Outfall Environmental Assessment.

# Memorandum of Understanding will form the basis for updating the Co-Owners Agreement, including asset ownership

Subject to the final approval of the Duffin Creek Plant Outfall Environmental Assessment on terms consistent with the published Environmental Study Report, staff are seeking Council approval of the Memorandum of Understanding dated November 2, 2015 between York Region and Durham Region. Related to this approval, staff are also seeking authorization for the Regional Chair and Regional Clerk to execute the necessary documents to give effect to the terms of settlement, including any amendments to the existing York Durham Sewage System Co-Owners' Agreement dated November 28, 1997. The terms agreed to between York and Durham staff will be used as a basis to revise and update the current Co-Owner's Agreement and finalize a new Operating Agreement. If the outcome of the Environmental Assessment is not consistent with the terms set out in the Environmental Study Report, staff will update Council on the matter prior to December 2019.

## Feasibility study on phosphorus to be completed in 2018 needed to formalize new agreement

Currently, the Regions are undertaking a feasibility study to explore options to reduce phosphorus to the lake in response to the Minister's Order received in April 2016. The study is expected to be completed in March 2018. It is unlikely that the scope of the outfall works can be concluded before the expiration date of York Durham Sewage System Operating Agreement on December 31, 2017. As such, it is recommended that the Operating Agreement under the existing terms with Durham Region be extended for an additional two years commencing January 1, 2018. Two year extension of current operating agreement provides time to formalize a new operating agreement within the context of the overall Co-Owners Agreement.

In the meantime, it is recommended that staff from both Regions continue to work together to discuss requirements for the new Operating Agreement. The new 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.

#### 5. Financial Considerations

## All 2017 capital and operation costs for Duffin Creek Plant included in approved budget

Sufficient funding has been allocated in the approved 2017 budget to cover the capital and operation costs pertaining to the Duffin Creek Plant.

### 6. Local Municipal Impact

The Duffin Creek Plant services approximately 970,000 people across eight local municipalities in York Region and approximately 220,000 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 the existing terms with Durham Region for an additional two years commencing January 1, 2018. This will enable continued operation of the plant to serve York and Durham residents, while awaiting the outcome of the Duffin Creek Plant Outfall Environmental Assessment.

It is also recommended that subject to the final approval of the Duffin Creek Plant Outfall Environmental Assessment on terms reasonably consistent with the published Environmental Study Report, Council approve the private Memorandum of Understanding dated November 2, 2015 between York Region and Durham Region and authorize the Regional Chair and Regional Clerk to execute the necessary documents to give effect to the terms of settlement, including any amendments to the existing York Durham Sewage System Co-Owners' Agreement.

For more information on this report, please contact Stephen Fung or James Steele, Infrastructure Asset Management at 1-877-464-9675 ext. 73025 or ext. 73018.

The Senior Management Group has reviewed this report.

May 31, 2017

Private Attachments (2)

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Accessible formats or communication supports are available upon request