

Clause 6 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 May 21, 2015.

6

Direct Purchase of Replacement Parts and Services to Meet  
Regulatory Requirements for York Region's Water and  
Wastewater System Assets

Committee of the Whole recommends adoption of the following recommendations contained in the report dated April 16, 2015 from the Commissioner of Environmental Services:

1. Recommendations

It is recommended that:

1. Council authorize the direct purchase of replacement parts and services from suppliers listed in Table 1 and Table 2 to meet regulatory requirements for York Region's water and wastewater system.
2. The Commissioner of Environmental Services be authorized to execute the agreements for up to five years with an upset limit of \$2,375,000, subject to the costs being within the approved budget.

2. Purpose

This report seeks approval for direct purchase of replacement parts and services from suppliers listed in Table 1 and Table 2, for up to five years, to meet regulatory requirements for York Region's water and wastewater facilities in accordance with provisions of the *Purchasing Bylaw (2014-53)*. This request will enable staff to make urgent and critical repairs by having parts available in a timely manner to minimize service disruption and damage to auxiliary assets. Based on current information available to the Environmental Services Department, all suppliers listed in Table 1 and Table 2 are the only legal entity reasonably capable of providing the deliverables and meet the requirements of direct purchase.

### 3. Background

York Region is responsible for complying with provincial legislation to supply safe drinking water

York Region is responsible for providing water and wastewater services to nine municipalities within York Region. The Environmental Services department maintains and operates water and wastewater systems in full compliance with legislation and regulations, including but not limited to the *Safe Drinking Water Act, 2002*, *Environmental Protection Act*, *Clean Water Act, 2006*, and the *Ontario Water Resources Act*. In addition, all water and wastewater maintenance must meet the requirements of York Region's Integrated Management System which supports the provincial Drinking Water Quality Management Standard.

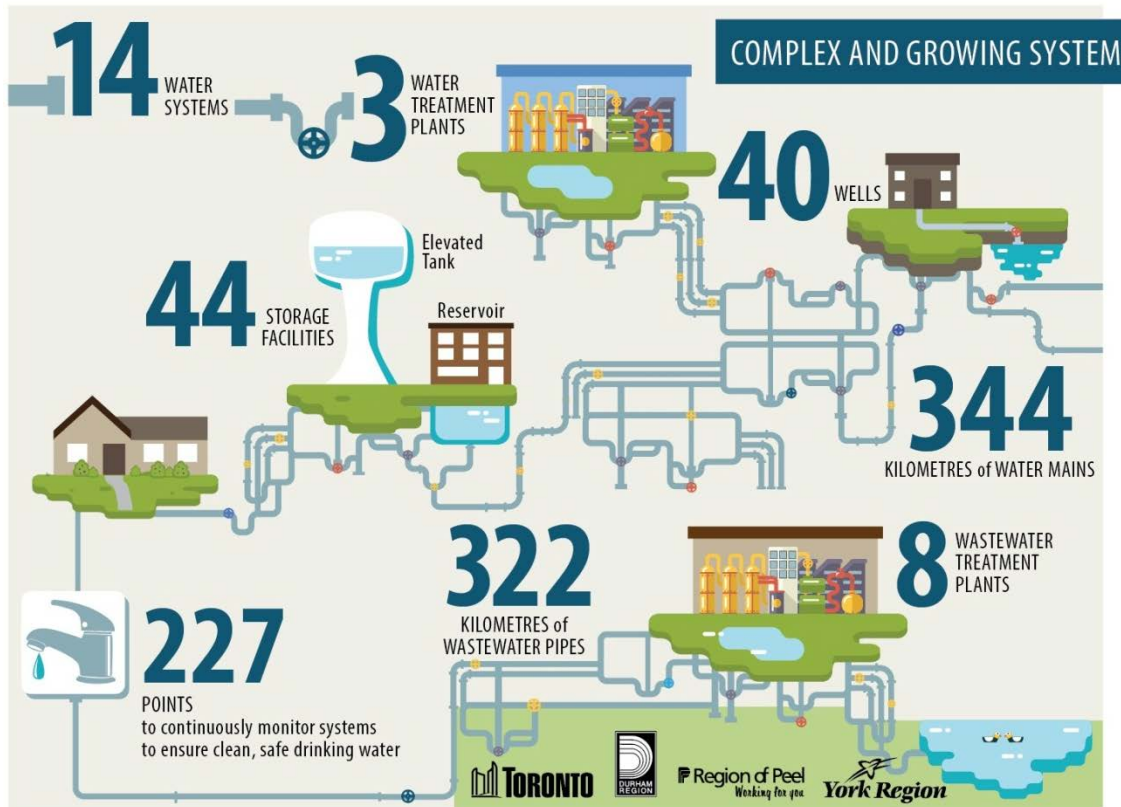
Highly specialized process equipment is required to monitor and control the Region's water and wastewater facilities to ensure performance limits are met at all times. These include: rated capacities, flow rates, chlorine residual management and disinfection. All primary disinfection facilities for municipal residential drinking-water systems are equipped with continuous disinfection process monitoring and recording devices with alarms as prescribed in *Ontario Regulation 170/03*.

Expanding and aging infrastructure leads to increased maintenance costs

York Region's water and wastewater infrastructure is a complex and growing system and represents approximately \$4 billion in assets. In 2010 to 2014 alone, water and wastewater assets grew by approximately 30 per cent. The system includes three water treatment plants, 40 wells, 344 kilometres of water mains, 44 storage facilities, 322 kilometres of wastewater pipes and eight wastewater treatment plants (Figure 1). Currently, 227 analyzers are used to continuously monitor systems to ensure clean safe drinking water.

Direct Purchase of Replacement Parts and Services to Meet Regulatory Requirements for York Region's Water and Wastewater System Assets

**Figure 1**  
**York Region's water and wastewater system assets**  
**total approximately \$4 billion**



As specified in *Ontario Regulation 170/03* and the Environmental Compliance Approvals, all measuring devices must be checked and calibrated in accordance with the manufacturer's instructions. Critical process equipment must be maintained to meet regulatory requirements to ensure the Region's facilities are operating in compliance, and to prevent damage to auxiliary equipment. New built infrastructure leads to an increased demand for operations and maintenance, as the purchase of replacement parts and services exceed the \$100,000 threshold over five years permitted under the *Purchasing Bylaw (2014-53)*.

## Direct Purchase of Replacement Parts and Services to Meet Regulatory Requirements for York Region's Water and Wastewater System Assets

Direct purchase distributors for replacement parts and services require Council approval

All equipment installed was purchased through York Region's procurement process. Due to equipment specifications, warranty requirements and unique integration with existing assets, many replacement parts and services can only be supplied by the original vendor or their authorized Ontario representative. The *Purchasing Bylaw (2014-53)* permits direct purchases where there is only one legal entity reasonably capable of providing the deliverables, and the compatibility of a purchase with existing equipment is the paramount consideration. Council approval is required to award contracts under section 9 of the *Purchasing Bylaw (2014-53)* where the total costs exceed \$100,000.

### 4. Analysis and Options

Purchase of replacement parts and services will exceed the \$100,000 threshold over five years permitted under the *Purchasing Bylaw (2014-53)*

All critical equipment must be maintained in accordance with manufacturer standards as outlined in legislation and Environmental Compliance Approvals issued by the Ministry of the Environment and Climate Change.

A review was undertaken by staff to identify and summarize all regulatory replacement parts and services required to maintain the water and wastewater system. A total of eight direct purchase suppliers of compatible replacement parts, consumables and calibration services identified, will exceed the \$100,000 threshold over five years permitted under the *Purchasing Bylaw (2014-53)* (Table 1 and 2).

Direct Purchase of Replacement Parts and Services to Meet Regulatory Requirements for York Region's Water and Wastewater System Assets

**Table 1  
Authorized Suppliers of Replacement Parts and Services for Chlorine Dosing and Monitoring Equipment**

Company Name	Justification	Estimated Five Year Cost
Evoqua Water Technologies Ltd.	Wallace and Tiernan parts are specifically designed for Evoqua equipment. The use of original manufactured parts will ensure equipment remains in compliance with manufacturer standards. Equipment is maintained to meet chlorine residual requirements for primary and secondary disinfection.	\$500,000
SPD Sales Ltd.	Exclusive representative for ATI products, Grundfos Dosing and Disinfection products, MSA Safety Inc. Fixed Gas and Flame Detection products, Blue-White Industries Pro-Series M peristaltic metering pump, YSI IQ Sensornet, Royce Technologies & WTW products, and Endress+Hauser products and services in the municipal market for Southern Ontario. Assets are maintained to ensure proper disinfection.	\$500,000
Metcon Sales & Engineering Ltd.	Provider for Capital Controls products, Watson-Marlow Pumps Group, ProMinent Fluid Controls, and ABB Inc.'s Instrumentation products in Ontario. Assets are maintained to ensure proper treatment and chemical dosing.	\$400,000
Hach Sales & Service Canada Ltd.	This equipment is maintained to ensure proper treatment, and disinfection of water and wastewater. All repairs, preventative maintenance and recalibration of Hach analyzers can only be performed by Hach to uphold the instrument's warranty.	\$125,000
<b>Total five year estimated cost</b>		<b>\$1,525,000</b>

Direct Purchase of Replacement Parts and Services to Meet Regulatory Requirements for York Region's Water and Wastewater System Assets

**Table 2  
Authorized Suppliers of Replacement Parts and Services for Critical Process Monitoring Equipment**

Company Name	Justification	Estimated Five Year Cost
Syntec Process Equipment Ltd.	Exclusive representative and supplier of Singer Valves and parts in Ontario. York Region operates and maintains a total of 44 Singer valves. Singer valves are maintained to provide safe drinking water and uninterrupted flow of wastewater to protect the environment.	\$300,000
Rotork Controls Inc.	York Region operates and maintains 309 Rotork valve actuators and operators. Rotork is the only vendor through which York Region can purchase replacement parts and services to maintain Rotork valve actuators. Rotork valves are maintained to provide safe drinking water and uninterrupted flow of wastewater to protect the environment.	\$250,000
Devine & Associates Ltd.	York Region operates and maintains 181 Cla-Val automatic regular and pressure release valves. Devine & Associates is the only provider in Ontario of Cla-Val automatic valves, replacement parts and services in Ontario. Cla-Val valves are maintained to provide safe drinking water and uninterrupted flow of wastewater to protect the environment.	\$200,000
Franklin Empire Inc.	Exclusive distributor for Siemens Process Instrumentation for York Region. Franklin Empire supplies pressure, flow, level and analytical equipment used to monitor critical processes and maintain regulatory compliance.	\$100,000
<b>Total five year estimated cost</b>		<b>\$850,000</b>

Based on current information available to the Environmental Services Department, all suppliers listed in Table 1 and Table 2 are the only legal entity reasonably capable of providing the deliverables, and meet the requirements of direct purchase under the *Purchasing Bylaw (2014-53)*. Written confirmation was obtained from the manufacturers to illustrate that only one provider is available in Ontario. The estimated cost was determined from historical data analysis, projected asset maintenance and replacement requirements.

## Direct Purchase of Replacement Parts and Services to Meet Regulatory Requirements for York Region's Water and Wastewater System Assets

Authorization of direct purchases result in operational cost benefits

Mandatory maintenance and services are required to meet legislative requirements. Authorization of direct purchases will:

- Ensure compatibility with existing equipment to minimize service disruption and damage to auxiliary assets
- Reduce total lifecycle costs through efficiencies related to maintenance costs and inventory management
- Reduce operator and staff training time with the operation and maintenance of compatible equipment

Link to key Council-approved plans

Stewardship of the Region's assets is a priority of the Region's 2015-2019 Strategic Plan. Maintenance is an integral component of preserving assets to meet regulatory compliance and deliver services in an efficient manner.

### 5. Financial Implications

The cost for the purchase of maintenance parts and services is included within the approved 2015 to 2018 operating budget of the Environmental Services department. The estimated total five year impact of direct purchases is \$2,375,000, with an estimated annual cost of \$475,000, which represents approximately 0.01 per cent of the total asset value on an annual basis. Staff will conduct periodic value assessments, which may result in negotiations or changes to requirements. This will ensure purchases are cost-effective and provided at fair market value.

### 6. Local Municipal Impact

The Operations, Maintenance and Monitoring Branch within the Environmental Services Department is committed to providing continuous operation of water and wastewater services to local municipalities within York Region. The water and wastewater systems are operated to meet applicable regulatory requirements.

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## 7. Conclusion

Legislation mandates the Region must provide safe drinking water and wastewater services to protect the health and wellbeing of the public and environment. It is recommended that Council authorize the direct purchase of replacement parts and services from the suppliers listed in Table 1 and Table 2 to ensure maintenance on existing systems, in accordance with Provincial legislation and provisions of the Regional *Purchasing Bylaw (2014-53)*.

For more information on this report, please contact Brett Bloxam, Director, Operations, Maintenance and Monitoring, Environmental Services at Ext. 75320.

The Senior Management Group has reviewed this report.

April 16, 2015

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