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The Regional Municipality of Durham Report

To: Works Committee
From: Commissioner of Works
Report: #2023-W-9
Date: February 8, 2023

Subject:

Sole Source Approval to Award Maintenance Service and Parts Supply Agreement for Ultraviolet Light Disinfection Equipment Installed at Various Water Supply and Wastewater Treatment Facilities

Recommendations:

That the Works Committee recommends to Regional Council:

- A) That staff be authorized to enter into a sole source maintenance service and parts supply agreement with Trojan Technologies at an upset limit of \$275,000* per annum with a term not to exceed five (5) years; and
 - B) That financing for the sole source maintenance service and/or parts supply agreement be provided from the approved and future annual Water Supply System and Sanitary Sewerage System Business Plans and Budgets.
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Report:

1. Purpose

- 1.1 The purpose of this report is to seek authorization to enter into a sole source maintenance service and parts supply agreement with Trojan Technologies for the existing and planned ultraviolet disinfection (UV) equipment installed at various Regional Municipality of Durham (Region) water supply and wastewater treatment facilities.
- 1.2 Dollar amounts followed by an asterisk (*) are before applicable taxes.

2. Background

- 2.1 The Region has six (6) ultraviolet disinfection equipment installations throughout the various water supply facilities and three (3) installation within the wastewater treatment facilities. Capital upgrades at one (1) more wastewater treatment facility will expand this inventory. This existing equipment was procured through the Region's standard procurement process associated with capital work tenders and were publicly tendered from 2003 through 2022, as well as through negotiated agreements for plant expansions where Trojan Technologies' systems were the only available product that met the technical specifications.
- 2.2 Specialized testing of some components is required to comply with the Ministry of the Environment, Conservation and Parks (MECP) Environmental requirements or the Region may be at risk of non-compliance. The MECP provides the guidelines for maintenance that must be followed by the Region in these circumstances.
- 2.3 With some UV treatment installations operating for nearly 20 years, maintenance requirements are more frequent and continually increasing. The use of a maintenance service and parts supply agreement will streamline the procurement activities that will continue to occur as this equipment ages.

3. Previous Reports and Decisions

- 3.1 Works Committee Report #2022-W-37, approved by Regional Council on September 29, 2022, authorized staff to enter into a sole source agreement with Trojan Technologies for the supply of UV disinfection units treatment to meet the performance and size specifications for the expansion of the Newcastle Water Pollution Control Plant.

4. Rationale for Sole Source

- 4.1 UV disinfection systems are a necessary component in the treatment and provision of final effluent discharge to the receiving water course and safe drinking water for communities.
- 4.2 To maintain the equipment warranties, regularly scheduled maintenance must be conducted as specified by the manufacturer. This specialized maintenance must be done by the manufacturer's qualified and trained personnel to uphold the warranty. Consumable spare parts, replacement components, and other maintenance items can only be obtained through the original manufacturer.

- 4.3 The service life of the existing installations ranges from 1 to 18 years. Planned maintenance activities including lamp replacement, UV sensor factory calibration, etc. are a function of operating hours. Component replacement activities are a function of the age of the equipment and require continued support from the manufacturer as they transition to newer product lines.
- 4.4 Some of the Region's older installations require an onsite reserve of additional spare parts to maintain operational readiness as the manufacturer's available inventory declines. Parts are manufacturer-specific and cannot be obtained from another supplier as the design of the physical and treatment designs vary between manufacturers. In addition, specialized maintenance and inspection services need to be procured and scheduled, which includes the calibration of the UV sensors. Existing compliance approvals require that this calibration is completed by the manufacturer of the equipment.

5. Financial Implications

- 5.1 Section 7.2 of the Region's Purchasing By-law #16-2020, permits the acquisition of goods and services through sole source negotiations under specific circumstances outlined in Appendix "C" of the by-law.
- 5.2 Section 1.1 of Appendix "C" permits negotiations for goods or services that can be supplied only by a particular supplier where no reasonable alternative or substitute goods or services exist to ensure compatibility with existing good or to maintain specialized goods that must be maintained by the manufacturer of those goods or its representative.
- 5.3 Appendix "D" to the by-law requires approval by the appropriate standing committee and Council for the award of sole source contracts that exceed \$100,000 in value, with the Commissioner of Finance authorized to execute the agreements upon Council's approval.
- 5.4 Financing for the maintenance service and/or parts supply agreement, estimated at an annual cost of \$275,000*, will be funded from the various annual Water Supply and Sanitary Sewerage Business Plans and Budgets.

6. Relationship to Strategic Plan

- 6.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:
 - a. Service Excellence Goal #5.1: Optimize resources and partnerships to deliver exceptional quality services and value; and

- b. Service Excellence Goal #5.2: Collaborate for a seamless service experience.

7. Conclusion

- 7.1 It is recommended that Regional Council authorize the award of a sole source maintenance service and parts supply agreement to Trojan Technologies for the maintenance of ultraviolet disinfection equipment installed at various Regional water supply and wastewater treatment facilities.
- 7.2 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the financial recommendations.
- 7.3 For additional information, contact: Rich Tindall, Manager, Plant Operations, 905-668-7711 ext. 3547.

Respectfully submitted,

Original signed by:

John Presta, P.Eng., MPA
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer