
Subject: Extension to 2023-T-38 Supply & Delivery of Ferric Chloride

Report To: Public Works Committee

Report date: Tuesday, April 9, 2024

Recommendations

1. That Contract 2023-T-38 – Supply and Delivery of Ferric Chloride with Fanchem Ltd. (dba PVS Benson) **BE EXTENDED** under the same terms and conditions, as outlined in this report, for the one (1) year optional extension at the total estimated cost of \$4,019,930 including 13% HST; and
2. That the CAO **BE AUTHORIZED** to approve the issuance of a Purchase Order to effect the extension of the contract.

Key Facts

- The purpose of this report is to seek Council's approval to extend the current contract with Fanchem Ltd. for the optional one (1) year term from June 1, 2024 to May 31, 2025, in accordance with the terms and conditions of Contract 2023-T-38.
- The contract extension requires Council approval in accordance with Schedule "B" (Purchasing and Execution Authority) of the Region's Procurement By-law 02-2016 as amended, whereby Council is required to approve any contract award that exceeds \$5,000,000 in total value.
- In 2023, Contract 2023-T-38 was awarded to Fanchem Ltd. for the supply and delivery of Ferric Chloride to Wastewater Facilities for a one (1) year term from June 1, 2023 to May 31, 2024. The Contract was awarded as part of a competitive Request for Tender (RFT) procurement process, where Fanchem Ltd. was the lowest of two (2) compliant bids received, at an annual cost of \$3,146,010 (excluding 13% HST).
- The Contract includes an option to extend for an additional one (1) year term for \$3,557,460 (excluding 13% HST) for a total term of two (2) years. This extension represents a year-over-year increase of 13.1% but still presents more favorable pricing than the next lowest compliant bid by approximately 4.4%.

Financial Considerations

The first-year tender price (covering June 1, 2023 to May 31, 2024) of Contract 2023-T-38 was \$3,201,380 (including non-recoverable HST) for the year, with an optional one

(1) year extension estimated cost of \$3,620,071 (including non-recoverable HST) for a total value of \$6,821,451 (including non-recoverable HST); a year-over-year increase of 13.1%. The next lowest compliant bid was \$6,982,486 (including non-recoverable HST).

Exercising the optional one (1) year extension for Contract 2023-T-38 represents a favorable position to the Region as it includes an estimated savings of approximately \$161,035 (including non-recoverable HST). It should be noted that contract pricing is based on a 'per kg' unit of measure and savings are dependent on the total quantity that is utilized in Niagara's Wastewater Treatment facilities, currently estimated at 633,000kg per year. Higher consumption will yield additional savings while less consumption will result in lower savings.

The increase associated with the renewal is accommodated in the 2024 Water Wastewater operating budget and will be accommodated in the 2025 Waster Wastewater operating budget.

Analysis

Phosphorous is a component of wastewater that must be treated (removed) to safely return the effluent to the environment as excess phosphorus can lead to harmful algal growth in lakes and rivers. The sources of phosphorous in wastewater comes mainly from human waste and some detergents. The removal of phosphorus requires chemicals to be added such as ferric chloride. The Ministry regulates the amount of phosphorus that can be released into the environment from the wastewater treatment plant. The Region has eight (8) wastewater sewage plants that use ferric chloride to remove phosphorus. In 2023, an estimate of 633,000 kg of ferric chloride per year was anticipated to be utilized at Niagara Wastewater Treatment facilities and was included in the RFT.

As the population grows, the amount of sewage to be treated also increases, requiring more ferric chloride to be used. Staff employ automation and continuous monitoring in water and wastewater chemical dosing systems in an effort to minimize chemical use and associated costs while remaining in regulatory compliance.

Pricing Trends

Since the pandemic, Niagara Region, Public Works Water & Wastewater Division has observed escalating costs for the supply and delivery of essential chemicals far exceeding the annual Consumer Price Index (CPI). Trends for the past three (3) ferric

chloride supply and delivery contracts, demonstrating pre-and post-pandemic pricing are shown in the Table 1 below:

Table 1: 2019 to 2024 - Supply and Delivery of Ferric Chloride Contract Awards (excluding 13% HST)

Contract	Service Year	Term	Unit Cost (per kg)	Extended Total	Per Unit Annual Price Increase (%)
2019-T-131*	2019-2020	Year One (1)	\$2.26	\$1,356,000.00	-
2019-T-131*	2020-2021	Year Two (2) (Optional)	\$2.38	\$1,428,000.00	5.3
2019-T-131*	2021-2022	Year Three (3) (Optional)	\$2.62	\$1,572,000.00	10.1
2022-T-02**	2022-2023	Year One (1)	\$3.26	\$1,946,220.00	24.4
2023-T-38***	2023-2024	Year One (1)	\$4.97	\$3,146,010.00	52.5
2023-T-38***	2024-2025	Year Two (2) (Optional)	\$5.62	\$3,557,460.00	13.1

*Based on estimated volume of 600,000 kgs.

**Based on estimate volume of 597,000 kgs. Optional years two (2) and (3) of contract 2022-T-02 were not extended as supplier could not honour optional year pricing due to rising cost of transportation and raw materials.

***Based on estimate volume of 633,000 kgs.

Supply and Delivery of Ferric Chloride Contract

The Contract requires Fanchem Ltd. to supply all labour, material and equipment to deliver Liquid Ferric Chloride for use at The Regional Municipality of Niagara wastewater treatment plants for wastewater treatment processes.

Optional 1-Year Contract Extension

As per Contract 2023-T-38, Niagara Region has in its favour the option to extend the contract with Fanchem Ltd. one (1) additional one-year term, on the same terms and conditions. If the contract is extended beyond the original one (1) year term, the total contract value would surpass \$5,000,000 in total value and requires Council approval as per Schedule “B” (Purchasing and Execution Authority) of the Region’s Procurement By-law 02-2016, as amended on February 28, 2019.

Staff have contacted Fanchem Ltd. to notify them of the Region’s intent to execute the available extension, subject to Council approval. Fanchem Ltd. are willing to extend the contract at the optional year two (2) ‘per kg’ unit price quoted in their original 2023-T-38 contract bid.

It is being recommended that the Contract be extended for the optional one (1) year term. The rationale for the contract extension is as follows:

- The extended total price for the optional one (1) year extension offers better value for money than the next lowest compliant bid received as part of the 2023-T-38 competitive RFT process; a savings of approximately \$158,250 (excluding 13% HST) assuming chemical use for 2024 follow 2023 patterns (633,000 kg of ferric chloride used in 2023).
- Transportation and chemical raw materials costs have continued to escalate since the onset of the pandemic, a dynamic that has been closely reflected in recent pricing trends for this contract and other similar W-WW essential supply & service contracts.
- Given recent contract RFT results and both current and projected market conditions, it is anticipated that a new tender will not yield more favorable pricing and would likely result in year-over-year increases more in line with 2022 and 2023; 24.4% and 52.5% respectively.

Alternatives Reviewed

Staff has examined the possibility of not extending the contract with Fanchem Ltd. If Niagara Region were to issue a new tender for the Supply and Deliver of Ferric Chloride in 2024, given 2023 RFT results and both current and projected industry conditions it is expected that the associated costs would exceed the cost of extending the existing contract. Furthermore, having cost certainty for the operating budgets will help mitigate any budget pressure associated with extending this contract.

Relationship to Council Strategic Priorities

This recommendation aligns with Council's strategic priority of Effective Region, specifically as it relates to delivering fiscally responsible and sustainable services. By extending the contract with Fanchem Ltd., Niagara Region will continue to offer value-for-money wastewater treatment services in an environmentally safe manner to Niagara residents.

Other Pertinent Reports

No other reports are pertinent to this report.

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