

Amendments to Various Drinking Water Treatment Chemical Blanket Contracts

Date: January 4, 2023
To: General Government Committee
From: General Manager, Toronto Water and Acting Chief Procurement Officer
Wards: All

SUMMARY

The purpose of this report is to request authority to amend various blanket contracts for the supply and delivery of critical chemicals used in the purification of water at the City's four drinking water treatment plants. These amendments are requested in response to escalating unit costs resulting from increased raw material costs, global supply chain challenges and the war in Eastern Europe. The amendment also covers the costs associated with increased chemical usage to further enhance the treatment of water.

The amendments requested total \$4,182,336 (net of HST recoveries) and would increase the current target value of five (5) Blanket Contracts.

RECOMMENDATIONS

The General Manager, Toronto Water and the Acting Chief Procurement Officer, recommend that:

1. The General Government Committee, in accordance with Section 71-11A of the City of Toronto Municipal Code Chapter 71 Financial Control By-law, grant authority to the General Manager, Toronto Water to amend existing Blanket Contract Number 47021759 issued to Kemira Water Solutions Canada Inc., for the supply and delivery of Liquid Polyaluminum Chloride for the Horgan water treatment plant to increase the overall target value by \$260,000 net of all applicable taxes and charges (\$264,576 net of HST Recoveries).
2. The General Government Committee, in accordance with Section 71-11A of the City of Toronto Municipal Code Chapter 71 Financial Control By-law, grant authority to the General Manager, Toronto Water to amend existing Blanket Contract Number 47023306 issued to Brenntag Canada Inc., for the supply and delivery of Liquid

Chlorine for the City of Toronto's drinking water treatment plants to increase the overall target value by \$1,700,000 net of all applicable taxes and charges (\$1,729,920 net of HST Recoveries).

3. The General Government Committee, in accordance with Section 71-11A of the City of Toronto Municipal Code Chapter 71 Financial Control By-law, grant authority to the General Manager, Toronto Water to amend existing Blanket Contract Number 47023305 issued to FloChem Ltd., for the supply and delivery of Phosphoric Acid for the City of Toronto's drinking water treatment plants and increase the overall target value including all option years by \$900,000 net of all applicable taxes and charges (\$915,840 net of HST Recoveries).

4. The General Government Committee, in accordance with Section 71-11A of the City of Toronto Municipal Code Chapter 71 Financial Control By-law, grant authority to the General Manager, Toronto Water to amend existing Blanket Contract Number 47023308 issued to Fanchem Ltd. dba PVS Benson, for the supply and delivery of Hydrofluosilicic Acid for the City of Toronto's drinking water treatment plants and increase the overall target value including all option years by \$725,000 net of all applicable taxes and charges (\$737,760 net of HST Recoveries).

5. The General Government Committee, in accordance with Section 71-11A of the City of Toronto Municipal Code Chapter 71 Financial Control By-law, grant authority to the General Manager, Toronto Water to amend existing Blanket Contract Number 47023326 issued to Chemtrade Chemicals Canada Ltd., for the supply and delivery of Aluminum Sulphate for the City of Toronto's drinking water treatment plants and increase the overall target value by \$525,000 net of all applicable taxes and charges (\$534,240 net of HST Recoveries).

FINANCIAL IMPACT

Amendment of Contract Number 47021759 for the current contract period including all option years by an additional \$260,000 net of all taxes and charges (\$264,576 net of HST Recoveries) will increase the contract value from \$594,675 net of HST to \$854,675 net of HST (\$869,717 net of HST Recoveries).

Amendment of Contract Number 47023306 for the current initial term by an additional \$1,700,000 net of all taxes and charges (\$1,729,920 net of HST Recoveries) will increase the contract value from \$3,881,831 net of HST to \$5,581,831 net of HST (\$5,680,071 net of HST Recoveries).

Amendment of Contract Number 47023305 for the current contract period and the first option year by an additional \$900,000 net of all taxes and charges (\$915,840 net of HST) will increase the contract value from \$4,917,055 net of HST to \$5,817,055 net of HST (\$5,919,435 net of HST Recoveries).

Amendment of Contract Number 47023308 for the current contract period and the first option year by an additional \$725,000 net of all taxes and charges (\$737,760 net of

HST Recoveries) will increase the contract value from \$2,261,966 net of HST to \$2,986,966 net of HST (\$3,039,537 net of HST Recoveries).

Amendment of Contract Number 47023326 for the current initial term by an additional \$525,000 net of all taxes and charges (\$534,240 net of HST Recoveries) will increase the contract value from \$2,174,340 net of HST to \$2,699,340 net of HST (\$2,746,848 net of HST Recoveries).

Funding for 2023 is included in the Toronto Water 2023 Tabled Operating Budget. Additional details follow in Table 1.

Table 1: Financial Impact Summary (Net of HST Recoveries)

Cost Centre	Increase in Contract Values 2023
Liquid Polyaluminum Chloride (Kemira Water Solutions Canada Inc.): Cost Centre TW7015 - GL 2430	\$264,576
Liquid Chlorine (Brenntag Canada Inc.): Cost Centre TW7015, TW7030, TW7045, TW7060 - GL 2415	\$1,729,920
Phosphoric Acid (FloChem Ltd.): Cost Centre TW7015, TW7030, TW7045, TW7060 - GL 2463	\$915,840
Hydrofluosilicic Acid (FANCHEM LTD. dba PVS BENSON): Cost Centre TW7015, TW7030, TW7045, TW7060 - GL 2450	\$737,760
Aluminum Sulphate (Chemtrade Chemicals Canada Ltd.): Cost Centre TW7015, TW7030, TW7045, TW7060 - GL 2430	\$534,240
Total Net of HST Recoveries	\$4,182,336

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

Bid Award Panel, at its meeting on June 20, 2018, granted authority to award Request For Quotation Number 6612-18-7041 to Kemira Water Solutions Canada Inc. for the supply of Liquid Polyaluminum Chloride for the drinking water treatment plants, in accordance with the Contract Details set out in the report dated June 13, 2018. A link to the related Bid Award Panel decision is provided.

[Agenda Item History - 2018.BA82.4 \(toronto.ca\)](#)

Bid Award Panel, at its meeting on December 16, 2020, granted authority to award Request For Quotation Document Number 2643695424 to Chemtrade Chemicals Canada Ltd. for the supply of Aluminum Sulphate for the drinking water treatment plants, in accordance with the Contract Details set out in the report dated December 9, 2020. A link to the related Bid Award Panel decision is provided.

[Agenda Item History - 2020.BA114.5 \(toronto.ca\)](#)

On July 25, 2022, in accordance with the City's approved Purchasing authorities, the original Aluminum Sulphate Contract Number 47023326 was amended to increase its value by \$500,000 net of all taxes and charges (\$508,800 net of HST Recoveries) to increase the contract value from 1,674,340 net of HST to \$2,174,340 net of HST (\$2,212,608 net of HST Recoveries) to allow for a temporary price increase and increased chemical usage.

Bid Award Panel, at its meeting on December 23, 2020, granted authority to award Request For Quotation Document Number 2519550243 to Brenntag Canada Inc. for the supply of Liquid Chlorine for the drinking water treatment plants, in accordance with the Contract Details set out in the report dated December 16, 2020. A link to the related Bid Award Panel decision is provided.

[Agenda Item History - 2020.BA115.1 \(toronto.ca\)](#)

Bid Award Panel, at its meeting on December 23, 2020, granted authority to award Request For Quotation Document Number 2637656772 to FloChem Ltd. for the supply of Phosphoric Acid for the drinking water treatment plants, in accordance with the Contract Details set out in the report dated December 17, 2020. A link to the related Bid Award Panel decision is provided.

[Agenda Item History - 2020.BA115.4 \(toronto.ca\)](#)

Bid Award Panel, at its meeting on December 23, 2020, granted authority to award Request For Quotation Document Number 2643791107 to Fanchem Ltd. dba PVS Benson for the supply of Hydrofluosilicic Acid for the drinking water treatment plants, in accordance with the Contract Details set out in the report dated December 17, 2020. A link to the related Bid Award Panel decision is provided.

[Agenda Item History - 2020.BA115.5 \(toronto.ca\)](#)

COMMENTS

Toronto Water uses various chemicals that are critical in the production of clean and safe drinking water and in ensuring regulatory compliance. Aluminum sulphate or polyaluminum chloride, also known as a coagulant, is added to the water to increase particle size of matter in the water for easier removal during filtration. Chlorine is added to destroy bacteria, algae and viruses. Phosphoric acid is used for corrosion control to help create a barrier between residential lead pipes and drinking water. And the addition of hydrofluosilicic acid helps prevent tooth decay.

Typically, the procurement of chemicals for Toronto Water consists of a two (2) year contract base term at a fixed unit rate and up to three (3) optional years which are subject to an annual price increase based on a blended index equal to:

Industrial Product Price Index (IPPI, All Items (or Chemicals and Chemical Products)) x 80 percent + Transportation, subcomponent of Consumer Price Index (CPI) by province x 20 percent, for the 12 month period from January of the previous year to January of the existing contract year.

Impact of Inflation on Blended Annual Index Values

The award of the above noted chemical contracts assumed a blended annual index value of 3 percent based on historic values. However, since 2022, chemical contracts for which option years have been exercised have been subject to higher blended annual indices ranging from 7.3 to 21.4 percent due to inflationary pressures. This is resulting in a higher depletion of contract funds than originally anticipated. The amendments in this report include an increase to cover the impacts of the higher blended annual index values on chemical contracts.

Impacts of Market Instability on Chemical Unit Rates

Toronto Water was approached by various chemical vendors throughout 2022 requesting temporary price increases as a result of impacts caused by inflation, increased raw material costs, global supply chain issues, transportation costs, scarcity of supply and the war in Eastern Europe. The contract unit rates (including those adjusted by the blended annual indices) were no longer reflective of current market conditions and a secure continued supply of chemicals was not guaranteed. Due to several global market and supply chain pressures, chemical unit rate increases ranging between 14 and 189 percent have been experienced.

Toronto Water consulted other Ontario municipalities using the same chemicals and found that they also received similar requests for price increases. The temporary increased unit prices remain competitive in comparison to unit rates at other Ontario municipalities. Toronto Water also compared unit rate increases being requested by vendors against indices that are reflective of components found in the chemicals used in drinking water treatment, where applicable. The indices confirm significant increases in component costs. The amendments in this report include an increase to cover temporary unit rate increases.

It is anticipated that the impacts of market instability will continue in 2023 and beyond. The amendments included in this report will provide the resources necessary to meet anticipated 2023 expenditures. Subsequent contract amendments may be required in 2024 and beyond depending on market conditions over the coming year.

Increased Coagulant Usage

In addition to the market instability impacts noted above, the coagulant dosage at all four drinking water treatment plants will be increased to further optimize particle destabilization and subsequent removal through filtration based on pilot testing and research conducted at the pilot filtration plant. This will result in an accelerated usage of the quantities identified in the coagulant chemical contracts thereby requiring an increase in the contract value, as captured in this amendment.

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SIGNATURE

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