



REPORT FOR ACTION

Contract Award for Purchase of Equipment for the Biosolids Master Plan Implementation at the Highland Creek Wastewater Treatment Plant, Request for Proposal No. 9117-18-7202

Date: May 7, 2019

To: Infrastructure and Environment Committee

From: Chief Engineer and Executive Director, Engineering and Construction Services and Chief Purchasing Officer

Wards: Ward 25 – Scarborough-Rouge Park

SUMMARY

The purpose of this report is to recommend acceptance of Request for Proposal (RFP) No. 9117-18-7202 for the purchase of equipment for two new Fluidized Bed Incinerators and associated peripherals including emissions monitoring and control equipment and to request authority to enter into an agreement with SUEZ Water Technologies and Solutions Canada in the amount of \$40,932,000 net of all applicable taxes and charges (\$41,652,403 net of HST recoveries), being the highest overall scoring vendor proponent meeting the proposal requirements.

RECOMMENDATIONS

The Chief Engineer and Executive Director, Engineering and Construction Services and the Chief Purchasing Officer recommend that:

1. The Infrastructure and Environment Committee, in accordance with Section 195-8.4A of the City of Toronto Municipal Code Chapter 195 (Purchasing By- Law), grant authority to the Chief Engineer and Executive Director, Engineering and Construction services, to negotiate and execute an agreement with SUEZ Water Technologies and Solutions Canada, being the highest overall scoring vendor meeting the requirements of RFP No. 9117-18-7202, to provide design, fabrication, supply, supervision of installation and commissioning of Fluidized Bed Incinerators and associated air emissions monitoring and control equipment for the total amount of \$40,932,000 net of all applicable taxes and charges (\$41,652,403 net of HST recoveries), including disbursements, provisional allowances and contingencies all in accordance with the terms and conditions as set out in the RFP and any other terms and conditions

satisfactory to the Chief Engineer and Executive Director, Engineering and Construction Services and in a form satisfactory to the City Solicitor.

FINANCIAL IMPACT

The total amount to award RFP No. 9117-18-7202 is \$40,932,000 net of all applicable taxes and charges, \$46,253,160 inclusive of all applicable taxes and charges and \$41,652,403 net of HST recoveries.

Funding is included in the Toronto Water 2019 Approved Capital Budget and 2020-2028 Approved Capital Plan under account CWW047-03, with forecasted expenditures as shown in the table below (net of HST recoveries):

Year	CWW047-03
2019	\$3,500,000
2020	\$3,000,000
2021	\$1,000,000
2022	\$10,000
2023	\$8,000,000
2024	\$10,000,000
2025	\$10,000,000
2026	\$6,142,403
Total	\$41,652,403

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

DECISION HISTORY

At its meeting of May 3, 4 and 5, 2016, City Council approved and requested that the General Manager, Toronto Water, finalize the Schedule B Class Environmental Assessment (Class EA) report associated with the implementation of the preferred biosolids management alternative for the Highland Creek Wastewater Treatment Plant. and submit it to the Ontario Ministry of Environment, Conservation and Parks (MECP) in accordance with the requirements of the Environmental Assessment Act. Council also directed that the General Manager, Toronto Water, include enhanced emissions scrubbing technologies for the proposed Fluidized Bed Incinerators in order to meet United States Environmental Protection Agency (US EPA) requirements with respect to air emissions and to report back, after completing the conceptual design, on the viability of including other energy and greenhouse gas emissions initiatives. The City Council decision can be found at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.PW11.4>

At its meeting on December 20, 2017, the Bid Award Panel approved award of RFP 9117-17-7198 to CH2M Hill Canada Limited for Professional Engineering Services for the design and contract administration of the proposed works at the HCTP. The Bid Award Panel decision can be found at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.BA55.2>

COMMENTS

Background

The Highland Creek Wastewater Treatment Plant (HCTP) is one of four wastewater treatment facilities operated by the City of Toronto. The HCTP is located at 51 Beechgrove Drive, south of Lawrence Avenue East and services an area bounded by Steeles Avenue on the north, Victoria Park Avenue on the west, the Rouge River on the east and Lake Ontario on the south. The facility serves a population of about 500,000 and operates on a 24/7 basis.

The HCTP was originally built in three phases: South East Plant (originally built in 1956), South West Plant and Incineration (constructed in 1976) and North West Plant (constructed in 1981). The rated capacity of the Plant is 219,000 cubic meters per day.

The HCTP provides complete treatment of municipal wastewater, including preliminary treatment, primary treatment, secondary treatment, phosphorus removal, disinfection, de-chlorination, anaerobic digestion, sludge treatment, incineration and odour control.

In February 2014, through a Request for Proposal (RFP) issued in November 2013, the City retained consulting services to undertake the new biosolids Schedule B Class EA for the HCTP. The Project Team for this Class EA included staff from Toronto Public Health (TPH) and the Toronto Energy and Environment Division (EED) in addition to Toronto Water (TW) and Engineering and Construction Services (ECS). Both TPH and EED assisted in the preparation of the RFP.

The Class EA study was completed and placed on public record on June 2, 2016. The study concluded that replacement of the existing Multiple Hearth Incinerators with current state of the art Fluidized Bed Incinerators and emission monitoring and control technology was the preferred biosolids management option for the HCTP.

On April 19, 2017, the MECP approved the recommended solution thereby allowing the City to proceed with the implementation of the works recommended in the Class EA.

In December 2017, through a Request for Proposal (RFP) issued in July 2017, the City retained consulting services to undertake the preliminary design, detailed design, construction contract administration and post-construction services for the new fluidized bed incinerator project.

Award of RFP No. 9117-18-7202

A Request for Proposal (RFP) was prepared by Engineering and Construction Services with Toronto Water, in conjunction with the Purchasing and Materials Management Division (PMMD), to procure two new Fluidized Bed Incinerators and associated air emissions monitoring and control equipment for the HCTP. The scope of the RFP included design, fabrication, supply, supervision of installation and commissioning of equipment. RFP 9117-18-7202 was issued by PMMD on November 19, 2018.

A mandatory information meeting was held on December 3, 2018, which was attended by five (5) firms. A total of two (2) proposals were received by the March 1, 2019, submission deadline from the following firms:

1. SUEZ Water Technologies and Solutions Canada (SUEZ)
2. Hankin Environmental Systems, Inc. (Hankin)

As required in the RFP Terms of Reference, the proposal submission included a separate, sealed cost proposal envelope. The selection process stipulated that the envelopes containing the cost proposals would not be opened until the evaluation of the technical proposals had been completed. A maximum of 65 points were allocated for the Technical Proposal and 35 points for the Cost of Services. The Technical Proposal had to score a minimum of 50 points (76.9%) to have the Cost of Services envelope opened and evaluated.

A selection committee comprised of two (2) Toronto Water staff, one (1) Engineering and Construction Services (ECS) staff and two (2) CH2M Hill Canada Limited (CH2M) staff evaluated the two (2) proposals. CH2M, as the City's design consultant, developed the technical specifications for the equipment and evaluated the proposals for technical compliance. The technical submission was first evaluated and scored independently by each member of the selection committee, in accordance with a set of pre-established criteria outlined in the RFP. The scores were then jointly reviewed by all members of the selection committee under the guidance of PMMD and the Fairness Monitor.

Hankin's Technical Proposal did not meet the minimum threshold of 50 points and therefore their Cost Proposal envelope was not opened. SUEZ's Technical Proposal exceeded the minimum threshold and their Cost Proposal envelope was opened and reviewed and found to be in compliance with the RFP requirements.

The selection committee concurred that the proposal submitted by SUEZ met the requirements of the RFP and demonstrated an appropriate level of effort and understanding of the requirements for the proposed fluidized bed incinerator system and in addition provided a multi-disciplinary team of experienced subject matter experts with the required expertise to design and oversee the installation and commissioning of the fluidized bed incinerators and associated air emissions monitoring and control equipment.

The Fair Wage Office has reported that the recommended firm has indicated that it has reviewed and understands the Fair Wage Policy and Labour Trades requirements and has agreed to comply fully.

The proposed contract award of \$40,932,000 net of all applicable taxes and charges, including disbursements, provisional allowances net of taxes, is lower than the engineering estimate of \$41,950,000. The difference in price is due to the competitive bidding process. The successful proponent will commence the design of the equipment in July 2019. The construction for fluidized bed incinerator facility is scheduled to commence in 2021 and end in 2026. The successful proponent confirmed that they will adhere to the schedule.

Fairness Monitor

The firm of MNP LLP was retained through a competitive bidding process to act as Fairness Monitor for the RFP evaluation. The Fairness Monitor's scope of work included:

- Providing oversight on the evaluation process for the purpose of ensuring adherence to high standard, objectivity and transparency of evaluation.
- Addressing any concerns relating to accountability/fairness (monitoring the level of openness and competitiveness of the procurement process).
- Independent assurance of the integrity of the evaluation process with a signed attestation statement.
- Preparing a Final Attestation Report for the City.

The Fairness Monitor concluded that the procurement process satisfied the principles of openness, fairness, consistency and transparency. The Attestation Report from the Fairness Monitor is included as Attachment 1.

CONTACT

Simon Hopton, P.Eng. Director, Major Infrastructure, Engineering and Construction Services, Tel: 416-395-6270, Email: Simon.Hopton@toronto.ca

Leanne Dacosta, Acting Manager, Professional Services, Purchasing and Materials Management, Tel: 416-397-4801, Email: Leanne.Dacosta@toronto.ca

SIGNATURE

Michael D'Andrea, M.E.Sc., P.Eng.
Chief Engineer and Executive Director, Engineering and Construction Services

Michael Pacholok, JD,
Chief Purchasing Officer

ATTACHMENTS

Attachment 1. Fairness Monitor Attestation Report