



Report to: General Committee

Meeting Date: December 5, 2023

SUBJECT: Contract 259-S-23 - Supply and Delivery of Self-Contained Breathing Apparatus, Face Piece and Breathing Valves
PREPARED BY: Matt Keay, Deputy Fire Chief, ext. 5975
Flora Chan, Senior Buyer, ext. 3189

RECOMMENDATION:

- 1) THAT the report entitled “Contract 259-S-23 Supply & Delivery of Self-Contained Breathing Apparatus, Face Piece and Breathing Valves” be received; and,
- 2) AND THAT the contract for 100 Interspiro S9 Incurve Self-Contained Breathing Apparatus and 272 of the associated Face Pieces and Breathing Valves be awarded to Canadian Safety Equipment Inc. in the amount of \$922,221.94 inclusive of HST; and,
- 3) AND THAT the tendering process be waived in accordance with Purchasing By-Law 2017-8, Part II, Section 11.1 (e), Non-Competitive Procurement, whereby “the City is acquiring specialized equipment, such as firefighting equipment, in which case the sources of supply may be identified based on technical specifications prepared by the User Department staff; and
- 4) AND THAT the funds for the award be provided from account 067-6150-23126-005 “Self- Contained Breathing Apparatus (SCBA) Replacement”, which has an available budget of \$950,000.00; and
- 5) AND THAT the remaining balance of \$27,778.06 (\$950,000.00 - \$922,221.94) in account 067-6150-23126-005 “Self-Contained Breathing Apparatus (SCBA) Replacement” be returned to the original funding source;
- 6) AND THAT Staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

This report seeks approval to award the contract for the Supply & Delivery of 100 Self-Contained Breathing Apparatus (SCBA) and 272 Face pieces/Breathing Valves.

BACKGROUND:

The Markham Fire and Emergency Services (MFES) utilize Self-Contained Breathing Apparatus (SCBA) for protection of the respiratory system during fires, hazardous materials and other emergency incidents.

For over 30 years, MFES has utilized SCBA and associated face pieces/breathing valves manufactured by Interspiro. MFES’ current SCBA and associated inventory and related supports include the following:

- 100 - Self Contained Breathing Apparatus (SCBA) - **To be replaced under this award**
- 272 - Face pieces/breathing valves (includes spares) - **To be replaced under this award**
- 7 - Rapid Intervention Kits (RIT)
- 286 - 45-minute air cylinders
- 10 - 60-minute air cylinders
- 5 - 15-minute air cylinders,
- In-house service facility outfitted with Interspiro SCBA components
- 16 trained and certified SCBA Technicians

OPTIONS/ DISCUSSION:

The City's SCBA inventory is at the end of its 9-year useful life and is due for replacement. The associated face pieces/breathing valves will also need to be replaced.

The proposed replacement model is the Interspiro S9 Incurve. Previous models have been declared obsolete by the manufacturer and are not available. Interspiro S9 meets the current National Fire Protection Association (NFPA) 1852 standards, which govern SCBA for firefighting use. This new model will also meet the next update of the NFPA standard, anticipated within a year, and therefore, MFES' safety gear will be compliant with standards throughout its useful life.

The current SCBA harnesses are absorbent fabric, whereas the new S9 harnesses are constructed from a Kevlar/neoprene material that is not absorbent and will not be contaminated by toxic products of combustion in fires. This new material will allow for more thorough cleaning and disinfection of the SCBA following an incident. The new harness also has significant ergonomic improvements making it more comfortable for longer duration wear.

All Interspiro SCBA, including the proposed model, have dedicated breathing valves for each firefighter, unlike any other SCBA. This feature proved highly valuable during the COVID-19 pandemic. In addition to the above, the continuation with Interspiro SCBA also provides the following benefits:

1. Cost avoidance:

Approximately 90% of MFES' current inventory of parts and cylinders are compatible and interoperable with the replacement model, with no modification required. Therefore, continuing with an Interspiro model avoids the substantial duplication of costs, additional training and re-certification costs for in-house technicians.

The following is the additional cost / administrative time to the City if we were to switch to another manufacturer:

- The City would be required to replace all air cylinders and RIT kits as our current Interspiro units are not transferrable to another manufacturer. The City estimates this cost at \$660,790 (based on life cycle). This amount would be in addition to the \$992K under this award report
- The requirement to re-outfit the in-house service facility with manufacturer-specific components
- Training and re-certifying in-house service technicians

- Training for all firefighters to use the new SCBA
- Policy and procedures updating

2. Price Competitiveness:

Canadian Safety Equipment Inc. is the sole distributor in Ontario for all Interspiro products. As part of due diligence, Staff reviewed the current market conditions and compared the latest pricing for Interspiro product, offered through Canadian Safety Equipment Inc., with two other leading manufacturers in the SCBA market using comparable specifications and quality. The prices from the two other leading manufacturers were found to be 13% and 19% lower than the pricing from Canadian Safety Equipment.

Given the cost avoidance considerations, Staff discussed pricing with Canadian Safety Equipment and negotiated a 34% discount off the suggested retail price should the City move forward with the purchase of the replacement Interspiro product.

FINANCIAL CONSIDERATIONS

Recommended bidder	Canadian Safety Equipment (non-competitive procurement)	
Current budget available	\$ 950,000.00	067-6150-24126-005 Self Contained Breathing Apparatus
Less: cost of award	\$ 922,221.94	Cost of Award SCBA & Face piece/Breathing valves
Budget Remaining	\$ 27,778.06	*

*The remaining balance of \$27,778 will be returned to the original funding source.

This is a Capital Project funded from the Life Cycle, and the award is consistent with the Life Cycle study amount. The 2024 Life Cycle will be updated with the current unit prices as per this award. As this is a capital project and given cost avoidance realized by staying with an Interspiro model, there is no incremental Operating Budget impact.

HUMAN RESOURCES CONSIDERATIONS

Not applicable

ALIGNMENT WITH STRATEGIC PRIORITIES:

Public Safety - The purchase of these replacement units will allow seamless continuity of fire service delivery and compliance with current and future NFPA standards.

BUSINESS UNITS CONSULTED AND AFFECTED:

Financial Services Department has been consulted in preparation of this report.

RECOMMENDED BY:

Chris Nearing
Fire Chief

Andy Taylor
Chief Administrative Officer