



Report to: General Committee

Date Report Authored: May 26, 2014

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**SUBJECT:** Self Contained Breathing Apparatus, Face Piece and Breathing Valve Replacement  
**PREPARED BY:** Dave Decker, Deputy Fire Chief, ext. 5975  
Patti Malone, Senior Buyer, ext. 2239

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**RECOMMENDATION:**

- 1) THAT the report entitled “ 108-S-14 Self Contained Breathing Apparatus, Face Piece and Breathing Valve Replacement” be received;
- 2) AND THAT the 2014 contract requirement be awarded to ResQtech Systems Inc. in the amount of \$577,844.16 inclusive of HST;
- 3) AND THAT the Fire Chief (or his designate) and the Senior Manager of Purchasing be authorized to exercise the option to renew Contract 108-S-14 for an additional year (2015) for \$60,257.18 inclusive of HST at the 2014 itemized prices subject to performance and budget approval;
- 4) AND THAT in accordance with Purchasing By-Law 2004-341, Part II, Section 7 (1e), Non-Competitive Procurement, whereby “the City is acquiring specialized equipment, such as fire fighting equipment, in which case the sources of supply may be identified based on technical specifications prepared by the User Department staff;
- 5) AND THAT the funds for the award be provided from account 067-6150-14124-005 “Self Containing Breathing Apparatus” in the amount of \$577,844.16 dollars (inclusive of HST);
- 6) AND THAT the remaining balance of \$18,356 in account 067-6150-14124-005 “Self Containing Breathing Apparatus” be returned to the original funding source;
- 7) AND THAT Staff be authorized and directed to do all things necessary to give effect to this resolution.

**PURPOSE:**

This report recommends the approval of 90 self contained breathing apparatus (SCBA) and 200 face masks/valves to be awarded to ResQtech.

**BACKGROUND:**

The Markham Fire and Emergency Services (MFES) utilize Self Contained Breathing Apparatus (SCBA) for protection of the respiratory system during incidents. MFES has utilized Interspiro SCBA for over 20 years and the City currently has 90 Self Contained Breathing Apparatus (SCBA), 300 face pieces/breathing valves which include spares, 6 Rapid Intervention Kits (RIT), a complete SCBA maintenance facility based on the Interspiro SCBA, 4 trained SCBA Technicians, 264 45 minute air cylinders, 8 60 minute air cylinders, and Special Hazardous Materials Response

equipment for voice communication. The recommended award is for the replacement of 90 SCBA and 200 masks/valves.

The existing version of Interspiro SCBA will no longer be available and with the release of the 2013 National Fire Protection Association (NFPA) version, MFES will encounter challenges in stocking spare parts. As the Markham Fire and Emergency Services increases resources based on growth, it will be necessary to purchase additional SCBA and related support equipment. ResQtech Systems Inc. is the only Canadian distributor for the Interspiro SCBA.

The maintenance on the existing units will become a challenge with the introduction of the latest version of the SCBA. The new NFPA 2013 models cannot be phased in as the features increase firefighter safety and it would not be reasonable to have some firefighters with additional safety features.

The new apparatus will have a digital display unit to provide firefighters with immediate accessible information for absorbed temperature, remaining air (visual and PSI value) and remaining air based on current rate of breathing. The RIT connection and the breathing hose protection have been upgraded. The apparatus has also been upgraded to include a heads up display that is mounted in each mask that provides an indication of breathing air as well as pass alarm status has been increased from 25% to 30%. The led's are designed to be visible to the fire fighter and those around them as well as the lighting can be adjusted to compensate for various lighting conditions. It will also include an adjustable waistband to allow firefighters of various heights to have optimum comfort.

If the City switches to another manufacturer then air cylinders need to be included adding additional cost. The lowest cost option as shown below is to purchase from the existing vendor. To purchase from any other manufacturer would entail the additional requirement of 264 45 minute cylinders and 8 60 minute cylinders, creating the additional cost of approximately \$360,000 (when compared to MSA). As well if the manufacturer is changed then the training and policies and procedures would need to be updated as well as staff training and purchase of other support equipment.

2013 Comparison Pricing				
Item	Qty	Interspiro	MSA Canada	Drager
SCBA W/Mask and Valve	90	\$388,080.00	\$437,175.00	\$504,810.00
Masks and Valves	210	\$177,450.00	\$164,364.00	\$153,720.00
Cylinders 45 Min	264	\$0.00	\$342,144.00	\$277,728.00
Cylinders 60 Min	8	\$0.00	\$13,356.00	\$9,824.00
Rapid Intervention	6	\$0.00	\$24,000.00	\$24,000.00
Total		\$565,530.00	\$981,039.00	\$970,082.00

Note: these are 2013 prices and quantities for comparison purposes only.

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**FINANCIAL CONSIDERATIONS AND TEMPLATE: (external link)**

Account	Account #	Budget Available	Allocation of Award	Budget Remaining
Self Contained Breathing Apparatus	067-6150-14124-005	\$ 596,200	\$ 577,844	\$ 18,356
<b>Total</b>		<b>\$ 596,200</b>	<b>\$ 577,844</b>	<b>\$ 18,356</b>

Remaining balance of \$18,356 will be returned to the original funding source.

The SCBA model differs from previous versions (i.e. digital display, upgraded RIC connection, breathing hose protection, etc.) and therefore the unit price is 10.5% higher than previous model used. The City received preferred supplier pricing through negotiations with purchasing.

**HUMAN RESOURCES CONSIDERATIONS**

Not applicable

**ALIGNMENT WITH STRATEGIC PRIORITIES:**

Not applicable

**BUSINESS UNITS CONSULTED AND AFFECTED:**

Not applicable

**RECOMMENDED****BY:**

13/06/2014

6/13/2014

  
**X**

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William Snowball  
Fire Chief  
**X**

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Brenda Librecz  
Commissioner, Community & Fire Services