



SUBJECT: Standardization of Self-Contained Breathing Apparatus (SCBA) equipment for the fire department

TO: Committee of the Whole

FROM: Fire Department

Report Number: BFD-01-24

Wards Affected: All

File Numbers:

Date to Committee: January 8, 2024

Date to Council: January 16, 2024

Recommendation:

Approve the City of Burlington to standardize the fire department's Self-Contained Breathing Apparatus (SCBA) equipment to the 3M SCOTT X3 PRO model as outlined in fire department report BFD-01-24.

PURPOSE:

Vision to Focus Alignment:

- Support sustainable infrastructure and a resilient environment.
- Deliver customer centric services with a focus on efficiency and technology transformation.

Executive Summary:

BFD-03-11 was approved by Council on September 26, 2011. This report gave the Burlington Fire Department approval to standardize their Self-Contained Breathing Apparatus (SCBA) equipment to the 3M SCOTT NxG7 model. The department is looking to continue with the standardization of their SCBA equipment with the 3M SCOTT X3 Pro model for up to ten (10) years.

Standardization will benefit the department in the following ways:

- Equipment uniformity and consistency to ensure health & safety of the worker

- Operational effectiveness
- Consistent training (familiarity and confidence in emergency situations)
- Proven technology and familiarity to staff
- In-house trained staff with the ability to service 3M SCOTT SCBA equipment
- Reduced repair parts inventory
- Ease of repairs

Department staff will work with procurement services to issue a Request for Tender (RFT) and award the contract to the lowest compliant bidder.

Background and Discussion:

The Burlington Fire Department is at a stage where the current inventory of SCBA equipment is reaching end of life. Switching the SCBA manufacturer at this stage would be costly and require all equipment to be replaced at one time, as the equipment is not all interchangeable between manufacturers. Continuing to use the 3M SCOTT brand will allow the department to replace individual pieces while still being able to use the previously purchased air paks. Below are some additional reasons staff are recommending continuing to utilize the 3M SCOTT SCBA brand:

1. Firefighter safety will be ensured as the proposed 3M SCOTT SCBA provides the patented “vibralert” feature which provides the highest level of low air notification, exceeding the NFPA 1981 2018 edition. Standard. Something that is not offered by other manufactures.
2. Cylinders manufactured for 3M SCOTT provide a unique integrated quick connect system not offered by other manufactures. This reduces time required for cylinder changes and increases firefighter safety by eliminating accidental incorrect assembly.
3. The department will be able to leverage existing investments in 3M SCOTT SCBA components, maintenance, training certifications and experience, parts inventory and tools.
4. Significant improvement to 3M SCOTT breathing apparatus accountability systems by being able to utilize electronic air tracking and accountability rather than manual systems. This system is integrated into the SCBA Pak design.
5. 3M SCOTT has extended equipment warranty of all replacement parts for the life of the product.
6. Longevity of reducer design. The concept and design of the 3M SCOTT reducer has not changed for the last 30 yrs. This proven design continues to exceed NFPA 1981 standards with minimal repairs.

7. 3M SCOTT SCBA have “Pak Tracker” integrated into the Pak design. This feature allows the rapid intervention teams to locate firefighters in danger and are unable to extricate themselves from dangerous situations.

Strategy/process

The Fire Department will issue a RFT through Procurement Services for SCBA and related equipment. All future SCBA equipment purchased, pending council's approval, will be to NFPA 1981, 2018 edition. SCBA standards during the recommended ten-year standardization term of this report.

Options Considered

1. Status quo — This is not a preferred option; the equipment is at end of life and requires replacement. SCBA equipment is out of warranty and SCBA cylinders are approaching their 15-year service life.
2. RFT with open specifications to any brand of SCBA — This is not a preferred option; maintaining the current brand of SCBA equipment will allow the department a seamless transition to the upgraded version while still being able to utilize the existing equipment. Switching to a different brand of SCBA equipment would require a full equipment change vs the two-year approach, additional training for all staff, re-certification of staff repair technicians, and additional costs related to the need for additional parts inventory/maintenance equipment.
3. RFT for standardized 3M SCOTT X3 Pro SCBA Equipment — This is the preferred and recommended option; this would allow the department to realize savings by leveraging existing investments in 3M SCOTT SCBA components, maintenance, training, parts inventory, and tools. The department would have a seamless transition to the upgraded model while still maintaining consistency with mutual-aid partners.

Financial Matters:

Total Financial Impact

The total financial impact over a two (2) year period is indicated in the chart below.

	Approved	Forecast	
	2024	2025	Total
Estimated Cost	\$1,400,000	\$800,000	\$2,200,000

Source of Funding

The funding will be provided through the Fire Vehicle & Equipment Depreciation Reserve Fund.

Climate Implications

Not Applicable.

Engagement Matters:

Not Applicable.

Conclusion:

Staff are recommending standardizing Burlington Fire Dept Self Contained Breathing Apparatus for the next ten (10) years (2024 — 2034) to the 3M SCOTT X3 Pro model. The standardization of SCBA equipment will also make certain the department has adequate SCBA equipment for emergency response utilizing technology that is familiar with staff.

By remaining with 3M SCOTT SCBA staff will be able to continue to utilize current testing and support 3M SCOTT equipment and leverage the department's previous investment in training, repairs, and maintenance.

Respectfully submitted,

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Report Approval:

All reports are reviewed and/or approved by Department Director, the Chief Financial Officer and the Executive Director of Legal Services & Corporation Counsel.