



IN CAMERA

ADMINISTRATIVE REPORT

Report Date: July 16, 2013
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VanRIMS No.: 08-2000-21
Meeting Date: July 23, 2013

TO: Vancouver City Council

FROM: Fire Chief, Vancouver Fire & Rescue Services (VFRS), General Manager,
Engineering Services, Director of Finance

SUBJECT: Vancouver Fire & Rescue's Replacement of Self-Contained Breathing
Apparatus (SCBA), Compressed Air Cylinders, Add-on Communication
Equipment Components, and Related Equipment

IN CAMERA RATIONALE

This report is recommended for consideration by Council in the In Camera agenda as it relates to Section 165.2(1) of the *Vancouver Charter*: (c) labour relations or other employee relations; (g) litigation or potential litigation affecting the city; (k) negotiations and related discussions respecting the proposed provision of an activity, work or facility that are at their preliminary stages and that, in the view of the Council, could reasonably be expected to harm the interests of the city if they were held in public.

RECOMMENDATION

- A. THAT subject to the conditions set out in Recommendations B, C, D, E, F and G, Council authorize the purchase of Scott Safety Self Contained Breathing Apparatus (SCBA) units and associated equipment from Acklands Grainger Inc. ("Acklands") at an estimated cost of \$2,325,400, plus applicable taxes and government fees, all under an existing standing offer contract dated March 1, 2013 between the City and Acklands (the "Contract").
- B. THAT Council approve a Capital Project Budget of \$2,325,400 for the purchase of the SCBA equipment, and an additional \$40,000 for the change-over costs to retrofit the fire trucks to accommodate the new SCBAs, with the source of funds to be the 2012-14 Capital Plan for the replacement of existing vehicles and equipment (Truck and Equipment Plant Account), with a net increase to the 2013 Capital Expenditure Budget in the amount of \$2,365,400.

- C. THAT the annual capital costs of the SCBA equipment be repaid to the Truck and Equipment Plant Account through annual charges of \$276,000 (increased from \$197,700, which was the annual repayment of the existing SCBA units); funding for 2013 to be provided from the existing 2013 Operating Budget and future years to be reviewed as part of the annual operating budget process.
- D. THAT the annual maintenance and operating costs of approximately \$35,000 continue to be provided from the existing Vancouver Fire and Rescue Services Operating Maintenance Budget.
- E. THAT Council approve the write-off of the remaining capital cost loan on the existing SCBA equipment in the amount of \$918,600 with the source of funds to be the Truck and Equipment Plant Account.
- F. THAT subject to the approval of the contractual and legal terms by the Fire Chief, Vancouver Fire and Rescue Services (VFRS), General Manager of Engineering Services, Director of Finance, Director of Legal Services and Chief Purchasing Official, the Chief Purchasing Official be authorized to execute on behalf of the City any documents required to implement or give effect to Recommendation A.
- G. THAT no legal rights or obligations will be created by Council's adoption of Recommendation A above unless and until an order for the new SCBAs and other equipment has been submitted to Acklands in accordance with the Contract and such other documents as are required have been executed by the Chief Purchasing Official.

REPORT SUMMARY

VFRS has a mandate to provide the necessary safety-related personal protective equipment, including SCBAs, so that all firefighters are able to safely perform their duties (WorkSafeBC Regulation - 31.19 General)

VFRS is requesting the purchase of a fleet of new SCBA units (and related equipment) from Acklands, to replace VFRS's existing SCBAs. The existing units, which were purchased in 2008 and 2012, need to be replaced due to product failures. These failures have led VFRS to conclude that it must replace the existing units prior to their planned end of life in order to adequately ensure firefighter and public safety.

VFRS has assessed the various SCBA equipment options available and is recommending the purchase of the Scott Safety equipment. Supply Chain Management recommends purchase of such equipment under the existing contract with Acklands.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

Council approves expenditures from Reserves, including the Truck and Equipment Plant Account.

CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The City Manager and General Manager of Vancouver Fire & Rescue Services recommends approval of the above recommendations.

REPORT

Background/Context

The SCBAs, which are required safety equipment under the *Occupational Health and Safety Regulation* (British Columbia), constitute among the most critical life-safety equipment of firefighters. They are intended to allow firefighters to enter structure fires and other environments filled with smoke or dangerous gases in order to fight fires and save lives. If an SCBA fails in this type of environment such that a firefighter is unable to breathe clean, cool air, he or she faces an immediate risk of serious injury or death. Unfortunately, VFRS has experienced problems with VFRS's existing SCBAs which have created precisely such a risk.

VFRS have implemented extensive training and thorough maintenance routines. Such training has focused on both the correct use of the equipment and the care, maintenance and repair of the equipment. Despite this, failures of the equipment have continued to occur.

Strategic Analysis

With the failures that have occurred, VFRS has evaluated its options and has assessed that it must replace the existing SCBAs prior to their planned end of life in order to adequately ensure firefighter and public safety.

Supply Chain Management has been directed to facilitate the acquisition of the goods in an expedited manner, and has determined that the City is able to use its existing standing offer agreement with Acklands to secure the appropriate equipment for VFRS. Supply Chain Management has recently been able to facilitate testing by VFRS of SCBA equipment from different manufacturers with a variety of suppression firefighters in different environments and conditions. Based on the results of this testing, VFRS determined that the Scott Safety SCBA products best meet its needs. Scott Safety SCBAs are proven, rugged and well tested and are also in use by many fire departments around the Lower Mainland, which is a mutual benefit in the event of any major disaster.

*Implications/Related Issues/Risk (if applicable)**Financial***One-time Costs**

The SCBA equipment to be purchased consists of three main components with separate cycle replacements: Communications equipment - 5 years, SCBA Mask Units - 10 years, and Air Cylinders - 15 years.

The capital cost of the new SCBA units and associated equipment is estimated at \$2,365,400, plus applicable taxes and government fees, comprised of \$2,325,400 for the purchase of the SCBA equipment, and an additional \$40,000 for the change-over costs to retrofit the fire trucks to accommodate the new SCBAs.

The source of funding for the purchase of this safety equipment is to be from the 2012-14 Capital Plan for the replacement of existing vehicles and equipment (Truck and Equipment Plant Account), with a net increase to the 2013 Capital Expenditure Budget in the amount of \$2,365,400.

The existing equipment, purchased in 2008 (\$1,385,855; 260 units) and 2012 (\$202,000; 47 units) is being replaced prior to the estimated life at that time of 10-20 years, depending on the component. The remaining capital cost loan balance on the existing SCBA equipment is \$918,600, which will be written off as a one-time charge to the Truck and Equipment Plant Account.

Ongoing Operating Costs

The ongoing average annual costs to the City associated with the replacement of these SCBA units is estimated to be approximately \$311,000, comprised of loan repayment in respect of SCBA equipment, and SCBA equipment maintenance, as described below in Table 1.

Table 1: Average Annual Operating Costs for replacement SCBA Units

Description	Life (years)	One-Time Capital Costs	Average Annual Operating Budget Requirements		
			Capital	Maintenance*	Total
Communications Equipment	5	\$69,800	\$17,700	\$500	\$18,200
SCBA Mask Units	10	\$152,000	\$22,100	\$4,500	\$26,600
Air Cylinders	15	\$2,143,600	\$236,200	\$30,000	\$266,200
TOTAL		\$2,365,400	\$276,000	\$35,000	\$311,000
Total Average Annual Operating Cost					\$311,000

* Maintenance costs will increase as units reach their end of life; \$35K is the estimated average annual cost in early life

The annual operating repayment of the capital costs for the new units is approximately \$276,000, of which \$197,700 is already included in the existing VFRS Operating budget (this was the annual repayment budget for the existing SCBA units, and will no longer be required for those units). It is anticipated that the units will be operational in Q4 2013; any additional

costs for 2013 are to be provided from within the existing 2013 Operating Budget and future years to be managed in the context of the annual Operating Budget process.

Maintenance costs for the SCBA equipment include on-going maintenance and replacement of various components (consumables) like head harnesses, visors and shoulder bands. These costs also include purchase of other consumables like batteries and any broken parts replacements. The average annual maintenance budget for the new units is estimated at \$35,000, funded through the existing VFRS Operating maintenance budget. The key components of the SCBA equipment are under limited warranty and as a result the maintenance costs will increase with the age of the SCBA equipment.

Cylinders require mandatory hydro testing and valve overhaul maintenance every five years and these costs are in addition to the regular maintenance described above. This testing is also funded through the existing VFRS Operating maintenance budget.

Legal

Legal Services has given legal advice on the City's rights and remedies as against the manufacturer of the City's existing SCBAs. VFRS, in consultation with Legal Services, will seek compensation from the manufacturer for the costs and losses incurred by the City as a result of equipment failures. While recovery is not guaranteed, the City will sue the manufacturer for damages if an out-of-court settlement cannot be reached.

Other

In the interim period before the delivery of new equipment, VFRS will do its utmost to minimize the risks to firefighter and public safety, including enhanced safety inspections and equipment flow tests. These tests are not sustainable over the long term, but can be conducted until a complete change-out can take place.

CONCLUSION

Based on the experience that VFRS has had with the existing SCBA units, it is recommended that the existing equipment be replaced prior to the anticipated end of life when originally purchased in 2008 and 2012.

Replacement equipment, at an estimated cost of \$2,365,400, will be funded through the Plant and Equipment account, with ongoing average annual operating costs associated with the replacement of the SCBA units of approximately \$311,000. The remaining capital cost loan balance of \$918,000 on the existing SCBA equipment will be written off as a one-time charge to the Truck and Equipment Plant Account.

VFRS is confident that the new SCBA units are the products best suited to meet VFRS's safety and operating requirements.

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