



CITY OF HAMILTON
HEALTHY AND SAFE COMMUNITIES DEPARTMENT
Hamilton Fire Department

TO:	Chair and Members Healthy and Safe Communities Committee
COMMITTEE DATE:	June 11, 2018
SUBJECT/REPORT NO:	Standardization of Fire Equipment, Parts, Supplies and Services for the Mechanical Division within the Hamilton Fire Department (HSC18025) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Shawn De Jager (905) 546-2424 Ext. 3378 Brian Keenan (905) 546-2424 Ext. 3332
SUBMITTED BY:	Dave Cunliffe Chief, Hamilton Fire Department Healthy and Safe Communities Department
SIGNATURE:	

RECOMMENDATION

- (a) That Council approve the standardization of the suppliers of fire apparatus equipment and services and Original Equipment Manufacturers (OEM) of equipment for fire apparatus and equipment as identified in Appendix A to Report HSC18025, pursuant to Procurement Policy #14 – Standardization and be approved as the single source of supply for the listed equipment, parts, supplies and services as the manufacturer's standard through to December 31, 2021 for the Hamilton Fire Department;
- (b) That the Fire Chief of the Hamilton Fire Department, or his/her designate, be authorized to negotiate, enter into and execute any required Contract and any ancillary documents required to give effect thereto with those suppliers identified in Appendix A to Report HSC18025 with content acceptable to the General Manager of Healthy and Safe Communities, and in a form satisfactory to the City Solicitor; and,
- (c) That the Fire Chief of the Hamilton Fire Department, or his/her designate, be authorized to amend any Contracts executed and any ancillary documents as required if a supplier identified in Appendix A to Report HSC18025 undergoes a name change.

EXECUTIVE SUMMARY

At its meeting of October 26, 2016, Council approved Report CES16044, which included the standardization of various brand specific equipment utilized by the Hamilton Fire Department (HFD) through to December 31, 2021 (five-year period).

Similar to Report CES16044, Report HSC18025 seeks the standardization of the products, services and suppliers identified in Appendix A to Report HSC18025 as the manufacturer standard and as the single source supplier for the listed equipment, parts, supplies and services for the Mechanical Division of the HFD through to December 31, 2021.

All items have been selected over the years by staff as the product that provides the HFD with divisional wide:

- Equipment uniformity and consistency
- Operational effectiveness
- Consistent training (familiarity and confidence in emergency situations)
- Compliance with *Occupational Health and Safety Act*, R.S.O. c. 0.1. (*OHS Act*) requirements
- Less equipment down time
- Reduced repair parts inventory
- Ease of repairs.

Procurement Policy #14 sets out requirements for standardization. Standardization is a management decision-making process that examines a specific common need or requirement and then selects a good and/or service that best fills that need to become the standard.

This report recommends that certain products be included as the Hamilton Fire Department's standard in order to strengthen our ability to meet the goals stated above, maintaining quality frontline fire apparatus and equipment in order to prevent delays or non-compatible products from entering the system.

Additionally, this standardization process will support the employer's requirements under the *Occupational Health and Safety Act*, R.S.O. c. 0.1. (*OHS Act*) to provide the necessary equipment, training and maintenance for the Hamilton Fire Department.

Prior to December 2021, the Hamilton Fire Department will again endeavour to perform due diligence by revisiting the marketplace and its operational practices and needs to determine whether to continue with the standardization of these items or go in another direction.

**SUBJECT: Standardization of Fire Equipment, Parts, Supplies and Services for
the Mechanical Division within the Hamilton Fire Department
(HSC18025) (City Wide) - Page 3 of 7**

Alternatives for Consideration – Not applicable

FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial: Appendix A to Report HSC18025 lists the products and services recommended for standardization. In 2017, the operating expenditures relative to these vendors was \$268,000. Adequate budget was approved for these procurements in 2017 and is similarly included in the 2018 operating budget.

Staffing: There are no staffing implications associated with Report HSC18025.

Legal: All contracts will be reviewed by Procurement.

HISTORICAL BACKGROUND

The Mechanical Division of the Hamilton Fire Department is staffed by a Chief Mechanical Officer, a Breathing Apparatus Technician, one Shipper/Receiver, one Storekeeper and eight mechanics.

Effective delivery of emergency responses by the fire suppression force depends on adequate and reliable vehicles. The Mechanical Division of the Hamilton Fire Department is charged with the maintenance and repairs of the Department's approximately 100+ apparatus, ancillary equipment, and the ambulance fleet for the Hamilton Paramedic Service. This Division is also responsible for writing specifications for fire apparatus and maintaining firefighting clothing, breathing apparatus and equipment.

Under a Chief Mechanical Officer, licensed mechanics, a self-contained breathing apparatus technician and a storekeeper carry out regular comprehensive programs of maintenance, testing and repair. Emergency repairs are done at all hours and there is staff attendance at multiple alarm fires when required. Routine maintenance is performed on apparatus on three-month, six-month, and annual cycles. The work of the division is wide ranging, including major vehicle work customarily contracted out in many other fire departments.

In 2017, Mechanical staff completed 1,252 repair orders and registered 7,400 labour hours on Fire Department vehicles and 2,090 labour hours on Paramedic Service vehicles. An additional 423 hours were spent on fire equipment repairs and 21.5 hours on Paramedic equipment repairs.

Since amalgamation, the Mechanical Division has been utilizing vendors who are known to have performed the work for the original manufacturer in question, who can carry out

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: Standardization of Fire Equipment, Parts, Supplies and Services for
the Mechanical Division within the Hamilton Fire Department
(HSC18025) (City Wide) - Page 4 of 7**

warranty work on their behalf, who have the ability to meet 24/7 emergency repair expectations and who can stand behind their work.

When facilitating the design and construction specifications of frontline apparatus and small fleet vehicles, the HFD strives to ensure that all equipment, parts, supplies and services are originally procured through the competitive bidding process.

At the time of this report, approximately 60% of the Fire Department's fleet of large frontline apparatus types are KME Rev Group brand vehicles, with an additional 10 replacement vehicles currently under construction with KME Rev Group. Thus by the beginning of 2019, 73% of the large frontline apparatus type vehicles that will be in service will be the KME brand.

The remaining small fleet of vehicles consists of small type support vehicles of various makes and models which are simpler in design and in turn to maintain, e.g. small compact cars for the Fire Prevention Fleet.

The HFD has previously undertaken OEM approval under Procurement Policy #11 for equipment, parts, supplies and services. In most cases there is no known aftermarket for parts and supplies available, or the OEM representative is the only source of specialized testing equipment and knowledge.

By allowing the standardization of equipment, parts, supplies and services the HFD can ensure they have inventory of the specific makes and models required to allow for direct replacements without any undue delay and in turn returning the piece of equipment or apparatus back into service.

It may be possible to maintain or reduce the number of Stock Keeping Units (SKUs) in the inventory. This streamlines repairs and maintenance work and puts out-of-service equipment and apparatus back in service in less time, thereby maximizing service availability and equipment uptime and maintaining legislative compliance. It reduces the amount of training needed for operators and maintenance technicians, and reduces the value of inventory carried in the department's stockroom.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

The City of Hamilton Bylaw #17-064 - Procurement Policy, Policy #14, Section 4.14, allows for standardization.

RELEVANT CONSULTATION

Staff have consulted with Corporate Services, Financial Services, Procurement staff and Corporate Services, Financial Planning, Administration, and Policy, Finance and Administration staff. All recommendations have been incorporated in this report.

ANALYSIS AND RATIONALE FOR RECOMMENDATION

The Mechanical Division of the Hamilton Fire Department (HFD) maintains and repairs the department's fleet of fire vehicles and equipment that consume a high volume of equipment, parts, supplies and services which are required in order to maintain the fleet of vehicles in a state of rapid operability and good repair. This satisfies a number of goals related to legislative compliance, continuity of operation, health and safety, cost-efficiency, productivity and return on investment.

Effective delivery of emergency responses by the Fire Department depends on adequate and reliable emergency response vehicles and equipment. The Mechanical Division of the Hamilton Fire Department is charged with the maintenance and repairs of the Department's approximately 100+ fire vehicles which consists of both small and large vehicle types, ancillary equipment (inclusive of breathing apparatus and personnel protective clothing. This Division is also responsible for writing the specifications for all frontline fire apparatuses, both large and small vehicles. The primary focus therefore of this division is to ensure the rapid availability of frontline emergency response vehicles to fire suppression staff within a 24/7 fire protection services operation.

In order to achieve this goal, this division relies on qualified vendors who can:

- provide immediate emergency repairs to vehicles when needed within the confines of a 24/7 operation
- carry out qualified warranty work and are authorized to do so,
- provide OEM parts,
- provide like parts, on an as required basis noting the need to ensure vehicles remain in service with little to no delay.

The supplier base for upgrading, performing emergency repairs and retrofitting existing apparatus and equipment is wide spread and complex. Many manufacturers have pre-authorized dealers for specific parts and/or those that can carry out warranty work or general repair work that will not void existing warranties. In addition to this, each large apparatus type within the Fire Department has an expected 20 year life cycle. With a life cycle this long, the fleet consists of numerous design types/standards which means there are various engines, transmissions and equipment types/parts to be managed, repaired and kept in a state of readiness within the 24/7 fire protection services environment as described in this report.

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: Standardization of Fire Equipment, Parts, Supplies and Services for
the Mechanical Division within the Hamilton Fire Department
(HSC18025) (City Wide) - Page 6 of 7**

Firefighting and rescue operations are very dangerous activities which require reliance on proven equipment in some of the most arduous and time sensitive situations. The recommended equipment has been researched, tested and selected by the end users.

Standardization will ensure that the equipment and fire apparatus is properly maintained by HFD staff by permitting the purchase of OEM components and parts to maintain equipment and frontline fire apparatus along with associated warranties.

Standardization also allows for the reduced stock levels of spare parts. Equipment downtime is costly in terms of service delivery and results in increased costs. Reliable equipment reduces the number of spares that would be required and reduces the cost of repairs. Firefighters in the field rely on the quality and reliability of their emergency equipment, vehicles and devices. Breakdowns or failures during emergency operations would bring the fire ground operations to a halt. By extension, such failures can extend the time in which an incident can be stabilized which can result in the injury and/or fatality of firefighters and/or civilians, as well as a result in a potential liability to the City.

Equipment-specific training is an ongoing requirement by the Mechanical Division on these types of speciality equipment and apparatus. Standardization will reduce training, enhance product knowledge and assist in efficient emergency fire operations. Furthermore, equipment and part familiarity will assist in mitigating health and safety issues.

Purchasing equipment, parts, supplies and services through Procurement Policy #14 will assist the HFD to be compliant with current Procurement Policies; provide transparency of the procurement process; and control cost of replacement components. It will also further reduce the amount of staff time required to prepare Procurement Policy #11's (single or sole source) for all of the suppliers listed.

The Procurement Policy requires an annual approval for each vendor when:

- There is only one source for supply of particular goods and/or services in the open market (sole source); and,
- A single source for the supply of a particular good and/or service is being recommended because it is more cost effective or beneficial for the City (single source).

ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN

Community Engagement & Participation

Hamilton has an open, transparent and accessible approach to City government that engages with and empowers all citizens to be involved in their community.

Built Environment and Infrastructure

Hamilton is supported by state of the art infrastructure, transportation options, buildings and public spaces that create a dynamic City.

APPENDICES AND SCHEDULES ATTACHED

Appendix A to Report HSC18025: HFD Standardized Equipment, Parts/Supplies and Services