

CITY OF HAMILTON

HAMILTON EMERGENCY SERVICES
Fire

TO: Chair and Members Emergency & Community Services Committee	WARD(S) AFFECTED: CITY WIDE
COMMITTEE DATE: May 14, 2012	
SUBJECT/REPORT NO: Standardization of Various Hamilton Emergency Services – Fire Emergency Equipment (HES12009) (City Wide)	
SUBMITTED BY: Robert Simonds Fire Chief Hamilton Emergency Services	PREPARED BY: Jim Doyle (905) 546-2424 Ext. 3377
SIGNATURE:	

RECOMMENDATION

- (a) That MSA manufactured thermal imaging camera (TIC) be approved as the standard through December 31, 2016.
- (b) That CMC Rescue manufactured specialty rescue equipment (carabiners, racks, pulleys, ascenders, harnesses, etc) be approved as the standard through December 31, 2016.
- (c) That Petzl manufactured specialty rescue equipment (Rescucender, rope rescue gloves, helmets, headlamps, etc.) be approved as the standard through December 31, 2016.
- (d) That Hale manufactured fire pumps be approved as the standard through December 31, 2016.
- (e) That Akron manufactured valves and nozzles be approved as the standard through December 31, 2016.

**SUBJECT: Standardization of Various Hamilton Emergency Services – Fire
Emergency Equipment (HES12009) (City Wide) - Page 2 of 9**

- (f) That Niagara Foam be approved as the standard for Fire Fighting Foam through December 31, 2016. Single Source.
- (g) That Industrial Scientific manufactured gas monitors be approved as the standard through December 31, 2016.
- (h) That Hurst Power Products manufactured hydraulic power equipment for auto extrication (spreaders, cutters, rams, and air lifting bags) be approved as the standard through December 31, 2016. Single Source.
- (i) That Portacount be the approved manufacturer's standard for quantitative face fit testing for Hamilton Emergency Services Fire and EMS through December 31, 2016. Single Source.
- (j) That Schlage Locks be the approved manufacturer's standard for Hamilton Emergency Services Fire and EMS through December 31, 2016. Single Source.
- (k) That Padgenite manufactured insulated panels be approved as the standard through December 31, 2016.
- (l) That the Standardization of Ventilation and Rescue Saws [Cutters Edge, a division of Edge Industries Incorporated, approved by Council October 1, 2009 (HES09003)] be extended through December 31, 2016.
- (m) That the Standardization of Self Contained Breathing Apparatus (SCBA) provided by Scott Safety, approved by Council October 1, 2009 (HES09003), be extended through December 31, 2016.
- (n) That the Standardization of Nederman Canada for vehicle exhaust extraction systems, approved by Council October 1, 2009 (HES09003), be extended through December 31, 2016.

EXECUTIVE SUMMARY

Standardization of brand specific equipment within Hamilton Emergency Services – Fire (HES – Fire) will save money by reducing the cost to retrain personnel in the use and application of specialty equipment. Furthermore, the acquisition of existing makes and brands of specialized equipment will support the operational efficiency and effectiveness of personnel; thus enabling them to reduce property damage and loss of life. Moreover, the utilization of standardized equipment also supports the health and safety of the firefighters during high intensity fire ground operations.

Cost savings can be achieved by ensuring the durability and longevity of equipment as it is exposed to rugged use, heat, moisture, etc. Equipment not properly designed for this use will fail prematurely, be expensive to maintain and may expose the City to needless liability should the equipment fail during a rescue or other emergency operations.

Standardization will ensure that the equipment is properly maintained and warranties are not invalidated by permitting the purchase of Original Equipment Manufactured (OEM) components and parts to maintain rescue and personal protective equipment (PPE). In some instances (Self Contained Breathing Apparatus), legislation exists relative to the prescriptive care and maintenance of such devices.

Ensuring uniform issue of critical rescue equipment reduces confusion / time delays during rescue operations as all staff will be familiar with its operation. It also reduces training costs by eliminating the need for multiple training programs for similar types of equipment. Fire has numerous worksites, therefore, a firefighter could be expected to use a piece of equipment from any apparatus at any time. Standardizing to one brand avoids confusion during emergency operations and supports operational effectiveness.

This report proposes and seeks approval to standardize “manufacturer’s standard” for the following emergency equipment used by HES – Fire through December 31, 2016:

1. MSA Thermal Imaging Camera (TIC)

Thermal Imaging Cameras (TIC) are used at emergency incidents to assist in rescue efforts by finding trapped persons in smoke filled environments. Additionally, TICs are highly effective in finding hidden fires in walls; thus reducing property damage and minimizing the potential for rekindles in the involved structure. HES – Fire currently has 21 MSA units in service.

2. CMC Rescue Equipment

This equipment is required so that HES – Fire can conduct safe High Angle Rope Rescues (HARR) in hazardous conditions. Included in this speciality rescue equipment are; carabiners, racks, pulleys, ascenders, harnesses, etc.

3. Petzl High Angle Rope Rescue Equipment

This equipment is required so that HES – Fire can conduct safe High Angle Rope Rescues (HARR). Included in this speciality rescue equipment are; Rescucender, rope rescue gloves, helmets, headlamps, etc.

4. Hale Fire Pumps

The standardization of these pumps and parts will allow for naming Original Equipment Manufacturer (OEM) in RFQs or RFTs. Hale Fire Pumps have been the heart of HES – Fire emergency pumpers since 1984. Mechanical Technicians at HES – Fire have a comprehensive understanding of pump design and repair procedures; thus enabling them to maintain manufacturer warranty requirements and negating their need to be retrained.

5. Akron Valves and Nozzles

These valves have been part of our emergency pumpers since 1990. The standardization of these valves and nozzle parts will allow for naming Original Equipment Manufacturer (OEM) in RFQs or RFTs.

6. Niagara Foam – Firefighting Foam Supplier

This foam is required so that HES – Fire can extinguish flammable liquid fires. This is a Single Source procurement as there is only one (1) distributor in Canada.

7. Industrial Scientific – Provider of Gas Detection for Hazmat and Confined Space

These gas detectors have been in service since 2008 and assist in providing important information of poisonous (carbon monoxide) or dangerous atmospheres (low oxygen in confined space rescues, and other explosive or poisonous chemicals) in some of the most hazardous conditions. Familiarization with such devices not only serves to negate the need to retrain numerous personnel in alternate devices (which is very costly), it also supports the operational effectiveness and efficiency of personnel.

8. Hurst Power Products – Provider of “Jaws of Life”

Hurst Power Products provides HES – Fire the hydraulic power equipment, commonly known as the “Jaws of Life” (spreaders, cutters, rams and air lifting bags), for extrication of entrapped persons from vehicles or industrial accidents. This is a Single Source procurement as there is only one (1) distributor in Canada.

9. Portacount – Fit Tester for Breathing and Protective Masks

This fit testing unit is to ensure the Fire Fighters and Paramedics have the required size and fit of their respirator and N95 medical mask. Annual face fitting of all personnel is a core requirement of Respiratory Protection programs and HES – Fire personnel are trained and knowledgeable in the operations and applications of the Portacount units. This is a Single Source procurement as there is only one (1) distributor in Canada.

10. Schlage Security Locks – Binns Lock and Key

At amalgamation in 2001, a security lock system was specially designed for Hamilton Emergency Services for use throughout its 30 Fire and EMS Stations. This Schlage security lock system is currently maintained by Binns Lock and Key, Hamilton, Ontario. This is a Single Source procurement as Binns Lock and Key is the only administrator of our high security Schlage lock system.

11. Padgenite Insulating Panels

These insulated panels are used at our Training Academy Burn Building to protect the building from the live training fires. This is a Single Source procurement as Padgenite is purchased directly from the manufacturer in the United States.

12. Ventilation and Rescue Saws – Cutters Edge

13. Self Contained Breathing Apparatus (SCBA) – Scott Safety

14. Vehicle Exhaust Extraction – Nederman Canada

Items 12, 13, and 14 are an extension of an existing Standardization approved by Council; Standardization of Ventilation and Rescue Saws, Self-Contained Breathing Apparatus (SCBA) and Vehicle Exhaust Extraction Systems (HES09003) (City Wide).

Funding for Items 1 and 11 has been through the approved Capital Budget Process. Funding for Items 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13 and 14 has been through the approved Operating (replacement or repair) Budget Process.

The proposed manufacturer's standardization is in accordance with Purchasing Policy #14, and will provide for Department wide consistency, which will lead to improved operational efficiencies and effectiveness. By standardizing the equipment listed, the Department will make it easier for HES – Fire staff to become proficient on the equipment that they may be required to use at any time.

**SUBJECT: Standardization of Various Hamilton Emergency Services – Fire
Emergency Equipment (HES12009) (City Wide) - Page 6 of 9**

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 HES – Fire.

Alternatives for Consideration – Not Applicable

FINANCIAL / STAFFING / LEGAL IMPLICATIONS (for Recommendation(s) only)

Financial:

There are no Financial implications.

Staffing:

There are no Staffing implications.

Legal:

There are no Legal implications.

HISTORICAL BACKGROUND (Chronology of events)

In the past some of these products were purchased by using low dollar and by the approval of the Manager of Procurement. As costs increase over the years the low dollar process is not available as the need has exceeded the \$5,000.00 limit. Having these products standardized will allow for a more permanent solution in purchasing goods required by HES – Fire.

POLICY IMPLICATIONS

Procurement Policy for the City of Hamilton, Policy #14 – Standardization

Ontario Health and Safety Act, R.S.O. 1990, c. 0.1, Section 21 Guidance Note #04-9
Respiratory Protection Program

Ontario Health and Safety Act, R.S.O. 1990, c. 0.1, Section 21 Guidance Note #03-1(3)
Reducing Diesel Fumes in Fire Stations

RELEVANT CONSULTATION

Corporate Services Department, Finance Services Division, Procurement Section
Hamilton Emergency Services, Administration Section
Hamilton Emergency Services, Mechanical Section

ANALYSIS / RATIONALE FOR RECOMMENDATION

(include Performance Measurement/Benchmarking Data, if applicable)

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 also allows for the reduced stock levels of spare parts.

On an annual basis it may be necessary to replace damaged, worn out units or repair with Original Equipment Manufacturer (OEM) parts. Operating Budget accounts are used for these types of expenditures.

Fire Suppression staff requires equipment-specific ongoing training on these types of speciality equipment. Standardization will reduce training, enhance product knowledge and assist in efficient emergency fire operations. Furthermore, equipment familiarity will assist in mitigating health and safety issues.

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 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.

All items have been selected over the years by staff as the product that provides HES – Fire with Department wide:

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

By standardizing these products HES – Fire can then name the specific goods required in the quote / tender. Depending on the product use over the five year period, further savings may be obtained by having long term contracts in place and assist in future budget considerations.

ALTERNATIVES FOR CONSIDERATION

(include Financial, Staffing, Legal and Policy Implications and pros and cons for each alternative)

The City of Hamilton purchases the lowest priced equipment tendered regardless of specific brand requirements. Staff does not recommend this as it will result in the City of Hamilton being required to purchase non end user supported / recommended equipment that may lead to increased repair costs; increased inventory costs (due to having to keep additional parts in inventory); increased training costs; increased maintenance training and software upgrades; end user dissatisfaction; compatibility issues and health and safety concerns.

CORPORATE STRATEGIC PLAN (Linkage to Desired End Results)

Focus Areas: 1. Skilled, Innovative and Respectful Organization, 2. Financial Sustainability, 3. Intergovernmental Relationships, 4. Growing Our Economy, 5. Social Development, 6. Environmental Stewardship, 7. Healthy Community

Skilled, Innovative & Respectful Organization

- ◆ A culture of excellence
- ◆ A skilled, adaptive and diverse workforce, i.e. more flexible staff
- ◆ More innovation, greater teamwork, better client focus
- ◆ An enabling work environment - respectful culture, well-being and safety, effective communication
- ◆ Opportunity for employee input in management decision making

Financial Sustainability

- ◆ Financially Sustainable City by 2020
- ◆ Delivery of municipal services and management capital assets/liabilities in a sustainable, innovative and cost effective manner
- ◆ Full life-cycle costing for capital

Growing Our Economy

- ◆ Competitive business environment
- ◆ An improved customer service

Social Development

- ◆ Residents in need have access to adequate support services

Environmental Stewardship

- ◆ Reduced impact of City activities on the environment

APPENDICES / SCHEDULES

None