TO: Chair and Members  
Public Works Committee  
WARD(S) AFFECTED: CITY WIDE

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<th>COMMITTEE DATE:</th>
<th>June 14, 2010</th>
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<th>SUBJECT/REPORT NO:</th>
<th>Replacement of Street Sweepers (PW05095c) - (City Wide)</th>
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**RECOMMENDATION**

That staff be authorized to single source the purchase of three (3) Tymco - DST6 street sweepers to The Equipment Specialist Inc, their authorized dealer.

**EXECUTIVE SUMMARY**

This report seeks approval for the purchase of three (3) street sweeper units. At the present time there are two (2) street sweepers in a fleet of seventeen (17) that are at the end of their life cycle and, therefore, require replacement. One (1) is a 2002 Johnston Cyclon (the only non-Tymco in the fleet), the second is a 2002 Tymco DST6. There is one (1) additional Tymco DST6 proposed to be purchased in support of the Industrial Zone Air Quality Initiative, which will be dedicated to servicing the industrial core of Burlington Street and the surrounding area in advance of the Pan Am Games. The current established life cycle for street sweepers is eight (8) years or sooner, based on reasonable and economic repair.

As outlined in the Public Works Report to Council in 2006 (PW05095b) on the replacement of street sweepers, staff noted that the City of Hamilton was represented by Public Works at the City of Toronto testing protocol. These proceedings were witnessed by Environmental Technology Verification Canada (ETV) and the Prairie Agriculture Machinery Institute. Both bodies, through their independent report, confirmed the scientific validity of the City of Toronto testing protocol. Additional factors,
by which the City of Hamilton recommended the exclusive purchase of the Tymco DST6, were:

- low maintenance and operating costs
- fuel consumption
- operator performance evaluation
- overall built-in safety features
- visibility
- lower decibel readings for operating noise and cab ergonomics.

The 2006 Report (PW05095b) further included a recommendation that the City’s Central Fleet Section establish the Tymco Regenerative Air Street Sweepers, certified by ETV Canada as its standard street sweeper until the end of 2007. The Public Works Department has been satisfied with the reliability and operation of the Tymco sweepers previously acquired under this standardization. Although the approval for standardization has expired, staff recommend that the purchase of these three sweepers be single sourced to Tymco so that the entire fleet complement will be comprised of Tymco DST6 units.

There still does not exist a proven alternative sweeper in the marketplace with higher surface removal efficiency and verifiable operating credentials. The goal is to constantly improve our service delivery and further reduce airborne pollutants and harmful particulate matter. As the marketplace produces better technology we will evaluate a proven entity to better serve our citizens. At the present time the Tymco DST6 represents the best in air quality street sweeping.

The report recommends the issuance of an order for three (3) new street sweepers to The Equipment Specialist Inc. at a total cost of $811,198.75 to replace two (2) existing street sweepers that are no longer economical or efficient to operate and one (1) additional street sweeper for the Industrial Zone Air Quality Initiative, with sources of funding from approved 2010 Capital Budget Cost Centre 58550 - 4941051100 in the amount of $534,490.00 and from approved 2010 Capital Budget Cost Centre 58550 - 4030707750 in the amount of $276,708.75.

**Alternatives for Consideration - See Page 4**

**FINANCIAL / STAFFING / LEGAL IMPLICATIONS**

**Financial:** Funds are available for the purchase in the approved Capital Budget. Project ID account 4030707750, in part, provides funding for the additional sweeper for the Industrial Zone Air Quality Initiative. The funding for the two (2) replacement sweepers will be funded from the Fleet Reserve. The budgeted replacement cost per sweeper is $290,000. The quoted price from the vendor for two (2) machines is $534,490.00 including all taxes ($267,245. each). The quoted price for the third machine is $276,708.75 including all taxes. This is due to special attachments added to the machine for specialized sweeper of elevated surfaces throughout the Industrial Core.
Staffing: Staffing for the additional sweeper will come from rescheduling and redistribution of existing staff complement.

Legal: N/A

HISTORICAL BACKGROUND

In 2006 and 2007, Central Fleet worked in partnership with the City of Toronto to rigorously evaluate street sweepers scientifically for the purpose of capturing fine particulate matter (PM 10 and PM2.5), known to be a major health hazard. As approved by Council in 2006, Central Fleet has replaced all but one (1) of the seventeen (17) sweepers in the fleet with the Tymco Brand DST6 Model Regenerative Air Street Sweepers. Establishing the protocol was necessary to recognize the importance of improving air quality by re-examining our methods of sweeping. For years, road sweeping was done by mechanical sweepers. This was an adequate means by which to sweep roads. However, it did not come close to removing harmful particulate matter that was left on the road only to become airborne pollutants. As new regenerative air technology emerged, it was necessary to evaluate different models to find the most effective equipment. After two years of intensive scientific testing using City of Toronto protocol, the end results found the Tymco DST6 to have the greatest efficiency and these findings continue to be upheld.

POLICY IMPLICATIONS

As per the City of Hamilton Purchasing Policy Bylaw, Policy 11 – Policy for Negotiations may be adopted when a single source for the supply of a particular Goods and/or Service is more cost effective or beneficial for the City. Council must authorize any requests for negotiations with a single source where the value of proposed procurement is $250,000 or greater.

This recommendation aligns with the Public Works Business Plan ‘Innovate Now’ by ensuring that proper equipment is selected and costs are kept to a minimum.

RELEVANT CONSULTATION

The Public Works Department involving its Operations and Waste Management Division, Transportation, Energy & Facilities Division, Energy Fleet & Facilities Group, Central Fleet Section (historical relevant report information) and Purchasing Section have provided input and fully support the report and its recommendations.

All consulted staff supports the report and its recommendation.

ANALYSIS / RATIONALE FOR RECOMMENDATION

Tymco International Ltd. is the only one of two vendors whose performance claim for controlling particulate matter (PM 10 and PM 2.5) is certified by ETV Canada with a surface removal efficiency of greater than 90%. An additional benefit is that if approved,
the City’s entire sweeper fleet will be from one manufacturer. This continues to simplify operation and maintenance procedures for both the Central Fleet and Road Operations Sections.

The Public Works Department has been satisfied with the reliability and operation of the Tymco sweepers previously acquired under this standardization. The City of Hamilton will continue to evaluate technology each and every time our sweepers reach their life cycle and are to be replaced. Purchasing the very best technology is crucial to program performance and sustainability. Staff are confident that the purchase price provides excellent value through benchmark comparisons against current market transactions.

Since the advent of the Toronto testing protocol, the City of Toronto has purchased a total of fifty-three (53) Tymco DST6’s based on the scientific results of the testing protocol.

ALTERNATIVES FOR CONSIDERATION

A tender process is an alternative, however, there is currently only one other Regenerative Air Street Sweeper on the market that is ETV Canada certified. However, the Tymco DST6 provides a 10% higher surface removal efficiency rating than that of its competitor, equating to the removal of approximately 40 to 60 tonnes of additional material collected through an annual program cycle.

The Tymco DST6 has the highest certified surface removal efficiency greater than 90% and is a proven entity in the market place throughout Ontario in the Municipal sector. The fact that the Tymco DST6 is the highest rated street sweeper by ETV Canada demonstrates the continued pursuit of excellence with respect to air quality and the containment and collection of harmful particulate matter. The replacement costs are also lower than budget.

The other alternative is to not replace either of the two (2) “at life” sweepers and restructure the assignment of the remaining fifteen (15) units with service level reductions City Wide.

CORPORATE STRATEGIC PLAN


Skilled, Innovative & Respectful Organization
♦ More innovation, greater teamwork, better client focus

Financial Sustainability
♦ Delivery of municipal services and management capital assets/liabilities in a sustainable, innovative and cost effective manner.
Growing Our Economy
   ♦ An improved customer service

Environmental Stewardship
   ♦ Reduced impact of City activities on the environment
   ♦ Aspiring to the highest environmental standards

Healthy Community
   ♦ Plan and manage the built environment

APPENDICES / SCHEDULES

None