



CITY OF HAMILTON
PUBLIC WORKS DEPARTMENT
Transportation Operations and Maintenance Division

TO:	Chair and Members Audit, Finance and Administration Committee
COMMITTEE DATE:	February 20, 2020
SUBJECT/REPORT NO:	Policy 11 Single Source Provider for TYMCO Sweeper DST-4 (PW20006(a)) (City Wide)
WARD(S) AFFECTED:	City Wide
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SUBMITTED BY: SIGNATURE:	Edward Soldo Director, Transportation Operations & Maintenance Public Works Department
SUBMITTED BY: SIGNATURE:	Rom D'Angelo, C.E.T.; CFM Director, Energy Fleet & Facilities Management Public Works Department

RECOMMENDATIONS

- (a) That pursuant to the City's Procurement Policy By-Law 17-064 (Policy #11 – Non-Competitive Procurements) a single source purchase of a TYMCO Sweeper DST-4 for use on bike lanes and other smaller City streets at the approximate cost of \$310,000 be awarded to The Equipment Specialists Inc. and funded from Project ID's 4031821350 and 4031921350;
- (b) That pursuant to the City's Procurement Policy By-Law 17-064 (Policy #14 – Standardization) the DST-4 Sweeper, as manufactured by TYMCO and supplied by The Equipment Specialist Inc., be added to the standardization list of Fleet Equipment and Parts; and

- (c) That the General Manager of Public Works be authorized to negotiate, enter into and execute all required documentation to give effect thereto with The Equipment Specialists Inc. in a form satisfactory to the City Solicitor.

EXECUTIVE SUMMARY

At the Audit, Finance and Administration Committee meeting on February 6, 2020 Council asked that Report PW20006, respecting Policy 11 Single Source Provider for TYMCO Sweeper DST-4 be referred back to staff for a report to the February 20, 2020 Audit, Finance and Administration Committee meeting. The purpose of the referral was to provide additional information related to the rationale for the single source, information regarding the capabilities of the vehicles and alternative suppliers.

The City currently has 18 TYMCO Sweeper DST-6's (DST-6) in its fleet that were purchased in support of the Clean Air Hamilton Report 2005-2006 progress report. The DST-6 units are dedicated for sweeping Burlington Street, other industrial areas and various streets across the City. As per Procurement Policy #14 – Standardization, the DST-6 units have been previously approved by Council as a standard piece of equipment.

The DST-4 is the second highest rated Environmental Technology Verification (ETV) certified sweeper available in the market. The DST-4 uses the same filtering system, filters and subsequent parts currently utilized on the DST-6 (highest rated ETV certified), however, the DST-4 runs on a smaller chassis making the unit more efficient and manoeuvrable in tight spaces. The DST-6 is the larger of the two units but has had issues on some of the tighter segregated bike lanes throughout the City of Hamilton.

The Public Works' Transportation Operations & Maintenance Division recommends the purchase of a DST-4 sweeper for the following reasons:

- a. Lower maintenance and operating costs;
- b. Fewer diagnostic and speciality tools;
- c. Proven reliability;
- d. Decreased fuel consumption;
- e. Enhanced operator performance;
- f. Overall enhanced safety features;
- g. Increased visibility; and
- h. Lower decibel readings for operating noise in cab ergonomics.

Of the nine (9) sweeper units tested, the TYMCO DST- 4 was the only compact sweeper to meet the ETV efficiency standard. The sweeper unit will enhance our service delivery and further reduce airborne pollutants as per the Reduction of Airborne Particulates in Hamilton (B0H18018) (City Wide) Board of Health Information Report.

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In summary, it is recommended that the ETV certified DST-4 be single sourced from Equipment Specialist Inc. to ensure improved air quality for City residents, and to enhance our service levels in maintaining segregated bike lanes.

It is also recommending that the DST-4 unit be added to the standardization list of Fleet Equipment and Parts, as amended, for the future purchase of any additional units for similar reasons set out in this report.

Alternatives for Consideration – See Page 5

FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial: Sufficient capital funds are available in Project ID 4031821350 (\$150,000) and Project ID 4031921350 (\$160,000).

Staffing: N/A

Legal: N/A

HISTORICAL BACKGROUND

Prior to 2006 City street sweeping was completed by mechanical sweepers which did not remove harmful particulate matter left on City roads only to become airborne pollutants. In 2006 and 2007, the Public Works Department worked in partnership with the City of Toronto to rigorously evaluate street sweepers from a scientific perspective for the purpose of capturing fine particulate matter PM10 and PM2.5 known to be a major health hazard. These particulates down to 0.3 microns are fine dust particles which can get into lungs and cause health and/or breathing problems.

As a result of this study, and as approved by Council in 2006, Public Works staff replaced all but one (1) sweeper with the recommended TYMCO Sweeper DST-6 regenerative air street sweeper along with implementing other improvements to our street sweeping processes. These enhancements increased sweeper operations on the road by 33% which significantly lowered the amount of airborne particulate circulating within the industrial core of the City.

Following this approval, Fleet Planning negotiated a single source multi-year agreement with The Equipment Specialist Inc. and initiated a contract which commenced on March 16, 2015. At the end of the first term Fleet Planning did not award term two (2) however, chose to initiate a new contract that allowed for revisions of the renewal dates to align with the chassis manufacturers release of annual pricing, attached to Report PW2006(a) as Appendix 'D' for Contract between the City and The Equipment Specialist Inc. The new contract commenced July 10, 2017 with provisions that the City

may extend the contract for four (4) additional one (1) year periods. The last term expiry is December 31, 2022.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

As per the Procurement Policy – Section 4.11 – Policy #11 – Policy for Negotiations requires that Council approval be obtained for any Single Source of \$250,000 or greater. With the single source negotiation, the City is not obligated to accept the vendors price and have the right to negotiate price.

In accordance with Procurement Policy – Section 4.14 – Policy #14 Standardization, if approved by Council, the DST-4 would be added to Fleet Services Section's list of approved standardization products, services, manufacturers and suppliers.

RELEVANT CONSULTATION

The following key stakeholders have been consulted with respect to the development and content of this report:

- Public Works: Energy, Fleet and Facilities: Roadway Maintenance Equipment Committee;
- Corporate Services: Finance;
- Public Health Services: based on report (B0H18018) that Roadway Maintenance supports; and
- TYMCO.

ANALYSIS AND RATIONALE FOR RECOMMENDATION(S)

The Fleet Planning section along with the Roadway Maintenance section have investigated street sweepers in the marketplace requested by Council and arranged for demonstrations with nine (9) sweepers for use on segregated bike lanes, attached to Report PW20006(a) as Appendix 'A'.

Fleet Planning communicates regularly with various street sweeper suppliers to determine whether there are any new technologies, products, or improvements to existing equipment that may surpass the ETV thresholds currently held by TYMCO models. In addition, where possible Fleet Planning requests to attend trade shows throughout North America to interact with municipal equipment suppliers and educated our City Fleet on industry innovations and improvements.

It should be noted that surface removal efficiency data is only available for those vendors who choose to participate and disclose results of the Canadian Environment

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Technology Verification (ETV) certification process. This is a testing method performed, measured, and verified by ETV Canada and validated by an independent body (PAMI).

Only the suppliers of TYMCO and Elgin have published data, attached to Report PW20006(a) as Appendix 'B' for TYMCO DST-4 certification and Appendix 'C' for Elgin Crosswind NX certification. The City made a request to the dealer representing Elgin for additional information however, received no response. It was further investigated and determined that Elgin does not make a compact sweeper comparable to the DST-4 in removing particulates down to 0.3 microns.

The findings indicated that of the nine (9) sweeper units tested, the TYMCO DST- 4 was the only compact regenerative air sweeper to meet the efficiency standard of removing minimum 90% of PM10 and PM2.5 particulates down to 0.3 microns proven to be a health hazard. The ETV certified sweeper the Elgin Crosswind NX removes 81.8% of PM10 and PM2.5 particulates and is now discontinued. Note: Elgin currently does not make a compact sweeper for use on segregated bike lanes.

The TYMCO sweeper units DST-6 and DST-4 have proven their performance in controlling particulate matter PM10 and PM2.5 and are certified by ETV Canada with a surface removal efficiency of greater than 90%. This aligns with the Standardization of Fleet Equipment and Parts report (PW09074(d)).

Since the acquisition of the DST-6 units in 2006 the City has been satisfied with the relationship and operations of the DST-6 units. The recommended purchase of the DST-4 unit for maintaining segregated bike lanes would not require additional training as City staff are currently familiar with the operation and maintenance of the larger DST-6 units. This would ensure the City's fleet remain entirely from TYMCO an ETV validated manufacturer.

Fleet Planning investigated the City of Toronto's acquisition of thirty (30) TYMCO 600 street sweepers in 2015 which totalled \$12.4 million; \$408,124 per sweeper. Through the City's single source contract with The Equipment Specialist Inc. in 2018, the City of Hamilton purchased a TYMCO DST-6 for \$365,103; \$43,021 less. Note: the TYMCO 600 model is not ETV certified and does not meet Council approved removal efficiency of greater than 90% like the City's current TYMCO DST-6 fleet.

The Equipment Specialist Inc. is the only authorized distributor of TYMCO Dustless Regenerative Air Street Sweepers in the Province of Ontario.

ALTERNATIVES FOR CONSIDERATION

Issue a Request for Proposal based on required performance criteria. Note: there are currently no sweepers in the marketplace that meet the ETV Canada certification or that

align with the rationalization for which the TYMCO DST-6 was approved by Council on March 28, 2017 in the Standardization of Fleet Equipment and Parts (PW09074(d)).

ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN

Clean and Green

Hamilton is environmentally sustainable with a healthy balance of natural and urban spaces.

Healthy and Safe Communities

Hamilton is a safe and supportive City where people are active, healthy, and have a high quality of life.

Built Environment and Infrastructure

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

Our People and Performance

Hamiltonians have a high level of trust and confidence in their City government.

APPENDICES AND SCHEDULES ATTACHED

Appendix “A” to Report PW20006(a) - Segregated Bike Lane Sweeper Comparison Chart

Appendix “B” to Report PW20006(a) - The Canadian Environmental Technology Verification Program Documentation on the TYMCO Sweeper DST-4

Appendix “C” to Report PW20006(a) - Elgin Crosswind NX Street Sweeper Verification Statement

Appendix “D” to Report PW20006(a) - Contract between the City and The Equipment Specialist Inc.