



## AUDITOR GENERAL'S REPORT ACTION REQUIRED

### Auditor General's Hotline Investigation Report: Fleet Services Division – Review of Various Equipment Maintenance Practices

<b>Date:</b>	August 31, 2013
<b>To:</b>	Audit Committee
<b>From:</b>	Auditor General
<b>Wards:</b>	All
<b>Reference Number:</b>	

#### **SUMMARY**

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The Auditor General initiated this review as a result of a number of complaints received by the City's Fraud and Waste Hotline. Generally, investigations relating to complaints to the Fraud and Waste Hotline are summarized in our annual report on the activities of the Hotline program and as a result are not reported separately. In this case, in view of the issues identified, we determined that it would be more appropriate to report separately to Audit Committee.

This review was generally concerned with the maintenance of the City's street sweepers by Fleet Services Division. However, during the review of these specific complaints we identified a number of other issues including issues concerning the Transportation Services Division. This Division is responsible for the operation of the City's street sweeping services.

This report contains nine recommendations along with a management response to each of the recommendations. The implementation of these recommendations will improve the overall effectiveness of the City's maintenance practices over equipment and could result in cost savings.

## **RECOMMENDATIONS**

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### **The Auditor General recommends that:**

1. City Council request the Chief Corporate Officer, in consultation with the General Manager, Transportation Services Division, to review the City's street sweeping performance measurement processes and where applicable develop appropriate measures. Such a process be developed in order to measure the ongoing effectiveness of the City's street sweeping services, as well as identify areas which require attention. Areas which should be addressed would include, but not limited to, air quality, tonnage of debris collected and equipment downtime. Such an evaluation be reported to City Council as required in 2006.
2. City Council request the Chief Corporate Officer to review and evaluate the current management information system to ensure it is meeting the needs of all staff but in particular senior management.
3. City Council request the Chief Corporate Officer to review the use of aftermarket parts in the maintenance and repair of all equipment, particularly street sweepers. Such a review include an analysis of original savings, frequency of parts replacement, quality, comparisons of maintenance costs, and warranty considerations.
4. City Council request the Chief Corporate Officer to review the current scheduling process for the preventative maintenance of all equipment particularly the street sweepers. Wherever possible all maintenance be conducted in accordance with the manufacturer's specifications.
5. City Council request the General Manager, Transportation Services Division, to ensure that all daily maintenance required to be completed by each operator is completed. Evidence of such maintenance be required. If necessary an appropriate level of training be provided.
6. City Council request the Chief Corporate Officer to review the process and criteria for selection of vendors contracted to ensure repairs are completed by vendors with the necessary expertise.
7. City Council request the Chief Corporate Officer, in consultation with the General Manager, Transportation Services Division, to review the current processes for the redeployment of underutilized vehicles. Such a process ensure the allocation of underutilized equipment to higher volume locations throughout the City.
8. City Council request the Chief Corporate Officer to review the training program at Fleet Services Division to ensure adequate training is provided to mechanics.
9. City Council request the Chief Corporate Officer to review all fleet related reports issued by the Auditor General's Office in order to ensure that recommendations continue to be effectively implemented.

## **Financial Impact**

The implementation of recommendations in this report will result in operating efficiencies. However, any resources required or potential cost savings resulting from implementing the recommendations in this report is not determinable at this time.

## **ISSUE BACKGROUND**

The capital investment in the City's street sweeping equipment is significant and is in the range of \$15 million. City Council approved the purchase of street sweepers acquired between 2006 and 2008 with the latest technology evaluated to improve both efficiency and air quality derived from the street sweeping program. The annual operating cost of the street sweeping program is approximately \$5 million.

## **COMMENTS**

This report contains nine recommendations along with a management response to each of the recommendations. The implementation of these recommendations will improve the City's maintenance practices over various equipment.

The audit report entitled "Fleet Services Division – Review of Various Equipment Maintenance Practices" is attached as Appendix 1. Management's response to each of the recommendations contained in the report is attached as Appendix 2.

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## **SIGNATURE**

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Jeff Griffiths, Auditor General

11-FHI-05

## **ATTACHMENTS**

Appendix 1: Auditor General's Hotline Investigation Report: Fleet Services Division – Review of Various Equipment Maintenance Practices

Appendix 2: Management's Response to the Auditor General's Hotline Investigation  
Report: Fleet Services Division – Review of Various Equipment  
Maintenance Practices

**AUDITOR GENERAL'S HOTLINE  
INVESTIGATION REPORT**

**Fleet Services Division –  
Review of Various Equipment  
Maintenance Practices**

**August 31, 2013**

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**Jeffrey Griffiths, CPA, CA, CFE**  
**Auditor General**



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## EXECUTIVE SUMMARY

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***Review initiated by complaints to the Fraud and Waste Hotline***

This review was initiated as a result of a number of complaints received by the City's Fraud and Waste Hotline. Generally, investigations relating to complaints to the Fraud and Waste Hotline are summarized in our annual report on the activities of the Hotline program and as a result are not reported separately. In this case, in view of the issues identified, we determined that it would be more appropriate to report separately to Audit Committee.

Complaints received by the Fraud and Waste Hotline generally concerned the maintenance of the City's fleet of street sweepers by the Fleet Services Division. However, during the review of these specific complaints we identified a number of other concerns including issues concerning the Transportation Services Division. This Division is responsible for the operation of the City's street sweeping services.

Our comments and recommendations concerning the complaints to the Hotline and the other more generic related issues are included in this report.

***Capital investment in street sweeping equipment is significant***

The capital investment in the City's street sweeping equipment is significant and is in the range of \$15 million. The annual operating costs of the program approximate \$5 million.

The fleet of 51 street sweepers was purchased by the City between 2006 and 2008. City Council in approving the purchase required that the sweepers be equipped with regenerative air technology which was designed to significantly improve the removal of fine road dust from road surfaces and reduce debris from being washed into the catch basins and sewer systems. Prior to the acquisition of the sweepers the City conducted significant air quality testing to ensure that they met an appropriate and predetermined level of air quality.

***Issues identified during review***

Issues identified during our review are contained in the following paragraphs. Certain of these issues pertain to the City's street sweeping services while others have relevance to the Fleet Division as a whole:

- A report to Council in 2006 indicated that there would be an evaluation of the effectiveness of the street sweepers subsequent to acquisition. An evaluation has not been conducted.
- Performance measures require review and need to be enhanced.
- Management reporting requirements need to be reviewed. Deficiencies identified need to be addressed.
- There has been no determination as to whether the use of aftermarket parts in the maintenance of the equipment is cost-effective even though aftermarket parts are routinely used.
- There appears to be little consideration as to whether or not the use of aftermarket parts impacts the manufacturer's warranty provisions.
- Timetables for preventative maintenance are not always followed.
- Daily maintenance on the street sweeper equipment in some cases is lacking.
- Selection of third-party vendors for the repair of specialized equipment requires re-evaluation.
- More attention needs to be given to the redeployment of underutilized equipment.
- Staff training needs should be addressed.
- A review of previous audit reports needs to be undertaken to determine whether circumstances which led to previous recommendation had reoccurred.

***Issues identified are significant***

The number of issues identified during the review is significant and should be addressed as soon as possible. We have discussed this report with management who are in agreement with the recommendations.



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## BACKGROUND

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***Review initiated as a result of complaints to the Fraud and Waste Hotline***

In mid 2012, subsequent to discussions with the then Deputy City Manager and Chief Financial Officer, the Auditor General initiated a review into a number of allegations made to the Fraud and Waste Hotline relating to the City's fleet of street sweepers.

During the course of the review of the allegations, we identified a number of other concerns which are outlined in this report.

***Allegations made to the Fraud and Waste Hotline***

The general allegations made to the Fraud and Waste Hotline were:

- The ongoing repairs and maintenance of the street sweepers were below generally accepted standards and compromised the efficient operation of the fleet. Specifically, the use of aftermarket parts in the maintenance of specialized equipment was identified as a major concern.
- The inappropriate sale of one of the street sweepers at a City auction.
- The 2013 Request for Proposal for the proposed outsourcing of street sweeping services managed by Transportation Services specifically excluded the air quality standards previously required by City Council at the time of the original purchase of the sweepers in 2006.

***A review conducted to examine merits of new street sweeper technology***

In 2003 the Clean Roads to Clean Air Program was initiated to examine the merits of new street sweeper technology. The primary objective was to assess whether more efficient street sweeping could improve air quality and reduce the health risks to the public associated with pollutants, namely fine road dust, generated as a by-product of wearing down of road surfaces and vehicle tires, as well as particles from brake wear and vehicle emissions.

***New technology approved***

The City in collaboration with the City of Hamilton evaluated a number of different street sweeper technologies and their ability to meet certain established air quality thresholds. City Council endorsed the thresholds as outlined in a 2005 report and required vendor testing to meet these thresholds as a condition of procurement. Council approved the acquisition of Tymco street sweepers from a company called The Equipment Specialist Inc.

***Initial investment in the equipment was \$15 million***

The sweepers were purchased in stages commencing in 2006 and, by the end of 2008, the City had acquired a fleet of 51 at a total cost in the range of \$15 million. City Council, in approving the purchase of a new fleet of sweepers required that they be equipped with regenerative air technology which was designed to significantly improve the removal of fine road dust from road surfaces and reduce debris from being washed into the catch basin and sewer systems.

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## **REVIEW OBJECTIVES, SCOPE AND METHODOLOGY**

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The initial purpose of the review was to specifically address the allegations made to the Fraud and Waste Hotline. However, as we progressed through the review, a number of other issues were identified. We have provided commentary and recommendations on those issues identified.

***Review methodology***

Our review methodology included:

- an analysis of documentation and data contained in the Fleet Focus Management Information System (M5 system) and SAP, the City's financial information system
- review of Transportation Services Division's management data related to the City's street sweeping services
- interviews and discussions with the principal owner of The Equipment Specialist Inc., the vendor of Tymco street sweepers, as well as a Vice President from Tymco, the street sweeper manufacturer located in Waco, Texas

- interviews with senior management and staff from the Fleet Services Division
- interviews with senior management and staff from the Transportation Services Division
- interview with City of Hamilton Garage Superintendent, Central Fleet
- review of documentation and data pertaining to the City of Hamilton's fleet of Tymco street sweepers.

Finally, in 2003 and 2005, the Auditor General issued two reports entitled Fleet Operations Review Phase One and Phase Two. Both of these reports were reviewed in detail in order to ensure that recommendations made at that time were appropriately addressed.

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## REVIEW RESULTS

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### Complaints to the Fraud and Waste Hotline

*Initial focus of review centred on complaints*

The initial focus of this review was to address the complaints to the Fraud and Waste Hotline. In this context we addressed each one of them separately as follows.

- It was alleged that the ongoing repairs and maintenance of the street sweepers were below generally accepted standards and compromised the efficient operation of the fleet. This allegation forms the basis of the contents of the report.
- It was also alleged that one of the street sweepers was inappropriately sold at a City auction. Our review identified internal control weaknesses relating to the approval process for submitting equipment for auction. We have reported this matter to senior management who have taken appropriate action. However, in this context a recommendation made in our 2003 audit report identified at the time that:

*“Current practice does not require written justification for vehicle and equipment replacement. With respect to disposals, a condition assessment of the vehicle or equipment is required prior to disposal. However, the condition assessment form designed for this purpose is not always completed. There is no documentation supporting the disposal. This documentation should include estimated future repair costs, future utilization, as well as an indication that steps have been taken to determine whether or not the vehicle could be reallocated to other departments. A business case should be mandatory for each vehicle and equipment replacement and disposal.”*

In this case it is clear that the recommendation was not followed.

- Finally, it was alleged that a Request for Proposal for the proposed outsourcing of the City’s fleet of street sweepers specifically excluded the air quality standards required by City Council at the time of the purchase of the sweepers in 2006.

We conducted a preliminary review into this matter and determined that the Request for Proposal process had been cancelled. Consequently we conducted no further review into this matter.

This issue was discussed in detail with senior management.

## **Determining the Effectiveness of the City’s Street Sweeping Services**

The capital investment in street sweepers is significant.

### ***Reporting out to Council was required***

One of the major reasons for purchasing the Tymco street sweepers was due to its environmental capabilities in terms of improved air quality. In a 2006 report to Council relating to the purchase of the street sweepers there was a requirement to report out on the effectiveness of the street sweepers. There has been no reporting out to Council in relation to this matter.

Consequently, there is no way of determining whether or not the sweepers are operating in the manner required. While there was significant testing of the performance of the sweepers prior to acquisition, a complete evaluation of the effectiveness of the sweepers has not been conducted subsequent to acquisition.

The City of Hamilton, which jointly tested and purchased Tymco street sweepers with the City has conducted periodic air quality testing and has used this information to make adjustments to the frequency of their street sweeping practices.

***Reduction of debris collected but no analysis of the reasons for the decrease***

One of the ways in which the Transportation Services Division measures the efficiency of the City's street sweeping services is by recording the annual tonnage of debris removed from streets. For example, in one of the Districts material removed from the City streets indicated that there was a significant increase in tonnage of material removed from City streets subsequent to the purchase of the Tymco sweepers. This continued until 2010 when tonnages decreased. While the obvious reason for this decrease may be due to a reduction in service levels there may also be issues relating to improper or poor maintenance of the equipment resulting in decreases in effectiveness. Based on the information available it is not possible to determine the reasons for the significant decrease in tonnage collected.

Finally in 2006, a report to Council from Transportation Services stated that:

*“Accelerating the replacement of street sweepers should result in a reduction in the average maintenance costs by approximately \$20,000 per sweeper and also improve Transportation Services’ ability to meet the street sweeping level of service by reducing the significant downtime currently being experienced due to unscheduled repairs.”*

It has been difficult to determine whether or not average maintenance costs have decreased due to an absence of accurate data. We have been advised that downtime reports related to repairs and maintenance are unreliable for a number of reasons including inconsistencies in the timely completion and closing of work orders in the fleet management information system.

### **Recommendations:**

- 1. City Council request the Chief Corporate Officer, in consultation with the General Manager, Transportation Services Division, to review the City's street sweeping performance measurement processes and where applicable develop appropriate measures. Such a process be developed in order to measure the ongoing effectiveness of the City's street sweeping services, as well as identify areas which require attention. Areas which should be addressed would include, but not limited to, air quality, tonnage of debris collected and equipment downtime. Such an evaluation be reported to City Council as required in 2006.**
- 2. City Council request the Chief Corporate Officer to review and evaluate the current management information system to ensure it is meeting the needs of all staff but in particular senior management.**

## **Aftermarket Parts in Many Cases Preferred to Manufacturer Parts**

### ***Parts provided under a sole source contract***

Following the initial purchase of the City's Tymco street sweepers from a company called The Equipment Specialist Inc. (TES), parts and service for the sweepers was provided by TES, the only local authorized dealer. These parts were provided under a sole source contract commencing December 2008 through to September 2009 for \$150,000. The sole source contract was extended twice through the Purchasing and Materials Management Division and increased to authorize cumulative expenditures totaling \$650,000 through to December 31, 2010.

### ***Sole source approved in accordance with policy***

As part of the process for requesting approval of a sole source contract, divisions are required to provide justification for using a sole source contract instead of a competitive procurement process. In this case, the justification provided by the Fleet Services Division related to the fact that TES was the only authorized dealer for the Tymco sweepers. In addition, it was indicated that the use of these parts from TES was required to ensure that warranty provisions on the equipment were not voided.

Based on our review it appears that the Fleet Services Division began using aftermarket parts sourced from other vendors through the City's parts and consignment contract that commenced in 2007 with UAP Inc. (Napa) even though the City had a sole source contract for parts with TES. Based on our discussions with staff, we have been advised that in order to save costs it was directed that aftermarket parts should be used wherever possible.

***Tymco street sweepers have specialized technology***

A January 2011 staff report to further extend and increase the TES sole source contract was tabled at the Government Management Committee. Staff recommended that the sole source contract be extended as TES was the "only Ontario authorized dealer for the supply of parts and services for Tymco Street Sweepers." This matter was deferred and staff were instructed to issue a Request for Proposal to secure bids to supply parts and services for Tymco street sweepers.

As a result of the procurement process, TES was awarded a new contract in May 2011 to provide parts and service for Tymco street sweepers, but on a non-exclusive basis.

While we understand the need to minimize costs, the use of aftermarket parts on specialized, complex high tech equipment should not be solely based on initial costs. This appears to be the sole reason for the purchase of aftermarket parts. The Tymco sweeper has specialized technology that the manufacturer claims was designed using high quality materials and components to achieve maximum performance and longevity.

***Discussions held with Tymco and TES***

In our review of the use of aftermarket parts we have had a number of discussions with Tymco, the manufacturer of the equipment as well as with TES the local dealer. We acknowledge that both parties have a vested interest in the City's use of original manufacturers parts, nevertheless TES provided examples of damage to several Tymco sweepers which they claim were attributable to the use of aftermarket parts. While we do not have the expertise to validate this information, this issue requires follow up and evaluation by the Fleet Services Division.

***Discussion also held with Fleet Services staff***

During our review we also met with staff from the Fleet Services Division to review any concerns that they had. We were provided with the following information:

- 1) In 2008, staff from Transportation Services Division advised, by e-mail, Fleet Services Division to discontinue the use of aftermarket parts because “other filters do not hold up and caused damage.”
- 2) In 2009, staff from Transportation Services Division referred to one sweeper that experienced damage attributed to the use of aftermarket parts that voided the manufacturer’s warranty.
- 3) Mechanics from the Fleet Services Division advised us that while aftermarket parts are less expensive, they do not fit as well and take longer to install which might offset cost savings.
- 4) Mechanics advised us that aftermarket broom parts wear out twice as fast as original equipment parts.

***Issues concerning the use of aftermarket parts need to be addressed***

There are a significant number of issues which need to be addressed in the context of the use of aftermarket parts. These include the following:

- 1) Are aftermarket parts less expensive?
- 2) Are aftermarket parts of equivalent quality as original manufacturer’s parts?
- 3) Are there warranty issues in the use of aftermarket parts?
- 4) What is the life cycle of aftermarket parts compared with original manufacturer’s parts?
- 5) Do the use of aftermarket parts impact efficiency?
- 6) Do the use of aftermarket parts increase the need for additional repairs?

These issues have not been adequately addressed by the Fleet Services Division.

While we are not discounting the use of aftermarket parts, particularly the less expensive and routine maintenance parts, there needs to be a detailed evaluation of a range of issues concerning their use.



**Recommendation:**

- 3. City Council request the Chief Corporate Officer to review the use of aftermarket parts in the maintenance and repair of all equipment, particularly street sweepers. Such a review include an analysis of original savings, frequency of parts replacement, quality, comparisons of maintenance costs, and warranty considerations.**

## **Preventative Maintenance and Repairs**

### **(1) Major Maintenance**

*Regular preventative maintenance is important*

The purchase of Tymco street sweepers was a significant investment by the City. Regular preventive maintenance of this equipment extends the useful life of the equipment by minimizing repair costs and enhancing vehicle reliability. Failure to provide regular preventive maintenance to equipment generally results in costly repairs in the long term due to unnecessary damage to sweeper components.

The Tymco manufacturer specifies regular preventative maintenance intervals at every 1,000 hours use on the rear engine components of all Tymco street sweepers. As the primary provider of maintenance and repair services for City vehicles, the Fleet Services Division has established a regular preventative maintenance cycle of 60 days for the Tymco street sweeper's rear engine service.

*Maintenance schedules not always adhered to*

Our review of maintenance work orders indicates that the 1,000 hour and 60-day preventative maintenance cycle has not consistently been met in practice. For example, several units had preventative service intervals exceeding six and seven months over a two year period. While we understand Fleet has a forecasting model to schedule planned maintenance intervals, the Fleet Maintenance Manager confirmed the general method of scheduling units for preventative maintenance service is for the most part ineffective.

**Recommendation:**

- 4. City Council request the Chief Corporate Officer to review the current scheduling process for the preventative maintenance of all equipment particularly the street sweepers. Wherever possible all maintenance be conducted in accordance with the manufacturer’s specifications.**

**(2) Daily Maintenance**

*Operators required to provide routine daily maintenance*

Ensuring regular service intervals and general maintenance are met is a shared responsibility between the Fleet Services Division and the Transportation Services Division, the primary user of the Tymco street sweeper. The design of the Tymco street sweeper requires that operators be fully trained and familiar with adjustments of sweepers required to meet varying road conditions. As well, operators are required to conduct a program of daily cleaning maintenance on specific areas of the sweeper at the end of every shift. This daily cleaning is intended to ensure the optimum performance and efficiency of the sweeper and is integral to the longevity of certain components.

*Inadequate daily maintenance*

Mechanic notations on several work orders describe operator negligence and inadequate daily maintenance procedures by operators as factors resulting in damage that has increased repairs to Tymco street sweepers.

During our discussions with the City of Hamilton, they emphasized that operator training is regularly required to ensure their Tymco sweepers are appropriately operated and cleaned daily to maintain optimum performance.

**Recommendation:**

- 5. City Council request the General Manager, Transportation Services Division, to ensure that all daily maintenance required to be completed by each operator is completed. Evidence of such maintenance be required. If necessary an appropriate level of training be provided.**

## **Selection of Third-Party Repair Vendors Requires Attention**

Generally, maintenance and repair work on the City's fleet is performed by staff at City-operated garages. Specialized work such as engine overhauls or emission testing are referred to private repair shops including TES that are under contract with the Fleet Services Division. We noted some Tymco street sweeper repairs have been sourced to third party vendors who did not have the expertise to complete the required repair.

*Repairs should only be contracted out to qualified vendors*

For example, an extensive engine repair on a Tymco street sweeper was completed by a vendor with a contract established for servicing emission and fuel injection issues. To complete the repair the vendor had to seek assistance from TES because the initial vendor was unfamiliar with the specialized components of the Tymco street sweeper. The selection of this vendor may have resulted in a higher repair cost than would have been charged by a vendor who specializes in major engine repairs and has knowledge of the Tymco sweeping components. In this case, this Tymco street sweeper was out of service from September 21, 2011 through to March 29, 2012.

### **Recommendation:**

- 6. City Council request the Chief Corporate Officer to review the process and criteria for selection of vendors contracted to ensure repairs are completed by vendors with the necessary expertise.**

## **Deployment of Underutilized Vehicles Needs Improvement**

The Fleet Services Division maintains centralized control of City equipment to oversee the acquisition, disposal and maintenance and repair requirements. This allows for a systematic approach and reporting process to divisions to identify and enable potential re-assignment of under-utilized vehicles across divisions. This also allows for prioritizing replacement of vehicles that may have excessive repair costs and it enables control over vehicles to ensure low usage surplus vehicles are considered for alternate use by other divisions, prior to disposal.

Our review of Tymco street sweeper maintenance records indicate a significant number of vehicles have significantly higher total maintenance and repair costs. This is due in part to the age of the initial 14 Tymco street sweepers acquired in 2006 and also reflects different sweeping service level requirements between City districts. For example, sweeping service levels for the downtown district require multiple daily shifts, while residential street sweeping requires reduced daily street sweeping services which were subject to further reductions introduced to meet Transportation Services Division budget reduction targets during 2011.

*Opportunities for redeployment need to be considered*

Transportation staff do not appear to be reviewing opportunities for the redeployment of under-utilized Tymco street sweepers used in residential districts to downtown districts.

**Recommendation:**

- 7. City Council request the Chief Corporate Officer, in consultation with the General Manager, Transportation Services Division, to review the current processes for the redeployment of underutilized vehicles. Such a process ensure the allocation of underutilized equipment to higher volume locations throughout the City.**

## **Staff Training**

*Training is deficient*

Several Fleet mechanics indicated during our discussions with them that they have not received sufficient technical training for several years. Some commented that the only training they had received was for Tymco street sweepers during a 2009 special spring repair program provided by TES. This training helped establish a knowledge level to enable the Division to complete more efficient repairs to Tymco street sweepers in house. The training was not repeated although staff requested and TES offered to conduct a similar service and refresher training prior to 2011 spring street sweeping season.

Concerns were also expressed that mechanics have not received adequate training updates on other lines of City heavy equipment including vehicles from Mack Truck, Volvo and Caterpillar heavy equipment divisions.

**Recommendation:**

- 8. City Council request the Chief Corporate Officer to review the training program at Fleet Services Division to ensure adequate training is provided to mechanics.**

## **Recommendations Contained in Previous Auditor General's Reports**

As part of this review we considered the recommendations contained in two previous reports issued by this office. These reports go back as far as 2003 and 2005. The 2003 report for the most part relates to controls over the use of fuel at this City. The 2005 report however, is more comprehensive and addresses many of the issues identified in this current report.

As a normal part of the audit process the Auditor General reviews the implementation status of recommendations contained in audit reports issued. Our final follow up review on the 2005 report on June 7, 2012 indicated that all the recommendations had been implemented.

Based on the findings in this report, it is apparent that issues previously addressed are now problematic.

It is important that senior staff monitor the ongoing status of audit recommendations in order to ensure that problems previously identified and addressed do not recur.

From a City-wide perspective, this was an issue we identified in our report dated May 1, 2013 entitled "Follow Up of Previously Implemented Audit Recommendations."

**Recommendation:**

- 9. City Council request the Chief Corporate Officer to review all fleet related reports issued by the Auditor General's Office in order to ensure that recommendations continue to be effectively implemented.**

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## CONCLUSION

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Generally, issues identified and addressed through the Fraud and Waste Hotline are included in the Auditor General's Annual Report on the activities of the Fraud and Waste Hotline. For the most part, these issues are not reported separately to the Audit Committee. In this case however, as we progressed through our review it became evident that a more detailed reporting out would be required due to the number of concerns identified.

This report contains nine recommendations. The implementation of the recommendations will lead to improvements in the Fleet Services Division. These improvements may result in cost savings.

**Management's Response to the Auditor General's Hotline Investigation Report:  
Fleet Services Division – Review of Various Equipment Maintenance Practices**

Rec No.	Recommendations	Agree (X)	Disagree (X)	Management Comments: <i>(Comments are required only for recommendations where there is disagreement.)</i>	Action Plan/Time Frame
1.	<p><b>City Council request the Chief Corporate Officer, in consultation with the General Manager, Transportation Services Division, to review the City's street sweeping performance measurement processes and where applicable develop appropriate measures. Such a process be developed in order to measure the ongoing effectiveness of the City's street sweeping services, as well as identify areas which require attention. Areas which should be addressed would include, but not limited to, air quality, tonnage of debris collected and equipment downtime. Such an evaluation be reported to City Council as required in 2006.</b></p>	X			<p>Transportation Services in consultation with Fleet Services will review street sweeping performance measurement and develop a process to measure effectiveness by April 2014.</p> <p>In 2003 and 2004, baseline data on roadway and roadside air quality was collected in each of the four operating districts of the City that used mechanical street sweepers at the prevailing time. It was to have been used to compare against air quality after acquisition and implementation of new regenerative air sweepers. These studies were scheduled to be conducted over 2006 and 2007; however, due to resource constraints the work was postponed.</p> <p>It is now incumbent on Transportation Services in partnership with Fleet Services and the Environment &amp; Energy Office to proceed with this comparative testing and evaluation so that it is initiated in 2014. Other performance measures to be evaluated are: tonnage of sweepings collected, level of service achievement and equipment reliability.</p>

Rec No.	Recommendations	Agree (X)	Disagree (X)	Management Comments: (Comments are required only for recommendations where there is disagreement.)	Action Plan/Time Frame
2.	<b>City Council request the Chief Corporate Officer to review and evaluate the current management information system to ensure it is meeting the needs of all staff but in particular senior management.</b>	X		FleetFocus (M5) is one of the most robust fleet management software applications on the market and it is utilized by number of large Government fleets across North America.	<p>The Fleet Services Division is in the process of engaging an external consultant to evaluate selected facets of the Division. This will include the evaluation of Fleet Services management information system.</p> <p>In the short term (by the end of Q2 2014), Fleet Services will conduct an evaluation of the current system and, if required, develop a high level action plan for improvement.</p>
3.	<b>City Council request the Chief Corporate Officer to review the use of aftermarket parts in the maintenance and repair of all equipment, particularly street sweepers. Such a review include an analysis of original savings, frequency of parts replacement, quality, comparisons of maintenance costs, and warranty considerations.</b>	X			<p>The Fleet Services Division is in the process of engaging an external consultant to evaluate selected facets of the Division. This will include the evaluation of Fleet Services Maintenance operations, including the use of aftermarket parts.</p> <p>Consultant's final report is expected to be completed by the end of Q4 2014. An interim report has been requested by the end of Q2 to identify any areas of immediate concern and/or for inclusion as part of the 2015 budget process.</p> <p>On an interim basis Fleet is working with the outsourced parts provider to develop and obtain reports for efficient and effective parts management.</p>



Rec No.	Recommendations	Agree (X)	Disagree (X)	Management Comments: <i>(Comments are required only for recommendations where there is disagreement.)</i>	Action Plan/Time Frame
4.	<p><b>City Council request the Chief Corporate Officer to review the current scheduling process for the preventative maintenance of all equipment particularly the street sweepers. Wherever possible all maintenance be conducted in accordance with the manufacturer's specifications.</b></p>	X		<p>City of Toronto Fleet Services has been recognized as the leader among Canadian municipal fleets in the area of preventive maintenance, according to a Canada-wide benchmarking analysis, completed by Utilimarc.</p> <p>As part of any continuous improvement process, pockets for improvement will continue to exist. The street sweepers represent approximately 1% of the fleet and at a 48% PM rate, compared to the industry ideal 60% PM rate. The Street sweepers and all corresponding processes are one of these pockets for improvement.</p>	<p>The Fleet Services Division is in the process of engaging an external consultant to evaluate selected facets of the Division. This will include the evaluation of Fleet Services Maintenance operations, including a review of the maintenance scheduling process.</p> <p>Consultant's final report is expected to be completed by the end of Q4 2014.</p>

Rec No.	Recommendations	Agree (X)	Disagree (X)	Management Comments: <i>(Comments are required only for recommendations where there is disagreement.)</i>	Action Plan/Time Frame
5.	<p><b>City Council request the General Manager, Transportation Services Division, to ensure that all daily maintenance required to be completed by each operator is completed. Evidence of such maintenance be required. If necessary an appropriate level of training be provided.</b></p>	X			<p>Transportation Services operators have been conducting daily maintenance of the Tymco street sweepers, however, records are not routinely completed. Documentation of daily maintenance will now be recorded by a supervisor to ensure that it is performed properly and tracked.</p> <p>Training for operators was provided in 2007 by the distributor of the Tymco sweepers (The Equipment Specialist) using "Tymco DST-6 Dustless Sweeping Technology Operator's Manual 2006; updated March 7, 2007". Refresher training was provided periodically by supervisors in subsequent years when needed.</p> <p>Intact refresher training for operators and supervisors is being arranged through the distributor (The Equipment Specialist) to again ensure that the sweepers are being optimally operated and maintained.</p>

Rec No.	Recommendations	Agree (X)	Disagree (X)	Management Comments: <i>(Comments are required only for recommendations where there is disagreement.)</i>	Action Plan/Time Frame
6.	<b>City Council request the Chief Corporate Officer to review the process and criteria for selection of vendors contracted to ensure repairs are completed by vendors with the necessary expertise.</b>	X			<p>The vendor selection and subsequent contract management processes are currently being reviewed and addressed as part of the Fleet Services response to the Internal Audit of Contracted Services recommendations. Target for implementation is the end of Q2 2014.</p> <p>Sustainment of the implemented contract management processes will be contingent on Fleet Services resource availability, including any additional approval and funding required.</p>
7.	<b>City Council request the Chief Corporate Officer, in consultation with the General Manager, Transportation Services Division, to review the current processes for the redeployment of underutilized vehicles. Such a process ensure the allocation of underutilized equipment to higher volume locations throughout the City.</b>	X			<p>Transportation Services in consultation with Fleet Services will review the utilization and present condition assessment of the Tymco sweepers by the end of April 2014. Such assessment would determine a strategy for enhancing the lifespan of the sweepers through agreement on any necessary major repairs and/or replacement when necessary to promote reliability and long life. Emphasis will be placed on ensuring that high volume locations are provided with reliable equipment.</p>

Rec No.	Recommendations	Agree (X)	Disagree (X)	Management Comments: <i>(Comments are required only for recommendations where there is disagreement.)</i>	Action Plan/Time Frame
8.	<b>City Council request the Chief Corporate Officer to review the training program at Fleet Services Division to ensure adequate training is provided to mechanics.</b>	X			<p>By Q2, 2013, Fleet Services recognized the need for additional staff training and subsequently allocated additional funds for training in its 2014 budget proposal.</p> <p>Additional training was completed in Q3 2013 and pending availability more training is scheduled for Q4 of 2013.</p> <p>Long term and on-going training requirements will be identified through the maintenance review processes.</p>
9.	<b>City Council request the Chief Corporate Officer to review all fleet related reports issued by the Auditor General's Office in order to ensure that recommendations continue to be effectively implemented.</b>	X			<p>The Fleet Services Division is in the process of conducting a review of all prior recommendations and developing an appropriate action plan to address any issues. The review is expected to be complete by the end of Q1 2014.</p>