OFFICE OF THE
City Auditor

Fleet Services Tools Audit

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THE CITY OF
Edmonton

The Office of the City Auditor conducted
this project in accordance with the
*International Standards for the
Professional Practice of Internal Auditing*

Fleet Services Tools Audit
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Executive Summary

Between 2006 and 2010, Fleet Services spent an average of $445,000 on small shop tools and equipment annually. Small shop tools and equipment are purchased centrally by the Buildings and Shop Equipment area of the Fleet and Facilities Planning Section within Fleet Services and delivered to one of 13 Fleet Services facilities (i.e. shops) located throughout the City.

The overall objective of this review was to assess the efficiency, effectiveness and controls over the purchasing, inventory management and disposal processes of small shop tools and equipment used by Fleet Services.

Effectiveness and Efficiency of the Purchasing Process
Four of seven shops we visited assessed the overall services related to the purchasing and delivery of shop tools and equipment received from Buildings and Shop Equipment as unsatisfactory in relation to the expected tool and equipment delivery timelines. However, without defined expectations and service levels, assessments by shop representatives are subjective. Therefore, we recommended Buildings and Shop Equipment define service levels and periodically assess the effectiveness of their service delivery. **(Recommendation 1)**

Almost all small tools and equipment purchases by Buildings and Shop Equipment are facilitated through Corporate Procurement Card (CPC) transactions (82% for 2009 and 90% for 2010). In order to be in compliance with the City's CPC procedures, Buildings and Shop Equipment should also be purchasing goods using existing outline agreements. **(Recommendation 2)** In addition, Buildings and Shop Equipment should explore the opportunity for setting up new outline agreements or adding line-items to existing outline agreements for top vendors and frequently purchased tools and equipment, identified through data analysis. **(Recommendation 3)**

We observed that the staff in the seven shops we visited have a good understanding of the current purchasing process for small shop tools and equipment. However, we observed several areas where Fleet Services could enhance the efficiency of the purchasing process. **(Recommendation 4)**

Controls over the Purchasing Process
We identified a number of areas, such as proper purchase approvals on Tool Request Forms and proper review and approval of CPC transactions, where improvements could be made concerning the controls over the purchasing process. After the Office of the City Auditor (OCA) pointed out these issues to Buildings and Shop Equipment, they addressed them by adding the tool number to all documents relating to a particular tool. As well, the Supervisor of Buildings and Shop Equipment now conducts spot checks tracing the CPC transactions to the appropriate Tool Request Form.

During our audit we also identified a number of irregularities in the recording of tool purchases, missing lists detailing the contents of toolboxes, and instances where shop tools were acquired without the assistance of Buildings and Shop Equipment. We recommended that adequate control processes over tool purchases be implemented. **(Recommendation 5)**

Inventory Management
Even though the shops are accountable for the tools and equipment at their location, we observed that none of the shops we visited had inventory lists on hand. We learned that Buildings and Shop Equipment does not regularly provide each facility with a current list of tools that are assigned to their shop. In addition, all seven shops we visited did not perform regularly scheduled physical inventory counts to account for all tools assigned to their locations. In order to manage a shop's assigned tool inventory effectively, physical counts should be performed on a regular basis (e.g., once a year) and compared to the actual perpetual inventory records for accountability and internal control purposes. **(Recommendation 6)**

Furthermore, a formalized system of documentation and recordkeeping should exist for the complete accountability and tracking of the physical existence and location of small tools and equipment. Buildings and Shop Equipment and shop supervisors should know at all times where a tool or piece of equipment is physically located, that it is adequately secured, and what its operational condition is. **(Recommendation 7)**

Disposal Process
Materials Management Procedure 34, *Surplus/Salvage Disposal* guides City departments regarding the disposal of surplus equipment and salvage materials. Even though all seven shops we visited have a good understanding of the current disposal process, we observed that Fleet Services' process documentation is not in complete compliance with Procedure 34. **(Recommendation 8)**

Conclusion
We found that Buildings and Shop Equipment is generally meeting Fleet Services' needs in relation to the purchasing of shop tools and equipment. We also found that shops are familiar with the proper procedures to make new tool and equipment requests, to initiate repairs on them, as well as dispose of them when they become damaged or obsolete.

However, we have made eight recommendations to help enhance the effectiveness and efficiency of the processes, strengthen controls, and improve accountability. Other potential benefits include cost savings, and more accurate and reliable tool inventory information for Fleet Services and the City as a whole.

Management has already launched some initiatives to address the issues identified in this review. Management has accepted the eight recommendations and developed action plans to address them.

Fleet Services Tools Audit

1.   Introduction

In an effort to lower operating costs and improve process effectiveness and efficiency, Management of the Fleet Services Branch (Fleet Services) requested that the Office of the City Auditor (OCA) conduct a review of the purchasing, inventory management and disposal processes relating to small shop tools and equipment. In response, the OCA included a review of Fleet Services' small tools and equipment purchases in its approved *2011 Annual Work Plan*.

The overall objective of this review was to assess the efficiency, effectiveness and controls over the purchasing, inventory management and disposal processes of small shop tools and equipment used by Fleet Services.

2.   Background

Fleet Services provides comprehensive fleet management services to City of Edmonton (the City) departments and other organizations including the Edmonton Police Service, the Edmonton Public Library, Alberta Health Services, and EPCOR. These services include acquisition and disposal of City-owned vehicles and equipment, preventative and repair services, operator training, and fuelling. Fleet Services manages a wide variety of vehicles, equipment, and infrastructure assets including ice shavers, sanders, backhoes, buses, vans, and fire trucks. The 2011 estimated value of these assets is $560 million.

The preventative and repair services on the City's fleet are a daily task performed by many highly skilled employees. The services require various types of tools and equipment. Fleet Services spends hundreds of thousands of dollars annually on small shop tools and equipment purchases (See Figure 1, next page). The annual cost is significant and thus, the accountability, recordkeeping and internal controls over such assets, as well as the efficiency and effectiveness of the purchasing, inventory management, and disposal processes are important to Fleet Services and City Management.

Small shop tools and equipment are purchased centrally by the Buildings and Shop Equipment area of the Fleet and Facilities Planning Section within Fleet Services and delivered to one of 13 Fleet Services facilities (i.e., shops) located throughout the City (see Appendix A). Buildings and Shop Equipment's other services include but are not limited to: preventative maintenance operations of Fleet Services facilities and fuel sites, snow removal and street sweeping around facilities and maintenance and data collection of hoist tank fluids. Buildings and Shop Equipment consists of a team of six maintenance repairman, a maintenance foreman and an administrative assistant managed by a supervisor.

Figure 1:
Five Year Small Shop Tools and Equipment Expenditures (in $000s)
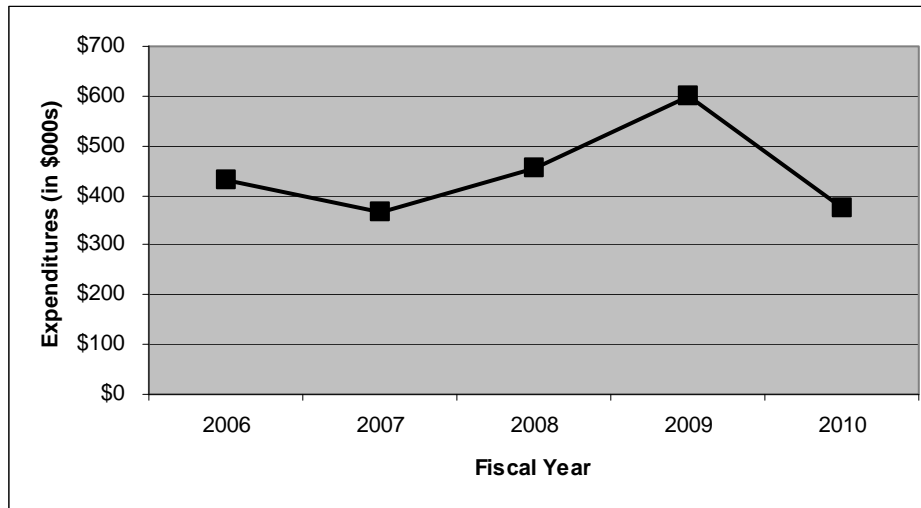
3.   Audit Objectives, Scope, & Methodology

Objectives
Audit objectives represent the goals of the overall audit. For this audit we defined the following four audit objectives:
1. To assess if shop tools are purchased in an efficient and economical manner.
2. To assess the effectiveness of Fleet Services' control practices concerning shop tool purchases.
3. To assess the effectiveness of the Fleet Services' control practices concerning the inventory management of shop tools.
4. To assess the effectiveness and efficiency of Fleet Services' disposal process concerning shop tools.

Scope
The project's scope included small shop tools and equipment purchased by Buildings and Shop Equipment on behalf of the 13 Fleet Services facilities. For the purpose of this review, small shop tools and equipment are defined as items costing between $75 and $5,000[1]. Our audit focused on purchases made in 2009 and 2010.

Methodology
To gain an understanding of the purchasing, inventory management and disposal processes relating to small shop tools and equipment, we conducted interviews with appropriate personnel, toured a sample of seven Fleet Services facilities, reviewed existing policies and procedures, and tested the accuracy and completeness of applicable records and financial reports.

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[1] Buildings and Shop Equipment informed us that they categorize tools and equipment valued under $75 as consumables (i.e. shop supplies). Tools and equipment valued over $5,000 are capitalized.

We utilized specialized auditing software to extract 2009 and 2010 inventory and financial data from the City's operational and financial system (SAP) for analyses. We also visited two external organizations to obtain information on the inventory management practices they employ.

4.   Observations and Analysis

4.1.   Effectiveness of the Purchasing Process

The purchasing and delivery of small shop tools and equipment is one of Buildings and Shop Equipment's main services to Fleet Services facilities. To determine the overall effectiveness of the purchasing process, we assessed the satisfaction of a sample of shop staff with Buildings and Shop Equipment's services for the purchase and delivery of shop tools and equipment. We also assessed Buildings and Shop Equipment use of purchasing strategies. Effective service delivery is aimed at ensuring that resources achieve intended goals.

4.1.1.   Service Delivery

Four of seven shops we visited assessed the overall services relating to the purchasing and delivery of shop tools and equipment received from Buildings and Shop Equipment as unsatisfactory. The main reason for the negative responses related to delivery time. Staff of the sampled shops indicated that new tools are being delivered in one to two weeks on average. While three shops felt this amount of time was satisfactory, the other four did not. The need for shops having to follow-up on the status of a particular tool request or when a tool under repair would be returned also affected the assessment of service negatively.

In addition, we found that Buildings and Shop Equipment does not have defined expectations for service levels. Without defined expectations, assessments by shop representatives will be based on their beliefs of what constitutes satisfactory service, and is to a great deal subjective. Therefore, we believe Buildings and Shop Equipment should consider defining service levels and periodically assessing the effectiveness of their service delivery (e.g., through shop surveys).

Recommendation 1
The OCA recommends that the Fleet Services Branch Manager define service levels and periodically conduct an assessment (i.e. customer surveys) to evaluate the effectiveness of the purchasing function in relation to service levels.
Management Response
Accepted: Yes

Responsible Party: Director Fleet & Facility Planning

Planned Implementation: |

Buildings and Shop Equipment will define service levels (e.g., response time) and communicate these service levels to Fleet Services facilities.

Buildings and Shop Equipment will conduct yearly internal customer focus groups with all Fleet Service's Transit and Municipal maintenance facilities by the end of Q4 2011 to assess its service levels and make adjustments to meet customer's needs.

The group will focus on the areas of tool procurement effectiveness and response time and maintenance repairmen professionalism.

4.1.2. Purchasing Strategies

Organizations implement purchasing strategies in order to make cost effective purchasing decisions. Within the City, there are seven purchasing strategies available for use. These include SAP reservations for items available at the City's Central Stores, Corporate Procurement Cards (CPC) purchases, Low Value Purchasing Orders for purchases <$10,000, Cheque Requisitions or Sign-Offs, standard Purchasing Orders, releases against existing outline agreements[2], and creating new outline agreements.

The purchasing strategy that should be used depends on the type of purchase being made as there are restrictions placed on certain types of purchases. Materials Management's buying guide on eCity provides a clear overview of goods and services that cannot freely be purchased such as restricted items, items readily available at the City's Central Stores, or items available through outline agreements. Similarly, according to the City's *Corporate Procurement Card – Process Description*, CPC's cannot be used for goods in stock at the City's Central Stores or available using existing outline agreements.

Almost all small tool and equipment purchases made by Buildings and Shop Equipment are facilitated through CPC transactions (82% for 2009 and 90% for 2010). Each Buildings and Shop Equipment repairman has his own CPC for this purpose. In practice, Buildings and Shop Equipment informed us that CPC's are not used for single tool purchases over $5,000 as these tools must be capitalized. We observed that Buildings and Shop Equipment should also be purchasing goods using existing outline agreements instead of CPC's in order to be compliant with the City's CPC procedures.

a) Use of Outline Agreements
Buildings and Shop Equipment was not aware of the contents of existing outline agreements or the possibility of adding line items to existing outline agreements. Consequently, they have not utilized either option. Our review of Buildings and Shop Equipment's 2009 and 2010 CPC transactions found that they could have reduced the costs to purchase some equipment if they had used the outline agreement instead of a CPC to purchase them.

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[2] An outline agreement is a long-term arrangement with a vendor for the supply of materials or provision of services over a certain period based on pre-defined terms and conditions (e.g. a pre-determined price of goods based on anticipated volumes).

There are currently over 1,500 outline agreements in effect. However, only a few outline agreements would potentially be applicable to Buildings and Shop Equipment. There is a listing of outline agreements available on eCity. This listing was last updated on October 21, 2009 and is therefore outdated. All outline agreements can be viewed on SAP. While it is the business areas' responsibility to determine whether a requested item falls under an existing outline agreement, Materials Management confirmed that there is not an easy search engine to search the SAP agreement listing and the contents of outline agreements.

As CPCs cannot be used to purchase items already included on an outline agreement, Buildings and Shop Equipment is not in compliance with CPC Procedures. Outline agreements provide the City with significant financial benefits. They provide the City with the bargaining power to negotiate favourable purchasing terms and prices. They also benefit the entire corporation and not just one business area. It is therefore in the best interest of the City to utilize outline agreements as much as possible.

Recommendation 2
The OCA recommends that the Fleet Services Branch Manager ensures compliance with City procedures by utilizing existing outline agreements for tool and equipment purchases.
Management Response
Accepted: Yes **Responsible Party:** Director Fleet & Facility Planning **Planned Implementation:** Buildings and Shop Equipment will assemble a master list of existing outline agreements and their agreement contents that the area will utilize to procure tools for completion by the end of Q3 2011. Buildings and Shop Equipment will update the master list on a quarterly basis to ensure it remains current.

b) Setting up Outline Agreements

Outline agreements are generally set up for items purchased by the City in high volumes and/or with high dollar/high volume vendors. Our analysis of CPC transactions showed that Buildings and Shop Equipment frequently purchases the same items for different shops and has a number of high dollar/high volume vendors. However, Buildings and Shop Equipment currently does not utilize the option of setting up outline agreements as they feel it takes too long and too much effort on their part. According to Buildings and Shop Equipment, this would wipe-out any cost-efficiencies generated by the agreements. Buildings and Shop Equipment also indicated that they do not have full knowledge of the roles and responsibilities regarding outline agreements. There are currently no manuals, process descriptions, guidelines, instructions, etc., regarding outline agreements.

We do acknowledge that setting up outline agreements requires an investment in time and effort up front. However, we do believe that in the long run the savings (i.e.,

possible discounts, favourable terms, additional controls) outweigh the time and effort required in setting up an outline agreement.

Recommendation 3
The OCA recommends that the Fleet Services Branch Manager, in cooperation with Materials Management Branch, explore the opportunity for setting up new outline agreements or adding line-items to existing outline agreements for: ■ High dollar/high volume vendors identified through data analysis. ■ Frequently purchased tools and equipment.

Management Response
Accepted: Yes **Responsible Party:** Director Fleet & Facility Planning **Planned Implementation:** Buildings and Shop Equipment will compile a summary list of top vendors and frequently purchased tools for the purpose of tendering and creating additional purchasing outline agreements through the Materials Management Branch to be completed by the end of Q4 2011.

4.2.   Efficiency of the Purchasing Process

Efficient service delivery is aimed at ensuring that resources are used in a productive manner with minimal waste. This includes:
■ Accountabilities, roles and responsibilities that are adequately defined and well communicated.
■ Appropriate methods to purchase, record and track shop tools.
■ Data analysis to measure efficiency (i.e., costs meet predefined targets).

We observed that the staff in the seven shops we visited have a good understanding of the current purchasing process for small shop tools and equipment. However our visits, documentation review, and data analysis revealed several areas where Fleet Services could enhance the efficiency of the purchasing process. These include:

Formalizing policies and procedures
Formal policies and procedures communicate management's intentions and expectations. Buildings and Shop Equipment does not have formalized procedures specific to the purchase of small shop tools and equipment. In addition, the process has not been formally communicated to shops. Lack of formalized policies and procedures may prevent employees from carrying out activities consistently and in an effective and efficient manner.

Manual and paper-based
The current purchasing process followed by Buildings and Shop Equipment is manual and paper-based. Manual and paper-based processes are inefficient compared to more computerized processes as they tend to be time and resource intensive. For example,

authorization for a tool purchase is provided by the shop foreman and supervisor though a Tool Request Form. Tool Request Forms are currently completed on paper and faxed or e-mailed to Buildings and Shop Equipment. Buildings and Shop Equipment staff informed us that faxes occasionally get misplaced and are not received by the appropriate repairman. Furthermore, the repairmen spend a substantial amount of their day out of the office attending to a variety of Fleet Services' needs. They return to the office to complete certain tasks including filling out a paper Equipment Record and retrieving new Tool Request Forms. Both the Tool Request Form and the Equipment Records are filed in binders for retention purposes. A more computerized process would expedite Buildings and Shop Equipment's ability to deal with increasing service volumes.

Increasing the use of mobile electronic equipment capabilities
One option to computerize the purchasing process is to utilize mobile electronic equipment capabilities, such as smartphones and laptops. Buildings and Shop Equipment currently does not utilize laptops and are not using the capabilities of smartphone technology effectively and efficiently to address their work tasks. For example, while repairmen are equipped with smartphones, they are currently not able to receive electronic faxes or open e-mail attachments. This means that repairman have to return to the office to pick up new Tool Request Forms before they can act on a request. Utilizing mobile electronic equipment capabilities would likely increase Buildings and Shop Equipment efficiency.

Implementing specific work order initiation processes
Besides purchasing new tools, Buildings and Shop Equipment also provides a variety of other services to Fleet Services facilities including small building repairs, small office moves, and tool repairs. Each type of service has a different process for authorization, recording, executing and monitoring. However, shops are using the form designed to request a new tool purchase to initiate all services. This form is not designed to initiate all of these services and is not serving the specific needs of each service request. Furthermore, Fleet Services is in the process of implementing a new system called *Asset Works Fleet Focus M5* (M5). This new system will require different recording processes for the different types of services. To proactively prepare for the new system and to ensure efficient service delivery, Buildings and Shop Equipment should define and implement different initiation processes for the different types of services it provides.

Maintaining accurate and up-to-date inventory information
Maintaining accurate, reliable and up-to-date records is vital to the success of any business. They form the foundation of important information for management. At the start of our audit, we observed that there was a backlog of about one year in data entry of tool inventory information into SAP. We also observed during sample testing of SAP data that entries are inconsistent and incomplete. For example, in a sample of 25 entries, we observed 13 cases with an inaccurate acquisition value recorded. This limited Buildings and Shop Equipment's ability to provide valuable management information regarding tool purchases and inventory management. Since the audit,

Buildings and Shop Equipment has eliminated the backlog by hiring temporary staff and is making changes to prevent a backlog from recurring in the future.

Ensuring unique tool numbers
Each tool that is purchased should receive a unique tool number according to the purchasing process. This tool number should be engraved on the tool and recorded in SAP. The tool number allows for tracking of tool information and serves as a control to identify the tool as a City asset. We observed 28 cases of duplicate tool numbers in the Tool Inventory List. By not ensuring each tool has a unique tool number it makes it difficult to track tools and tool information.

Tracking of repair costs
Repairs to a damaged tool generally cost less than purchasing a replacement. Tools in need of repair are brought to the attention of Buildings and Shop Equipment by the shops. An assessment is made by the Buildings and Shop Equipment repairman or a contracted service repair shop to determine the work required and the cost for repairing a tool. Buildings and Shop Equipment informed us that the rule of thumb is if the cost of the repair is greater than 50% of the replacement value of the tool, it is replaced with a new tool. We observed that the repair costs were not formally tracked in SAP. As a result, there is a risk that a tool repair would be approved based on a single repair estimate rather than considering the accumulated repairs that may well be in excess of 50% of the current value of the tool. In these cases, over the tool's life cycle, repairs may cost more than a new tool purchase. In response to this audit finding, Buildings and Shop Equipment now tracks repair information in SAP.

Analysing data
Data analysis provides management with important information to support business decisions. Buildings and Shop Equipment informed us that they currently do not conduct any data analysis on small tools and equipment purchases. In addition, we learned that setting budgets or targets per shop for tool expenditures is currently not expected within Fleet Services. The only budgeting that is taking place is at a Branch level. In order to manage small tools and equipment purchases in an effective, efficient and economical manner, data analysis should be performed on a regular basis. The following are examples that may be helpful in managing tool purchases:
- Trend analysis of tool purchases per shop. Purchasing trends can provide management with information on issues such as high loss of tools (e.g., due to theft) or information to assist with resource planning and budgeting.
- Workload of repairman (e.g., how many Tool Request Forms are in process and in what stages of the process). This information can assist management with resource planning, meeting service delivery levels and budgeting.
- Purchasing analysis (e.g., how many torque wrenches were bought) and vendor analysis (e.g., value of purchases per vendor). This information can assist management in negotiating discounts or favourable terms with vendors.

We also conducted two tests to determine if the current purchasing process is followed consistently. First, we selected 45 Tool Request Forms and traced them through the

purchasing process, and if applicable, to tool in the shop tool crib. In addition, we selected 25 tools from the inventory list and traced them to the original Tool Request Forms and to the shop tool crib. Based on the results of the two tests, we observed that the current purchasing process is not consistently and adequately followed by Buildings and Shop Equipment staff, e.g., Tool Request Forms could not be located and purchases were not entered (correctly) in SAP.

Improving the purchasing process, addressing the identified inefficiencies, as well as implementing data analysis, would enhance the overall management of the purchasing process and ensure effective and efficient service delivery.

Recommendation 4
The OCA recommends that the Fleet Services Branch Manager review the current purchasing process, make necessary revisions, and communicate the revised purchasing process to all Fleet Services facilities it services. This review should include but not be limited to: - Creating formalized policies and procedures.   - Making use of technology to increase efficiency.   - Ensuring accurate and complete recording in inventory system.   - Ensuring unique tool numbers are assigned.   - Tracking of repair costs in inventory system.   - Performing data analysis to measure effectiveness and efficiency.

Management Response
Accepted: Yes
Responsible Party: Director Fleet & Facility Planning
Planned Implementation:
Completed Implementation:
Policies and procedure improvements have been formalized, implemented and communicated to Fleet Service facilities.
Outstanding Implementation:
Upon implementation of revision 2.8 of the Fleet Service's new software system in the Spring 2012, effective tracking of tools and their related maintenance cost will be available.
Continual purchasing processes improvements will be implemented and updated based on the annual focus group feedback.
The tool numbering process will be revised to ensure tool numbers will be assigned per tool not collectively as in the past by the end of Q3 2011.

4.3.   Controls over the Purchasing Process

Internal controls should be proactive, value-added, cost-effective and address exposure to risk. Effective controls overseeing the purchasing process would ensure that:
- Accountabilities and roles and responsibilities are adequately defined and well communicated.
- Processes and controls are formal, comprehensive and consistently applied.
- Shop tools are properly requested, authorized and supported with documentation.
- The process enables adequate monitoring.

The following sections summarize the areas where improvements could be made concerning the controls over the purchasing process:

4.3.1.   Purchase Approvals

According to Buildings and Shop Equipment's purchasing process, Tool Request Forms are to be signed by a foreman and a supervisor for approval of the purchase request. For purchases over $2,000, Tool Request Forms are also to be approved by the applicable director for either Transit or Municipal Fleet Maintenance.

We conducted a test to determine if tool purchases are properly authorized and approved. In 11 of 45 cases sampled, proper approvals were not obtained as the supervisor's signature was missing or the requestor of the tool signed as both the foreman and supervisor. Buildings and Shop Equipment staff indicated that these circumstances may happen whenever a foreman is temporarily acting in a supervisory role. In addition, only one signature may be obtained whenever the supervisor is initiating the Tool Request Form.

In order to have proper segregation of duties, each Tool Request Form should have signatures from at least two different people. For example, the requestor, foreman and supervisor should not be the same person. The requestor and foreman may be the same person as long as the supervisor is different. In case of a foreman acting as supervisor; another foreman should sign. The signature from the director would always qualify as one of the two required authorizations.

4.3.2.   Corporate Procurement Card

Almost all small tools and equipment are purchased through CPC transactions (82% for 2009 and 90% for 2010). CPCs are convenient to use as they facilitate purchases anytime and anywhere. CPCs are also the preferred purchasing method for the City for low value purchases because of low processing costs and rebate benefits.

However CPCs carry an additional risk compared to other purchasing methods as payment approval occurs *after* the purchase has been made, rather than before. The Supervisor of Buildings and Shop Equipment reviews the CPC statements of repairmen on a monthly basis to monitor CPC purchases in accordance with the City's CPC Process. However, in the case of tool purchases, this person who *approves* the CPC purchase is not the same as the person who *authorized* it. Authorization for a purchase is given by the shop foreman and supervisor by means of the Tool Request

Form. As a copy of the Tool Request Form is not attached to the CPC statement or available in SAP, the Supervisor of Buildings and Shop Equipment does not have an efficient and effective way of linking the CPC purchase to the Tool Request Form to determine whether it was properly authorized and based on a bona fide request from a shop. Up until recently, the Supervisor of Buildings and Shop Equipment also had no way of reconciling the tool purchase to the inventory listing in SAP due to the backlog of data entry into SAP. During our audit, we also found a number of irregularities in the recording of tool purchases such as; incorrect tool number recorded and tool information not entered in SAP.

These control deficiencies create risks of improperly authorizing and approving tool purchases. Risks can be minimized with enhanced review oversight. Since the OCA has pointed out these risks to Buildings and Shop Equipment during the audit, they have addressed this issue by adding the tool number to all documents relating to a particular tool. As well, the Supervisor of Buildings and Shop Equipment now conducts spot checks tracing the CPC transactions to the appropriate Tool Request Form.

4.3.3.   Other Control Observations

We also noted the following control observations concerning small tools and equipment during the course of our audit:

- **Lists for toolboxes.** Each shop possesses a number of toolboxes that are comprised of various tools (e.g., toolboxes assigned to service trucks). Each tool included in the toolbox is inscribed with the same tool number to indicate that it belongs to the set. However, neither Buildings and Shop Equipment nor the shops could provide us with any lists detailing the contents for any of these toolboxes. The lack of maintaining lists for each toolbox limits the shop's ability to control and account for its contents.

- **Tool receipt acknowledgment.** Since November 2010, shops are to sign the Tool Request Form acknowledging the receipt of tools or equipment after delivery. We observed that many Forms since that date did not have a signature acknowledging the delivery of the tool. Since our audit, Buildings and Shop Equipment has informed us that they are consistently enforcing this step (either having the shop sign the Tool Request Form or retaining an e-mail acknowledging the shop's receipt). This step is important as once a tool is provided to the shop it becomes their complete responsibility and the shop is accountable for its management.

- **Bypassing Buildings and Shop Equipment.** There are instances where acquired shop tools bypassed Buildings and Shop Equipment's purchasing process and did not receive a tool number nor were recorded in SAP, for example:
  - At one facility, the Foreman stated that the shop would occasionally arrange tool purchases or replace tools under warranty with the vendor directly due to the urgent need for a certain tool.
  - Two shops indicated that they occasionally obtained specialized tools from the Fabrication Shop (made in-house) without Buildings and Shop Equipment's

assistance. As the use of internally fabricated tools constructed without proper consultation and approval have since been determined to be a safety risk, we have been told by Buildings and Shop Equipment that they will be removed from the shops.
- There are occasions when a new asset (e.g., a vehicle) is obtained by the City that may be already equipped with various tools that are required for its maintenance needs. These tools and equipment were included as part of the purchase agreement facilitated by Materials Management Branch.

If the shops do not notify Buildings and Shop Equipment of these acquisitions, these tools do not receive a tool number and are not properly recorded in SAP. This limits the ability to adequately monitor these tools.

Recommendation 5
The OCA recommends that the Fleet Services Branch Manager ensure adequate control over tool purchasing are implemented and that these include: ■ Adding copies or scans of Tool Request Forms to CPC statements or SAP records. ■ Proper approval signatures on Tool Request Forms. ■ Proof of receipt of tools by shop on or attached to Tool Request Forms. ■ Ensuring all tools above $75 are supported by a Tool Request Form and are entered into the inventory system in a timely manner (prior to the CPC approval deadline). ■ Maintaining lists for toolbox contents on-site and in SAP.

Management Response
Accepted: Yes **Responsible Party:** Director Fleet & Facility Planning **Planned Implementation:** Completed Implementation: All tool purchases have the invoice and Tool Request Form scanned and entered into SAP and Assetworks M5. Buildings and Shop Equipment have implemented procedures to have appropriate authorizations for purchase and confirmation of tool delivery on all tool forms for all tools purchased over $75.00. Outstanding Implementation: Inventory master lists for all tool boxes will be created and added to the tool box for inventory verification and audit purposes to be completed by end of Q4 2011.

4.4.   Inventory Management

Inventory management is the process of efficiently overseeing the constant flow of units in and out of an existing inventory. Effective controls concerning inventory management of tools would ensure shop tools are:

- Well maintained and secure.
- Managed efficiently with given resources.
- Appropriately inventoried, issued and accounted for.
- Governed by policies and procedures that are formalized and well communicated.

The following summarizes areas for improvements in the inventory management process:

4.4.1.   Accurate Tool Lists

According to Buildings and Shop Equipment's purchasing process, each tool and equipment purchase over $75 should be recorded in SAP. Inventory lists by shop can then be generated to effectively and efficiently account for tools and equipment. Even though the shops are accountable for the tools and equipment at their location, we observed that none of the shops we visited had a list on hand. Buildings and Shop Equipment does not regularly provide each facility with a current list of tools that are assigned to their shop. Instead, the tool list is only provided to a shop if the facility makes a request to Buildings and Shop Equipment.

As part of the purchasing process, we found that there was a backlog in entering new tool purchases into SAP. According to Buildings and Shop Equipment, this backlog stemmed from the area's challenges in managing the increasing amount of requests for services that were being made by the various client departments in the City. Due to the backlog, tool lists for facilities were not current, complete or accurate, as any newly purchased tools would not be reflected on the most recently generated lists.

Without a current tool list on-hand, Fleet Services shops will not be able to effectively and efficiently account for their assigned tool inventories. In addition, without current tool lists it will not be easy to determine which tools are available in other shops. This may unnecessarily increase the need of renting or purchasing tools that are only needed occasionally and are readily available at another Fleet Services facility.

4.4.2.   Periodic Physical Inventory Counts

All seven shops we visited did not perform regularly scheduled physical inventory counts to account for all tools assigned to their locations. This is not currently a procedure expected within Fleet Services. While the shops did not schedule regular periodic counts, they did make efforts to organize their tool cribs when the opportunity arose. E.g., a mechanic or serviceman on light-duty could be assigned the task of organizing the tool crib(s) and checking the inventory. However, we learned that this attempt to account for tools on-hand would usually prove to be ineffective due to the lack of defined processes for conducting proper inventory checks, lack of current and complete inventory lists, and commitment to the task as the worker on light-duty would eventually return to their regular job leaving the inventory task incomplete. Furthermore,

workers on light-duty may not have had sufficient understanding of the tools in order to perform an efficient inventory count.

In order to manage a shop's assigned tool inventory effectively, physical counts should be performed on a regular basis (e.g., once a year) and compared to the actual perpetual inventory records for accountability and internal control purposes. This check should be undertaken in conjunction with an area that is independent from the owner of the tools. This will allow management to determine whether the tool inventory is being managed effectively and efficiently at the shop-level.

Without conducting periodic physical inventory checks, accountability is diminished and there is an increased potential for loss or misappropriation of shop tools, thus increasing the costs to replace them. Results from these periodic inventories can be the impetus for changing the way tools are managed within shops and the related costs to be invested in securing the tools.

Recommendation 6
The OCA recommends that the Fleet Services Branch Manager implement a formalized process to conduct periodic physical counts of tool and equipment inventories and compare the results to current perpetual records to enhance accountability and internal control over small tools and equipment assigned to each facility.

Management Response
Accepted: Yes **Responsible Party:** Director Fleet & Facility Planning **Planned Implementation:** In complement to this audit, Fleet Services will immediately begin an annual physical inventory count and corrective tool analysis with the support from the Business Process and Performance Section of the Fleet Services Branch with a completion date of Q4 2011.

4.4.3.   Tracking of Tools

A formalized system of documentation and recordkeeping should exist for the complete accountability and tracking of the physical existence and location of small tools and equipment. Buildings and Shop Equipment and shop supervisors should know at all times where a tool or piece of equipment is physically located, that it is adequately secured, and what its operational condition is.

a) Tracking of Tools Taken Off-Site

Although it is currently not a procedure expected within Fleet Services, four shops we visited incorporated a method to keep track of tools taken off-site. However, the method in which they keep track of this information varied from location-to-location. We also learned that some shops have had to follow-up with Buildings and Shop Equipment to obtain the status of a particular tool that was out on repair for an extended period of

time. To facilitate follow-ups, one shop used a simple method of filing e-mails to keep track of these situations while another incorporated a more formal method of having people check-out the particular tool that was being taken off site on a sign-out sheet. In this latter case, we learned that the shop was having some difficulty having users consistently utilize the form.

A formalized methodology used for tracking tools taken off-site encourages accountability by the party the tool is provided to and facilitates a process to follow-up a concern if necessary.

b) Tracking of Tools Used Within a Shop

Five of the seven shops we visited did not use a formal method of tracking the whereabouts of a tool used at any given time on-site. Two shops indicated that mechanics are losing valuable "wrench-time" chasing down tools that are not in the tool crib. Without employing a system – such as a tool sign-out sheet or "chit" system[3] – tools may be harder to locate and track down when they are required by another worker.

We visited two external organizations in the repair and maintenance industry to determine how they were accounting for their tool inventories. One organization utilizes a chit system along with a dedicated "stores" person to oversee the distribution of tools. Such a system enhances the security and the accountability over its usage, however, it is costly. The second organization has an honour system: tools have to be returned to their designated spot in the tool crib at the end of each shift. To accomplish this staff are provided with the last 15 minutes of their shift to return the tools they had borrowed from the shop's tool cribs.

Some Fleet Services' shops have recognized the need for greater accountability of tool usage by workers. One shop uses sign-out sheets for tool-equipped carts and another uses a white-board for tool sign-out/in. In the latter case, the shop commented that the system is not consistently used by staff.

A formalized system of recordkeeping should exist to improve the accountability and tracking over small tools and equipment within the shops. There are many variations of tracking systems on the market from simple chit systems to sophisticated barcode systems, all with varying implementation and operating costs. In the absence of conducting regular inventory checks to determine what the current risk exposure is to tool losses, it would be premature to conclude that the benefits of any system will outweigh the costs.

4.4.4.   Security Over Shop Tools

Fleet Services owns over 7,500 pieces of small tools and equipment and spends an average of $445,000 annually on new or replacement purchases. Fleet Services

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[3] A tool chit system is a tool control system. Each tool has a designated position in the tool crib. Each employee has identification chits that are placed in the designated spot if a tool is removed.

requires these assets to perform their duties. As the owner, it is Fleet Services' responsibility to have sufficient controls in place to safeguard these assets.

During our shop visits, we observed that all but two of the seven shops incorporated some physical security measure to protect their tool inventories from loss. However, we also found that there is not a consistent manner as to how the tools are secured from shop-to-shop. Of the seven facilities we visited:

- Two facilities use a "punch key" code combination to release the lock on the door to the tool crib. The combinations to these locks are not changed regularly based on any set criteria, thus weakening this control.
- Three facilities use padlocks to lock up the crib after the shop's operating hours. However, this padlock remains open during regular hours when visitors to the shop may be present.
- One facility does not use locks. The foremen indicated that due to the protocols that must be followed within the shop (i.e., no unaccompanied visitors) exposure to loss from any external visitors is believed to be low.
- One facility uses swipe card access to allow entry into their tool crib; it is also equipped with a video camera that is placed outside the tool crib door as another security measure. However, we learned that this particular crib can be accessed by anyone working for Fleet Services in any capacity, rather than just the mechanics and servicemen assigned to the location.

Thus, while the majority of shops keep their tool cribs under lock and key, these assets are not always consistently secure. With the ability for visitors to enter a shop's working floor, there is a heightened risk that tools can be taken from the crib without proper authorization and may never be returned.

Inadequate security of tool cribs increases opportunity and potential for loss or misappropriation of assets thus increasing costs for replacement equipment and inventories. The value of incorporating inventory security measures such as those for tool tracking or access control will vary depending upon the size of the shop, its operations and the risk exposure. At a minimum, shops should emphasize the importance of compliance with applicable tracking systems at periodic staff meetings. In addition, access to the tool crib should be limited to mechanics and code combinations should be changed on a regular basis (e.g., with shift rotation changes).

Recommendation 7
The OCA recommends that the Fleet Services Branch Manager evaluate current inventory management practices and where necessary resolve identified inefficiencies which include: ■ Providing accurate and current inventory lists on a regular basis to shops. ■ Ensuring all tools and equipment are marked with a tool number and entered into the inventory tool system by Buildings and Shop Equipment. ■ Ensuring each shop has a system of tracking tools that are taken off-site (e.g., for repairs) and that are used within the shop. ■ Ensuring that assets are adequately secured and protected from loss (e.g.,

renewing punch key code combinations).

In addition, the OCA recommends that the Fleet Services Branch Manager formally document and standardize inventory management practices as appropriate.

Accepted: Yes

Responsible Party: Director Fleet & Facility Planning

Planned Implementation: Buildings and Shop Equipment clerk will provide shops with an updated tool inventory on a quarterly basis.

The Buildings and Shop Equipment Supervisor will ensure the tools are marked with the appropriate tool number by completing random quality assurance checks on tool purchases, ensuring that tool numbers are displayed on the completed Tool Request Form and the data is entered into the tool inventory system.

Fleet Services Maintenance Facility supervisors and shop foremen will ensure the security of the tool crib inventory is maintained through formalization of policies. Standardized inventory management practices will be updated and adhered to, e.g.,: renewing punch key code combinations on a regular basis, implementing a system of tracking tools that are taken off-site and that are used within the shops.

4.5.   Disposal Process

When shop tools and equipment cannot be repaired or become obsolete, effective controls concerning the disposal process for small tools ensure that:
- Accountabilities and roles and responsibilities are adequately defined and well communicated.
- Processes and controls are formal, comprehensive and consistently applied.
- Tools are disposed of efficiently with given resources.
- Appropriate methods are used to dispose of any tool surplus.

The Materials Management Branch has documented procedures that guide City Departments regarding the disposal of surplus equipment and salvage materials. Procedure 34 of *Surplus/Salvage Disposal* provides a description of each party's responsibilities.

Even though all seven shops we visited have a good understanding of the current disposal process, we observed that Fleet Services is not in complete compliance with Procedure 34 on several points:

- Section 3.01 of Procedure 34 states that "*City Departments shall develop internal programs backed by written policy/procedures…*" Section 3.02 adds *"Copies of Departmental instruction/procedures shall be sent to the Surplus Coordinator for review..."* Buildings and Shop Equipment confirmed they have never provided

internal disposal process documentation to the Surplus Coordinator as it has never been developed. However, Buildings and Shop Equipment stated that knowledge of the disposal procedure is communicated through on the job training.

■ Section 3.01 states that the written policy/procedures will "…*define the delegated authority of personnel authorized to sign Surplus Declaration forms…*" We learned that Buildings and Shop Equipment staff sign Surplus Declaration forms. However, this authority is not documented explicitly, but understood as part of the job responsibilities.

■ Section 3.01 also advises to *"…define responsibilities of line managers and supervisors to make regular surveys of their operations to turn up any dormant surplus/salvage…"* Through the shop visits, we learned that inventory checks and surveys for surplus equipment have not been performed on a regular basis. Surplus equipment and tools are likely on-site but shops have not completed an official survey to identify and dispose of it properly.

We also found that Buildings and Shop Equipment is not always notified as required when tools are discarded by the shops. As a result, there is a risk that the discarded tool remains on the shop's tool inventory list, in addition to its newly acquired replacement (if applicable).

Regular inventory checks will highlight any tools that are on the inventory list but no longer in the shop (e.g., thrown away, misplaced, or stolen). Further, it can also assist in identifying any obsolete tools and equipment.

Recommendation 8
The OCA recommends that the Fleet Services Branch Manager document and communicate the disposal process to all shops serviced by Buildings and Shop Equipment. Such documentation should be sent to the Surplus Coordinator for review (in accordance with Materials Management Procedure, Procedure 34, dated December 1989). The documentation should define: ■ " …*the delegated authority of personnel authorized to sign Surplus Declaration forms…*" ■ " …*responsibilities of line managers and supervisors to make regular surveys of their operations to turn up any dormant surplus/salvage…*"
Management Response
Accepted: Yes **Responsible Party:** Director Fleet & Facility Planning **Planned Implementation:** Buildings and Shop Equipment has formalized a documented process and will communicate a Branch disposal process as required by Materials Management

Procedure 34.

As part of recommendation 6, Fleet Services Maintenance Facilities will identify any dormant surplus/salvage tools as part of the annual inventory.

Any surplus/salvage tools to be removed will be processed according to the procedures through the Buildings and Shop Equipment and Materials Management Branch.

5.   Conclusions

Our objective of this review was to assess the efficiency, effectiveness and controls over the purchasing, inventory management and disposal process of small shop tools and equipment used by the Fleet Services Branch.

Through our site visits, interviews and documentation review, we found that Buildings and Shop Equipment is generally meeting Fleet Services needs relating to the purchasing of shop tools and equipment. We also found that shops are familiar with the proper procedures to make new tool and equipment requests, to initiate repairs on them, as well as dispose of them when they become damaged or obsolete.

However, based on our data analysis, site visits and interviews, we did identify opportunities to improve the purchasing, inventory management and disposal processes relating to small shop tools and equipment. Our recommendations focus on:
- Defining service levels and periodically conducting assessments to evaluate the effectiveness of the purchasing function. (Recommendation 1)
- Ensuring compliance with City procedures. (Recommendations 2 and 8)
- Utilizing existing outline agreements and exploring opportunities for setting up new outline agreements for top vendors and/or high volume purchases. (Recommendation 3)
- Improving the efficiency of the purchasing process. (Recommendation 4)
- Providing formalized procedures to communicate expectations, to standardize practices and to strengthen internal controls. (Recommendations 4, 7 and 8)
- Improving and strengthening controls over the purchasing process and inventory management. (Recommendations 5 and 7)
- Implementing formal periodic physical inventory checks to increase accountability and decrease opportunity and potential for loss or misappropriation of assets. (Recommendation 6)

In our opinion, implementation of our recommendations will result in more effective and efficient processes, strengthened controls, and improved accountability. Other potential benefits include cost savings, and more accurate and reliable tool inventory information for Fleet Services and the City as a whole.

We would like to thank the management and staff of Fleet Services and Materials Management for their cooperation and assistance during this audit.

Appendix A: Fleet Services Sites

Municipal Fleet Maintenance

Davies Facility 8733 - 58 Avenue Edmonton, AB T6E 5W4	EMS Service Centre 10545 - 105 Street Edmonton, AB T5N 2P5
Kennedale Facility 12840 - 58 Street Edmonton, AB T5A 4L3	Westwood Facility 12404 – 107 Street Edmonton, AB T5G 2S7
Police Garage 9620 - 103A Avenue Edmonton, AB T5H 0H7	Fire/Rescue Service Centre 18603 – 106A Avenue Edmonton, AB T5N 2P5
West End Facility 14402 - 114 Avenue Edmonton, AB T5M 2Y9	Ellerslie Facility 2415 – 101 Street SW Edmonton, AB T6X 1A1

Transit Fleet Maintenance

Paterson Facility 5710 – 86 Street Edmonton, AB T6E 2X3	Mitchell Facility 11904 - 154 Street Edmonton, AB T5V 1J2
Ferrier Facility 8620 - 58 Ave Edmonton, AB T6E 5G3	Westwood Facility 11840 - 106A Street Edmonton, AB T5G 2S4
Centennial Garage 15520 Ellerslie Road SW Edmonton, AB T6W 1A4	