

**CITY OF HAMILTON
INTERNAL AUDIT REPORT 2012-06
SNOW CLEARING / SALT & SAND CONTRACTS
FOLLOW UP**

#	OBSERVATIONS OF EXISTING SYSTEM	RECOMMENDATION FOR STRENGTHENING SYSTEM	MANAGEMENT ACTION PLAN	FOLLOW UP (APRIL 2014)
1.	<p><u>Inventory Control – Salt and Salt/Sand Mix</u> The City uses a variety of materials such as salt and a salt/sand mix for winter snow and ice control. During the past winter season, the City purchased more than \$2.6 million in salt and \$270,000 of salt/sand mix.</p> <p>End of the year inventory counts of salt and salt/sand were performed at the 14 yards across the City. At nine of the 14 yards, there were salt variances between the inventory count and the amount reported in the Hansen inventory system greater than 100 tonnes. In four of the eight yards, there were salt/sand mix variances of over 100 tonnes.</p> <p>As a result, salt inventory was understated in Hansen by \$16,510 and the salt/sand mix was understated by approximately \$87,150.</p>	<p>That management improve practices of inventory control. By reconciling inventory in the yards to that recorded in the Hansen system more often throughout the year, overages and shortages may be easier to investigate and thus, take corrective action, if applicable.</p>	<p>Agreed. Loadrite will be installed on all the yard loaders. There will be a complete removal and reload of all stock from storage structures using the Loadrite system before and after the winter season.</p> <p>If a full time Winter Project Manager position is approved, Loadrite tickets will be reconciled each month and compared to the monthly estimates of inventory. This will allow us to address any discrepancies between the inventory and Hansen.</p>	<p>Initiated. The Loadrite system is no longer being considered. Management is investigating the use of laser scanning technology that will permit quick and accurate measurement of salt and salt/sand inventory. This will allow frequent comparison of the physical inventory to Hansen. Management expects an agreement on a pilot project for this technology by May 2014.</p>

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2.	<p><u>Inventory Replenishment</u></p> <p>Salt and salt/sand mix are ordered by the Operations' Supervisors as their inventory is depleted. The contracts specify that the City is to receive the materials ordered the next day, weather permitting. The Supervisors in the East and West District yards do not maintain a log documenting when the order was placed. The lack of documentation makes it difficult for management to evaluate the vendor's performance with respect to deliveries as per the contract.</p> <p>The City does not confirm the inventory delivered from the vendor when it agrees to the quantity listed on the invoices. Inventory is not weighed upon delivery and City management does not visit the vendor periodically to inspect the process.</p> <p>The salt/sand mix contract has a provision that the materials delivered will meet specified quality requirements. The salt/sand mixture is required to be at a ratio of one part salt and three parts sand (1:3 ratio). Management does not confirm that the product received meets this standard. There is a risk that the City could be paying for a more expensive material than actually received. If a sub-standard mixture of salt/sand was applied to the roads, it may affect the safety conditions.</p>	<p>That Supervisors maintain a log with the material ordered and the date of the order. This information should be compared to the actual delivery date in order to evaluate the vendor's performance per the contract terms.</p> <p>That management verify the weight of the inventory delivered on a sample basis throughout the year to determine the reasonableness of the quantities billed.</p> <p>That management confirm the materials purchased meet the quality standard provisions specified in the contract.</p>	<p>Agreed. The East and West Districts will implement a similar recording practice that is currently being used in the North.</p> <p>Agreed. There will be spot checks of inventory being delivered by sending the delivery trucks to local transfer stations for weight verifications.</p> <p>Agreed. Quality control spot checks will be performed by external companies during various times throughout the season.</p>	<p>Completed. The ordering of winter control materials for the different yards has been centralized. A log of the materials ordered is maintained and the information is compared to the delivery date and quantities requested to evaluate the vendor's performance.</p> <p>Not completed. This will be part of the new contract that is expected to be finalized by Q4, 2014.</p> <p>Not completed. This will be part of the new contract that is expected to be finalized by Q4, 2014.</p>

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3.	<p><u>Reconciling IMOS Timesheets</u></p> <p>The City has a contract with Integrated Maintenance & Operations Inc. (IMOS) to provide winter road maintenance on some of the City roads. IMOS is responsible for monitoring and keeping the roads clear of ice and snow. IMOS submits invoices to the City for work performed and City staff verify the accuracy of the invoices by comparing the hours charged to the information provided from the Global Positioning System (GPS) units installed on IMOS vehicles. Discrepancies in time between the Operator timesheets and the output from the GPS units are required per the contract to be returned to IMOS for verification.</p> <p>During audit testing, several instances were noted where time claimed by IMOS exceeded what was recorded in the GPS records. City management attributed the differences to the time taken by IMOS to load trucks at the beginning of the shift and unload them on their return. However, no billing for idle time is to be made as per the term of the contract and as recently clarified under the new contract. The City could be paying more for the services provided by IMOS than provided for in the contract.</p>	<p>That management ensure IMOS is only being paid for "Operational Time" as per the terms of the new contract, which began on October 15, 2012.</p>	<p>Agreed. The recommendation has been corrected through the new contract and the full use of the GPS system.</p>	<p>Not completed. The idle time referred to in the original observation is now considered part of the operational time as per the terms of the current contract. However, Roads management is allowing IMOS a further allowance of 10 minutes for every four operating hours that is not provided for the current contract. Management expects to clarify this cost with IMOS by Q3, 2014.</p>

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4.	<p><u>GPS on City Vehicles</u></p> <p>The City's vehicles used in the clearing of winter snow and ice are equipped with GPS units. GPS data is used to verify that all streets have been cleared and/or salted. The GPS can also be used to verify that the work reported on the Daily Activity Sheets by the Supervisors is accurate.</p> <p>Currently, there is no reconciliation between the information provided by the GPS units and the work reported by the Supervisors in the Daily Activity Sheets which is recorded in the Hansen system.</p> <p>Accurate GPS records reconciled to the Daily Activity Sheets will improve the City's ability to limit its liability for accidents on City roads during winter conditions.</p>	<p>That management and staff compare the ploughing and materials spread information available from GPS reports to the Daily Activity Sheets and Hansen data. Differences should be investigated and documented.</p>	<p>Agreed. Random spot checks will be performed throughout the year. Due to existing staff limitations, it is not feasible to compare every GPS report to the Daily Activity Sheets and Hansen data.</p>	<p>Not completed. Staff do not compare information from GPS reports for City vehicles to Daily Activity Sheets and Hansen data. A tool that summarizes GPS data for IMOS vehicles has been developed. This tool will be considered for adaptation to facilitate the comparison of ploughing and materials spread information from GPS reports to Daily Activity Sheets and Hansen by Q4, 2014.</p>

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5.	<p><u>Snow Clearing Services</u> Vendors (on-call or standby equipment and operators) are required to be on the work site within one hour of being called into services to assist with snow clearing and removal. Supervisors are not documenting when calls are made to on-call vendors, when they arrive for work and late arrivals. Vendors that do not show up within an hour impact the City's ability to clear snow in a timely manner and comply with a term of the contract.</p>	<p>That Operations' Supervisors responsible for contacting the vendors for snow clearing and removal document the time they place the calls to the vendors and the arrival times in the yard. Follow up should be performed with vendors that do not arrive within an hour as per the terms of the contract.</p>	<p>Agreed. The Contract Winter Project Manager will monitor the performance parameters of the vendors for 2013. If a new full time position is approved, this task will be part of their ongoing duties.</p>	<p>Initiated. Operations Supervisors are documenting the time they place calls to the vendors. However, they are not documenting vendors' arrival times to the yards. The arrival time will be documented by Q4, 2014.</p>