SUBJECT: Follow Up of Audit Report 2006-06 - Metered Water Billings and Revenue (CM08011) (City Wide)

RECOMMENDATION:

That Report CM08011 respecting the follow up of Audit Report 2006-06, Metered Water Billings and Revenue, be received.

Ann Pekaruk
Director, Audit Services
City Manager's Office

EXECUTIVE SUMMARY:

Audit Report 2006-06, Metered Water Billings and Revenue, was originally issued in May 2006 and management action plans with implementation dates were included in the report. In March 2007, Internal Audit followed up the report to determine that appropriate and timely actions had been taken. Regarding the implementation of the ten (10) recommendations in the original Report and Addendum, three (3) have been completed while three (3) remain in progress and one (1) has been initiated without any significant progress. The status of the remaining three (3) is incomplete.

BACKGROUND:

Audit Report 2006-06, Metered Water Billings and Revenue, was originally issued in May 2006. The report indicated ten (10) recommendations to strengthen the oversight responsibilities in regard to the service agreement with Hamilton Utilities Corporation (HUC) and improve the meter reading activities.
BACKGROUND: (Continued)

It is normal practice for Internal Audit to conduct follow up reviews within a 12-18 month period following the issuance of the original report in order to determine whether action plans committed to by departmental management have been implemented. In March 2008, Internal Audit followed up the report to confirm appropriate and timely actions had been taken.

ANALYSIS/RATIONALE:

The report attached as Appendix "A" to Report CM08011 contains the first three (3) columns as originally reported in Audit Report 2006-06 along with an added fourth column indicating Internal Audit’s follow up comments. Four (4) items in the Addendum have also been followed up with appropriate details.

Three (3) of the recommendations – monitoring and investigation of repeatedly estimated readings; monitoring of consumption and revenue patterns; and reviewing the service level requirements for water billing payments at the Municipal Service Centres – have all been completed and/or continue to be ongoing.

The implementation of three (3) other recommendations is in progress. This includes: the requirements of seeking City approval for payment deferrals exceeding $50,000 and communicating changes in the reading and billing schedule being incorporated in the agreement with HUC (expected upon negotiation of a new agreement at the end of 2009); and the reporting of unpaid amounts transferred to taxes at the 90-day mark (expected by the 2nd quarter of 2008).

Three (3) recommendations remain incomplete. These include: no prioritization of repairs to meters and outside remotes, many of which continue to take a year or more to complete; abandoned properties which continue to attract water billings which remain unpaid instead of the City exercising its right to turn off the water service; and no written documentation acknowledging the delegation of particular responsibilities of the General Manager as per the agreement with HUC to the Senior Policy and Projects Manager.

ALTERNATIVES FOR CONSIDERATION:

Not applicable.

FINANCIAL/STAFFING/LEGAL IMPLICATIONS:

Financial
Closer monitoring of unpaid amounts and timely transfers to taxes may result in more success in collection.

Staffing
None

Legal
Several changes will have to be incorporated in the new agreement with HUC expected by December 2009.
POLICIES AFFECTING PROPOSAL:
By-law R-84-026 – turn off of water service.

RELEVANT CONSULTATION:
The results of the follow up were provided to the staff in Corporate Services responsible for the administration of the HUC agreement.

CITY STRATEGIC COMMITMENT:

By evaluating the “Triple Bottom Line”, (community, environment, economic implications) we can make choices that create value across all three bottom lines, moving us closer to our vision for a sustainable community, and Provincial interests.

Community Well-Being is enhanced. ☑ Yes  ☐ No

The provision of an efficient and economical water and sewer system including billing and collection for resources used is important to the businesses and residents of the community.

Environmental Well-Being is enhanced. ☑ Yes  ☐ No

A system that bills and collects funds for resources used by residents and businesses is important to the environmental well being of the City.

Economic Well-Being is enhanced. ☑ Yes  ☐ No

City Council's strategic commitment to "Best Practices - Best Value" under "A City That Spends Wisely and Invests Strategically" is addressed through audits and reviews and their subsequent follow up to ensure controls are in place to protect the assets of the City and promote efficient, effective and economic services and programs.

Does the option you are recommending create value across all three bottom lines? ☑ Yes  ☐ No

Do the options you are recommending make Hamilton a City of choice for high performance public servants? ☐ Yes  ☑ No

ap:dt
Attachment – Appendix “A”
<table>
<thead>
<tr>
<th>#</th>
<th>OBSERVATIONS OF EXISTING SYSTEM</th>
<th>RECOMMENDATION FOR STRENGTHENING SYSTEM</th>
<th>MANAGEMENT ACTION PLAN</th>
<th>FOLLOW UP (March 2008)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>During the course of the audit, it was noted that consumption in some accounts had been estimated for prolonged periods of time – in one case, the account had been estimated consistently every other month for almost five years. This occurred even though Horizon Utilities Corporation (HUC) had fulfilled its part of the Service Agreement by informing the City that it could not read the meter for three consecutive billing periods. The more consecutive times an account is estimated, the more likely that a customer will be over/under-billed as the variances between each estimate and the actual consumption contribute to the accumulation of the over/under-billed accounts. Discovered over-billing usually results in customer refunds. Under-billing that has accumulated to a large amount may not be immediately payable by the customer resulting in requests for deferrals or adjustments (and thus, write offs) under the City’s relief program. Sometimes estimations are necessary due to faulty or inoperative meters or outside remotes, the repair of which is requested from the City by HUC. In the audit, it was noted that such repairs may take an inordinate amount of time (in one case, it was 18 months), thus causing continued estimation.</td>
<td>That staff in the City’s Budget and Finance section responsible for this contract administration monitor and investigate more closely accounts that have been estimated excessively and take more timely action. That City staff prioritize requested repairs to meters and outside remotes in order to reduce the number and frequency of estimated accounts.</td>
<td>Agreed. While the Billing Agent (HUC) on the City’s behalf takes proactive measures to minimize the number of estimated accounts through such measures as leaving read cards with the ratepayer when a meter read is not possible, as well as sending out a letter of notice to the ratepayer after 3 estimates, there continues to be a number of accounts that will continue to be estimated for extended periods. Effective 2nd quarter 2007, Water &amp; Wastewater, Finance &amp; Administration staff will log estimated accounts when they exceed 3 billing periods, based on the monthly Estimate Report provided by the Billing Agent. They will work along with the Billing Agent and Water and Wastewater Division to remedy, in a timely manner, any problems that may contribute to estimates in a timely manner.</td>
<td>Completed. Finance &amp; Administration staff are now monitoring and investigating accounts whose readings have been estimated on more than three consecutive occasions. Of the 3,948 estimated readings in January 2008, approximately 9% (340) had been estimated for more than three consecutive billing periods. Staff have also been co-ordinating attempts made by Water &amp; Wastewater to address some of the causes that resulted in the estimates. Incomplete. A review of metered water work orders completed in January 2008 still indicated many repairs taking a year or more from the time HUC notified the City. Management has indicated that part of the reason for this is staff turnover in the section. Management is hopeful that, now that new staff are in place, it will be able to continue with the data integration project that will facilitate communication between HUC’s information system (Daffron) and Public Works’ Hansen system. This is expected to be in place by the end of 2008.</td>
</tr>
<tr>
<td>#</td>
<td>OBSERVATIONS OF EXISTING SYSTEM</td>
<td>RECOMMENDATION FOR STRENGTHENING SYSTEM</td>
<td>MANAGEMENT ACTION PLAN</td>
<td>FOLLOW UP (March 2008)</td>
</tr>
<tr>
<td>----</td>
<td>---------------------------------</td>
<td>----------------------------------------</td>
<td>------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>2.</td>
<td>As noted in point 1 above, customers who cannot meet their payment obligations may enter into a deferred payment agreement with HUC. However, there is no provision in the Service Agreement for HUC to notify the City when it enters into such an agreement with the City’s water and wastewater customers. The majority of such deferred payment agreements are for minor amounts that do not present a concern when compared to the total water and wastewater revenue generated monthly. However, in a recent situation, a deferred payment agreement was entered into by HUC with a customer that owed the City approximately $5 million. In addition, the customer was known to be in a precarious financial condition. The City’s Manager of Policies and Projects (contract administrator) inadvertently learned about the agreement when inquiring about another matter. Arrangements concerning such sizeable amounts expose the City to the risk of potential losses or write offs without any input into the original agreements.</td>
<td>That HUC notify the City’s appropriate contact in the Budget and Finance section of proposed deferred payment agreements made with water and wastewater customers whenever the amount owing exceeds a set threshold level agreed to by both the City and HUC. The Service Agreement between the City and HUC should be modified to reflect the above requirement.</td>
<td>Agreed. Effective 2007, the City’s Billing Agent has provided staff with a monthly report of all deferrals and has requested approval from City staff for financially material deferrals. Going forward, the Billing Agent will require the City’s approval through the Water and Wastewater Finance and Administration staff of the GM of Finance and Corporate Services or his/her designate of all deferrals greater than $100,000, combined water and wastewater.</td>
<td>In progress. HUC has modified their procedures so that the City is notified of any deferred payment arrangement between themselves and the customer when the amount deferred exceeds $50,000. However, the Service Agreement between the City and HUC has not yet been modified to reflect this requirement. The Agreement is set to expire on December 31, 2009, at which time the Agreement is expected to be updated to reflect this change.</td>
</tr>
<tr>
<td>3.</td>
<td>As part of the Service Agreement, HUC is to notify the City of any customer account that remains unpaid for more than 90 days for transfer to taxes. In the accounts sampled, it was noted that the City was notified well past the 90 days, with one occasion of the transfer to taxes not occurring for 113 days past due.</td>
<td>That the City’s management in the Budget and Finance section periodically monitors the accounts transferred to taxes to ensure that the terms of the Service Agreement are met. Any non-compliance should be promptly reported back to HUC.</td>
<td>Agreed. The current practice is for the Billing Agent to transfer all water and wastewater unpaid accounts of more than 90 days to the City weekly. Therefore, theoretically, unpaid accounts can be in a state of arrears for up to 96 days. Effective the last quarter of 2006, the Billing Agent revised their billing system with respect to final billings, thereby rectifying some instances where transfers exceeded 90 days. The City will request that effective the 2nd quarter of 2007, the weekly transfer of accounts report identify the number of days that the unpaid account has been in a state of arrears at the time of transfer. Also, Water and Wastewater, Finance &amp; Administration staff will periodically sample the information in the report for accuracy.</td>
<td>In progress. The billing system used by HUC has been updated to trigger transfers to taxes at the 90 day mark. However, HUC has indicated that it has not been possible to modify the weekly transfer of accounts report to identify the number of days that the unpaid account has been in arrears at the time of transfer. HUC’s system vendor has made some program changes and these are being tested before being put into production. The new report is expected to be available by the 2nd quarter of 2008.</td>
</tr>
<tr>
<td>#</td>
<td>OBSERVATIONS OF EXISTING SYSTEM</td>
<td>RECOMMENDATION FOR STRENGTHENING SYSTEM</td>
<td>MANAGEMENT ACTION PLAN</td>
<td>FOLLOW UP (March 2008)</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------</td>
<td>----------------------------------------</td>
<td>------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>4</td>
<td>The restructuring of some of the reading routes in April, 2006 caused a delay of the reading and billing of several water customers until May. This delay, carried over throughout the year, would result in some accounts (including several of the top 100 water customers) being billed for one less cycle in 2006.</td>
<td>That changes to the reading or billing schedules that affect a large number of accounts or accounts with large consumptions be communicated by HUC to the City’s management in the Budget and Finance section at the time that they are implemented. The Service Agreement should be changed to reflect the requirement.</td>
<td>Agreed. Due to the nature of scheduling on a yearly basis, the Billing Agent’s read schedule dates moved ahead by one day each year. The Billing Agent has indicated to City staff a concerted effort in reading and billing financially material accounts in a timely manner will be made, even to the point of accelerating a reading cycle and subsequent billing. The Billing Agent has indicated the willingness to work with the City to ensure the bills will get processed in the month the city is expecting the revenue.</td>
<td>In progress. The City’s Budget and Finance section staff confirm that HUC has communicated changes occurring to the reading/billing schedule. However, as indicated in point 2 above, the Service Agreement between the City and HUC has not been modified to reflect this requirement. The Agreement is set to expire on December 31, 2009, at which time the Agreement will be updated.</td>
</tr>
<tr>
<td></td>
<td>As City water revenues are budgeted based on the standard expected number of readings and billings in a given year, budgeted versus actual differences are difficult to explain when such large scale reading schedule changes are made and not communicated to the City on a timely basis. Note that, overall, there would be no loss in income over the long run, only timing differences in the billing and collection.</td>
<td>That the City’s Budget and Finance section regularly monitor consumption patterns of the various water and wastewater customer classes during the course of the year so as to identify and quantify changes or inconsistencies which may result in budget variances.</td>
<td>Agreed. Water &amp; Wastewater, Finance and Administration staff will continue to monitor monthly revenue reporting from the Billing Agent relative to budget. As in the past, staff will request clarification from the Billing Agent or through account review, in the case of abnormalities in consumption reads and related revenues. Regular monthly meetings between the Billing Agent and City staff permit for more detailed discussion surrounding issues related to the Billing Agent’s services and level of service. Budgets and Finance staff will also continue to report any water and wastewater revenue issues or concerns to Council through the Budget Variance Reports. Similarly, the City will continue the practice of accruing for water consumed during a particular year but not billed out until the following year through year-end accruals.</td>
<td>Completed. The City’s staff are monitoring the consumption and revenue patterns of the different water and wastewater customer classes each month. This helps staff identify any reading or billing changes made by HUC. Meetings between representatives of the City and HUC occur as needed.</td>
</tr>
</tbody>
</table>
ADDENDUM

The following items were noted during the course of the audit. Although they do not present internal control deficiencies, they are indicated in this Addendum so management is aware of the issues and can address them.

1. Water and wastewater consumption data is based on the accuracy of the meters used. During this audit, it was noted that more than 24,000 meters of the approximately 130,000 meters in use are 15 years or older. Once meters have been in use for 15 years, they approach the end of their useful service life.

As meters age, they usually begin to under-register. Therefore, customers can be under-billed for water and wastewater consumption. Although the majority of these older meters are used in residential and small commercial properties where water consumption is generally less than industrial customers, nonetheless, consumption and thus, revenue, would be under-recorded. The fact that there are so many older meters would impact on the total under-registered consumption and by extension, the revenue due.

It is recommended:
That the City’s Water and Wastewater section of Public Works escalate a program to replace older meters so as to minimize the risk of potential revenue loss.

Management Response:
Agreed. Effective March 1, 2007, the City will be undertaking a 5-year operation and maintenance contract for water meter services in the City of Hamilton (estimated at 20,000 meters in years 1 to 3). All meters will be operating within American Water and Wastewater Association (AWWA) specification by the end of this contract and will be subject to AWWA specified maintenance and service programs.

During the course of this contract, City staff will also be embarking on a Data Integration project which will allow for ease of information sharing within City departments and outside contractors such as HUC. With the integrated data management and the computerized maintenance management systems operating to specifications, City staff will be able to prioritize water meter repairs and upgrades much more efficiently and effectively. The data integration project will also establish measurement points to track progress of all parties involved in the contracts.

Follow Up Comment:
Initiated. Of the approximately 24,000 meters that have been in service from 1991 or earlier noted above, 850 have been replaced since the fall of 2006. Also, management is in the process of writing their "Revenue Meter Asset Management Plan". This will specify the cycle at which old meters are to be replaced depending on their size and application. This plan is expected to be completed by the third quarter of 2008. Management acknowledges that currently some 27,000 meters need to be replaced as they are past their useful life or the technology used no longer provides reliable readings.
2. All properties serviced by the City’s water are charged a flat minimum fee even when there is no consumption during the billing period. In cases where the properties have been abandoned, this can be problematic. Even though HUC has already cut off hydro service, it continues to read the water meter and bill the customer the minimum fee for water service. Usually, the owner does not pay the bills and they continue to accumulate until the outstanding amount reaches the threshold for transferring to the tax roll. Once on the tax roll, the amount continues to draw interest charges, now as part of the tax billings. In most instances, tax billings also remain unpaid. This process is an inefficient use of resources due to the costs associated with reading, billing and administering such accounts when the amounts billed may never be recovered.

*It is recommended:*

*That the City co-ordinate with HUC to identify properties that are abandoned. When charges for water/wastewater services continue to be unpaid over an extended period, the City should exercise its option to turn off the water service to such properties under the provision of By-law R84-026, section 13(6)(a).*

**Management Response:**

*Agreed. Water and wastewater staff will determine the extent of abandoned properties. With the assistance of Finance staff and HUC, the extent of the problem of arrears with respect to these particular cases will be determined. Following this review, staff will evaluate any impacts of the above recommendation. As well, any impact that policy changes may have on properties and their allocated capacity at the water and wastewater plants will be considered.*

**Follow Up Comment:**

*Incomplete. Management stated that this has not changed. Abandoned properties are still being charged a minimum fee for water and wastewater service and the amount is still transferred to tax once a threshold is reached. Management agrees that this is an inefficient use of resources and is looking to implement a change by the fourth quarter of 2008.*

3. The terms of the service agreement between the City and HUC specifies that the City authority and contact is the General Manager of Finance and Corporate Services. However, in practice, much of the responsibility for the contract administration, negotiation and plumbing relief approvals lies with the Senior Policy and Projects Manager. There is no written document acknowledging this delegation of authority.

*It is recommended:*

*That written documentation be retained acknowledging the delegation of particular responsibilities regarding the City’s service agreement with HUC to the Senior Policy and Projects Manager.*

**Management Response:**

*Agreed. The General Manager of Finance and Corporate Services has acknowledged, through documentation, delegation of authority and financial limits to the Senior Policy and Projects Manager (Budgets and Finance) and the Business Administrator (Water and Wastewater Division).*

**Follow Up Comment:**

*Incomplete. There is no written documentation acknowledging the delegation of particular responsibilities of the General Manager to the Senior Policy and Projects Manager in the City’s service agreement with HUC. Such a document is expected to be completed by the beginning of the 2nd quarter of 2008.*
4. The number of customers and the dollar value of payments for hydro and water bills made in cash at the Municipal Service Centres (MSC) are very small. However, the processing of such payment by staff is cumbersome as it involves informing HUC of the paying customers three different times and producing a cheque to HUC for as little as $25 with HUC returning the City’s water portion in a subsequent period. Putting so much effort into a process that yields minimal return is inefficient.

It is recommended:
That the acceptance of cash payments for water billings at the Municipal Service Centres be reconsidered. At the very least, the current process should be streamlined to eliminate triplication of notification of payments and cheque generation for nominal amounts.

Management Response:
Agreed. Staff will review the degree of water and wastewater billing activity at the Municipal Service Centres and consider the continuation of this service, as well as reviewing the current process in an effort to identify efficiencies.

Follow Up Comment:
Completed. The Municipal Service Centres (MSC) have reviewed this service and indicate that many of the people using it are seniors and others whose mobility is restricted. Management stated that in order to assist such individuals that would otherwise find it difficult to pay their bills, cash payments for water billings continue to be accepted at all of the MSC. Also, cheque requisitions to transfer payments to HUC are generally no longer for nominal amounts as the requisitions are usually issued weekly.