City of

Winnipeg

Report on the Review of Internal Controls over the Water and Waste Department's Billing and Collection Processes

Ernst & Young

Quality In Everything We Do

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Executive Summary

The City's Water and Waste Department uses a similar billings and collections process as that of the former Winnipeg Hydro. Recent events uncovered fraudulent activities within the collections process at the former Winnipeg Hydro. As such, the City requested a review of internal controls within the Water and Waste Department to mitigate the risk of error and fraud with respect to "cash receipts" (cash and cheques received).

In conducting our review, we gained an understanding of the billing and collection procedures within the Water and Waste Department, assessed areas where errors could occur and identified weaknesses where controls were absent or insufficient to detect a material error.

Based upon our review, we have the following key observations:

- Opportunities for the misappropriation of funds existed subsequent to February 2003 due to weaknesses in the internal control systems within the Water and Waste Department and the fact that Water and Waste counter staff were directly receiving payments from customers.

- The billings and collections processes, which represent the most significant accounting transactions of the department, are not subject to the ongoing assessment of controls and review of results as other transaction streams within the department. A vital aspect of any internal control environment is the regular monitoring of the operation of key controls. Without effective monitoring practices, management may be unaware that key internal controls are not functioning as intended and errors or abuses may go unnoticed.

- Inadequate access and security controls over the IT systems supporting the billings and collections processes increase the risk that a misappropriation of assets could occur.

- Internal controls over the cash collections procedures could be strengthened to ensure that errors or potentially a misappropriation of assets are prevented or detected on a timely basis.

Where possible, we have provided recommendations to management on ways to strengthen existing internal controls and address the weaknesses noted in our review. Management's responses to the identified weaknesses have also been included in this report.

A. Scope of the Engagement

The City's Water and Waste Department uses a similar billings and collections process as that of the former Winnipeg Hydro. Recent events uncovered fraudulent activities within the collections process at the former Winnipeg Hydro. As such, the City requested a review of internal controls within the Water and Waste Department to mitigate the risk of error and fraud with respect to "cash receipts" (cash and cheques received). In conducting our review, we gained an understanding of the billing and collection procedures within the Water and Waste Department, assessed areas where errors could occur, identified controls in place to mitigate the risk of error and identified weaknesses where controls were absent or insufficient to detect a material error.

B. Summary of Findings

Prior to February 2003, collection procedures within the Water and Waste Department were limited to cheques received via mail, drop boxes or third party collection sites. As such, the risk of misappropriation of funds was greatly reduced due to the limited access to cash. Any cash collections during this time period were handled through the counter staff at Winnipeg Hydro, Corporate Finance, Community Services for Water and Waste Department emergency after hour services. Subsequent to February 2003, the Water and Waste Department has its own counter staff to receive payments from customers. In our review of the billing and collection processes, we have noted weakness in the internal control system that with the added ability of staff to access cash could result in a misappropriation of funds. We have provided our comments related to internal control weaknesses (Section F) for your consideration in the areas of:

- Monitoring of internal control effectiveness
- Computerized access and security controls
- Cash collections procedures

C. Overview of Billing and Collection Processes

Billing Process

Our review starts after a billing has been created and mailed to the customer. The billing process can be broken down into the following sub-processes:

(i) Normal usage – commercial, industrial and residential

Normal usage refers to the standard billing for consumption of commercial, industrial and residential usage based on usage captured by water meters at each customer location. Commercial, Industrial and Residential billings are treated essentially the same in all respects, with the exception that an attempt is made every quarter to receive an actual meter reading for all commercial and industrial locations. Residential customers are sent a meter reading request in 3 quarters and during May to August meter readers attend the premises (obtain 1 reading per year). Normal usage comprises the largest portion of the revenues and billings of the

Water and Waste department. Billings for commercial, industrial and residential revenues are done quarterly based on the applicable billing date for the 60 billing cycles (20 cycles billed per month).

(ii) Keyguard

Keyguard revenues refer to a small number of customers who consume water via irregular filling trips to one of three keyguard filling locations (i.e. Water haulers for construction companies). A customer attends one of three keyguard filling locations and unlocks their account via a unique identifiable key provided by Water and Waste. The customer specifies the amount of water that they wish to purchase, and the appropriate amount of water is dispersed. On a monthly basis, an inspector attends the location and enters the meter readings into a manual book, which also contains the prior months readings. The inspector also records the meter reading for the entire location. This reading acts as a control total of total water consumption since the previous month. The log, itemizing usage by each customer, is then provided to a Senior Clerk (Sup 4) who creates a spreadsheet with all this information to determine the individual customers usage and applicable charges. This spreadsheet is then provided to the secretary to create a manual billing. The bills are then returned to the Senior Clerk (Sup 4) who mails them to the individual customers.

(iii) Coin box

Coin Box revenues refer to the advance payment by certain customers of a specified amount of water. A customer deposits a set amount of coins for a desired amount of water and receives the amount of water that he/she has paid for.

(iv) Sewer rental allowance (SRA)

Sewer Rental Allowances refers to a form of billing adjustments for large industrial customers who use water in their manufacturing processes or use water in their cooling systems. As the process for approving these customers occurs prior to the billing process, we did not examine the review and approval controls for granting the SRA's. As sewer rates are based on water consumption, a rebate is given to these customers when their quantitative discharge to the sewer is not proportional to their water intake. A customer that is eligible for a SRA is outfitted with three separate meters – a meter that measures the water coming into the customers premises, a meter that measures the bleed of the water and a third meter that measures the output of the water into the sewer system. These three meters are all read each quarter and are submitted to the Billing Adjustments Clerk (C) who is responsible for generating the SRA billings. This clerk then consolidates the billings for this customer and issues a combined billing to the customer.

(v) Department of National Defence (DND)

Department of National Defence refers to a form of billing consolidation performed by the Water and Waste Department on behalf of the government. The meters of the Department of National Defence are all read and consolidated onto one report. However, rather than creating a separate billing for each account, they are summarized on one report and this report is used to create a master billing covering all of the accounts managed by DND.

(vi) Large volume discounts

Large Volume Discounts refer to a discount offered to selected industries within the City of Winnipeg that meet criteria as specified by City Council (i.e. minimum percentages of sales that must be outside of the City of Winnipeg). The billing process is similar to normal commercial and industrial billings, however, the customer can complete an annual application following the billing to receive a credit that would be applied to their next billing. The customer must apply and provide support that they are eligible for the credit. Audited financial statements are required to substantiate that the customer meets the minimum standard of at least 25% of sales to customers outside the City of Winnipeg. The completed application is forwarded to the Supervisor of Accounting (Sup 2) who reviews the application and eligibility for the discount. The amount of the discount is then calculated (30% of sewer services and surcharge revenues in excess of $100,000). Following preparation of the credit, the discount is approved by both the Manager of Finance and Administration and the Director of Water and Waste. The approved form is then sent to the Supervisor of Accounting who notifies the customer that they are accepted, and the expected amount of their credit. A credit is applied to their account by the Billing Clerk C and appears on their next bill.

Collection Process

The collection process can be broken down into the following sub-processes:

(i) Monies received in person.

A customer attends either the main branch of the Water and Waste at 510 Main St. or the alternate bilingual location in St. Boniface.

At the beginning of a shift, each cashier is given a float of $175. The cashier is responsible for his/her own till, and no cashier is allowed to use another's terminal. A customer approaches the cashier to make a payment. There are two scenarios in that a customer either has a remittance stub or they do not. If the customer has a remittance stub and is paying the exact amount per the stub, the cashier accepts the payment and scans the electronic code in the SII cashier software which credits the customers account for the amount paid. If the customer is paying an amount different from the amount per the remittance stub, the cashier electronically scans the remittance stub in the SII cashier software and manually alters the payment to match. The second scenario is if the customer does not have a remittance stub. In this scenario, the cashier creates a remittance stub for the customer (based on

information from the billing system and information provided by the customer) and then processes it as above. When the cashier accepts funds from the customer they indicate in the system whether the funds were received in cash, cheque, Government Cheque or Interac. Cheques are immediately endorsed by the cashier "For Deposit Only" to the City of Winnipeg Water and Waste Department. The customer receives an SII cashier system generated receipt summarizing the transaction. The cashier finally records the payment in the mainframe billing system "remarks" panel.

The Cashier Supervisor Senior Clerk closes down each cashier individually, starting at approximately 11:00 a.m. and finishing at approximately 1:00 p.m. At the time of the closing, the cashier is given an empty bank bag, in which he/she places all of the currency from his/her cash drawer including the float. This bag is then sealed and placed in the vault until the Cashier Supervisor Senior Clerk performs the daily reconciliation. The amount of Interac receipts according to the individual bank slips are manually totalled by the Cashier Supervisor Senior Clerk and compared to a bank printout that is generated through the Interac terminal. A system generated report (Cashiers Report) detailing the amount and composition of the transactions tendered during that day (i.e. cash transactions, cheque transactions, Interac transactions etc) is generated. As part of this closing process, this report is reconciled to the composition of currency in the cashiers drawer. All discrepancies are followed-up by the by the Cashier Supervisor Senior Clerk and if the discrepancy cannot be determined an Over/Short report is created and signed by the Cashier Supervisor Senior Clerk and the cashier responsible for the discrepancy.

Upon closing down all the cashiers, the Cashier Supervisor Senior Clerk will create a deposit slip. There is a separate deposit slip created for each cashiers cash drawer as well as one deposit slip for the cheques tendered during the day by all cashiers in aggregate. The amount of cash, cheques and Interac receipts for these deposits must equal the Cashiers Report which is the system generated report outlining the daily transactions recorded by that cashier. The cash deposits are verified by an independent Water and Waste employee who comes over from the mail opening area. There is no signature indicating this independent review of the bank deposit. The deposit is then sealed and the amount of the deposit, as well as the seal numbers of the deposit are recorded onto a deposit log. The deposits are then walked over to the Treasury department by the head cashier or designate. A representative of the Treasury branch signs the deposit log indicating that they have received all the deposits that have been included on the log. A master total slip is generated which documents the total amount of the deposits for that day.

Individual customer accounts are updated on a batch basis overnight, crediting the account with payment received from all sources (e.g. cashier, electronic funds transfer, mail in payment, agencies, etc). A batch log is generated which indicates the transaction number, the batch number as well as the date of the transaction. The individual remittance slips are maintained in the same order as they appear on this batch log for ease of future tracking. The Accounting Senior Clerk receives a bundle from the cashier counter that includes all remittance stubs, all deposit slips

(normally one deposit slip for cheques and a separate deposit slip for each cashier and a control total of the total deposits for the day. No additional verification of the cash vs. cheque composition is made. The Accounting Senior Clerk verifies that the control total is accurate by comparing it to an addition of the deposits and then prepares a listing of total cash collected, which is used to generate the journal entry to record the cash receipts for the day. This listing itemizes the applicable department for which the cash was received (i.e. Water and Waste, Winnipeg Transit, Corporate Finance, etc). This listing is transmitted to the Accountant Trainee III for approval and is forwarded to the Supervisor of Accounting and Administrative Service who performs final approval for posting to the general ledger. The total amounts of posting from the cash counter and the mail centre are totalled and input into the "Create Cash" entry. If this amount does not equal the amount of the expected upload, then the upload is not completed until the amount is reconciled.

Cheques received in the mail by the payment processing individuals are reconciled to the amount of credits to accounts receivable on a daily basis, however, cash received at the cash counter by the cashiers is only reconciled to the credits to accounts receivable on a monthly basis.

(ii) Monies received through the mail

Payments of accounts are received directly by the accounting branch of the Customer Service division of Water and Waste. Payments are couriered from Canada Post to the City of Winnipeg mailroom where they are sorted and delivered to the accounting branch in the Mandarin Building. The sorting is done via a postal code that was created in order to identify the item as a payment.

The mail is initially dropped off at Water and Waste each morning in a large plastic bin. The plastic bin is then picked up by an individual responsible for opening mail on that day. Water and Waste personnel sort the envelopes by physical size. The number of individual sorters varies depending on staffing resources, but historically has been at least two individuals. Once the mail is sorted by physical size, an individual takes the envelopes into a room to slice open the envelopes. The envelopes are then returned by this individual to a table where payment processing clerks begin processing envelopes and sorting them into batches of approximately 200-250 envelopes. As the mail is being opened, the receipt of cash requires the clerk to notify an independent clerk who will come and count the amount of cash and place a notation on the customers account. At this point, the cash is walked over to the cashiers counter at 510 Main Street for processing, as described above.

For each item, the contents of the envelope is organized so that the remittance form is on top of the cheque received and all extraneous information is removed and sent to the applicable department (i.e. change customer information etc). The cheque information is also validated at this stage to ensure that the payee is correct, the amount on the cheque equals the remittance (if not, the remittance is changed to the correct amount) etc. Post-dated cheques are removed and placed into a diarised file,

which is reviewed daily for the cheques that have been dated for that applicable date. Once a clerk has approximately 200-250 pieces, they begin to process the mail, by logging into the system. The process begins with the entering of the cheque information into the SII system through the scanning of the individual bill stubs/remittance advices and the entering of the amount of the payment. At the end of the batch, a listing of all receipts is printed. The original clerk and a second clerk verify the accuracy of all receipts through a manual verification process of one individual reading the cheque amount and the second individual keypunching the cheque amount onto an adding machine tape. The amount of this manual calculation is compared to the original amounts processed per the system to ensure that there were no keypunch errors. A supervisor is then contacted to close the batch. Any voided entries on the original listing must be removed by the supervisor. The SII system requires the entry of a supervisor's password and user-id in order to validate any of the void items. The total of the manual adding machine tape created by the two individuals is then entered into the SII system, which validates the batch totals. The system generated (and system numbered) batch total slip is then kept with the batch in order to create the deposit listing upon completion of all the day's batches.

At the end of the day, a supervisor performs a close off of the terminals and a deposit is created by one of the payment processing clerks by summarizing the batch totals that have been generated throughout the day. Batch totals are used to create the deposits which ensures that all receipts are deposited on a timely basis.

The following morning a report is generated of the cash processed the prior day is generated. This report would indicate if a batch was missed in the completion of the daily deposit.

(iii) Monies received through the drop box

Customers can make cheque or money order payments during non-business hours through a secure drop box that is located at 510 Main St. The drop-box is cleared every morning by the Cashier Supervisor Senior Clerk and an individual from Corporate Finance. The drop-box contains deposits for numerous city departments including Water and Waste and Corporate Finance, and also contains the nightly deposit of coins from the civic parkade. For purposes of this review, we only examined the process for Water and Waste related envelopes. Upon opening of the box, a listing is created of the number of envelopes that are designated to each individual department. This listing is created and signed by both the individual from Corporate Finance and the Cashier Supervisor Senior Clerk. The Cashier Supervisor Senior Clerk then delivers the envelopes to one of the cashiers who records the receipts as per normal procedures. No indication is made that the cashier had received the number of envelopes that has been recorded on the control log that was initially created upon the opening of the drop box.

(iv) Monies received by other agencies

Due to the large number of customers served by Water and Waste, numerous operating agreements have been formed which allow customers to pay their bills at non-city owned locations. These locations then remit monies to the city on a regular basis according to a remittance schedule, which varies between weekly and bi-weekly depending on location.

Numerous drugstores within Winnipeg collect payments for Water and Waste. A drugstore only collects from customers who have remittance forms. Again, if the amount of the remittance differs from the amount that the customer is paying, a manual correction of the amount of the payment is recorded on the remittance form. A daily listing of all receipts by a drugstore is recorded on a log, which indicates the total amount of daily receipts made by a drugstore as well as the number of receipts made by the drugstore (as indicated by the number of remittances). Drugstores receive a commission of $0.10 per remittance handled. A drugstore then sends this daily listing along with a cheque for the total amount of remittances handled in cash and the cheques made payable to the City of Winnipeg – Water and Waste Department.

Upon receipt of the funds from the drugstores and remittances from the customers, processing is completed in the same manner as cheques received directly by Water and Waste. The only difference in processing is that rather than one account being credited through the receipt of a cheque, Water and Waste credits the listing of customers as indicated by the batch of remittances recorded on the daily listing.

Customer payments can also be made at numerous banks and credit unions, the depositing of the funds into the Water and Waste account is coordinated by the Royal Bank who provides Water and Waste with a consolidated report of the deposits made by these agencies. This report provides an electronic listing of the individual amounts paid by Water and Waste customers. This report is reconciled to the amount of cash received by the Royal Bank and upon successful agreement of these two amounts, it is uploaded into the billing system and the individual customers accounts are credited through an overnight batch process.

Account Adjustment Process

Adjustments to customer's accounts can be made under the following scenarios:

1) Transfer of an account balance to the property owner's tax account

Upon non-receipt of amounts owing, Water and Waste has the ability to transfer the outstanding water and sewer account balance to the customer's property tax account. The transfer to the tax account is handled by a Clerk B who enters the transfer into an Access database that is subsequently emailed to an individual in the Corporate Finance Department. The access database is then reviewed by the tax department and used to update the Corporate Finance Mantis system. Water and Waste and the tax department maintain a "Due from/Due to" account that is reconciled on a monthly basis by Supervisor of Accounting and the Senior Accounting Clerk.

2) Adjustments to accounts due to an estimated meter reading being replaced by an actual.

   Frequent billing adjustments are created when a customer provides an actual reading for which a billing has been generated based on an estimated reading. Ability to adjust an account over multiple quarters and only one rate change is not limited to individuals independent of the cash receipt process and can be created by billings adjustments clerks, Customer Service Representatives (CSR's) as well as cash counter clerks. A report of these changes is not reviewed due to the frequency of these transactions as well as the level of detail contained in the report. The report is essentially a text dump of all transactions during the day without a function enabling it to sort according to some threshold.

   Adjustments over more than one rate change are calculated manually by the Adjustment Clerk B and entered into the system by the Keypunch Clerk A.

3) Write-off's of field service charge

   An account adjustment can be created for the removal of a field service charge. Ability to create these adjustments is not limited to individuals independent of the cash receipt process and can be created by billing adjustment clerks, CSR's as well as cash counter clerks. A report is generated of all policy adjustments, such as a write-off of a field service charge. The system is configured to code all policy adjustments to a miscellaneous expense account. This miscellaneous expense account is reviewed on a monthly basis by the accounting supervisor.

4) High Bill adjustment – "One time" adjustment

   An account adjustment (based on a Council approved formula) can be created for a billing that is extremely high as compared to prior billings. A customer has the opportunity to apply for a one-time adjustment that is known as a "High-bill" adjustment. This adjustment is meant to compensate customers for unusual occurrences such as accidental water usage due to a plumbing problem etc. The customer fills out an application that is reviewed by the Clerk B – Adjustments, who applies guidelines in support of the Council policy. If the application is approved, the customer is issued a revised billing for an amount equal to double the normal billing for every billing period where an estimated reading was used. The adjustment is generated through the system through the creation of a transaction that is provided to the production data clerks who key punch the adjustment into the system. A report is generated of all adjustments that have been coded to the miscellaneous expense account. The system is configured to code all policy adjustments to a miscellaneous expense account. This miscellaneous expense account is reviewed on a monthly basis by the Supervisor of Accounting.

5) High Water Bill: Financial hardship adjustment

If application of the high water bill adjustment formula results in significant financial hardship, a customer can apply for an adjustment based on financial hardship. A senior clerk reviews all residential applications according to stringent criteria including a review of the income tax returns for all residents of the property. Applications for businesses are reviewed by the Manager of Customer Services. If granted, a transaction card is completed for the amount of the adjustment and provided to the production data clerks who keypunch the adjustment into the system. A report is generated of all adjustments that have been coded to the miscellaneous expense account, which according to discussion with management is the configuration of the system. This miscellaneous expense account is reviewed on a monthly basis by the Supervisor of Accounting.

6) Policy Adjustment

Policy adjustments are the most common method of adjusting customer accounts. A policy adjustment can be created for numerous reasons; however, the vast majority of these adjustments relate to adjusting NSF cheques, dismissing a turn-off charge etc. An adjustment request is provided to the Senior Clerk – Special Adjustments who prepares a manual adjustment form which is entered in to the billing system by the keypunch operator, thus adjusting the customers account. A monthly report is generated of all policy adjustments, and is reviewed by the Supervisor of Accounting.

7) General Account Write-off

General account write-off is the annual process that is completed in order to purge uncollectible or unknown balances from the accounts receivable subledger at Water and Waste. This essential process appears to be a highly controlled mechanical exercise. This exercise is performed annually, in November, and entails running a detailed Accounts Receivable report which outlines all inactive accounts (no activity within one year), as well as any outstanding debits or credits that are outstanding greater than one year. The system automatically removes these items from the listing.

Customer Refunds

Under the current system, cashiers are authorized to issue a refund to customers. For example, a customer who has a credit on their account can attend a cashier's workstation and the cashier is permitted to issue cash. Examples of why a customer would have a credit on their account include circumstances when a real estate client pays the Water and Waste bill after the lawyer has also paid the billing. Also, a credit may result from a customer providing an actual meter reading for an account that has been estimated for a long period of time.

The current policy for issuing refunds is that the cashiers are only permitted to refund up to $300 per customer in one day. Refunds in excess of $300 are supposed to be handled through the customer writing a letter to a customer service representative who would review the request and approve a cheque. The approved listing is then provided to Corporate Finance who ultimately prepares the cheque. However, we were advised by the Cashier Supervisor Senior Clerk, that the $300 is a daily limit, and if the customer is entitled to a refund in excess of $300, they can simply return on multiple days. Additionally, the Senior Accounting Clerk advised us that the $300 limit is simply a 'guideline' and is not enforced by the system. For example, if the amount of the refund is $305, the cashier and the Cashier Supervisor Senior Clerk have authority to approve the transactions. Accordingly, there is not a computerized system control that enforces the $300 refund limit. Additionally, there is no independent approval required at the time of the refund.

Currently, the process for generating a refund is that the customer has to provide identification to validate that he/she is the actual property owner. The cashier will then verify that the credit on the account is a valid credit. A refund form is then completed by the cashier and signed by both the cashier and the customer. At the end of the day, a listing of the number of refunds is reconciled to the cash balancing report. All the refund slips are provided to the Senior Accounting Clerk who files the refunds slips and reviews them monthly.

D. Overview of IT Control Environment

The effectiveness of an entity's overall control environment is very dependent on the effectiveness of its Information Technology (IT) access and security controls. The Billing and Cash Receipts Systems within the Water and Waste Department uses primarily three computerized systems: the billing system, the cash receipts system and the interface with the general ledger mainframe of the City of Winnipeg. We reviewed the IT system controls related to the billing and the cash receipt systems. The interface with the general ledger mainframe of the City of Winnipeg is controlled by Corporate Finance which is external to our examination of the control environment.

Billing System

Program change controls

The Information Technology division, which has no operational or accounting responsibilities within the Water and Waste billing system, controls all program changes. Any program changes must be requested and approved by the Supervisor of Customer Relations, the Superintendent of Customer Accounts or the Supervisor of Accounting. These program change requests are made verbally or through email communication. Extensive testing is performed on system changes by both the IT division as well as the individual who requests the change prior to the change being implemented in a live environment, using actual data. The IT group maintains a log, which outlines all program, changes, the reason for the request and who initiated the change.

System security
User passwords are created by individual users with a minimum of four alpha-numeric or numeric characters. These passwords are required to be changed every 60 days and cannot be repeated within the next six unique passwords. Following six incorrect log-in attempts, the user is locked out and re-setting of password is required by the Senior Clerk – Production. The Senior Clerk – Production's password is reset by Corporate Finance. Multiple user access by one user is permitted by the system, which can result in one individual user being logged into two machines simultaneously.

Access controls
The system is set up to assign each individual with system access corresponding to an unique access group. Each individual access group is assigned specific create, read, update and delete access rights which defines their ability to view and modify system data. When an individual is required to perform a separate job activity from their normal activity, an individual's supervisor will inform the Senior Clerk - Production of the required change who will then make the change. However, it does not appear that an adequate review of the individual's roles and responsibilities occurs (segregation of duties). For example, it was noted that an individual was opening mail in the morning of a shift and then recording billings in the afternoon.

Cash Receipts System

Program change controls
Program changes are initiated by the Senior Accounting Clerk, the Supervisor of Accounting or the Cashier Supervisor Senior Clerk. The cash receipts system (SII) is a purchased software package and accordingly any system changes must be requested from the original manufacturer Paradigm. This provides an effective control in that changes would require a purchase order/quote request process, a purchase order to a third party vendor as well as subsequent receipt of the vendor's invoice.

There have been no system changes to this software since the initial purchase.

System security
User passwords are created by each individual with a minimum of five alpha-numeric or numeric characters. However, there is no requirement that these passwords be changed over time. Additionally, there is no limit on the number of attempted log-ons. Multiple user access is permitted by the system, which results in one individual user being logged into two machines simultaneously.

Access controls
The system is set up to assign each individual with system access corresponding to a unique access group. Each individual access group is assigned specific functions that they can perform with respect to the cash receipts system. When an individual is required to perform a separate job activity from their normal activity (segregation of duties), the process is that the individual's supervisor will change the users access group. However, due to the small number of access groups, the requirements that a user group would require modification are infrequent.

E. Analysis of Areas Where Errors Could Occur

In conducting our assessment of the internal control environment, we considered areas where errors of material significance or misappropriation of funds could occur as follows:

- Cash receipts are not recorded when received
- Cash receipts differ from amounts deposited
- Cash receipts or transfers are recorded on a date different from when received
- Coding of cash receipts to individual accounts is incorrect
- Duplicate postings of cash receipts are made
- Account adjustments are generated without authorization

F. Summary of Identified Internal Control Weaknesses

1) Monitoring of the Effectiveness of Internal Control Environment

A vital aspect of any internal control environment is the regular monitoring of the operation of key controls. Without an effective monitoring practice, management may be unaware that key internal controls are not functioning as intended.

Within the Water and Waste Department, the billings and collections processes are the most significant accounting transaction streams yet they are outside the control of Water and Waste's senior financial resource, the Manager of Finance and Administration. These transaction streams are currently not subject to the ongoing assessment of controls and review of results as other transaction streams within Water and Waste. As a result, weaknesses in internal controls exist and may result in the misappropriation of assets or material errors occurring in the billings and collections systems that would impact the financial results.

We recommend that the Manager of Finance and Administration be responsible for the management of the billings and collections processes and systems. This would streamline the accounting processes within Water and Waste and enhance the monitoring and management of key financial systems. It is crucial that management (with the appropriate expertise) continuously monitor the systems of internal control to reduce the risk of error or abuse that may occur through the performance of these processes.

Management Response

We agree with the recommendation and effective September 2, 2003, the organizational structure was amended so that the customer billing and collection functions report to the Manager of Finance and Administration.

2) Inadequate Segregation of Duties (Incompatible Access Rights)

(i) Individuals assigned to User Access Groups

In the course of review, we noted that individuals with access to cash also have the ability within the system to make changes to billings. This provides the opportunity for an individual to receive payment, amend a billing and misappropriate cash.

In addition, within the cash receipts system, the access right listing appears to be outdated and as a result access is provided to individuals who do not require access to the system (including computer programmers).

We recommend that the duties and access rights for all individuals be reviewed to eliminate incompatible duties (where possible) and to limit the access individuals have within the system to those functions required to perform their job.

Management Response

The customer who makes a cash payment gets a system-generated receipt from the cashier. A customer requires a record of their cash transaction and would typically demand a receipt from the cashier. The work processes are being realigned and effective October 14, 2003, the cashiers will no longer have the ability to adjust accounts in the billing system.

The department does monitor and keep records of access to the mainframe billing system and cashier system. We agree with the recommendation in that the review and monitoring of access rights has to be done on a more ongoing and rigorous basis. Plans are underway to have a security/risk assessment performed and proper scrutiny done by a finance professional to ensure that there is proper segregation of duties.

(ii) Changes to an individual's User Access Groups

Changes to an individual's access rights are made without consideration of the impact on the internal control environment that result in inappropriate segregation of duties. Currently, the individual's supervisor contacts the Senior Clerk to have that individual's system access changed to what is required to perform the new job. A manual log is kept of all these changes, however it is not reviewed. As a result, over time, the altering of an individual's access rights has created a system where employees have access to perform duties that should be segregated. For example, an individual had access to cash during the morning and access to the billing system in the afternoon resulting in an opportunity to misappropriate funds.

We recommend that a listing of incompatible job functions be generated and considered when changing an individual's access rights to the system. User access groups should be reviewed for incompatible functions as well. Additionally, the log,

created when altering an individual's access rights, should be reviewed by senior personnel on a regular basis.

Management Response

The department does monitor and keep records of access to the mainframe billing system. We agree with the recommendation in that the review and monitoring of access rights has to be done on a more ongoing and rigorous basis. Plans are underway to have a security/risk assessment performed and proper scrutiny done by a finance professional to ensure that there is proper segregation of duties.

3) System Security

(i) Ability to log-on to Multiple Mainframe Workstations

The systems currently allow individuals to be logged on to more than one workstation at any given point in time. This creates an opportunity for an individual to inappropriately access the system utilizing another's user-id and password.

We recommend that the system configuration be altered such that an individual is required to log out of their initial workstation prior to accessing another workstation under their same user-id account.

Management Response

The system does permit multiple access ability but is rarely used. The only situation where more than one logon may occur is when departmental staff are dealing with a customer in the public meeting room located in the reception area. A customer that visits the premises at 185 King Street typically has a question/concern about their water account. The staff member dealing with the customer has the ability to log onto a workstation located in this meeting room to lookup their account, answer questions or make adjustments as necessary.

It is only the supervisory staff who conduct these meetings (Senior Clerks, Supervisors and Superintendent of Customer Accounts) and they ensure that their regular workstations are password protected to prevent others from accessing their desktop. The balance of the staff have permanent workstations and would not have the opportunity or reason to log on to multiple workstations.

The Manager of Information Systems advises that the multiple logons is a function of the mainframe computer product (CICS) that controls the online billing system. This cannot be changed until June 2004 when the billing system will function from an alternate mainframe program. The actual practise of multiple logons is limited. In the interim, the Superintendent of Customer Accounts will observe practises to ensure that supervisors do not leave their workstations unattended during client meetings and ensure that staff log off/password protect their workstations when taking lunch or coffee breaks.

(ii) System passwords (SII system)

The cash receipts program does not require the changing of passwords on a regular basis. This can increase the risk of misappropriation as familiarity with others' passwords occurs over time.

We recommend that system controls be amended to require that passwords be changed after a set amount of time of usage (e.g.. after 60 days) and that the new password cannot be a form of the previous passwords (i.e. must be a unique password that is different from the last three or more passwords).

Management Response

We agree with the recommendation. The SII system has been reconfigured so that passwords expire after 60 days.

(iii) Restriction on Number of Log-in Attempts (SII system)

Currently, there is no system limit on the number of unsuccessful system login attempts prior to a user-id being disabled within the cash receipts program. This provides greater opportunity for individuals to "hack" into the system by trying random passwords until they acquire access to the cash receipts system.

We recommend that a user-id be disabled following a set amount of unsuccessful login attempts. The user would then be required to contact a system administrator to have their account re-enabled.

Management Response

The Manager of Information Systems advises that SII does not have this functionality. However, there is little opportunity for "hacking". The SII system is a stand-alone application that is only installed on seven workstations, only three of which handle cash transactions.

These seven workstations are never vacant during the workday and are in plain view of other staff and/or supervisors. These workstations are also password protected and locked down after 15 minutes of inactivity. There is very limited opportunity for unauthorized users to access the program. In addition, the users' access (with the exception of 3 supervisors) is limited to processing payments and does not permit any voiding or editing of transactions.

4) Cash collection procedures – Cashier workstations

(i) Cashier balancing and depositing procedures

The cashier is currently not involved in the cash balancing and depositing procedures with the exception of when the Cashier Supervisor Senior Clerk informs them of a discrepancy that requires correction. This provides the opportunity for the Cashier Supervisor Senior Clerk to manipulate the funds received without clear accountability for who was responsible for the cash last.

We recommend that the cashier be involved throughout the cash closing and depositing procedures beginning with the cashier signing off on any close-down of their till and the balancing performed on it.

Management Response

We agree with the observation that there must be clear accountability for who was last responsible for the cash. It is not operationally feasible to have the cashier participate in the closing and depositing procedures but an alternate process has been implemented that makes accountability clear.

When the cashier closes their till at the "end of day", he/she seals the money bag, records the seal number and a second cashier signs off indicating that the seal is in place and the number as recorded by the cashier is correct. When the Cashier Supervisor Senior Clerk retrieves the money bag, they sign the seal log indicating whether the seal was intact or not. If the seal is not intact, the Cashier Supervisor Senior Clerk advises the Supervisor of Accounting immediately and the bag is not opened until the Supervisor is in attendance.

Similarly, when the Cashier Supervisor Senior Clerk prepares the cashier' float for the "start of day", the Senior Clerk seals the bag, notes the seal number on the log and has a second clerk sign off, indicating that the bag is sealed and the number recorded is correct. When the cashier retrieves their float, the cashier signs the seal log indicating whether the seal was intact or not. Again, the Supervisor of Accounting will be notified immediately if the seal is not intact and the bag will not be opened until the Supervisor is in attendance.

(ii) Voiding of Transactions

The risk of misappropriation is greater within the existing system due to a system-enabled ability to change the form and substance of the cash receipt tendered. As a result, funds can be removed from the register and the transaction voided without detection. To prevent this from occurring, voided transactions require second level approval from the Cashier Supervisor Senior Clerk, the Supervisor of Accounting or the Senior Accounting Clerk. As the Cashier Supervisor Senior Clerk has access to cash, it is recommended that the Cashier Supervisor Senior Clerk not be permitted,

within the system, to initiate a voided transaction or implement the change feature without higher second level authorization.

Management Response

New procedures have been implemented limiting the Cashier Supervisor Senior Clerk's access to cash. The clerk cashier is on hand to observe the Cashier Supervisor closing off their SII system, including transaction voiding, to ensure there are no inappropriate voids. The cash drawer is sealed (and witnessed by another clerk) before the Senior Clerk even performs these voids.

As an additional control, the Supervisor of Accounting now reviews a weekly voided transaction report to monitor irregularities.

(iii) Verification of daily cash deposits

For currency received at the cash counter, there is an independent verification of the amount of the daily deposits from all the cashiers. However, the independent counter of the deposit does not sign or acknowledge that they agree with the original count as per the Cashier Supervisor Senior Clerk.

We recommend that the independent reviewer of the deposit sign the deposit slip and/or the deposit log. This is important in order to be able to hold the reviewer accountable that a proper review took place. This individual should be instructed to ensure all deposit slip details are accurate including the breakdown of actual cash and cheques included in the deposit.

Management Response

We agree with this recommendation and it has already been implemented.

(iv) Acceptance of Third Party Cheques

Currently, there is no established policy over the acceptance of third party cheques. Cashiers will accept any third party cheque as payment.

We recommend that Water and Waste only accept third party cheques from a guaranteed source, such as government cheques. This reduces the risk that Water and Waste will not fully collect on the third party cheque and reduces administrative time and costs that would be incurred if a third party cheque is returned.

Management Response

The department assumed the cashier function in February 2003 and the City's policy had always been to accept third party cheques that can be charged back. The Water and Waste department has the ability to turn off water service or add the

water account to taxes so uncollectible accounts are limited. When a payment gets rejected due to insufficient funds, there is an administrative charge that gets added to the customer's account.

However, the department agrees with the recommendation and effective November 1, 2003 will only accept third party cheques from a guaranteed source.