

AUDIT REPORT

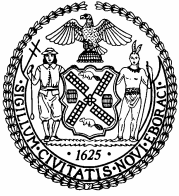


CITY OF NEW YORK
OFFICE OF THE COMPTROLLER
BUREAU OF MANAGEMENT AUDIT
WILLIAM C. THOMPSON, JR., COMPTROLLER

Audit Report on Department of Environmental Protection Controls over The Issuance and Depletion of Credits From its Reimbursable Metering Program

MG07-060A

June 26, 2007



THE CITY OF NEW YORK
OFFICE OF THE COMPTROLLER
1 CENTRE STREET
NEW YORK, N.Y. 10007-2341

WILLIAM C. THOMPSON, JR.
COMPTROLLER

To the Citizens of the City of New York

Ladies and Gentlemen:

In accordance with the Comptroller's responsibilities contained in Chapter 5, § 93, of the New York City Charter, my office has examined the Department of Environmental Protection (DEP) controls in place to accurately issue and deplete Reimbursable Metering Program (RMP) credits.

DEP bills and collects water and sewer charges for most City properties. Through this program, DEP is encouraging owners of residential properties to install water meters. Since its inception, more than 16,000 water meters have been installed under this program. Audits such as this provide a means of ensuring that DEP and other city agencies operate programs effectively and efficiently for the citizens of the City of New York.

The results of our audit, which are presented in this report, have been discussed with officials from DEP, and their comments were considered in the preparation of this report. Their complete written response is attached to this report.

I trust that this report contains information that is of interest to you. If you have any questions concerning this report, please e-mail my audit bureau at audit@comptroller.nyc.gov or telephone my office at 212-669-3747.

Very truly yours,

A handwritten signature in cursive script that reads "William C. Thompson, Jr.".

William C. Thompson, Jr.

WCT/EC

Report: MG07-060A
Filed: June 26, 2007

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The City of New York
Office of the Comptroller
Bureau of Management Audit

Audit Report on
Department of Environmental Protection Controls over the
Issuance and Depletion of Credits from its
Reimbursable Metering Program

MG07-060A

AUDIT REPORT IN BRIEF

This audit determined whether the Department of Environmental Protection (DEP) has adequate controls in place to accurately issue and deplete Reimbursable Metering Program credits.

DEP manages and maintains the City's water supply, distribution, and wastewater systems. It bills and collects the water and sewer charges quarterly for most City properties based on consumption at the premises, which is measured by water meters. In Fiscal Year 2006, DEP collected \$1.7 billion from water and sewer charges.

In the early 1990's, after Local Law 53 authorized DEP to require the installation of water meters, "The Reimbursable Metering Program" (RMP) was introduced. This program allows owners of residential properties to have a Licensed Master Plumber of their own choosing, rather than a Plumber assigned by DEP, install their water meters as well as automatic meter reading (AMR) equipment. Then, the RMP unit issues RMP and AMR credits, generally ranging from \$450 to \$4,700, to the property owner's account to reimburse the property owner for the cost of installation. The credits are applied to outstanding and future water and sewer bills unless property owners request a refund. Since its inception, more than 16,000 meters have been installed under this program.

Audit Findings and Conclusions

We determined that DEP generally issues and depletes RMP credits in accordance with the RMP guidelines of May 1, 2005. Applications for refunds and AMR credits were properly processed and posted to customer accounts. Based on our review and reconciliation of DEP records, we found that in Fiscal Year 2006, DEP issued at least 618 RMP credits totaling \$601,545.

However, internal controls need to be improved since the RMP unit, which consists of one individual, is responsible for reviewing, approving, and posting credits. This individual's work is not reviewed, nor is the individual required to periodically inform management of the dollar amount of credits approved. While we found only minor errors, and no indication of any improprieties, this situation could allow inaccurate or improper credits to be issued.

Audit Recommendations

To address these issues, we make three recommendations. DEP should:

- Ensure that there is an independent review of all credits posted on CIS by the RMP Unit;
- Ensure that the RMP Unit provides management with periodic reports of operational and financial data;
- Consider adding functionality to CIS to allow it to capture and identify credit type and the specific individual who authorized it.

Agency Response

In its response, DEP generally agreed with all of the audit's recommendations.

The City of New York
Office of the Comptroller
Bureau of Management Audit

Audit Report on
Department of Environmental Protection Controls over the
Issuance and Depletion of Credits from its
Reimbursable Metering Program

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INTRODUCTION

Background

The Department of Environmental Protection (DEP) manages and maintains the City's water supply, distribution, and wastewater systems. It delivers more than 1.1 billion gallons of drinking water from upstate reservoirs to more than eight million city residents. It bills and collects the water and sewer charges quarterly for most City properties based on consumption at the premises, which is measured by water meters. In Fiscal Year 2006, DEP collected \$1.7 billion from water and sewer charges.

To ensure accurate billing based on actual water use, DEP has a goal of metering all properties. Of the approximately 824,000 water and sewer customer accounts serviced by DEP in Fiscal Year 2006, 30,000 were un-metered and 794,000 were metered accounts. In the early 1990's, after Local Law 53 authorized DEP to require the installation of water meters, "The Reimbursable Metering Program" (RMP) was introduced. DEP has an office in each of the five boroughs responsible for customer service which administers this program.

The RMP allows owners of residential properties to have a Licensed Master Plumber of their own choosing, rather than a Plumber assigned by DEP, install their water meters. Once the meter is installed, the property owner completes an application and submits it along with the required documentation to the respective borough DEP office. The borough office reviews and approves applications for RMP credits and submits them to the RMP unit. The RMP unit, after reviewing and confirming the validity of the submitted application and prior approval, issues an RMP credit, generally ranging from \$450 to \$4,700, to the property owner's account to reimburse the property owner for the cost of installation.

In addition, as part of the RMP, customers who have automatic meter reading (AMR) equipment installed for billing purposes are eligible for AMR credits. An itemized bill for reimbursement is sent directly to the RMP unit, along with an owner's affidavit of work completed. After verifying a DEP inspector has confirmed the AMR equipment is working, the RMP unit issues a \$500 AMR credit to the property owner's account.

The RMP unit is staffed with one person who is responsible for issuing all RMP and AMR credits. Those credits are applied to outstanding and future water and sewer bills. As an alternative, property owners may instead request a refund of these credits. Since its inception, more than 16,000 meters have been installed under this program.

Objective

The objective of this audit was to determine whether DEP has adequate controls in place to accurately issue and deplete Reimbursable Metering Program credits.

Scope and Methodology

The scope of this audit is Fiscal Year 2006. To gain an understanding of the RMP, we met with DEP officials, conducted walk-throughs of the RMP Unit, and reviewed internal DEP policies and procedures, and management reports, and its *Reimbursable Metering Program* booklet, dated May 1, 2005. For criteria, we used these RMP guidelines as well as Comptroller's Directive #1, "Principals of Internal Control."

To determine the total number and value of credits issued through the RMP in Fiscal Year 2006, we obtained summary schedules from each of the five borough offices that listed the 608 RMP applications sent to the RMP Unit, and the associated application documents¹ supporting all those applications. We subsequently obtained a listing from the DEP Customer Information System (CIS)² of all 644 credits issued by the RMP unit clerk. We compared this CIS listing with the applications received from the borough offices and resolved the differences resulting in a total of 618 RMP credits³ being issued.

To test the data reliability of the CIS listing we judgmentally selected a sample of 61 RMP credits issued (every tenth credit) from the borough office summary schedules. For our sample, we determined if the appropriate RMP credit was posted to the customer's account on CIS and whether the amount and date matched the amount and date specified by the RMP Unit. In addition, we established whether the credit was being depleted by a refund or against use.

¹ RMP application documents include Meter Permit Application, Itemized Bill for Reimbursement, Property Owner's Affidavit of Work Completed, Election of Metered Billing Forms, and Refund Application.

² DEP's computer billing system.

³ From the 644 RMP credits we excluded 29 credits that were issued for the installation of Automatic Meter Reading (AMR) equipment and one credit that was reissued. We added 4 credits that were documented but not posted.

To determine whether credits had been issued in accordance with RMP guidelines, we reviewed all 608 RMP applications and their supporting documents for completeness and accuracy, and confirmed that the credits issued did not exceed the plumbers' bills. We also reviewed RMP Unit schedules and their supporting documents for the 29 AMR credits issued. Then we determined whether the RMP credits submitted by the borough offices and the AMR credits submitted directly to the RMP unit were issued appropriately and correctly posted to the property owner's account.

In addition, we obtained a listing of all 38 refund requests made by customers during Fiscal Year 2006. We reviewed those applications along with the corresponding CIS records to determine whether the refund applications had been properly requested, processed, and posted.

The results of these tests provided a reasonable basis to determine whether DEP has adequate controls in place to accurately issue and deplete RMP credits.

The audit was conducted in accordance with generally accepted government auditing standards (GAGAS) and included tests of records and other auditing procedures considered necessary. This audit was performed in accordance with the City Comptroller's audit responsibilities as set forth in Chapter 5, §93, of the New York City Charter.

Discussion of Audit Results

The matters covered in this report were discussed with DEP officials during, and at the conclusion of, this audit. A preliminary draft report was sent to DEP officials on March 26, 2007, and discussed at an exit conference held on April 16, 2007. On April 25, 2007, we submitted a draft report to DEP officials with a request for comments. We received a written response from DEP officials on May 15, 2007. In its response, DEP generally agreed with the audit's three recommendations. The full text of DEP's response is included as an addendum to this report.

FINDINGS AND RECOMMENDATIONS

We determined that DEP generally issues and depletes RMP credits in accordance with the RMP guidelines of May 1, 2005. Applications for refunds and AMR credits were properly processed and posted to customer accounts. Based on our review and reconciliation of DEP records, we found that in Fiscal Year 2006, DEP issued at least 618 RMP credits totaling \$601,545.

However, internal controls need to be improved since the RMP unit, which consists of one individual, is responsible for reviewing, approving, and posting RMP credits. This individual's work is not reviewed, nor is the individual required to periodically inform management of the dollar amount of credits approved. While we found only minor errors, and no indication of any improprieties, this situation could allow inaccurate or improper credits to be issued. These weaknesses are discussed in greater detail below.

Independent Review of RMP Unit Transactions Needs Improvement

The RMP unit at DEP is staffed by one individual who reviews all RMP applications, posts credits to customer accounts on CIS, and then reports program statistics to management. DEP has no procedure in place, nor is there any evidence of an independent review, to ensure the accuracy of credits issued to customer accounts.

While DEP generally issued the appropriate RMP credits based upon the documents we reviewed, we found that five of the 618 credits had processing discrepancies totaling \$7,355. In one instance a credit for \$4,700 was posted twice within two weeks to the same account. In the remaining four instances credits totaling \$2,655 had not been posted—despite documentation that said they had been posted. These processing discrepancies went undetected until we advised DEP of our findings. DEP took immediate action and corrected these processing discrepancies. In another instance, a customer complaint led DEP to post an RMP credit of \$1,375 that had been outstanding since June 1999 because of a processing error. Without independent review, the process is susceptible to discrepancies that misstate customers' accounts.

Comptrollers Directive #1 states “Key duties and responsibilities need to be divided or segregated among different staff members to reduce the risk of error or fraud.” However, in cases where segregation of duties is difficult mitigating controls should be implemented. These controls should include supervisory monitoring of work on an ongoing basis, examining related records, and verifying entries.

DEP's Response: “The audit's review was limited to the second step of a two-step process. RMP application, inspection and review work is performed primarily by the Bureau of Customer Services (“BCS”) Borough Offices. ... To ensure that applications are independently reviewed, and to ensure that credits are posted by someone completely independent of the initial reviewer, the credits are posted by someone located at the BCS Central Office. The Comptroller's review was limited to this central function, which is

already an independent review of all RMP credit recommendations. Further, any credit which results in a refund check is independently reviewed by two additional BCS staff.” DEP pointed out that the “recommendation is for DEP to review the work of the reviewer in order to reduce an error rate that the Audit found to be in the 1% range...(We) must also weight the costs and benefits of this additional level of review and its impact on customer service.”

Auditor Comment: The audit tested only the controls over the issuance and depletion of the RMP credits in the BCS Central Office and did not review the approval process in the Borough Office. While DEP reviews credits that result in the issuance of refund checks, they are only a very small portion of the credits that are issued. Further, we are recommending that the posting of the credits that do not result in refund checks also be reviewed. The errors identified in the audit could have been eliminated with a minimal independent review of credits processed by the RMP unit and would have contributed to improved customer service.

Recommendation

1. DEP should ensure an independent review of all credits posted on CIS by the RMP Unit.

DEP’s Response: “We agree that this is an issue worth addressing further and we will begin having 100% of the credits posted being reviewed again.”

DEP Lacks Adequate Reports to Measure the Performance of its Reimbursable Metering Program

For Fiscal Year 2006, DEP was unable to provide us with the actual number or dollar value of RMP credits issued. However, based upon our review of borough office documents and a CIS listing obtained from the RMP Unit, we determined that DEP issued at least 618 RMP credits totaling \$601,545. This is 29 more RMP credits than the 589 RMP credits the RMP unit reported to management (without any financial data) that it issued in Fiscal Year 2006. Also, CIS does not specifically identify RMP-issued credits apart from all DEP credits. Consequently, DEP management is not able to easily review the RMP credits that were issued. This lack of financial reporting and disclosure, in conjunction with the lack of independent review reported above, increases the possibility of issuing inaccurate or improper RMP credits without detection.

Comptrollers Directive #1 states: “Management requires both operational and financial data to determine whether they are meeting their agencies’ strategic and annual performance plans as well as achieving their goals for the effective and efficient use of resources.” While we confirmed that DEP management receives monthly operational information in its Universal Metering Statistics, we found that the number of meters reported installed through the RMP (i.e., credits issued) did not match the credits actually issued on CIS.

Comptrollers Directive #1 further states that “Financial information is needed for both internal and external purposes . . . to make operating decisions, monitor performance, allocate resources and, most important, take necessary corrective measures, as necessary.” Not only were

the monthly reported statistics on the RMP inaccurate, but DEP management received no financial data from the RMP.

A DEP internal report showed a total of 16,626 meters have been installed through the RMP in Fiscal Years 1998—2006. Since DEP was unable to provide us with the total dollar value of RMP credits issued during this period, we estimated that those 16,626 meters had RMP credits valued at more than \$16 million, based upon an average credit of \$973⁴ for Fiscal Year 2006.

In addition, DEP officials told us that CIS is unable to generate a listing of all accounts that received an RMP credit because the system specifies only transaction type (i.e., “credit”) but does not specify the credit type (i.e., “RMP credit”). We were provided a CIS listing of credits issued by the RMP Unit Clerk. However, we are unable to determine whether additional RMP credits may have been issued on CIS by different users. Furthermore, there are no other reports generated by CIS or elsewhere within DEP that report or verify both the number and value of the credits issued under the RMP.

Without adequate reports to measure the performance of its program, DEP management cannot effectively monitor the RMP as required by Comptrollers Directive #1, which states that “Agency management must perform continual monitoring of activities and programs.” It concerns us that without our analysis, the RMP Unit was unable to confirm the exact number or value of RMP credits it issued. Furthermore, since CIS cannot identify credits issued by credit type or generate reports by agency program, it is possible that RMP credits could be issued by unauthorized users without detection. By not effectively monitoring its program, DEP fails to assure full accountability for its resources and may allow mistakes to go undetected or fraud to occur.

DEP’s Response: “The Draft Audit’s recommendation that the RMP unit provide “operational data” is based on the fact that since the Audit found a 1 percent discrepancy between the number of credits posted on two different lists, no operational data is being provided. In fact, detailed data is reported every month on the number of meters, credits and submissions from Borough offices.”

Auditor Comment: We are not implying that “no” operational data is being provided, just that DEP was unable to provide us with reports of the actual number or dollar value of RMP credits issued in Fiscal Year 2006.

Recommendations

2. DEP should ensure that the RMP Unit provides management with periodic reports of operational and financial data.

DEP’s Response: “[We] have no fundamental disagreement with the recommendation ... We have begun reporting financial data and will continue to do that in the future.”

⁴ The average credit was calculated by taking the total value of \$601,545 in Fiscal Year 2006 credits, divided by the 618 credits issued that year.

3. DEP should consider adding functionality to CIS to allow it to capture and identify credit type and the specific individual who authorized it.

DEP's Response: "BCS provides transaction security by limiting the dollar value of transactions of any kind that individuals can perform. Security is also instituted by limiting CIS subsystems accessible to each individual, and by associating each transaction with an individual's CIS authorization code. . . . we do not disagree in principle with the recommendation and therefore will include the proposed measure in the specifications for any new billing system that DEP may purchase in the future."

Auditor Comment: In the meantime, DEP should better track RMP credits to compensate for the lack of this function in CIS.



May 15, 2007

**DEPARTMENT OF
ENVIRONMENTAL
PROTECTION**

59-17 Junction Boulevard
Flushing, New York 11373

**Emily Lloyd
Commissioner**

**Steven W. Lawitts
First Deputy Commissioner**

Tel. (718) 595-6576
Fax (718) 595-3557
slawitts@dep.nyc.gov

John Graham
Deputy Comptroller
Office of the Comptroller
1 Centre Street
New York, NY 10007-2341

RE: MG07-060A
Draft Report
Audit Report on Department of Environmental Protection
Controls Over The Issuance and Depletion of Credits From Its
Reimbursable Metering Program

Dear Mr. Graham:

Thank you for the opportunity to comment on the draft version of the above-referenced report. We are pleased that your review determined that DEP generally issues and depletes RMP credits in accordance with the applicable May 1, 2005 guidelines.

Based on the report, three recommendations were offered:

1. Ensure that there is an independent review of all credits posted on CIS by the RMP Unit;
2. Ensure that the RMP Unit provides management with periodic reports of operational and financial data;
3. Consider adding functionality to CIS to allow it to capture and identify credit type and the specific individual who authorized it.

We have no serious objections to any of the three recommendations, and have already taken action with respect to the implementation of reports covering RMP financial data. However, we are concerned that the recommendations may suggest the absence of internal controls when in reality numerous checks and balances exist to safeguard these operations. Therefore, in response to each recommendation, we have reiterated DEP's current system of internal controls over RMP Unit activities.



DIAL 311 Government Information
and Services for NYC

Recommendation 1:

Ensure that there is an independent review of all credits posted on CIS by the RMP Unit.

The audit's review was limited to the second step of a two-step process. RMP application, inspection and review work is performed primarily by the Bureau of Customer Services ("BCS") Borough Offices. The Borough offices review and approve or reject RMP applications and then forward a monthly detailed list ("schedule") of reimbursements approved by the Borough office. To ensure that applications are independently reviewed, and to ensure that the credits are posted by someone completely independent of the initial reviewer, the credits are posted by someone located at the BCS Central Office. The Comptroller's review was limited to this central function, which is already an independent review of all credit recommendations.

Further, any credit which results in a refund check is independently reviewed by two additional BCS staff. The limited scope of the audit results in a recommendation that suggests that there is no independent examination of RMP reimbursements, when in fact the reimbursements recommended by the Borough offices are reviewed independently at least once. The thrust of the Draft Report's recommendation is for DEP to review the work of the reviewer in order to reduce an error rate that the Audit found to be in the 1% range.

The Audit found a minor discrepancy in the total credits posted as represented by different lists. The Audit did not find the source of the discrepancy nor did it point to a list of accounts responsible for the discrepancy. We agree that this is an issue worth addressing further and we will begin having 100% of the credits posted being reviewed again. However, we must also weigh the costs and benefits of this additional level of review and its impact on customer service.

Recommendation 2:

Ensure that the RMP Unit provides management with periodic reports of operational and financial data.

While we have no fundamental disagreement with the recommendation, the wording of the recommendation suggests that operational data is not being reported when voluminous operational data is in fact reported. The Draft audit's recommendation that the RMP Unit provide "operational data" is based on the fact that since the Audit found a 1 percent discrepancy between the number of credits posted on two different lists, no operational data is being provided. In fact, detailed data is reported every month on the number of meters, credits and submissions from Borough offices.

As we noted during the course of the Audit, the Department has not received any previous requests for a report of the dollar value of RMP credits posted. The value of credits posted is about \$600,000 a year with refunds comprising \$50,000 of that total. We have begun reporting financial data and will continue to do that in the future.

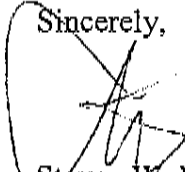
Recommendation 3:

Consider adding functionality to CIS to allow it to capture and identify credit type and the specific individual who authorized it.

BCS provides transaction security by limiting the dollar value of transactions of any kind that individuals can perform. Security is also instituted by limiting the CIS subsystems accessible to each individual, and by associating each transaction with an individual's CIS authorization code. Further, a Quality Assurance unit spot reviews all types of transactions to monitor transaction accuracy and appropriateness. The Comptroller's view is that, in the case of credits, the type of credit should also be tagged so BCS can further limit staff ability to perform certain transactions, in this case RMP credits.

Again, we do not disagree in principle with the recommendation and therefore will include the proposed measure in the specifications for any new billing system that DEP may purchase in the future.

Finally, in submitting these comments on the Draft Report we would like to express appreciation for the intelligence and professionalism with which the Audit staff performed their work. They carried out their work with minimal impact on BCS operations, asked questions that reflected their quick understanding of the subject matter they were studying and provided useful insight from their perspective on the issues under discussion.

Sincerely,

Steven W. Lawitts