



**OFFICE OF INSPECTOR GENERAL**  
*City of Chicago*



***REPORT OF THE OFFICE OF INSPECTOR GENERAL:***

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***DEPARTMENTS OF WATER MANAGEMENT AND FINANCE  
WATER SERVICE ACCOUNT INVENTORY AND REVENUE  
FOLLOW-UP INQUIRY***

**APRIL 2016**

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## OFFICE OF INSPECTOR GENERAL *City of Chicago*

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April 01, 2016

To the Mayor, Members of the City Council, City Clerk, City Treasurer, and residents of the City of Chicago:

The City of Chicago Office of Inspector General (OIG) has completed a follow-up to its June 2015 audit of the City's Water Service Account Inventory and Revenue. OIG concludes that the Departments of Water Management (DWM) and Finance (DOF) have begun implementation of the corrective actions related to the original audit findings.

The purpose of the 2015 audit was to determine whether the City recorded meter read data in its water billing system in a timely manner, maintained a complete and accurate inventory of all locations receiving water service, and billed the legally required rate for temporary water usage from fire hydrants. Our audit found that,

- DWM uploaded 100% of meter-read data to its billing system in a timely manner;
- beginning in June 2008, the City did not charge a permit or use fee for water used during private construction activities, resulting in estimated lost revenue of \$3.9 million;
- DWM provided non-metered service to nonresidential buildings and residential buildings with more than two units in violation of Municipal Code of Chicago (MCC) § 11-12-210;
- the City provided \$330,981 of water service to some properties without collecting payment from the property owners;
- DWM had a complete inventory of water service accounts, but gaps in the account verification process could allow future new customers to receive water without being billed; and
- DWM charged only one-third of the daily rate required by the MCC for temporary use of water from hydrants, issued fee waivers without express MCC authorization, and failed to track hydrant permit revenue.

Based upon the results of our audit, we recommended that the City,

- consider the feasibility of requiring meter installation immediately upon receipt of new water services;
- develop procedures to ensure all revenues collected on its behalf are completely and accurately recorded in its financial records;
- determine what, if any, action it should take to recoup the permit fee payments the City received but that were ultimately misallocated because of coding errors;

- develop and document a cost-effective strategy to enforce MCC § 11-12-210 by identifying the complete population of noncompliant, non-metered water service accounts and transitioning the accounts to metered service;
- continue its efforts to collect the \$330,981 that should have been billed on 26 accounts;
- develop a method to detect or prevent the inappropriate classification of accounts as inactive;
- work with the vendor that administers the City's billing system to limit the number of users who can mark accounts as permanently removed;
- consider whether it would be cost-effective to institute a process for periodically reviewing accounts marked as permanently removed to verify that staff appropriately classified those accounts;
- design and implement a method to ensure that the City's account verification process identifies all new water service installations;
- correct the rates charged for temporary water usage to match the rates prescribed in MCC § 11-12-290;
- ensure its fee waiver policy complies with the MCC; and
- work with DOF to assess the cost-effectiveness of implementing practices that would allow it to track hydrant permit revenue.

In December 2015, OIG inquired with DWM and DOF regarding the status of the corrective actions the Departments committed to in response to OIG's audit and any other actions they may have taken. On the following pages we have summarized the six original audit findings and recommendations, as well as the City's response to our follow-up inquiry.

Based on the Departments' follow-up responses, OIG concludes that DWM and DOF have begun implementation of their corrective actions. Once fully implemented, OIG believes the corrective actions reported by the Departments may reasonably be expected to resolve the core findings noted in the original audit.

We thank the staff and leadership of DWM and DOF for their cooperation during the original audit and responsiveness to our follow-up inquiries.

Respectfully,



Joseph M. Ferguson  
Inspector General  
City of Chicago

## Follow-Up Results

In December 2015, OIG followed up on a June 2015 audit of DWM and DOF's Water Service Account Inventory and Revenue processes.<sup>1</sup> DWM and DOF responded by describing the corrective actions they have taken since receiving the original audit and provided supporting documentation. We have summarized the six original findings, the associated recommendations, and the status of the Departments' corrective actions below. OIG's follow-up inquiry did not observe or test implementation of the new procedures and thus makes no determination as to their effectiveness, which would require a new audit with full testing of the procedures.

OIG uses four categories for Status of Corrective Action:

- **Implemented** - The department has implemented actions that may reasonably be expected to resolve the core findings/concerns noted in the original audit.
- **Partially Implemented** - The department has implemented actions in response to the audit but the actions do not fully address the findings/concerns raised in the original report.
- **Pending Implementation** - The department has initiated action plans that, if fully implemented, may reasonably be expected to resolve the core findings of the original audit. However, the department has not completed implementation.
- **Not Implemented** - The department has not initiated or implemented any actions responsive to OIG's findings.

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**FINDING 1:** **DWM uploaded 100% of meter read data to its billing system in a timely manner.**

OIG Recommendation: This finding did not identify concerns for correction, therefore we made no recommendation.

Status of Corrective Action: No corrective action necessary.

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**FINDING 2:** **Beginning in June 2008, the City did not charge a permit or use fee for water used during private construction activities, resulting in estimated lost revenue of \$3.9 million.**

OIG Recommendation: DWM should consider the feasibility of requiring meter installation immediately upon receipt of new water services. If DWM determines such a requirement to be infeasible, it should develop a mechanism to prevent unauthorized use of water during private construction.

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<sup>1</sup> The 2015 audit report is available on the OIG website: <http://chicagoinspectorgeneral.org/wp-content/uploads/2015/06/Water-Service-Account-Inventory-And-Revenue-Audit.pdf>

During the audit, OIG also found that in 2006, due to coding errors, DOF had incorrectly allocated revenue from construction water permits to the Corporate Fund instead of the Water Fund. Therefore, OIG also recommended that DWM develop procedures to ensure all revenues collected on its behalf are completely and accurately recorded in its financial records. Finally, DWM should determine what, if any, action it should take to recoup the permit fee payments the City received but that were ultimately misallocated because of coding errors.

Status of Corrective Action: **Pending Implementation.** DWM requested an amendment to MCC § 11-12-210 to require water meter installation “at the time the building is connected to the city’s water system.” City Council amended the MCC, which became effective on October 5, 2015, and DWM implemented procedures to comply on the same date. In addition, DWM stated it began notifying contractors that were issued a permit prior to the effective date of the amendment, informing them that they must have meters installed. DWM stated it anticipated completing meter installation at those sites by September 30, 2016.

The amendment of the MCC eliminated the need to transfer portions of future water construction permit fees to the Water Fund. DWM and DOF determined the estimated amount misallocated to the Corporate Fund was \$1.8 million. As part of the 2015 year-end process, OBM and DOF reduced the year-end reimbursement due from the Water Fund to the Corporate Fund by that amount.

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**FINDING 3: DWM provided non-metered service to some nonresidential buildings and residential buildings with more than two units in violation of MCC § 11-12-210.**

OIG Recommendation: DWM should develop and document a cost-effective strategy to enforce MCC § 11-12-210 by identifying the complete population of noncompliant, non-metered water service accounts and transitioning the accounts to metered service.<sup>2</sup> The strategy should include tactics designed to overcome barriers and criteria that dictate when to implement specific tactics—including but not limited to procedures authorized under the MCC and the Illinois Administrative Code—as well as a goal for completion of the project.

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<sup>2</sup> As reported in the original audit, MCC § 11-12-210 requires the installation of a meter on all water service pipes installed after September 15, 1982 and requires property owners to have meters installed on all water service pipes serving existing non-residential buildings and residential buildings with more than two units.

Status of Corrective Action: **Pending Implementation.** DWM stated it “has examined and investigated all non-metered accounts identified in the Banner System, and has identified those that are non-compliant.” As of February 25, 2016, it had converted 1,288 non-compliant non-metered accounts. There were 515 accounts that remained in non-compliant status. DWM stated it will continue “to pursue enforcement where necessary against [these 515] non-compliant, non-metered accounts [...]”

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**FINDING 4:** **The City provided \$330,981 of water service to some properties without collecting payment from the property owners.**

OIG Recommendation: DOF should continue its efforts to collect the \$330,981 that should have been billed on 26 accounts. OIG also recommended that DOF develop a method to detect or prevent the inappropriate classification of accounts as inactive. In addition, DOF should work with the vendor that administers its billing system to limit the number of users who can mark accounts as permanently removed. Finally, DOF should consider whether it would be cost-effective to institute a process for periodically reviewing accounts marked as permanently removed to verify that staff appropriately classified those accounts.

Status of Corrective Action: **Pending Implementation.** As of January 6, 2016 property owners had made payments on 22 of the 26 accounts while 4 accounts had no payments. DOF continues to pursue the debts via its normal collection process.

DOF developed and implemented procedures to identify accounts that were set to inactive without a corresponding account being created. In addition, DOF established a special examination code for “permanently removed accounts” which will enable it to identify accounts classified as permanently removed. It is coordinating the development of related procedures with DWM and currently has an implementation goal of the end of the second quarter 2016.

Furthermore, DOF stated that, during the course of the audit, it had reduced the number of billing system users from 175 to 22. As part of its follow-up response, DOF stated it had further reduced that number to 18.

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**FINDING 5:** **DWM had a complete inventory of water service accounts, but gaps in the account verification process could allow future new customers to receive water without being billed.**

OIG Recommendation: DWM should design and implement a method to ensure that its account verification process identifies all new water service installations. Alternatively, if DWM began requiring immediate meter installation, as recommended in Finding 2, it could issue the meter and create an account in the billing system prior to the scheduled water service installation. Eliminating the delay between water service installation and account creation would minimize the need to detect errors after the fact. Given the complex logistics of water service installation, DWM should assess the feasibility and cost-effectiveness of this option.

Status of Corrective Action: **Implemented.** The amendment to MCC § 11-12-210 described in Finding 2 eliminated the delay between water service installation and account creation.

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**FINDING 6:** **DWM charged only one-third of the daily rate required by the MCC for temporary use of water from hydrants; issued fee waivers without express MCC authorization; and failed to track hydrant permit revenue.**

OIG Recommendation: DWM should correct the rates charged for temporary water usage to match the rates prescribed in MCC § 11-12-290. In addition, DWM should ensure its fee waiver policy complies with the MCC.

DWM should also work with DOF to assess the cost-effectiveness of implementing practices that would allow it to track hydrant permit revenue.

Status of Corrective Action: **Implemented.** At the request of DWM, the City Council amended the MCC in July 2015 and defined the daily rate for temporary water usage to be \$83.78. DWM and the Department of Buildings implemented procedures to charge the updated rate.

As part of the original audit response, DWM stated that it no longer waived temporary water use fees. It also stated that the implementation of the flat-rate daily fee (discussed above) in combination with the process and system changes discussed in Finding 2, would “effectively facilitate more accurate and complete tracking of hydrant permits and related revenue.” As part

of the follow-up response, DWM stated that it currently has the ability to manually compare operational reports with the cash management system to ensure permit fees are collected and that it is also developing an automated method to accomplish that review.



**CITY OF CHICAGO OFFICE OF INSPECTOR GENERAL**

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**MISSION**

The City of Chicago Office of Inspector General (OIG) is an independent, nonpartisan oversight agency whose mission is to promote economy, efficiency, effectiveness, and integrity in the administration of programs and operations of City government. OIG achieves this mission through,

- administrative and criminal investigations;
- audits of City programs and operations; and
- reviews of City programs, operations, and policies.

From these activities, OIG issues reports of findings and disciplinary and other recommendations to assure that City officials, employees, and vendors are held accountable for the provision of efficient, cost-effective government operations and further to prevent, detect, identify, expose, and eliminate waste, inefficiency, misconduct, fraud, corruption, and abuse of public authority and resources.

**AUTHORITY**

The authority to produce reports and recommendations on ways to improve City operations is established in the City of Chicago Municipal Code § 2-56-030(c), which confers upon the Inspector General the following power and duty:

*To promote economy, efficiency, effectiveness and integrity in the administration of the programs and operations of the city government by reviewing programs, identifying any inefficiencies, waste and potential for misconduct therein, and recommending to the mayor and the city council policies and methods for the elimination of inefficiencies and waste, and the prevention of misconduct.*