



**DISTRICT OF COLUMBIA  
WATER AND SEWER AUTHORITY**

**Board of Directors**

*Audit Committee*

*Thursday, February 28, 2013*

9:30 a.m.

1. **Call to Order** ..... Bradford Seamon, Chairperson
  
2. **External Auditor Communication with the Committee** .....Uzma Malik-Dorman  
**Bazilio Cobb Associates**
  
3. **Review of Internal Audit Status** .....Joseph Freiburger
  - A. **Regulatory Compliance Report Final**
  - B. **Remote Cashiering Report Final**
  - C. **Chemicals Purchasing Report Final**
  - D. **Special Report – IT Inventory**
  
4. **Update on Establishing Fraud Hotline**.....Joseph Freiburger
  
5. **Executive Session**..... Bradford Seamon
  
6. **Adjournment**



District of Columbia  
Water and Sewer Authority

Audit of Federal Award Programs

Year Ended September 30, 2012



Certified Public Accountants and Consultants  
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**DISTRICT OF COLUMBIA  
WATER AND SEWER AUTHORITY  
AUDIT OF FEDERAL AWARD PROGRAMS  
YEAR ENDED SEPTEMBER 30, 2012**

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**INDEPENDENT AUDITOR'S REPORT ON  
INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE  
AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS  
PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS***

Board of Directors  
District of Columbia Water and Sewer Authority

We have audited the financial statements of the District of Columbia Water and Sewer Authority (“DC Water” or the “Authority”) as of and for the year ended September 30, 2012, and have issued our report thereon dated December 17, 2012. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

**Internal Control Over Financial Reporting**

Management of the Authority is responsible for establishing and maintaining effective internal control over financial reporting. In planning and performing our audit, we considered the Authority's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control over financial reporting.

*A deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. *A material weakness* is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be deficiencies, significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

**Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the Authority's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

We noted certain matters that we reported to management of the Authority in a separate letter dated December 17, 2012.

This report is intended solely for the information and use of the Board of Directors, management, others within the Authority, and federal awarding agencies and is not intended to be and should not be used by anyone other than these specified parties.

Washington, D.C.  
December 17, 2012

Bazilio Cobb Associates



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**INDEPENDENT AUDITOR'S REPORT ON  
COMPLIANCE WITH REQUIREMENTS THAT COULD HAVE A DIRECT AND  
MATERIAL EFFECT ON EACH MAJOR PROGRAM AND INTERNAL CONTROL  
OVER COMPLIANCE IN ACCORDANCE WITH OMB CIRCULAR A-133**

Board of Directors  
District of Columbia Water and Sewer Authority

***Compliance***

We have audited the Compliance of the District of Columbia Water and Sewer Authority (“DC Water” or the “Authority”) with the types of compliance requirements described in the U.S. Office of Management and Budget (“OMB”) Circular A-133, *Compliance Supplement*, that could have a direct and material effect on each of its major federal programs for the year ended September 30, 2012. The Authority's major federal programs are identified in the summary of auditor's results section of the accompanying *Schedule of Findings and Questioned Costs*. Compliance with the requirements of laws, regulations, contracts, and grants applicable to each of its major federal programs is the responsibility of the Authority's management. Our responsibility is to express an opinion on the Authority's compliance based on our audit.

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and OMB Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations*. Those standards and OMB Circular A-133 require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the Authority's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion. Our audit does not provide a legal determination on the Authority's compliance with those requirements.

In our opinion, the Authority complied, in all material respects, with the compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended September 30, 2012.

***Internal Control Over Compliance***

Management of the Authority is responsible for establishing and maintaining effective internal control over compliance with the requirements of laws, regulations, contracts, and grants applicable to federal programs. In planning and performing our audit, we considered the Authority's internal control over compliance with the requirements that could have a direct and material effect on a major federal program to determine the auditing procedures for the purpose of expressing our opinion on compliance and to test and report on internal control over compliance in accordance with OMB Circular A-133, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control over compliance.

*A deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. *A material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be deficiencies, significant deficiencies, or material weaknesses. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses, as defined above.

***Schedule of Expenditures of Federal Awards***

We have audited the financial statements of the Authority as of and for the year ended September 30, 2012, and have issued our report thereon dated December 17, 2012. Our audit was performed for the purpose of forming an opinion on the basic financial statements taken as a whole. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by OMB Circular A-133 and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated, in all material respects, in relation to the financial statements as a whole.

This report is intended solely for the information and use of the Board of Directors, management, others within the Authority, and federal awarding agencies and is not intended to be and should not be used by anyone other than these specified parties.

Washington, D.C.  
January 25, 2013

*Bazilio Cobb Associates*

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY  
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS  
YEAR ENDED SEPTEMBER 30, 2012**

<b>Federal Grantor/ Pass-through Grantor/Program Title</b>	<b><u>CFDA Number</u></b>	<b><u>Federal Expenditures</u></b>
<b>Environmental Protection Agency</b>		
<b>Direct Payments</b>		
Clean Water Act Program*	66.458	\$ 9,329,500
American Recovery and Reinvestment Act - Clean Water Act Program **	66.458	1,580,031
Safe Drinking Water Act Program*	66.468	8,817,900
American Recovery and Reinvestment Act - Safe Drinking Water Act Program **	66.468	8,670,723
<b>Congressional Appropriation</b>		
Combined Sewer Overflow*	99.UNK	<u>30,526,536</u>
<b>Total Expenditures of Federal Awards</b>		<u><u>\$ 58,924,690</u></u>

\* Denotes a major program

\*\* Denotes ARRA Funds

See accompanying notes to the schedule of expenditures of federal awards.



**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY  
NOTES TO THE SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS  
SEPTEMBER 30, 2012**

**NOTE 1: BACKGROUND**

The District of Columbia Water and Sewer Enterprise Fund (the “Fund”) was established in 1979 and was operated by the Water and Sewer Utility Administration, a division of the District of Columbia (the “District”) Department of Public Works. The District of Columbia Water and Sewer Authority (the “Authority”), an independent authority of the District, was created in April 1996 and began operating October 1, 1996 under and pursuant to an Act of the Council of the District entitled the “Water and Sewer Authority and Department of Public Works Reorganization Act of 1996 (as amended)”, and an Act of the United States Congress entitled the “District of Columbia Water and Sewer Authority Act of 1996”.

The Authority provides water and wastewater services to District residents, businesses, federal and municipal customers, and certain facilities of the Federal government in Virginia and Maryland. The Authority also operates a regional wastewater treatment plant (Blue Plains) and an interceptor trunk line that carries wastewater primarily from Loudoun and Fairfax Counties and Dulles Airport to the Blue Plains wastewater treatment facility.

The Authority’s wastewater service territory includes over 2 million people in Montgomery and Prince George’s Counties in Maryland, Fairfax and Loudoun Counties in Virginia, and the District. The Blue Plains Intermunicipal Agreement (“IMA”) was executed in September 1985 among the District; Fairfax County, Virginia; and the Washington Suburban Sanitary Commission, which comprises Montgomery and Prince George’s Counties in Maryland (collectively referred to as the “Participants”). The IMA provided for the expansion of the Plant’s processing capacity to 370 million gallons per day. The IMA also provided for the allocation of capital, operating, and maintenance costs among the Participants. Capital costs of the Plant are allocated among the Participants in proportion to their respective wastewater treatment capacity allocation as defined in the IMA. Operating costs are allocated based on wastewater flows from each participant.

The Loudoun County Sanitation Authority and the Potomac Interceptor Group also purchase wastewater services from the Authority. The Potomac Interceptor Group consists of the Town of Vienna, Virginia; the U.S. Park Service; the Department of the Navy; and the Metropolitan Washington Airport Authority (Dulles Airport).

The Authority purchases water from the Washington Aqueduct (the “Aqueduct”), which is owned by the U.S. Government and operated by the U.S. Army Corps of Engineers under the direction of the Secretary of the Army. The Aqueduct operates two water purification plants for the exclusive benefit of the Authority; Arlington County, Virginia; and the City of Falls Church, Virginia. The Authority

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY  
NOTES TO THE SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS  
SEPTEMBER 30, 2012**

**NOTE 1: BACKGROUND (Continued)**

purchases approximately 75 percent of the water produced by the Aqueduct, which is reported as water purchases.

**NOTE 2: BASIS OF PRESENTATION**

The schedule of expenditures of federal awards includes the activity of all federal financial award programs of the Authority and is presented on the accrual basis of accounting. The information in this schedule is presented in accordance with requirements of OMB Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations*. Therefore, some amounts presented in the schedule may differ from amounts presented in, or used in the preparation of, the basic financial statements (See Note 4).

**NOTE 3: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

The federal grants awarded to the Authority are cost-reimbursable. Grant revenues are recorded when earned and expenditures are recorded as incurred. For cost-reimbursable awards, revenue is recognized to the extent of expenses incurred.

Various reimbursement procedures are used for federal awards. Timing differences between expenditures and program reimbursement can exist at the beginning and end of the year. Accrued balances at year-end represent an excess of reimbursable expenditures over cash received. Deferred balances represent an excess of cash received over reimbursable expenditures incurred to date. Generally, an accrued or deferred balance caused by differences in the timing of cash reimbursements and expenditures will be reversed in the remaining grant period.

In fiscal year 2001, the Authority adopted Government Accounting Standards Board (“GASB”) Statement No. 33, *Accounting and Financial Reporting for Nonexchange Transactions*. This statement requires governments to recognize capital contributions as revenues and not contributed capital. The statement does not allow governments to restate contributed capital from prior periods. Thus beginning in fiscal year 2001, grants received from the federal governments for utility plant construction were recorded as revenues and not contributed capital.

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY  
 NOTES TO THE SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS  
 SEPTEMBER 30, 2012**

**NOTE 3: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

In fiscal year 2012, the Authority received \$14.9 million in appropriations from the U.S. Government to be used, with matching funds, for capital projects aimed at reducing Combined Sewer Overflows. Appropriations revenues are recorded when matching expenditures are incurred. In fiscal year 2010, the Authority was also awarded \$25.3 million in American Recovery and Reinvestment Act (“ARRA”) funding. Of this amount, \$19.5 million was awarded to fund Safe Drinking Water Act Capital projects while, \$5.8 million was awarded to fund Clean Water Act projects. Eligible ARRA expenditures were 100% funded by the Environmental Protection Agency.

**NOTE 4: RECONCILIATION TO BASIC FINANCIAL STATEMENTS**

The following schedule reconciles Total Expenditures of Federal Awards reported on page 6 to Federal grants and contributions reported on page 48 of the 2012 Comprehensive Annual Financial Report in the Statement of Revenues, Expenses and Change in Net Assets for the year ended September 30, 2012.

Total Expenditures of Federal Awards	\$ 58,924,690
D.C. Office of Deputy Mayor for Planning and Economic Development	139,777
D.C. Department of Environment, D.C. Office of Planning, General Services Administration, Smithsonian Institution, and D.C. Homeland Security and Emergency Management Agency	85,751
Decrease in allowance and possible disallowed costs	<u>(193,123)</u>
Federal grants and contributions per financial statements	<u><u>\$ 58,957,095</u></u>

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY  
SCHEDULE OF FINDINGS AND QUESTIONED COSTS  
YEAR ENDED SEPTEMBER 30, 2012**

**Section I – Summary of Auditor’s Results**

***Financial Statements***

The type of auditor’s report issued on the financial statements Unqualified

*Internal control over financial reporting:*

- Material weaknesses identified? No
- Significant deficiencies identified that are not considered to be material weaknesses? None Reported

Noncompliance material to the financial statements noted? No

***Federal Awards***

*Internal control over major programs:*

- Material weaknesses identified? No
- Significant deficiencies identified that are not considered to be material weaknesses? None Reported

The type of auditor’s report issued on compliance for major programs Unqualified

Any audit findings disclosed that are required to be reported in accordance with Section 510(a) of OMB Circular A-133? No

Identification of major programs:

<u>CFDA Number</u>	<u>Name of Federal Program or Cluster</u>
66.458	Environmental Protection Agency – Clean Water Act
66.458	Environmental Protection Agency – ARRA Clean Water Act
66.468	Environmental Protection Agency – Safe Drinking Water Act
66.468	Environmental Protection Agency – ARRA Safe Drinking Water Act
99.UNK	Congressional Appropriation – Combined Sewer Overflow

Dollar threshold used to distinguish between Type A and Type B programs: \$1,774,506

Auditee qualified as low-risk auditee under Section 520 of OMB Circular A-133 Yes

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY  
SCHEDULE OF FINDINGS AND QUESTIONED COSTS  
YEAR ENDED SEPTEMBER 30, 2012**

**Section II – Financial Statement Findings**

None

**Section III – Federal Award Findings and Questioned Costs**

There were no Federal award findings and questioned costs in fiscal year 2012.

**STATUS OF PRIOR YEAR’S FINDINGS**

There were no Federal award findings and questioned costs in fiscal year 2011.



*Internal Audit Update*  
*Audit Committee Meeting*  
*February 28, 2013*

The following represents a summary of the activities and achievements since the November 29, 2012 meeting.

**I. HIGHLIGHTS:**

Performance of scheduled internal audits – Internal Audit performed audit work in seven separate audit areas. Additionally, three final reports were issued related to the FY2013 Internal Audit Plan (Regulatory Compliance, Chemicals Purchasing and Cashiering Remote Site) and one final report was issued stemming from a special project (IT Asset Inventory). The Purchasing Card (P-card) audit is substantially complete as we await Management responses. Two audits, Investments and Cash Management, and Fleet Management, are each in the fieldwork phase. One audit, IT Network Security, just began and is in the planning stage. The chart below depicts the planned projects and their status for the fiscal year.

**A. Stage of Audits & Special Projects** - The following represents an indication of the stage of completion for each scheduled audit and requested special project.

PROJECT	PLANNING / SCOPING	FIELDWORK	DRAFT REPORT	FINAL REPORT
Regulatory Compliance				
P-Card				
Chemicals Purchasing				
Cashiering Remote Site				
Investments & Cash Management				
Fleet Management				
IT Network Security				
Sewer – Emergency Services				
Engineering – High Priority				
PCCS				
Utilities – Repairs & Flushing				
Maintenance Services				
Warehouse Operations				

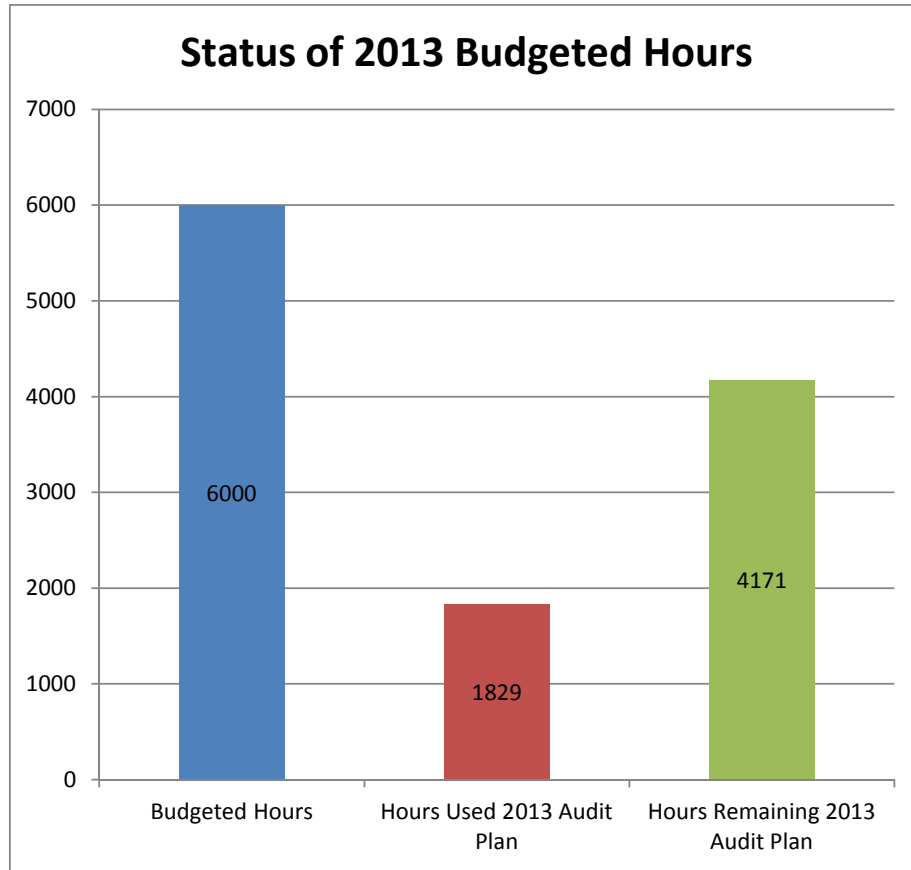
IT – SDLC & Change Management				

**B. Analysis of key milestone dates** - The following represents an indication of the date of completion of key project milestones.

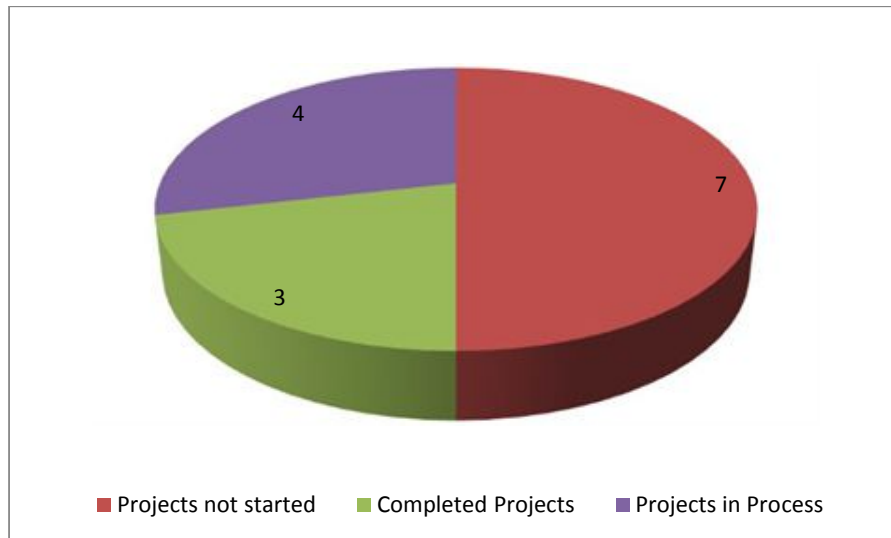
PROJECT	START DATE	FIELDWORK END DATE	DRAFT REPORT ISSUANCE DATE	FINAL REPORT
Regulatory Compliance	12/7/2012	1/10/2013	1/22/2013	2/14/2013
P-Card	10/12/2012	1/10/2013	2/8/2013	
Chemicals Purchasing	11/14/2012	1/18/2013	2/5/2013	2/19/2013
Cashiering Remote Site	12/11/2012	1/7/2013	1/15/2013	2/15/2013
Investments & Cash Management	1/15/2013			
Fleet Management	1/22/2013			
IT Network Security	2/21/2013			
Sewer – Emergency Services				
Engineering – High Priority				
PCCS				
Utilities – Repairs & Flushing				
Maintenance Services				
Warehouse Operations				
IT – SDLC & Change Management				

**C. Analysis of Hours** – The chart below indicates the actual hours used through January 31, 2013 toward completion of the internal audit plan, along with an indication of the total hours included in the FY2013 plan.





## II. 2013 Audit Plan Status



## A. Reports Issued Since Last Audit Committee Meeting

### 1. Regulatory Compliance

Our overall audit objective was to assess DC Water's ability to effectively meet the necessary reporting requirements and deadlines, and to communicate relevant regulatory changes to the applicable parties. Specific goals included:

- Assess whether the Office of the General Counsel has the ability to identify and collect legal and regulatory compliance requirements for the entire organization on an ongoing basis;
- Determine whether a process is in place to accurately capture legal and regulatory compliance requirements in the organization's tracking system;
- Determine whether adequate internal controls have been implemented to assure adherence to regulatory reporting requirements and guidelines;
- Evaluate the integrity of the data used to complete the reports and filings submitted to regulatory bodies;
- Assess whether regulatory reports and filings are properly reviewed and approved prior to their submission;
- Determine whether regulatory reports and filings are submitted timely on a consistent basis;
- Identify whether support is retained relative to the integrity of the data and reports submitted to regulatory bodies; and,
- System access to the tracking system is properly assigned.

The audit performed a review of the legal and regulatory compliance requirements collected by the Office of the General Counsel, and a review of the processes and controls in place to monitor compliance with the regulatory requirements.

Internal Audit concludes that a sound process and effective controls are in place to achieve the overall DC Water compliance objectives. We noted one observation and offer a recommendation for management's consideration:

- Assure that the Compliance Officer's annual plan is documented, then formally reviewed and approved by the Office of the General Counsel prior to execution.

This audit resulted in the addition of one Management Action Item in the chart in Section III Follow Up.

## 2. Remote Cashiering

Our overall audit objectives included identifying and evaluating the processes and procedures around the acceptance, processing and depositing of customer payments, as well as performing detailed testing to assess the effectiveness of the existing controls. In addition, the physical security of the business office and the customer payments while on-site were evaluated to assure their completeness and appropriateness. Specific audit objectives focused on:

- Assessing whether business office roles and responsibilities are adequately segregated;
- Validating that payments are completely and accurately applied to customer accounts on a consistent basis;
- Verifying that payments are independently reconciled to billing system records to assure that all payments are properly received and accurately recorded to customer accounts;
- Determining whether all deposits are accurately prepared, properly safeguarded, and deposited timely;
- Evaluating whether the levels of information systems access granted to business office personnel with cash-handling responsibilities are appropriate and that they are restricted from issuing credit, transferring balances, etc without appropriate reviews and approvals;
- Evaluating access to the business office - including the lobby, cashier area and back office space;
- Assessing the appropriateness of the security cameras located at the business office, as well as the storage of the recordings from the cameras;
- Evaluating the level of security provided by the business office safe, along with controls designed to limit access to the safe; and,
- Determining whether business office drop boxes are properly secured to protect customer payments until they are collected and applied to customer accounts.

We performed an evaluation of the physical controls, as well as a review of the processes and procedures at DC Water's business office located at 810 First Street, NE Washington, DC and the permit office located at 1100 4th Street SW, Washington, DC.

Internal Audit concludes that a number of topics should be addressed by management in order to further strengthen DC Water's Remote Cashiering processes and improve various aspects of the control environment. In particular, there is a need to address the following:

- Remove the following abilities and responsibilities from the Cash Receipts Supervisor:
  - o The ability to enter credit adjustments;
  - o The ability to transfer balances in customer accounts; and,
  - o The responsibility for investigating and resolving variances identified in the independent bank to billing system reconciliations.
- Enhance the current process of investigating and resolving variances from the monthly bank to billing system reconciliation through the following:
  - o Designate an independent employee to investigate and resolve variances identified through the independent bank to billing system reconciliations;
  - o Require that all variances identified during the independent bank to billing system reconciliation are investigated and resolved each month; and,

- Review and approve all resolutions to variances identified through the independent reconciliation between the bank deposits and the payments applied to CIS each month.
  
- ❑ Modify the Business Office teller procedures to incorporate the following:
  - Require that two tellers count and dually verify the starting balance of each teller till at the beginning of each day;
  - Require that two tellers count and dually verify the cash in each till at the end of each day; and,
  - Require that two employees prepare the daily bank deposits together, with both employees either initialing or signing the deposit slip.
- ❑ Modify the drop box payment procedures to incorporate the following:
  - Require that two employees collect and process the drop box payments together;
  - Require that the two employees collecting the drop box payments together also record each payment collected onto a spreadsheet or log book as evidence of their receipt; and,
  - Designate a back-up key holder for the interior drop box.
- ❑ Shred all customer checks in-house, rather than giving them to the third-party document destruction vendor for shredding.
- ❑ Establish periodic sweeps of the excess cash in the teller tills. Cash should be swept back down to the starting balance of the till (\$200), and the excess cash recorded and placed into the safe until it can be included in the end of day teller reconciliations.
- ❑ Store the security camera recordings at an off-site location, such as the Security or Facilities offices.
- ❑ Require that all checks be restrictively endorsed at the time that they are received by the tellers.

This audit resulted in the addition of eight Management Action Items in the chart in Section III Follow Up.

### **3. Chemicals Purchasing**

Our overall audit objectives included an evaluation of the accuracy and propriety of costs incurred relative to the procuring of various chemical used in the treatment process, along with an assessment of compliance with applicable laws and regulations. Specific audit procedures performed are as follows:

- ❑ To ensure that chemical activities are in compliance with DC Water policies and procedures, as well as applicable laws and regulations.
- ❑ To determine the accuracy and propriety of costs incurred relative to the procuring of various chemicals used in the treatment process.
- ❑ To ensure that proper controls exist to monitor and secure the chemical inventory.
- ❑ To ensure chemical purchasing activities are operating effectively.
- ❑ To ensure that personnel handling chemicals are adequately trained and hold the appropriate certification (if applicable).

To achieve their objectives, the Department of Wastewater Treatment utilizes the following seven chemicals; ferric chloride, methanol, sodium hypochlorite, polymer, sodium bisulfate, lime, and caustic soda. In FY2012, DC Water had a budget of \$23.7 million and expended \$21.0 million for the purchase of various chemicals.

After reviewing the current control environment, Internal Audit concludes that while there are no significant control gaps, there are several process improvement opportunities that exist within the chemicals purchasing environment. The majority of these issues can be remediated with increased automation of processes.

For instance, our testing indicated that the process to review and approve invoices is cumbersome and inefficient as the staff relies on the manual creation and manipulation of approval spreadsheets that occur outside of Lawson. Additionally, the Supervisory Summary Reports, used to track all chemical deliveries and relevant weight information, are prone to manual entry errors, are not consistently updated to include all required information, and omit information, such as chemical deliveries. Our testing also identified that chemical orders, at times, are directly placed with the vendor by foremen and are not always communicated to the DWT Chemical Ordering staff; the standard operating procedures require that orders are formally requested by the DWT Chemical Ordering staff.

Finally, Internal Audit determined that there are several process improvement areas, such as implementing secondary reviews of chemical delivery documentation in the field and annually revising standard operating procedures relevant to chemical activities that would strengthen the department's control environment. To further enhance the department's real-time monitoring activities, Management should look to implement standardized reports, such as monthly expenditures in Lawson and inventory roll-forward reports in PCS.

This audit resulted in the addition of five Management Action Items in the chart in Section III Follow Up.

#### **4. IT Asset Inventory - Special Project**

DC Water engaged WIS International ("WIS"), a third party inventory counting service provider, to perform the physical inventory of selected IT and Fleet assets. The contractual arrangement with the firm specified that they were to limit their process to recording items observed and provide DC Water staff with the listing of items observed. The items observed would subsequently be compared to an inventory listing provided by DC Water. WIS was not required to resolve any discrepancies between DC Water's actual records and the count. Furthermore, they communicated that when their team was scheduled to be on-site, they would record any in-scope items as being present. The instructions provided to WIS specified that following categories of assets were considered to be in-scope: Monitors, CPUs, Laptops, Printers, Faxes, Scanners, Copiers, Projectors and Plotters.

In instances in which they were not able to observe any items or an office area, the related items on DC Water's records would be identified as "missing."

It would then be the responsibility of the DC Water staff to determine the correct disposition of the items categorized as “missing.” The actual count process was conducted in October 2012.

The asset records provided to WIS identified 4,305 IT assets in the categories identified above. After WIS completed their inventory process, they provided DC Water with a listing of 1,613 IT assets (37.4% of all IT assets) that they could not locate and categorized as “missing.”

Internal Audit assisted in the process of researching and attempting to resolve the noted discrepancies. The goal of the follow-up IT asset review was not to gain 100% assurance as to the presence of, or absence of, every asset on the “missing” list. Rather, the goal was to conduct an intensive short-term search of the items on the DC Water inventory list to locate as many of the assets as possible, to identify any assets that were no longer in the possession of the assigned end users, and to assess the IT asset processes, procedures, and controls.

The result of the IT asset inventory follow-up performed by Internal Audit is as follows:

- Assets identified as “missing” after WIS test counts: 1,613 IT Assets (37.4% of total assets)
- Assets found by Internal Audit: 829 IT Assets
- Remaining “missing” as Internal Audit test counts: 784 IT Assets (17.4% of total assets)

Based on the age of the majority of the remaining “missing” IT assets, it is likely (but not confirmed) that the majority of these assets have been replaced due to obsolescence and/or malfunction and subsequently sold or destroyed through the IT asset disposal process.

Internal Audit recommends that DC Water examine re-engineering the processes and procedures around the deployment, disposal, tracking, and monitoring of IT Assets to gain assurance that all assets are efficiently utilized and adequately safeguarded against theft or loss. During the course of our search for the missing IT assets, Internal Audit noted the following weaknesses in the current IT Asset Management process:

- DC Water uses an internally-developed IT Database to record the description, location, and movement of its IT assets. We noted several weaknesses with both the database (e.g. logging, reporting, access controls) and with the controls surrounding how the information in the database is updated and maintained (e.g. consistency, accuracy, audit trails, dates). Additionally, we noted issues with how disposals and results of physical inventories are recorded in the database. Finally, we noted that the system does not communicate with Lawson and that asset numbers assigned in Lawson do not correspond with asset numbers in the IT database which complicates the possibility of accurately determining the valuation of any potential financial statement write-off as a result of missing or damaged IT assets.
- IT does not have detailed policies and standard operating procedures related to IT’s strategy for the acquisition of assets; the deployment, moving, and re-deployment of assets; and the method and frequency of the disposition of assets is necessary to ensure both the transparency of the IT organization and consistency across all users of the assets.

- ❑ We noted several different types of asset tags while performing our physical counts. We recommend that the IT department adopt a new, uniform IT asset tracking methodology that is applied to all IT assets, new and existing, that contains barcodes for efficient use of scanning.
- ❑ The IT cage in the BP-1 warehouse needs to be assessed and a new methodology be adopted for the receipt, storage, and disposition of the assets in the cage is developed. There is no physical inventory record of what is in the IT cage. We noted new IT assets such as laptops and monitors that had been received but not tagged or entered into the database. We also noted that IT assets were not stored in boxes or cabinets to prevent exposure to dust and debris and that the IT assets were not stored in an organized manner by asset type. Additionally, we noted there were a significant number of IT assets that were marked for disposal and not yet removed and there are other assets not marked for disposal that are clearly obsolete, damaged, or otherwise unusable. Finally, there is a policy that states that warehouse personnel can only enter the IT Cage for emergencies or when escorted by IT; however, there are no controls in place that prevents or limits the access of warehouse personnel into the IT cage or that could detect instances where unauthorized warehouse personnel accessed the cage.
- ❑ We noted that IT asset inventories have occurred in the past by contracted vendors. However, it appears that there was no follow-up or resolutions for the items identified as not found in previous inventories, nor were these items ever purged from the IT Database.
- ❑ Responsible Property Officers (“RPOs”) are assigned for each business unit with the purpose of monitoring their assets. We noted that the RPOs are not sufficiently trained on their roles and responsibilities and not provided with adequate reporting tools to effectively monitor the business unit’s assets.

This special project resulted in the addition of six Management Action Items in the chart in Section III Follow Up.

### III. Follow Up

In addition to our work performed relative to the audit projects identified in the 2013 Internal Audit Plan, Internal Audit conducted follow-up activity relative to previously reported audit comments. The table below summarizes the issues by area of responsibility and the current status of the action plan proposed by Management.

	Chief Engineer	AGM Wastewater Treatment	AGM Consumer Services	Chief Financial Officer	General Counsel	Chief Information Officer	AGM Support Services	General Manager	Total
New Management Action Plans Since Previous Meeting	-	5	-	8	1	6	-	-	20
Management Action Plans Implementation Date Not Expired	-	8	1	1	-	5	19	-	34
Management Action Plans Implementation Date Expired	-	-	-	-	-	4	2	1	7
Total	-	13	1	9	1	15	21	1	61

**Listed Below is the detail of the Management Action Plans With the Expired Implementation Dates**

**Chief Information Officer**

1. 2012 IT Operating and Business Applications - Testing details and appropriate formal sign-off from the post-implementation review were not consistently documented and maintained during the most recent Lawson system upgrade for all necessary phases. Based on review of supporting documentation and inquiry with implementation project management, it was determined that approvals for exceptions, test results, and the post-implementation review were verbally communicated and informally recorded during project team meetings. A more formal testing and documentation process should be implemented.



2. 2012 IT Governance Internal Audit - Current policies could not be readily identified and a number of draft documents were still in need of approval and distribution. More specifically, it was determined that ten of thirteen IT standards reviewed were still in draft form and periodic reviews of IT standards, policies, and procedures are not being conducted on a regular basis.
3. 2012 IT Governance Internal Audit - A formal, periodic review of the IT systems inventory is not being performed by the IT Department. A periodic inventory including change authorization, critical components, system versions, on-boarding effectiveness, modification dates, and contractual requirements is a practice that most organizations perform to gain confidence that risks are being mitigated with regard to systems in operation.
4. 2012 IT Governance Internal Audit - A fully functioning risk assessment framework has yet to be implemented and does not include documented approval from IT Management, a process to formally track, monitor, and mitigate identified risks, and a defined process for implement the resulting directives, including responsibilities, priorities, timeliness, monitoring procedures, and periodic updates.

#### **AGM Support Services**

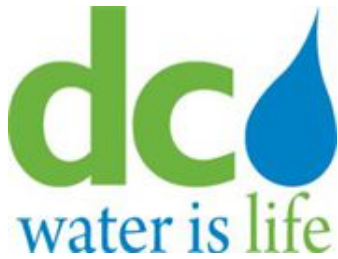
1. 2011 Safety Programs Training & Compliance Management - There was no effective follow-up process in place regarding identified safety violations for inspected facilities. It was recommended that a monitoring process be implemented to ensure corrective action is taken within the required 45 days. Subsequently a suitable software package has been acquired to track and report the incidents. The system is in the implementation phase.
2. 2011 Safety Programs Training & Compliance Management - Neither the Department of Safety & Security, nor the Department of Risk Management performs any statistical analysis relating to incurred accidents. A compilation of the nature of the accidents that have occurred, the locations, and the frequency will assist in identifying a pattern of safety problems. The data, in turn, can be used to develop a plan to prevent such events from occurring in the future. This should be addressed in conjunction with item 1 above.

#### **Office of the General Manager:**

1. 2011 Human Capital Management - The DC Water policies related to employment laws and regulations have been revised to reflect current laws and regulations; however, these updated policies have not been officially approved by the General Manager and made available to all DC Water employees.

## **IV. Other Topics**

Internal Audit is collaborating with DC Water's Finance and Procurement departments regarding the initiative to develop a Fraud Mitigation plan for the organization. A Fraud and Abuse hotline process is being implemented and it is anticipated that it will be operational by April 1, 2013. The contract with the vendor, The Network, has recently been signed. A cross-functional team has been established, including members from Finance, Procurement, Human Capital Management, and Internal Audit, which will work with the vendor to execute the implementation of the hotline and related training and awareness campaign.



**Regulatory Compliance  
Internal Audit Report**

February 13, 2013

**INTERNAL AUDIT TEAM**

Director: Joe Freiburger

Manager: Russell Ojers

Associate: Dominic Usher

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## EXECUTIVE SUMMARY

### **Background**

The Office of the General Counsel provides guidance and oversight to the departments responsible for maintaining legal and regulatory compliance with state, District of Columbia and federal laws, regulations, and consent decrees. This includes any current requirement applicable to the organization - whether on-going or periodic, any action mandated to be completed, or any report or filing required to be submitted by a specified date.

The Office of the General Counsel, with the assistance of IT, developed an automated system to facilitate the monitoring process. The Compliance Requirement Notification System was implemented in early 2009 to track the organization's due dates and progress toward meeting legal and regulatory compliance requirements and deadlines. The system's primary functionality relates to issuing automated notifications to responsible individuals, department heads, and the Office of the General Counsel. The intent is to enhance meeting regulatory filing requirements and avoid potential penalties.

In July 2012 DC Water hired a Compliance Officer, who reports to the General Counsel's office and works directly with department contacts assigned to complete the various regulatory requirements. The Compliance Officer is responsible for tracking and monitoring the timely completion of all of the regulatory requirements to which DC Water must adhere. The Compliance Officer researches existing and potential regulatory requirements to provide assurance that DC Water is effectively addressing all current requirements and also performs periodic reviews of completed filings to assure that they were accurately prepared and submitted timely.

### **Objectives**

Our overall audit objective was to assess DC Water's ability to effectively meet the necessary reporting requirements and deadlines, and to communicate relevant regulatory changes to the applicable parties. Specific goals included:

- Assess whether the Office of the General Counsel has the ability to identify and collect legal and regulatory compliance requirements for the entire organization on an ongoing basis;
- Determine whether a process is in place to accurately capture legal and regulatory compliance requirements in the organization's tracking system;
- Determine whether adequate internal controls have been implemented to assure adherence to regulatory reporting requirements and guidelines;
- Evaluate the integrity of the data used to complete the reports and filings submitted to regulatory bodies;
- Assess whether regulatory reports and filings are properly reviewed and approved prior to their submission;
- Determine whether regulatory reports and filings are submitted timely on a consistent basis;
- Identify whether support is retained relative to the integrity of the data and reports submitted to regulatory bodies; and,
- System access to the tracking system is properly assigned.

### **Audit Scope and Procedures**

This audit was conducted based on the approved FY2013 internal audit plan. The audit was initiated in December, 2012 and completed in January, 2013. The audit included a review of the legal and regulatory compliance requirements collected by the Office of the General Counsel, and a review of the processes and controls in place to monitor compliance with the regulatory requirements. Internal Audit met with management to identify processes and procedures and reviewed a download of legal and regulatory compliance requirements from the Compliance Requirement Notification System. In order to complete the analysis, Internal Audit conducted interviews with key contacts within various departments and reviewed a selection of required regulatory inspections and submissions.

### **Summary of Work**

Internal Audit concludes that a sound process and effective controls are in place to achieve the overall DC Water compliance objectives.

We noted one observation and offer a recommendation for management’s consideration:

- Assure that the Compliance Officer’s annual plan is documented, then formally reviewed and approved by the Office of the General Counsel prior to execution.

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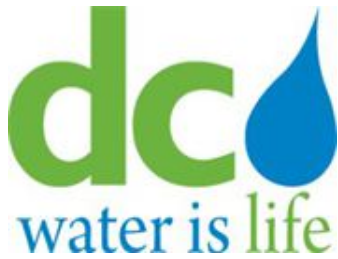
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Joe Freiburger, CPA, CIA

## II. DETAILED OBSERVATIONS & RECOMMENDATIONS

I. Compliance Officer Review Plan		
<p><b>Observation:</b> Internal Audit noted that for 2013, the Compliance Officer plans to test a sample of each department’s regulatory requirements to assure that they’ve been properly completed, along with a review of fire extinguisher inspections and forklift safety &amp; certifications. Currently, the Compliance Officer has not documented this plan, and the plan has not been formally reviewed and approved by the Office of the General Counsel.</p> <p><b>Risk:</b> Without formal review and approval, there is a risk that the Compliance Officer’s annual plan does not align with the key issues and concerns of the Office of the General Counsel relative to compliance and regulatory issues.</p>	<p><b>Recommendation:</b> Internal Audit recommends that that the Compliance Officer’s annual plan be documented, then formally reviewed and approved by the Office of the General Counsel prior to execution.</p>	<p><b>Management’s Action Plan:</b> The Office of the General Counsel (OGC) agrees with this recommendation. Compliance Officer’s Department Compliance Review Plan will be prepared by February 25, 2013. The Compliance Review Plan will be reviewed and approved by the General Counsel by March 8, 2013. OGC expects to begin implementing the approved Compliance Review plan by March 11, 2013.</p> <p><b>Implementation Date:</b> March 11, 2013</p>





**Remote Cashiering  
Internal Audit Report**

February 14, 2013

**INTERNAL AUDIT TEAM**

Director: Joe Freiburger

Manager: Russell Ojers

Associate: Dominic Usher

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## EXECUTIVE SUMMARY

### **Background**

As a service to customers, DC Water accepts and processes payments at a business office located at 810 First Street, NE Washington, DC. There are currently six DC Water employees that work out of the business office, including four employees that are involved in the processes included in the scope of this review. There is a Cash Receipts Supervisor, a Lead Teller and two Tellers. There are also two Customer Service representatives that work in the business office; however, their customer service activities have been excluded from this review and would be included in a separate Customer Service review.

The business office accepts approximately \$150,000 in cash per month. The business office also processes customer payments made by checks and credit cards averaging approximately \$2.3 million per month. This amount of checks and credit card payments includes approximately \$604,000 per month that is received by the 1100 4th Street SW, Washington, DC Permit Office for payments related to permit applications and engineering reviews, which are ultimately processed and applied to customer accounts by the business office.

The acceptance of customer payments – particularly cash – creates risks related to the safeguarding of DC Water’s assets, and also to the safety and security of its employees. From the time that the payment is accepted by the teller, left in one of the available drop boxes, or handled by an engineering technician, each step in the process presents an opportunity for the misappropriation of funds or for the security of the customer’s financial information to be compromised. These risks can only be eliminated or mitigated if they are properly identified and addressed by DC Water Management, as well as the personnel involved in the acceptance and processing of customer payments.

### **Objectives**

Our overall audit objectives included identifying and evaluating the processes and procedures around the acceptance, processing and depositing of customer payments, as well as performing detailed testing to assess the effectiveness of the existing controls. In addition, the physical security of the business office and the customer payments while on-site were evaluated to assure their completeness and appropriateness. Specific audit objectives focused on:

- Assessing whether business office roles and responsibilities are adequately segregated;
- Validating that payments are completely and accurately applied to customer accounts on a consistent basis;
- Verifying that payments are independently reconciled to billing system records to assure that all payments are properly received and accurately recorded to customer accounts;

- Determining whether all deposits are accurately prepared, properly safeguarded, and deposited timely;
- Evaluating whether the levels of information systems access granted to business office personnel with cash-handling responsibilities are appropriate and that they are restricted from issuing credit, transferring balances, etc without appropriate reviews and approvals;
- Evaluating access to the business office - including the lobby, cashier area and back office space;
- Assessing the appropriateness of the security cameras located at the business office, as well as the storage of the recordings from the cameras;
- Evaluating the level of security provided by the business office safe, along with controls designed to limit access to the safe; and,
- Determining whether business office drop boxes are properly secured to protect customer payments until they are collected and applied to customer accounts.

### **Audit Scope and Procedures**

This audit was conducted based on the approved FY2013 internal audit plan. The audit was initiated in December, 2012 and completed in January, 2013. The audit included an evaluation of the physical controls, as well as the processes and procedures at DC Water's business office located at 810 First Street, NE Washington, DC and the permit office located at 1100 4th Street SW, Washington, DC. The audit process included interviews with appropriate members of Treasury, the business office, Engineering, and Customer Service, as well as site inspections of both locations. The audit process also included substantive testing of a sample of daily reconciliations and corresponding deposits. Emphasis was placed on the identification of significant risks that could potentially impact the safeguarding of DC Water assets and the security of customer financial information.

### **Summary of Work**

Internal Audit concludes that a number of topics should be addressed by management in order to further strengthen DC Water's Remote Cashiering processes and improve various aspects of the control environment.

In particular, there is a need to address the following:

- Remove the following abilities and responsibilities from the Cash Receipts Supervisor:
  - o The ability to enter credit adjustments;
  - o The ability to transfer balances in customer accounts; and,
  - o The responsibility for investigating and resolving variances identified in the independent bank to billing system reconciliations.

- ❑ Enhance the current process of investigating and resolving variances from the monthly bank to billing system reconciliation through the following:
  - Designate an independent employee to investigate and resolve variances identified through the independent bank to billing system reconciliations;
  - Require that all variances identified during the independent bank to billing system reconciliation are investigated and resolved each month; and,
  - Review and approve all resolutions to variances identified through the independent reconciliation between the bank deposits and the payments applied to CIS each month.
- ❑ Modify the Business Office teller procedures to incorporate the following:
  - Require that two tellers count and dually verify the starting balance of each teller till at the beginning of each day;
  - Require that two tellers count and dually verify the cash in each till at the end of each day; and,
  - Require that two employees prepare the daily bank deposits together, with both employees either initialing or signing the deposit slip.
- ❑ Modify the drop box payment procedures to incorporate the following:
  - Require that two employees collect and process the drop box payments together;
  - Require that the two employees collecting the drop box payments together also record each payment collected onto a spreadsheet or log book as evidence of their receipt; and,
  - Designate a back-up keyholder for the interior drop box.
- ❑ Shred all customer checks in-house, rather than giving them to the third-party document destruction vendor for shredding.
- ❑ Establish periodic sweeps of the excess cash in the teller tills. Cash should be swept back down to the starting balance of the till (\$200), and the excess cash recorded and placed into the safe until it can be included in the end of day teller reconciliations.
- ❑ Store the security camera recordings at an off-site location, such as the Security or Facilities offices.
- ❑ Require that all checks be restrictively endorsed at the time that they are received by the tellers.

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## II. DETAILED OBSERVATIONS & RECOMMENDATIONS

### I. Cash Receipts Supervisor - Segregation of Duties

**Observation:**

Access to cash and customer billing records is not adequately segregated. Internal Audit has validated that the Cash Receipts Supervisor has the following accesses, abilities and responsibilities:

- Access to cash;
- Access to the exterior customer drop box;
- Access to the safe;
- Preparer or reviewer of the cash deposits;
- Ability to enter credit adjustments;
- Ability to transfer balances in customer accounts; and,
- Responsible for investigating and resolving variances identified in the independent bank to billing system reconciliations.

**Risk:**

These overlapping accesses and responsibilities present a risk that monies received for customer payments could be misappropriated without detection.

**Recommendation:**

Internal Audit recommends that DC Water management remove the following abilities and responsibilities from the Cash Receipts Supervisor:

- Ability to enter credit adjustments;
- Ability to transfer balances in customer accounts; and,
- Responsibility for investigating and resolving variances identified in the independent bank to billing system reconciliations.

**Management’s Action Plan:**

- Vertex has reduced the Supervisor’s (Ivan Boykin) miscellaneous (MISC) adjustment capabilities down to one penny (\$0.01).
- The Billing Manager (or designee) will review customer account transfers made by the Cash Receipts Supervisor.
- The Billing Manager will also review transfer reports for all ID’s associated with Cash Receipts personnel.
- All activity involving transfers will be noted/segregated when the Accountant runs their monthly payment report from the CIS system and this will be sent to the Billing Manager for review.

**Implementation Date:**

3/8/2013

**II. Bank to Billing System Reconciliation Variances**

**Observation:**

Following the end of each month, a Senior Accountant in the Finance office performs a reconciliation between the deposits for all customer payments for the month reported by the bank, compared to billing system reports showing the amounts applied to customer accounts. Currently, any variances identified are given to the Cash Receipts Supervisor to investigate and resolve. Internal Audit identified the following related to this process:

- Variances identified during the independent bank to billing system reconciliation are not investigated and reconciled by someone without access to customer cash and the ability to alter customer accounts;
- All variances identified during the independent bank to billing system reconciliation are not required to be investigated and resolved on a monthly basis; and,
- The resolutions to the variances identified and resolved as a result of the independent bank to billing system reconciliation are not reviewed for appropriateness on a consistent basis.

**Recommendation:**

To address the risks that have been identified with the current process of investigating and resolving variances from the monthly bank to billing system reconciliation, Internal Audit recommends the following:

- DC Water management designate an independent employee to investigate and resolve variances identified through the independent bank to billing system reconciliations;
- DC Water management implement a process to require that all variances identified during the independent bank to billing system reconciliation are investigated and resolved each month; and,
- DC Water management implement a process to review and approve all resolutions to variances identified through the independent bank to billing system reconciliation.

**Management’s Action Plan:**

- Any variances identified by the Accounting Department during their monthly reconciliation will be reviewed and resolved by the Cash Receipts Supervisor upon receipt and no later than the end of the next reconciliation period.
- Management is making a commitment to clear any outstanding variances.
- All variances which remain unresolved within two months of identification will have to be approved by the Treasury Manager.
- The Cash Receipts Supervisor will provide the Accounting Department and the Treasury Manager with the required documentation/back-up to support the resolved variances.

**Implementation Date:**

3/8/2013

<p><b>Risk:</b> Internal Audit identified the following risks associated with the current process of resolving variances from the monthly bank to billing system reconciliation:</p> <ul style="list-style-type: none"> <li>• The Cash Receipts Supervisor investigates and resolves the variances identified through the monthly reconciliation. The Cash Receipts Supervisor also has access to cash, as well as the ability to issue credit adjustments and transfer balances on customer accounts. The employee investigating the variances should not be the individual who is also in the position to cause the variances;</li> <li>• Unresolved variances could represent fraud, payments that were received but never applied to customer accounts, or payments that were applied to customer accounts without being received. The longer these variances remain unresolved, the greater their cumulative impact becomes; and,</li> <li>• Decreased customer satisfaction. If variances are inaccurately diagnosed and are not correctly resolved, the negative impact of the variance could remain outstanding.</li> </ul>		
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**III. Dual Counting and Verification**

**Observation:**

During the observation of the processes and procedures of the Business Office tellers, Internal Audit identified the following:

- The starting balance of each teller’s till is not dual-counted or verified by two employees at the beginning of each day to assure that it’s at the correct level (\$200 opening balance);
- The cash and checks collected by each teller are not dual-counted or verified by two employees at the end of each day to verify that all monies collected from customers are properly accounted for; and,
- Deposits are prepared and reviewed separately by two Business Office employees (the Lead Teller and the Cash Receipts Supervisor) who also both have access to the safe.

**Risk:**

Internal Audit identified the following risks associated with the current processes of counting the teller tills and preparing the bank deposits:

**Recommendation:**

To address the risks that have been identified with the current process of counting teller tills and preparing deposits, Internal Audit recommends the following:

- DC Water management should implement a process where two tellers count and dually verify the starting balance of each teller till at the beginning of each day;
- DC Water management should implement a process where two tellers count and dually verify the cash in each till at the end of each day; and,
- DC Water management should implement a process where two employees prepare the daily bank deposits together, with both employees either initialing or signing the deposit slip.

**Management’s Action Plan:**

- The \$200 starting balance will be dual-counted between two employees for verification. If only one Teller is available, the Teller will count their \$200 to open. The entire drawer will be counted once a Supervisor or Lead Teller arrives. A daily sign off sheet will be created for dual signatures.
- The \$200 ending balance will be dual-counted between two employees for verification. If only one Teller is available, the Teller will count their \$200 to close. The entire drawer will be counted once a Supervisor or Lead Teller arrives. A daily sign off sheet will be created for dual signatures.

**Implementation Date:**

1/22/2013

<ul style="list-style-type: none"> <li>• If a teller’s till does not contain the correct opening balance, or if cash is removed from the till prior to the next day, the teller will be liable for any misappropriation of funds that may have occurred;</li> <li>• If there is a discrepancy between the teller’s count at the end of the day, and the lead teller/supervisor’s count that occurs the next day, there is a loss of accountability for the teller due to the period of time that elapsed between the counts, and the individuals that have access to the safe; and,</li> <li>• The Cash Receipts Supervisor sometimes prepares the deposits. Other times they review the deposit prior to the armored car service collecting it. The Cash Receipts Supervisor also has access to cash, as well as the ability to issue credit adjustments and transfer balances on customer accounts. The deposit could be subject to fraud given the lack of segregation of duties and the levels of access that the Cash Receipts Supervisor has.</li> </ul>		
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**IV. Drop Box Payments**

**Observation:**

The Business Office has two payment drop boxes that are available for customer use. One drop box allows customers to remit payments from outside the building, and one drop box is located inside the building. When reviewing the controls around the collection of payments from the drop boxes, Internal Audit identified the following:

- Only one employee collects the drop box payments each day. Two employees are not required to collect and verify drop box payments together;
- The payments collected from the drop boxes are opened and processed by the employee that collected them. The drop box payments are not logged or recorded as evidence of their receipt; and,
- Only one employee has a key to the interior drop box. If that employee is absent, the payments are not collected and applied to customer accounts until the next time that the employee returns to the Business Office.

**Recommendation:**

To address the risks that have been identified with the collection and processing of drop box payments, Internal Audit recommends the following:

- DC Water should require that two employees collect and process the drop box payments together;
- DC Water should require that the two employees collecting the drop box payments together also log each payment collected onto a spreadsheet or log book and both initial the entries as evidence of the drop box payments that were received; and,
- DC Water should designate another business office employee as a back-up keyholder for the interior drop box. This would assure that the interior drop box payments are still collected and processed if the primary keyholder is not at work on a given day.

**Management’s Action Plan:**

- Currently, only one employee is required to collect, verify and process drop box payments. The existing process is sufficient for the business environment. Risk is not diminished by logging or recording the payments before they are processed on CIS. Missing payments would be discovered by the customer or thru the balance process if indeed someone committed theft or fraud.
- See previous comment
- As of 12/6/2012, the Cash Receipts office has a central location where the interior drop box key and other keys are located. This allows any Teller to process interior drop box payments.
- “NO CASH Allowed” sign to be displayed on night deposit Drop Box.

**Implementation Date:**

- Already in effect.
- “NO CASH Allowed” by 3/1/2013

<p><b>Risk:</b> Internal Audit identified the following risks associated with the observations regarding the Business Office drop boxes:</p> <ul style="list-style-type: none"> <li>• If drop box payments are not collected by two employees, then it is not possible to verify that all payments remitted by customers into the drop boxes were properly applied to customer accounts;</li> <li>• If drop box payments are not logged or recorded as received, then there is no evidence that all payments remitted by customers into the drop boxes were properly applied to customer accounts; and,</li> <li>• A delay in processing customer payments could affect customers whose accounts are due or become past-due during the period in which the payment is received, but not applied because it can't be collected from the drop box.</li> </ul>		
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**V. Security of Customer Bank Information**

**Observation:**

Customer checks are swiped by the tellers into an electronic bank deposit machine at the end of the day. The checks that are collected by the tellers are then stored in the safe until the bank deposits are verified. When these checks are ready for disposal, they are not shredded on-site. Rather, they are given directly to a third-party document destruction vendor employee who collects the documents for shredding. The vendor employee takes the checks off-site to be shredded.

**Risk:**

Theft of customer assets. Document destruction vendor personnel could improperly benefit from their access to customer bank account and routing information.

**Recommendation:**

Internal Audit recommends that DC Water management procure a cross-cut shredder and shred all customer checks in-house, rather than giving them to the third-party document destruction vendor for shredding.

**Management’s Action Plan:**

- There is a small cross cut shredder on site located in the Teller’s area.
- A larger commercial size cross cut shredder has been requested for the Cash Receipts office.

**Implementation Date:**

- 1/17/2013 for the small cross cut shredder
- Date undetermined for the large cross cut shredder

**VI. Periodic Cash Sweeps**

**Observation:**

Business Office tellers begin each day with an opening till balance of \$200 cash. As cash payments are collected throughout the day, this cash is also stored in the teller tills. Excess cash is not swept from the teller tills and placed into the safe throughout the day. Average combined cash collection by Business Office tellers is approximately \$6,000 per day.

**Risk:**

There is an increased potential loss should there be a robbery at the business office. As the amount of cash in the teller tills increases, the amount of the potential loss from theft also increases.

**Recommendation:**

Internal Audit recommends that DC Water management establish periodic sweeps of the excess cash in the teller tills. Cash should be swept back down to the starting balance of the till (\$200), and the excess cash recorded and placed into the safe until it can be included in the end of day teller reconciliations.

**Management’s Action Plan:**

The increased potential of theft is diminished by the daily balancing of activities of each Teller around 3:00 pm each day. Additionally, all cash received must be balanced against CIS before a cash batch can close. Tellers are responsible for differences found during balance process. As a result, the existing process is sufficient for the business environment.

**Implementation Date:**

Already in effect.

**VII. Storage of Security Camera Recordings**

**Observation:**

Internal Audit confirmed that the Business Office utilizes security cameras to monitor activity throughout the facility. We further confirmed that the footage from these cameras is recorded and stored for at least 30 days; however, the security camera footage is stored on a hard drive located in the Cash Receipts Supervisor’s office directly above the safe.

**Recommendation:**

Internal Audit recommends that DC Water store the security camera recordings at an off-site location, such as the Security or Facilities offices.

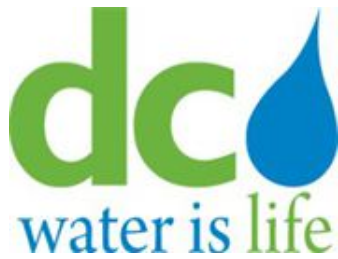
**Management’s Action Plan:**

- DC Water Security has a recommendation to store all security footage at the Security office through the IT Dept.

**Implementation Date:**

12/31/2013

<p><b>Risk:</b> Loss of documentation or evidence. If the hard drive containing the security camera recordings is stolen, or damaged, the recordings would not be available for use in any subsequent investigation.</p>		
<p><b>VIII. Restrictive Endorsement of Checks</b></p>		
<p><b>Observation:</b> Business Office tellers accept check payments from customers. These checks are swiped by the tellers into an electronic bank deposit machine at the end of the day. The checks that are collected by the tellers are no restrictively endorsed by the tellers using a “For Deposit Only” stamp that includes the DC Water account number into which the checks are to be deposited. Rather, the checks are placed to the side of each teller’s desk and stored throughout the day.</p> <p><b>Risk:</b> Misappropriation of assets. If the checks are not restrictively endorsed and are stolen, the checks could potentially be cashed or deposited by an unauthorized party.</p>	<p><b>Recommendation:</b> Internal Audit recommends that DC Water require that all checks be restrictively endorsed at the time that they are received by the tellers.</p>	<p><b>Management’s Action Plan:</b></p> <ul style="list-style-type: none"> <li>• As of 12/1/2012, Cash Receipts began using TD Bank’s new software for remote capture which did not require a DC Water stamp.</li> <li>• Moving forward, all checks will be endorsed with a DC Water stamp at the time of retrieval from the customer.</li> </ul> <p><b>Implementation Date:</b> 1/18/2013</p>



## **Chemicals Purchasing Internal Audit Report**

February 20, 2013

### **INTERNAL AUDIT TEAM**

Staff:	Jackie Kosovich
Senior:	Anne Simpson
Manager:	Becky Jordan
Director:	Joe Freiburger



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## EXECUTIVE SUMMARY

### Background

The Department of Wastewater Treatment (DWT) is responsible for treating influent wastewater to remove pollutants in order to meet the National Pollutant Discharge Elimination System Permit requirements, as well as the Authority's treatment targets. To achieve this, the Department of Wastewater Treatment uses the following chemicals:

- Ferric Chloride
- Methanol
- Sodium HypoChlorite
- Polymer (3 different polymers used for the different treatment types)
- Sodium Bisulfite
- Lime
- Caustic Soda

The chemicals' dosage and quantity assumptions are forecasted annually by the Director of Wastewater Treatment based on historical and predicted inflow rates and the derived stoichiometric calculations based on the type and amount of pollutants projected within the inflow rates. These assumptions guide the monthly chemical ordering process.

The chemicals are delivered to the plant on a regular, at times daily, basis. The operators monitor the inventory with the Process Control System (PCS) and several management reports. The quality of the chemical is ensured by the vendor through the certificate of analysis and by the Authority through the use of independent testing and monitoring of the chemicals' performance.

In FY2012, DC Water had a budget of \$23,651,600 and expended \$21,033,597 for the purchase of various chemicals.

### **Objectives**

Our overall audit objectives included an evaluation of the accuracy and propriety of costs incurred relative to the procuring of various chemical used in the treatment process, along with an assessment of compliance with applicable laws and regulations. Specific audit procedures performed are as follows:

- To ensure that chemical activities are in compliance with DC Water policies and procedures, as well as applicable laws and regulations.
- To determine the accuracy and propriety of costs incurred relative to the procuring of various chemicals used in the treatment process.
- To ensure that proper controls exist to monitor and secure the chemical inventory.
- To ensure chemical purchasing activities are operating effectively.
- To ensure that personnel handling chemicals are adequately trained and hold the appropriate certification (if applicable).

### **Audit Scope and Procedures**

This audit was conducted based on the approved FY2013 internal audit plan. The audit was initiated in November 2012, completed in January 2013, and included an evaluation of the chemical purchasing activities of the Department of Wastewater Treatment during the period of October 2011 – November 2012.

### **Summary of Work**

After reviewing the current control environment, Internal Audit concludes that while there are no significant control gaps, there are several process improvement opportunities that exist within the chemicals purchasing control environment. The majority of these issues can be remediated with increased automation of the process.

For instance, our testing indicated that the process to review and approve invoices is cumbersome and inefficient as the staff relies on the manual creation and manipulation of approval spreadsheets that occur outside of Lawson. Additionally, the Supervisory Summary Reports, used to track all chemical deliveries and relevant weight information, are prone to manual entry errors, are not consistently updated to include all required information, and omit information, such as chemical deliveries.

Our testing also identified that chemical orders, at times, are directly placed with the vendor by foremen and are not always communicated to the DWT Chemical Ordering staff; the standard operating procedures require that orders are formally requested by the DWT Chemical Ordering staff.

Finally, Internal Audit determined that there are several process improvement areas, such as implementing secondary reviews of chemical delivery documentation in the field and annually revising standard operating procedures relevant to chemical activities that would strengthen the department's control environment. To further enhance the department's real-time monitoring activities, Management should look to implement standardized reports, such as monthly expenditures in Lawson and inventory roll-forward reports in PCS.

SC&H Consulting

By:

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Joe Freiburger, CPA, CIA

**II. DETAILED OBSERVATIONS & RECOMMENDATIONS**

Observation(s)	Internal Audit Recommendation(s)	Management Comment(s)
<b>I. Invoice Review and Approval</b>		
<p><b>Observation:</b></p> <p>The process to review and approve invoices is cumbersome and inefficient. DWT Chemical Ordering Staff is responsible for reviewing and approving all the invoices submitted from the chemical vendors. On a weekly basis, the DWT Business Operations Manager sends a Lawson generated spreadsheet detailing all invoices received for the Department to all purchasers within the Department. The DWT Chemical Ordering Staff reviews the spreadsheet for his applicable invoices, then copies and pastes his invoices into an internal invoice approval spreadsheet for review. Once he reviews the actual invoice to the spreadsheet total, he evidences his review by checking the approved invoice on the invoice approval spreadsheet.</p>	<p><b>Recommendation:</b></p> <p>We recommend that Management work with the vendors to standardize their invoicing process, in which vendors would be required to submit one invoice a month on the designated date and provide an itemized listing of all deliveries for the month. A standardized process would enable the DWT Chemical Ordering Staff to streamline the review process. We recognize that Management has included new language requesting submission of one monthly invoice for the new contracts engaged in FY2013. If the vendors are unable to submit one monthly invoice, we recommend that Management request that the vendor provide a monthly summary report of the deliveries made during the month.</p>	<p><b>Management’s Action Plan and Implementation Date:</b></p> <p><b>Comment:</b></p> <p>The Department of Wastewater Treatment (DWT) receives nearly 5,000 chemical deliveries annually. A method of checks and balances must be used so that DWT can account for each delivery, verify that the quantity is correct and the quality meets contract specifications, and the billing from the vendor is accurate. The invoice approval process and the tools, such as the DC Water Financial System (Lawson) generated spreadsheets, described in this observation are used to facilitate review of invoices in a timely and accurate manner.</p>

<p>He sends this invoice approval spreadsheet to the DWT Business Operations Manager for her to release these invoices in Lawson.</p> <p>Through discussion and test work performed, we found that the Chemical Ordering Staff has verbally approved invoices to the Business Operations Manager, rather than approving the invoices on the internal invoice approval spreadsheet. In these instances, the verbally approved invoices are not included in the Business Operations Manager’s spreadsheets and potentially could not be included in the approved invoices that the Business Operations Manager releases in Lawson. Additionally, we noted one instance in which Lawson recorded and paid an additional \$10,000 for an invoice that was actually submitted for \$51,419.23. This overpayment was not captured by AP or the DWT Chemical Ordering Staff until Audit inquired about the overpayment.</p>	<p>Additionally, Management should work to implement an automated review and approval process within Lawson, in which Lawson would route all chemical invoices to the DWT Chemical Ordering Staff. The DWT Chemical Ordering Staff would only have review/approval access in Lawson. This would eliminate the manual nature of the approval process. Further automation, such as implementing a receiving module or an interface with Scale Logic, would be beneficial to streamline the invoice review process.</p> <p>Finally, we recommend that Management implement a standardize report in Lawson that would enable the Chemical Ordering Staff to review all chemical expenditures related on chemical activities against the budgeted amounts on a monthly basis. Reviewing this monthly report will enhance the department’s monitoring of real-time activities.</p>	<p>The department recognizes the importance of standardizing vendor invoicing and streamlining and automating the invoice review process to minimize errors.</p> <p>DWT concurs with the internal audit’s recommendations.</p> <p><b>Action Plan:</b></p> <ol style="list-style-type: none"> <li>1. Forward a request to the Procurement Department to include language in all new and issue an addendum to all existing chemical supply contracts requiring submission of a monthly invoice with itemized listing of all deliveries (February 22, 2013)</li> <li>2. Forward a request to the CFO and IT to (a) interface the Blue Plains Scale Management System (Scale Logic) with Lawson and provide a receiving module and a single platform for comparing chemical transactional records, and (b)</li> </ol>
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<p><b>Risk:</b> Failure to properly approve invoices could result in DC Water paying erroneous or improper invoices.</p>	<p><b>Business Owner(s):</b> Aklile Tesfaye, Director of Wastewater Treatment</p>	<p>streamline and automate the chemical review and approval process (February 22, 2013)</p>
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Observation(s)	Internal Audit Recommendation(s)	Management Comment(s)
<p>II. Ordering Process</p>		
<p><b>Observation:</b> The DWT Chemical Ordering Staff does not consistently use the Chemical Delivery Order Confirmation Form as required in their Standard Operating Procedure for Chemical Delivery. The DWT Chemical Ordering Staff utilizes the Chemical Delivery Order Confirmation Form for the initial delivery for newly contracted vendors. For established order schedules, DWT Chemical Ordering Staff communicates with the vendor via email.</p>	<p><b>Recommendation:</b> We recommend that Management update the Standard Operating Procedure to reflect that the Chemical Delivery Order Confirmation Form is required for monthly orders, not individual deliveries.  The Chemical Delivery Order Confirmation Form should be implemented as an email template to facilitate a more efficient ordering process.</p>	<p><b>Management’s Action Plan and Implementation Date:</b>  <b>Comment:</b> Chemical orders are placed on a monthly basis by the Chemical Ordering Staff by completing, for each chemical, Chemical Delivery Order Confirmation Form for the month and electronically transmitting the form to the vendor.</p>

<p>Further, for some chemicals, such as lime and methanol, the foremen order the chemicals through direct communication with the vendor and only communicate the orders to the DWT Chemical Ordering Staff if a significant order (e.g., 7 loads rather than 3 loads) is placed.</p> <p><b>Risk:</b></p> <p>Failing to provide the vendor with the proper documentation and using email instead may cause the vendor to miss an order request or to deliver the wrong number of loads.</p> <p>Failing to notify the DWT Chemical Ordering Staff of requested orders may prevent the DWT Chemical Ordering Staff from accurately forecasting monthly orders or from properly verifying the orders during his review of the invoice.</p>	<p>We recommend that the DWT Chemical Ordering Staff and foremen utilize the Chemical Delivery Order Confirmation Form when placing orders with the vendors to ensure the proper information is captured and that the necessary parties are appropriately notified of all orders. The foremen should always copy the DWT Chemical Ordering Staff on the order request email. This will ensure that the DWT Chemical Ordering Staff is alerted of the order, can update his chemicals orders spreadsheet, and will be able to verify that these orders were indeed requested by the foremen during his invoice review.</p> <p><b>Business Owner(s):</b></p> <p>Aklile Tesfaye, Director of Wastewater Treatment</p>	<p>Any changes to orders made on the form are communicated to the vendors through e-mail notification. Chemical delivery scheduling procedure exceptions were made for methanol and lime deliveries because of the extensive construction activities in these process areas. The front-line Foremen have up-to-date information on system outages and constructions activities, can quickly verify available storage capacity, and therefore are better suited to plan for deliveries of these chemicals. The CIP projects, planned for commissioning in 2014, will provide new and rehabilitated storage and feed facilities with additional capacity and enhanced tools to monitor inventory of both chemicals; at which time the ordering process will follow the chemical scheduling SOPs for all other chemicals.</p>
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		<p>The department recognizes the importance of standardizing use of the Chemical Delivery Order Confirmation Form for all chemicals (to include methanol and lime currently scheduled by the Foreman). DWT concurs with the audit report’s recommendation.</p> <p><b>Action Plan:</b></p> <ol style="list-style-type: none"> <li>1. Prepare electronic template of Chemical Delivery Order Confirmation Form (March 12, 2013)</li> <li>2. Update the Chemical Delivery SOP to require use of the electronic template for all chemicals and transmit the form to vendors, with copy to Chemical Ordering Staff, through electronic mail (March 31, 2013)</li> <li>3. Notify vendors and complete training of employees on the revised SOP (April 30, 2013)</li> </ol>
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Observation(s)	Internal Audit Recommendation(s)	Management Comment(s)
III. Supervisory Summary Reports		
<p><b>Observation:</b></p> <p>The supervisory summary reports are not consistently updated, are missing chemical deliveries, and report incorrect chemical delivery weight information. At the end of the day, the foremen complete the supervisory summary reports detailing all chemical delivery information (e.g., chemical name, scale ticket number, net weight in truck, total amount delivered, any conversion from pounds to gallons) for loads received that day. The delivery information used to populate the summary reports is obtained from the manifest/bill of lading, chain of custody monitoring form, and scale ticket information, which is received by the operator. Of the 30 deliveries reviewed, it was noted that 9 deliveries were not captured on the supervisory summary sheets.</p> <p>Weights reported by vendors may differ from weights recorded by Scale Logic due to</p>	<p><b>Recommendation:</b></p> <p>We recommend that Management work to implement more automation into producing the supervisory summary report, such as building a reporting mechanism out of Scale Logic or eLogger. If automation is not possible, we recommend that Management implement a process for the foremen to reconcile the information on the supervisory summary reports with the transactions reported in Scale Logic; as all chemical deliveries are required to weigh-in, this will ensure that the foremen are accurately and completely capturing all deliveries made to the plant on a daily basis. Further, Management should document an acceptable weight variance threshold, specifying if the threshold is applied to individual or aggregate transactions, in the Standard Operating Procedures.</p>	<p><b>Management’s Action Plan and Implementation Date:</b></p> <p><b>Comment:</b></p> <p>Use of the supervisory summary report of chemical inventories is a vestige of past practice and is not used for inventory monitoring, order forecasting, or weight verification of chemicals received at the plant</p> <p>The department will discontinue use of the supervisory summary reports for chemical deliveries.</p> <p><i>A. Inventory Monitoring and Forecasting Tool – Process Control System (PCS)</i></p> <p>The plant’s PCS provides powerful tools to control and monitor chemical use and inventory on a real time basis. PCS tools are used to forecast demand and chemical orders for any given period of time and in management’s decision making.</p>

<p>multiple reasons including the calibration of vendor scales or varying conversion calculations (e.g., converting gallons to tons). However, there is no documented guideline for determining an acceptable variance threshold. Of the 30 deliveries reviewed, there were 29 deliveries in which the weight reported on the supervisory summary reports did not agree to the weight captured by Scale Logic. Therefore, during our testing, we established a 5% variance threshold for individual deliveries and noted two deliveries in which the weight variance was greater than the 5% threshold. We also noted that all chemical vendors calculate their invoice totals by multiplying the unit price of the chemical by their scale weights, not the weight captured in Scale Logic.</p> <p><b>Risk:</b> Failing to consistently complete the supervisory summary reports, including the correct amount (e.g., weight of the chemical) may negatively impact the order forecasting.</p>	<p>To further enhance the department’s real-time monitoring activities on the chemical inventory levels, Management should look to implement standardized reports from PCS, such as monthly inventory roll-forward reports. These reports will help the Chemical Ordering Staff verify that the amounts delivered to DC Water were appropriately reflected by the vendor.</p> <p><b>Business Owner(s):</b> Aklile Tesfaye, Director of Wastewater Treatment</p>	<p><i>B. Weight Verification Tool – Blue Plains Scale Management System (Scale Logic)</i></p> <p>All chemical delivery trucks are required to use the certified truck scale station at Blue Plains. Information on each delivery, including chemical description and net weight of chemical received are automatically logged and stored in a secured data base and are accessible to the Chemical Ordering Staff. The actual weight obtained from this data base is used during review and approval of vendors’ invoices. The data base also provides standard reports on chemical deliveries.</p> <p>During the invoice review process, the net weights of deliveries captured in Scale Logic are compared to the weights reported by the vendor. Based on current practice, if the total of the weights reported on invoices does not match within 1%, DWT will investigate the discrepancy, reconcile with the vendor, and/or initiate invoice adjustment or credit with the vendor.</p>
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		<p><b>Action Plan:</b></p> <ol style="list-style-type: none"><li>1. Improve and build reporting mechanisms out of Scale Logic. Capture data extracted from chemical delivery manifest in this data base (TBD)</li><li>2. Discontinue use of the Supervisory Summary Report for chemical inventories (February 28, 2013)</li><li>3. Notify vendors and train employees on the updated SOP and reports(TBD – will follow completion of Action Plan Item 1 of this observation))</li></ol>
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Observation(s)	Internal Audit Recommendation(s)	Management Comment(s)
<b>IV. Chemical Delivery Documentation</b>		
<p><b>Observation:</b></p> <p>Chain of custody monitoring forms and certificate of analysis were incomplete or missing for a sample of chemical deliveries tested. Upon receipt of a chemical delivery, the operator or foreman should review the certificate of analysis and review and complete the chain of custody monitoring form. After the delivery is complete, the operator or foreman will provide the Wastewater Treatment Technician the certificate of analysis and chain of custody monitoring form, which is filed on site and retained for 3 years. It was noted that 4 of the 20 deliveries did not have completed chain of custody monitoring forms, in which all 4 chain of custody monitoring forms were missing required operator or foremen signatures.</p>	<p><b>Recommendation:</b></p> <p>Upon completion of the delivery of the chemical, the foreman should review the vendor documentation to ensure that the operator received all the required documentation and verified the documentation and successful completion of the delivery prior to submission to the technician. For any incomplete chain of custody monitoring forms, the foreman should provide an explanation for the missing information/signatures.</p> <p><b>Business Owner(s):</b></p> <p>Aklile Tesfaye, Director of Wastewater Treatment</p>	<p><b>Management’s Action Plan and Implementation Date:</b></p> <p><b>Comment:</b></p> <p>DWT agrees with the recommendation. The current procedure will be modified to require second level review of the vendor documentation to verify that operator received all the required documentation.</p> <p><b>Action Plan:</b></p> <ol style="list-style-type: none"> <li>1. Update the Chemical Delivery SOP to require second level review of vendor documentation (March 31, 2013)</li> <li>2. Notify vendors and train employees on the updated SOP (April 30, 2013)</li> </ol>

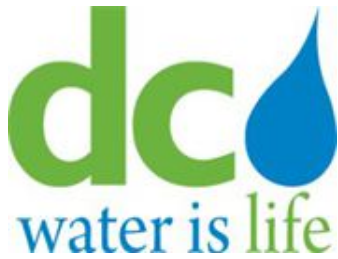
<p>Additionally, of the 4 deliveries with incomplete chain of custody monitoring forms, we noted that 1 delivery was also missing the certificate of analysis documentation.</p> <p><b>Risk:</b></p> <p>By failing to receive the certificate of analysis prior to delivery, the operators are unable to confirm that the delivered chemicals comply with the contracted specifications of the chemical. Additionally, by failing to complete the chain of custody monitoring forms, the operator or foreman are unable to confirm the manifest and scale ticket information provided by the vendor and to verify the successful completion of the chemical delivery.</p>		
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Observation(s)	Internal Audit Recommendation(s)	Management Comment(s)
<b>V. Policies and Procedures</b>		
<p><b>Observation:</b></p> <p>The Department of Wastewater Treatment currently uses several standard operating procedures that were last modified in 2010 (7 SOPs), 2007 (6 SOPs) and 2002 (1 SOP). The Wastewater Treatment Department maintains 18 standard operating procedures related to general chemical practices (ordering, delivery, receiving, storing, and monitoring) and to specific chemical practices (e.g., methanol liquid feed system, chlorination building - dosage control and storage, etc.). However, of the 18 SOPs, we noted that 7 SOPs were last updated in 2010, 6 SOPs were last updated in 2007, and 1 SOP was last updated in 2002.</p>	<p><b>Recommendation:</b></p> <p>We recommend that Management review and update the SOPs on an annual basis. Additionally, we recommend that Management review and update the Operator Certification Policy to include all active positions and remove any outdated information. Further, Management should review and revise (if needed) the policy, at minimum annually, or as changes in staff positions or certification requirements occur.</p> <p><b>Business Owner(s):</b></p> <p>Aklile Tesfaye, Director of Wastewater Treatment</p>	<p><b>Management’s Action Plan and Implementation Date:</b></p> <p><b>Comment:</b></p> <p>Wastewater treatment certification is a DC Water policy requirement and is maintained and revised by DC Water’s Human Capital Management (HCM) department. DWT will immediately bring the inaccuracies the audit has identified to the attention of HCM.</p> <p>While the Wastewater Treatment Certification Policy lists all job classifications that require wastewater operator certification, the requirements are stated in both existing and new job descriptions and vacancy announcements of all operator positions with DWT.</p>

<p>The Department's standard practice is to only modify SOPs if there are major changes to the current practices or new equipment.</p> <p>Additionally, the Wastewater Treatment Operator Certification Policy is outdated and contains inaccurate information.</p> <p>The Wastewater Treatment Operator Certification Policy is not current, as it was last updated in 2001. It was noted that new job positions listed as required to maintain certification (e.g., WWT Operator RW-11) are not listed.</p> <p><b>Risk:</b></p> <p>Failing to update standard operating procedures on a regular basis may allow for inconsistent practices or failing to communicate changes or modifications to Wastewater Treatment staff.</p>		<p>DWT's current practice is to modify SOPs if there are changes to existing O&amp;M practices or process equipment. However, the department recognizes the importance and value of reviewing and updating the SOPs on an annual basis in addition to revisions initiated by O&amp;M and equipment changes.</p> <p><b>Action Plan:</b></p> <ol style="list-style-type: none"> <li>1. Review and update all SOPs related to chemical deliveries on an annual basis in addition to revisions initiated by O&amp;M and/or equipment changes. Complete the 2013 reviews and updates by December 2013.</li> <li>2. Notify HCM and request review and update of the Authority's Wastewater Treatment Operator Certification Policy (February 22, 2013).</li> </ol>
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<p>By failing to provide an updated policy that contains the most current positions required to maintain operator certification, operators holding positions not listed may not be aware of the certification requirements and therefore may not complete or maintain active certification.</p>		
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**IT Asset Inventory – Special Project  
Internal Audit Report**

December 19, 2012

**INTERNAL AUDIT TEAM**

Manager: Becky Jordan

Manager: Russell Ojers

Director: Joe Freiburger

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## Introduction

SC&H, Internal Audit, initiated a special project in November 2012. Internal Audit is aware that, on an annual basis, DC Water solicits the assistance of an outside firm to perform a physical inventory count of selected items of IT and Fleet Equipment. The primary purpose of the exercise is to provide assurance that the asset records are accurate and will provide support for DC Water's financial statement audit as of the end of the fiscal year.

Based on inquiry and discussions with relevant parties, Internal Audit was informed that sizeable discrepancies were noted between the actual items counted/observed by the outside firm and the DC Water inventory records. In order to assist in resolving the discrepancies, Internal Audit determined that it would be in the best interest of DC Water for Internal Audit to provide assistance toward reconciling the asset records and the physical items on hand.

This report summarizes the events leading up to the actual count process, the methods used by Internal Audit, a summary of the results of our review, and suggested next steps which includes a brief summary of our observations. Additionally, we provided a more detailed description of the observations and our recommendations.

## I. EXECUTIVE SUMMARY

### Background

Since the completion of the physical inventory process in FY2011, the Chief Information Officer and the individual responsible for maintaining the inventory records are no longer employed by DC Water. For the FY2012 count, DC Water management initiated the discussion process relative to conducting a physical count and engaging a company to perform the count exercise in April, 2012. Management also determined that the prior firm used to complete this exercise would not be retained in 2012. Consequently, a search for a new service firm was initiated.

DC Water ultimately engaged WIS International ("WIS"), a third party inventory counting service, to perform the physical inventory of selected IT and Fleet assets. The contractual arrangement with the firm specified that they were to limit their process to recording items observed and provide DC Water staff with the listing of items observed. The items observed would subsequently be compared to an inventory listing provided by DC Water. WIS was not required to resolve any discrepancies between DC Water's actual records and the count. Furthermore, they communicated that when their team was scheduled to be on-site, they would record any in-scope items as being present. The instructions provided to WIS specified that following categories of assets were considered to be in-scope: Monitors, CPUs, Laptops, Printers, Faxes, Scanners, Copiers, Projectors and Plotters.

In instances in which they were not able to observe any items or an office area, the related items on DC Water's records would be identified as "missing." It would then be the responsibility of the DC Water staff to determine the correct disposition of the items categorized as "missing." The actual count process was conducted in October 2012.

DC Water staff provided WIS with a listing of IT assets from the prior year's (dated September 30, 2011) count. In other words, the physical count conducted in October 2012 was compared to an inventory listing that had not been updated in over one year. This factor combined with a less than aggressive effort to actually locate all items considered to be in-scope resulted in a considerable level of differences in the records.

The asset records provided to WIS identified 4,305 IT assets in the categories identified above. After WIS completed their inventory process, they provided DC Water with a listing of 1,613 IT assets (37.4% of all IT assets) that they could not locate and categorized as "missing." Because of the high volume of assets that could not be located by WIS during their initial audit, Internal Audit assisted in following-up on the list of outstanding IT assets provided by WIS and made attempts to locate the IT assets identified as "missing".

It was communicated to Internal Audit that all Fleet-related discrepancies and items initially identified as "missing" were subsequently resolved.

### Methodology

Internal Audit formed several teams and collaborated with contacts within each department to locate the items identified as "missing" IT assets. Follow-up visits to departments at various DC Water locations that were previously included in the scope of the WIS inventory were visited, as well as initial visits to some locations, such as Fort Reno and some trailers at Blue Plains, that WIS did not visit.

The goal of the follow-up IT asset review was not to gain 100% assurance as to the presence of, or absence of, every asset on the "missing" list. Rather, the goal was to conduct an intensive short-term search of the items on the DC Water inventory list to locate as many of the assets as possible, to identify any assets that were no longer in the possession of the assigned end users, and to assess the IT asset processes, procedures, and controls.

### Results

Internal Audit physically located and verified 829 of the 1,613 "missing" IT assets. This reduced the remaining number of "missing" IT assets to 784 items (17.4% of to the total 4,503 IT assets) as of December 5, 2012.

Based on the age of the majority of the remaining “missing” IT assets, it is likely (but not confirmed) that the majority of these assets have been replaced due to obsolescence and/or malfunction and subsequently sold or destroyed through the IT asset disposal process. The revised listing was submitted to the appropriate staff members in Finance and Information Technology and is attached, as Appendix A to this report.

### Next Steps

Internal Audit recommends that DC Water examine the observations described in this report and work to re-engineer the processes and procedures around the deployment, disposal, tracking, and monitoring of IT Assets to gain assurance that all assets are efficiently utilized and adequately safeguarded against theft or loss.

Our review was limited in scope and only included the activities identified above. During the course of our search for the missing IT assets, Internal Audit noted the following weaknesses in the current IT Asset Management process:

1. **IT Asset Database:** DC Water uses an internally-developed IT Database to record the description, location, and movement of its IT assets. Internal Audit noted several weaknesses with both the database and with the controls surrounding how the information in the database is updated and maintained.
  - **Database Integrity:** Internal Audit found that the information in the database is not accurate and cannot be relied upon as an accurate record of deployed IT assets or for use in any decision-making or reporting.
  - **Dates:** The IT Database has three date fields: date acquired, date added, and date entered into inventory. It is unclear what the source of the dates entered are or what the dates truly represent. All three dates are different, often spanning multiple years.
  - **Access:** All IT Solution Center staff has access, can update, and make changes to the IT Database.
  - **Accountability:** The current IT asset process does not require the accountability of either the IT department or the individual business units for assets assigned to them.
  - **Consistency:** The IT Database is capable of tracking the history of movements of an IT asset; however, this is not updated on a consistent basis.
  - **Movement of IT Assets:** The process to assign or remove IT assets to/from end users or business units is not adequately documented or tracked by either the IT department or by the end user/business unit.
  - **Reporting:** Currently, there is no reporting from the IT Database, other than the data dump of all current assets that was provided for our follow-up review.
  - **Documentation:** The information and asset-specific details recorded in the database is inconsistent.
  - **Location:** Internal Audit noted assets assigned to locations that no longer exist, such as to the CMF Warehouse Cages, CMF Deployment Room, IT Trailer (which was not in use at the time of the test counts), etc.

- **Disposals:** Internal Audit noted disposals are not handled consistently and are improperly captured in the IT Database.
  - **Communication with Lawson:** The IT Database does not communicate with Lawson, DC Water’s financial system
2. **Policies & Procedures:** Internal Audit was unable to obtain detailed policies and standard operating procedures from the IT department. Policies and procedures related to IT’s strategy for the acquisition of assets; the deployment, moving, and re-deployment of assets; and the method and frequency of the disposition of assets is necessary to ensure both the transparency of the IT organization and consistency across all users of the assets.
  3. **Asset Tagging:** Internal Audit recommends that the IT department adopts a new, uniform IT asset tracking methodology that is applied to all IT assets, new and existing, that can be scanned
  4. **Warehouse:** Internal Audit noted the following areas of concern in our review of assets stored in the warehouse:
    - **Untagged Assets:** New IT assets, including laptops and monitors, which had been received in June 2012 and stored in the warehouse, have not been tagged or entered into the IT database.
    - **Storage:** The IT cage located at BP-1 is not safeguarded from environmental conditions.
    - **Disorganization:** The IT assets are not stored in an organized manner.
    - **Disposals:** There is a significant number of IT assets that are shrink-wrapped or otherwise marked for disposal that appear to have remained in the warehouse for an extended period of time.
    - **Record-Keeping:** Assets in the warehouse are not properly recorded in the IT Database.
    - **Access:** Currently, the warehouse staff has access to the IT cage, but they are not responsible for the IT assets stored in the cage.
    - **Physical Inventory Listing:** There is no physical inventory record of what is in the IT cage.
  5. **Physical IT Asset Inventories:** IT physical asset inventories have occurred in the past by contracted vendors. However, it appears that no attempt was made to locate and resolve items identified as not found in previous inventories, nor were these missing items ever purged from the IT Database.
  6. **Responsible Property Officers (“RPOs”):** DC Water has designated RPOs for each department. Internal Audit noted that the RPOs are not sufficiently trained on their roles and responsibilities.

## II. DETAILED OBSERVATIONS AND RECOMMENDATIONS

Throughout the IT Asset follow-up inventory process, Internal Audit identified several opportunities to strengthen DC Water's IT Asset Management processes and controls.

**1. IT Asset Database:** DC Water currently utilizes an internally-developed IT Database to track the DC Water's IT assets. Internal Audit noted several weaknesses with both the database and the controls surrounding how the information in the database is updated and maintained.

- **Database Integrity:** Internal Audit found that the information in the database is not accurate and cannot be relied upon for an accurate record of deployed IT assets or for use in any decision-making. During our inventory counts, Internal Audit noted multiple discrepancies between what was recorded in the IT Database and the location or disposition of the actual asset. The differences noted include the user assigned to the asset, the asset's physical location, the asset's serial number, the asset tag number, and the asset description (e.g. a laptop recorded as a monitor).

*Recommendation:* See IT Database General Recommendation #2 below.

- **Dates:** The IT Database has three date fields: date acquired, date added, and date entered into inventory. It is unclear what the source of the dates entered are or what the dates truly represent. All three dates are different, often spanning multiple years. Internal Audit also noted that the IT Database records of over 100 of the missing assets reflected a date acquired or date entered into inventory of 1/1/1900. Without knowing the date that the asset was acquired or put into service, it is not possible to accurately determine the asset's life cycle. This hinders DC Water's ability to accurately determine the amount of any potential write-off that may be necessary as a result of the missing IT assets.

*Recommendation:* See IT Database General Recommendation #1 below. Further, the purpose of each date field needs to be defined, and if the purpose is unclear, that date field should not be utilized going forward.

- **Access:** All IT Solution Center staff have access to update and make changes to the IT Database. Access to the asset inventory records should be restricted to protect the integrity of the data.

*Recommendation:* Access to the IT Database should be restricted, allowing only a limited number of IT staff to have "change" access into the database and allowing the remaining IT staff to have "view" access.



- **Accountability:** The current IT asset process does not require the accountability of either the IT department or the individual business units. There is no periodic communication between IT and the business units to ensure the accuracy of the information captured in the database. This has created an increased risk of fraud, theft, or misuse of DC Water assets either by IT personnel, who could misappropriate assets by fictitiously assigning them to a business unit without actually deploying the assets, or by business unit personnel, who, in many cases, were not required to provide acknowledgement that IT assets had been assigned to them or removed from them.

*Recommendation:* See IT Database General Recommendation #2 below.
- **Consistency:** The IT Database is capable of tracking the history of movements of an IT asset; however, this is not updated on a consistent basis. The system appears to log changes in the “History” screen, but it is unclear whether this captures all changes or just those changes that are purposely logged.

*Recommendation:* See IT Database General Recommendation #2 below.
- **Movement of IT Assets:** The process to assign IT assets to end users or business units or to remove IT assets from end user or business units is not adequately documented or tracked by the IT department, the end user, or business unit. Internal Audit found many instances in which assets were assigned to end users in the IT Database; however, the employees stated that IT had removed assets and, in many cases, replaced them with newer assets. Due to multiple construction projects, department relocations, and updates to DC Water computer equipment, the IT assets may have been moved and/or removed multiple times. These movements are not consistently captured in the IT Database. This prevents DC Water from determining if IT assets have been misappropriated and by whom.

*Recommendation* See IT Database General Recommendation #2 below.
- **Reporting:** Internal Audit was not able to determine whether the IT Database lacks adequate reporting ability or if the users and owners of the database lack the training and knowledge to utilize existing reporting features. Regardless, there is no reporting from the IT Database, other than the data dump of all current assets that was provided for our follow-up review. Internal Audit feels that canned reports on additions, changes, and disposals would be beneficial for management reporting (e.g. budget, forecast, trending, and life cycle costs) and an overall increase in IT asset transparency. Additionally, increased reporting functionality would enhance IT’s ability to provide relevant information to interested parties, such as the Finance Department, Internal Audit, External Auditors, etc., as well as to perform its own internal reviews to ensure compliance with procedures.

*Recommendation:* Users of the IT Database, including Finance, Internal Audit and External Audit, should work with IT to develop a listing of relevant and essential reports. Then, the administrator of the IT Database should create these reports so they can be accessed monthly (or any other appropriate frequency) to provide meaningful data to management for decision making. Two reports that should be created immediately and reviewed on a monthly basis to increase both transparency and compliance are:

- 1.) An Access Report: detailing who has what access to the database and any additions, changes, or terminations of access that occurred during the month, and;
- 2.) A Change Log: all changes made within the database, including who made the change and the nature of the change.

- **Documentation:** The information and asset-specific details recorded in the database is inconsistent. Some assets have detailed comments about who the asset is assigned to, where the asset is located, etc. Other assets have limited information that increases the difficulty in tracking or locating the asset.

*Recommendation:* See IT Database General Recommendation #1 below.

- **Location:** Internal Audit noted assets assigned to locations that no longer exist, such as to the CMF Warehouse Cages, CMF Deployment Room, IT Trailer (which was not in use at the time of the test counts), etc.

*Recommendation:* See IT Database General Recommendation #1 below. The IT Database should be updated to eliminate these locations and to assign the assets to their proper location.

- **Disposals:** Internal Audit noted that the policy on IT asset disposals and the retirement of assets is unclear. Our follow-up review identified assets marked as “disposed” or that had a comment of “PDA” in the IT Database were located during our follow-up inventory counts. Currently, the disposal process includes assigning assets to the warehouse where they remain until a vendor comes in and physically removes the assets from the facility.

*Recommendation:* See IT Database General Recommendation #1 below. The IT department should adopt a methodology to assure that only assets that are truly obsolete or damaged beyond repair are disposed. The IT department should also assure that disposals are completed timely so that assets marked for disposal do not remain in the warehouse for extended periods of time, where they take up space that could be better utilized and are at an increased risk for theft or additional damage that would adversely impact any remaining salvage value. Finally, the IT department should develop a disposal process where they solicit bids for disposing of assets so DC Water can benefit from the lowest disposal cost, or the highest salvage cost, depending on the assets to be disposed.

IT could also consider alternative dispositions for assets that are exchanged through scheduled IT asset upgrades, including reassignment to a less-critical role or donation of items to schools, charities, or other non-profit organizations.

- **Communication with Lawson:** The IT Database does not communicate with Lawson, DC Water's financial system. Further, the Lawson Asset ID number assigned to each asset for depreciation does not correspond with the Asset Tag number assigned to assets within the IT Database. The IT Database number is manually input based on the tag or decal applied on the physical asset, whereas the Lawson number is in chronologic order. Internal Audit also noted that certain IT asset purchases in Lawson were recorded in bulk (i.e., 10 laptops recorded as one asset for \$10,000), rather than each asset's individual asset value. This further complicates the possibility of accurately determining the valuation of any potential financial statement write-off as a result of missing or damaged IT assets. The IT Database has a field for purchase price, but this entry is inconsistently populated and the source of the pricing is unclear.

*Recommendation:* IT needs to work with Finance to develop either a consistent numbering methodology or create a field within the IT Database to input the Lawson Asset ID number. Additionally, IT and Finance need to develop a process to ensure the accurate asset cost is assigned to each asset to ensure proper valuation at all times. Further, if management is unable to implement the recommendations within this report with the current IT Database, management should consider procuring a software solution that could effectively interface with Lawson, as well as perform the other recommended functionalities of an IT Asset Management tool.

*IT Database General Recommendation #1:* Internal Audit recommends that management update and correct errors and inconsistencies within the current IT Database as soon as possible. This includes updating the current individual and location of IT Assets, as well as properly disposing of assets that have been determined to be truly missing.

*IT Database General Recommendation #2:* Further clarification and definition of IT policies and procedures, as well as detailed instructions of what fields should be populated in the IT Database and how to properly populate each field should be documented. All IT employees, RPO's, and end users should be trained on their specific roles and responsibilities in the IT Asset Management process. See Policies and Procedures Observation and Recommendation below for more information.

**2. Policies & Procedures:** Internal Audit was unable to obtain detailed policies and standard operating procedures from the IT department, with the exception of some policies and procedures related to the Help Desk (which more so detailed how and when to use the Help Desk, service level agreements on turn-around time for requests, contacts, etc.). Policies and procedures related to IT's strategy for acquisition of assets; deployment, moving, and re-deployment of assets; and the method and frequency of disposition of an assets is necessary to ensure both the transparency of the IT organization and consistency across all users of the assets.

*Recommendation:* Internal Audit recommends that the IT Solutions Center develop and maintain a comprehensive set of policies and standard operating procedures that will guide users on the correct processes for physically deploying and removing IT assets from end users, as well as assigning, moving, removing, and disposing of IT assets for end users within the IT Database. These policies should clearly note all required forms and approvals that are necessary for each type of asset movement, including what documentation should be provided to the end user/business unit. Furthermore, the standard operating procedures should detail what specific information should be captured in each field in the IT Database and where to get that information to ensure consistency in the database across all users. Additionally, an IT employee who does not have access to the database should audit the previous month's changes to the database to ensure the established policies and procedures are followed and that the appropriate forms are obtained and approved.

**3. Asset Tagging:** Internal Audit recommends that the IT department adopts a new, uniform IT asset tracking methodology that is applied to all IT assets, new and existing. Internal Audit observed at least four different asset tags during our follow-up inventory review. Only one tag had barcodes on it that allowed the use of electronic scanners. Two tags were silver stickers; sometimes the sticker has the asset tag number and sometimes it is the decal number. The other asset tag was a paper sticker that had the asset tag number, decal number, serial number, asset type and to whom it was assigned. This is confusing and difficult for end users to understand.

*Recommendation:* All assets need to be re-tagged with a tag that is able to be scanned. The IT department should purchase barcode scanners. Another option would be the use of each IT asset's serial number as the identifying asset number.

**4. Warehouse:** Internal Audit recommends that the use of the IT cage in the warehouse is reviewed and a new methodology for the receipt, storage, and disposition of the assets in the cage is developed. There are a significant number of IT Assets stored in the BP-1 warehouse. We noted the following areas of concern in our review of assets stored in the warehouse:

- **Untagged Assets:** New IT assets, including laptops and monitors which had been received in June 2012, are stored in the warehouse. The IT assets are untagged and have not been recorded in the IT Database. Internal Audit also noted large stockpiles of smaller value equipment (e.g., laptop bags, keyboards, batteries, cables) that appeared new and also untracked.
- **Storage:** The IT cage located at BP-1 is not safeguarded from environmental conditions. Internal Audit observed monitors, flat screen TVs, laptops, CPUs, and printers that were not stored in boxes or in cabinets, and have subsequently been exposed to large amounts of dust and debris.
- **Disorganization:** The IT assets are not stored in an organized manner. Similar categories of asset types are not stored together and usable assets are stored with assets that are ready to be disposed. The resulting disarray makes it difficult to locate specific items. Further, some assets are stacked on top of each other, resulting in damage to some assets.
- **Disposals:** There is a significant number of IT assets that are shrink-wrapped or otherwise marked for disposal that appear to have remained in the warehouse for an extended period of time. Additionally, there are other assets not marked for disposal that are clearly obsolete, damaged, or otherwise unusable that should be disposed.
- **Record-Keeping:** Assets in the warehouse are not properly recorded in the IT Database. Specifically:
  - Assets that are marked as “disposed” in the IT Database are still in the warehouse.
  - Assets that are currently assigned to end users in the IT Database are physically located in the warehouse.
  - Assets that are currently assigned to the warehouse in the IT Database could not be located during our physical counts.
- **Access:** Currently, the warehouse staff have access to the IT cage, but they are not responsible for the IT assets stored in the cage. Conversely, the IT department is responsible for the assets in the cage, but they do not have independent access to the cage. In order for IT personnel to access the cage, they must request access from the warehouse personnel. The warehouse personnel then obtain the keys that open the IT Cage. There is a policy that states that warehouse personnel can only enter the IT Cage for emergencies or when escorted by IT. However, there are no controls in place that prevents or limits the access of warehouse personnel into the IT cage or that could detect instances where

unauthorized warehouse personnel accessed the cage. Further, any IT staff can gain access to the cage during normal business hours. Internal Audit specifically noted that:

- While Internal Audit was in the cage trying to locate missing IT Assets, warehouse staff were observed entering the cage without IT escorts.
  - Facilities had cleared out an office space and brought the IT Assets from that office space to the warehouse for storage without an IT escort. IT did not know that the IT Assets had been relocated to the Warehouse.
- **Physical Inventory Listing:** There is no physical inventory record of what is in the IT cage and it does not appear that a full physical inventory of the contents of the IT Cage has been performed in over a year.

*Recommendation:* Internal Audit recommends that management implement the following actions as soon as possible:

- Perform a full physical inventory of all assets located in the warehouse.
- Update the IT Database to reflect the results of the physical inventory count.
- Properly dispose of any obsolete assets; ensure these assets are also disposed in the IT Database.
- Create an organized storage system for the remaining assets, including cabinets or boxes when necessary. Further, there should be separate locations specified for disposal and deployment activities.
- Update policies and procedures related to physical access to the IT Cage. Considerations should include further restrictions on both warehouse staff and IT staff access to the cage based on business need or appropriate, documented justification. Additional consideration should be made into purchasing security cameras aimed into the cage, as well as accessing the IT cage through the use of electronic access cards rather than a shared key to prevent and detect theft or fraud.
- Assets should be tagged immediately upon receipt. The warehouse staff can physically receive the items, but IT should be immediately contacted to tag and record the assets into the IT Database.

**5. Physical IT Asset Inventories:** IT physical asset inventories have occurred in the past by contracted vendors. However, it appears that there was no follow-up or resolutions for the items identified as not found in previous inventories, nor were these items ever purged from the IT Database. The IT Database has a physical inventory history dashboard for each asset that shows the results of the last physical inventory performed by a previous consultant, ABCi. Internal Audit noted assets that were marked as “Still Open” in the “Date Closed” column and a quantity of “0” in the “Found” column from the 2011 (and prior inventories).

*Recommendation:* DC Water should continue to have an outside vendor perform an annual audit of their IT assets to ensure segregation of duties, as IT should not be counting their own inventory. However, the IT department is responsible for maintaining an accurate record of IT assets. As such, IT should perform periodic, unscheduled audits of IT assets throughout the year so that each department or location is audited at least once prior to the vendor’s year-end review. After all locations have been audited by IT, any assets not accounted for should be marked as lost or disposed within the IT Database and written off of the financial records.

**6. Responsible Property Officers (“RPOs”):** DC Water has designated RPOs for each department. Internal Audit noted that the RPOs are not sufficiently trained on their roles and responsibilities. The lack of training and their lack of ownership over the tracking and safeguarding of their department’s IT assets has resulted in inadequate monitoring of each business unit’s IT assets.

*Recommendation:* DC Water should reassess their current RPO listing and decide who the appropriate RPOs should be. A department could have more than one RPO depending on the size of the department, their location(s) and/or their job functions. Finance and IT need to develop and document the RPO policies, procedures, and responsibilities. These procedures should include a report that is provided to the RPO from the IT Database, which they would be responsible for verifying the accuracy of the report on a quarterly basis. Once the updated documents are approved, the new RPOs should be trained on IT Asset Management and aware of updates made to the policies and procedures, as well as DC Water’s expectations of them regarding the IT assets for which they are responsible.

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