

## DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

#### **Board of Directors**

Audit Committee
Thursday, February 27, 2014
9:30 a.m.

1.	Call to Order	
2.	Update – 2013 IT Asset Inventory Reconciliation	Mark Kim
	Review of Internal Audit Status	Joseph Freiburger
4.	Executive Session	Bradford Seamon
5.	Adjournment	Bradford Seamon



# Presentation to Audit Committee 2013 IT Asset Inventory Reconciliation

February 27, 2014





## **2013 IT & Fleet Asset Inventory**

- In July 2013, DC Water selected ProBar, a third party inventory counting service, by RFP, to perform a physical inventory count of all IT and Fleet assets
- Summary results of ProBar inventory count:

Asset Inventory	IT	FLEET
Initial Database	3435	1065
Found Assets	2793	868
Missing Assets	642	197
Missing Assets (%)	18.70%	18.40%

The 642 "missing" assets were identified by IT as 291 ITSC (desktop assets), 337 DC NIT (network assets) and 14 non-hardware IT assets



## **IT Asset Inventory Reconciliation**

### IT Desktop Assets (ITSC)

ITSC	Count
Total Assets	3034
Initial Found	2743
"Missing"	291
Reconciliation	257
Total Found	3000
Total Found (%)	98.9%

### IT Network Assets (DC NIT)

DC NIT	Count
Total Assets	387
Initial Found	50
"Missing"	337
Reconciliation	280
Total Found	330
Total Found (%)	85.3%



## **IT Asset Inventory Reconciliation**

- IT has located 98.9% of 'missing' ITSC assets and 85.3% of DC NIT assets
  - 34 (or 1.1%) of the remaining ITSC assets were not found and have an estimated total value of \$7400 and are between 2-4 years old
  - 57 (or 14.7%) of the remaining DC NIT assets were not found and have an estimated total value of \$8000 and are between 4-10 years old
- DC Water will write-off the remaining value of these missing assets and dispose of any obsolete equipment
- In addition, IT has instituted the following changes:
  - New Information Systems Hardware Inventory Policy
  - New IT Asset Disposal Policy
  - New IT Asset Database Management System



## **Appendix**



## **History**

#### **WIS**

- In April 2012, DC Water engaged WIS International ("WIS"), a third party inventory counting service, to perform a physical inventory count of all the Authority's IT & Fleet assets
- After WIS completed their count, they provided DC Water with a listing of 1,613
  IT assets (37.4% of all IT assets) out of a total baseline of 4305 IT assets that they
  could not locate and categorized as "missing"
- Internal Audit was directed to locate the IT assets listed as "missing"

### 2012 Internal Audit Report

- In November 2012, Internal Audit physically located and verified 829 of the 1613 missing assets (51.3% of the missing assets)
- Of the 784 assets that remained "missing" approximately 78% were aged 3 years or more
- In December 2012, Internal Audit issued a report on the IT Asset Inventory process and recommended improvements in the following areas: (1) IT Asset Database Management; (2) Policies and Procedures; (3) Asset Tagging and Storage



# 2012 Internal Audit Findings and Recommendations

Internal Audit Findings	Internal Audit Recommendations	Status
IT Asset Database:  Database Integrity Inconsistent Dates All Staff have access rights to change IT database Inconsistent Documentation Inconsistent Disposal Policies and Procedures No Link to Lawson Financial System	New IT Asset Database Management System	IT has acquired a new inventory management system Passport from ASAP systems and will convert the existing system once final validation of the Probar inventory is complete. Dates will be maintained for all new assets once the new system is on-line Access rights have been restricted and will be maintained in the new system New standards for asset documentation will be enforced by the new system. The new Passport will be integrated system with Lawson
Policies and Procedures:  No detailed Policy and Procedure document	Revised IT Policies and Procedures	IT has updated its Asset Management Policy. (see attached)
Asset Tagging  • No uniform asset tagging methodology	New Asset Tagging Methodology	The new asset tags provided by Probar will be the asset id of record once the Passport system is implemented
IT Cage in BP1 Warehouse  Untagged Assets  Improper storage  Lack of proper record keeping  Lack of Access to IT Cage	Improved Warehouse Storage(IT Cage)	<ul> <li>The IT inventory cage is now organized by asset type and secured.</li> <li>All assets are entered into the asset database within 5 days of arriving at the warehouse.</li> <li>Access to the cage has been restricted to 3 people</li> </ul>
Physical IT Asset Inventories  No follow-up after Inventory count	Periodic Inventory Counts by IT	Quarterly inventory checks are done. since the WIS audit 3 checks have been done and all inventory has been validated.



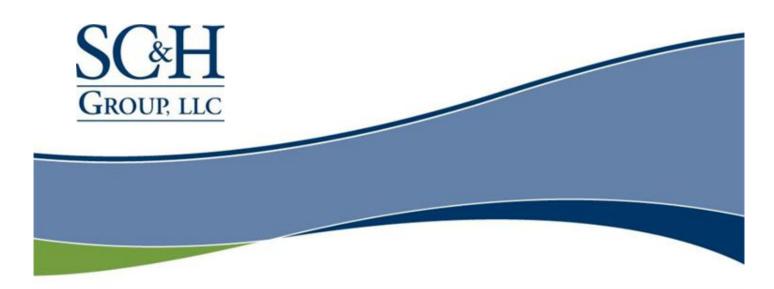
### **Fleet Asset Reconciliation**

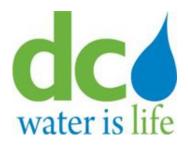
#### Reconciliation Process

- The 197 "missing" assets were identified by Fleet Management as mostly Small Equipment: hand-pumps, small weed-trimmers, leaf blowers, etc.
- Fleet personnel set out to locate the "missing " assets
- Internal Audit and Finance independently validated part of Fleet's findings

#### Results

- Missing small equipment has average cost of \$100 each and a total combined value of approximately \$10,000
- Per Fleet personnel, most of these items are over 5 years old, fully depreciated and obsolete





## Legal Operations Internal Audit Report

February 11, 2014

#### **INTERNAL AUDIT TEAM**

Director: Joe Freiburger

Manager: Russell Ojers

Associate: Dominic Usher



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#### **EXECUTIVE SUMMARY**

#### **Background**

DC Water's Office of the General Counsel ("OGC") is responsible for the oversight and support of all legal issues relevant to the Authority. The OGC provides assistance throughout the organization, working with individual departments to ensure that: compliance with applicable laws and regulations, human resource issues are handled appropriately, vendor contracts are properly reviewed, customer issues are properly resolved, and a wide range of other tasks. The OGC is also responsible for assuring that DC Water is properly represented in all external legal and regulatory matters.

Randy Hayman, Esq. has led the department since he joined DC Water in 2010. Prior to DC Water, Mr. Hayman served as the General Counsel for the Metropolitan St. Louis Sewer District where he held the General Counsel position for ten years. The OGC currently employs five Principal Counsels, each with a primary focus in a specific area of law. The OGC also employs three paralegals and three administrative staff members. Internal Audit notes that there is currently one vacant Principal Counsel position and two open Paralegal positions.

The goal of the OGC is to support the organization through the utilization of in-house personnel, to the extent possible. In some instances, the General Counsel employs external counsel with specific experience of areas of expertise to provide DC Water with the best possible advice and representation. One of the department's objectives for FY 2014 and FY 2015 is to increase the amount of work performed in-house and reduce reliance on external counsel. For FY 2014, the OGC has approximately \$1.8M budgeted for in-house personnel, compared to \$4.5M budgeted for external counsel services — which is down from an original FY 2014 budget amount of approximately \$5.5M. A further reduction to approximately \$4.1M is planned for FY 2015.

#### **Objectives**

and,

Our overall audit objective was to evaluate the effectiveness and efficiency of the operations and activities around the OGC. Specific audit objectives included:

Ensure that legal operations and activities associated with both internal and external counsel
are effectively monitored, tracked and managed;
Determine whether DC Water's legal operations are in compliance with Local, State, Federal
and agency-specific requirements;
Evaluate the vendor selection and procurement process for external counsel and verify
appropriate billing practices;
Verify DC Water is properly safeguarding privileged information passed through the OGC



Ensure	that	DC	Water	maintains	adequate	standard	operating	procedures	around	legal
operatio	ons.									

#### **Audit Scope and Procedures**

This audit was conducted based on the approved FY2014 internal audit plan. The audit was initiated in October, 2013 and completed in January, 2014. The audit included an evaluation of the processes and procedures of the OGC. The audit also included an examination of the process to acquire and manage external counsel as well as a review of the vendor billing process. The audit procedures consisted of interviews with the appropriate parties, observations of daily operations, a review of pertinent documents and reports and testing of a sample of activity.

#### **Summary of Work**

Internal Audit concludes that the OGC does have effective processes and controls in place around legal operations. In our opinion, the work performed by the OGC is in compliance with Local, State, Federal and agency-specific requirements. Further, Internal Audit finds that the OGC properly manages the work performed both in-house, and through the use of external counsel. Additionally, the selection of external counsel is appropriate and the OGC's relationship with the outside firms is properly managed. Finally, Internal Audit also concludes that privileged information produced or received through the OGC is adequately safeguarded.

Internal Audit has identified a few items that should be addressed by management in order to further strengthen the OGC operations.

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

ın þ	barticular, there is a need to address the following.
	Implement a process to properly utilize the OGC Database system for the tracking and reporting of all assigned tasks; and,
	Review, update, approve and distribute process and procedure documents on a consistent, recurring basis to assure that they are representative of the current operating environment and all associated requirements.
	SC&H Consulting By:
	Joe Freiburger, CPA, CIA



#### II. DETAILED OBSERVATIONS & RECOMMENDATIONS

#### I. OGC Database Utilization

#### **Observation:**

In 2010, the OGC implemented a software system called the OGC Database to track assigned work activities. The OGC Database was designed to assist Management in the 1. Update process and procedure documents tracking the status of all OGC activities and includes reporting capabilities. Internal Audit notes that the OGC Database is not being used on a consistent basis.

An expanded utilization of the OGC database would increase efficiency throughout the department by reducing the number of in-person, ad hoc update meetings, and would allow the General Counsel greater visibility into the comparative workloads of his staff, key milestones and deadlines, and would replace many of the manual tracking spreadsheets that are currently produced within the department.

#### Risk:

Failing to properly track OGC activities could result in missed deadlines and possibly result in unnecessary costs to DC Water.

#### **Recommendation:**

Internal Audit that recommends Management:

- related to the operation and use of the OGC database so that OGC personnel will have a clear understanding of the operation of the database, as well as the requirements for using the database as the primary means for tracking open cases, filings and other tasks.
- 2. Implement a training program to ensure that all members of the OGC can properly operate the OGC Database. The training should include instruction on the full lifecycle of the tasks to be tracked – from initial entry, to periodic updates, through completion. Training should define database use requirements and also set expectations regarding the use of available reporting.

#### **Management's Action Plan:**

The Office of the General Counsel agrees with the recommendations and will design a process to implement them.

#### **Implementation Date:**

September 30, 2014

C Water – 2014 Internal Audit gal Operations		SC+H GROUP, LLC
	<ul> <li>3. Identify the population of activity which should have been entered into the OGC Database and formulate a plan to bring the database current.</li> <li>4. Identify opportunities to enhance the capabilities of the OGC Database to further meet departmental needs - such as increased management reporting capabilities. Work with the IT Department to assess feasibility and implement improvements.</li> </ul>	



#### **II. Standard Operating Procedures**

#### **Observation:**

Internal Audit noted the following instances where the OGC's process and procedure documents had not been updated to reflect changes in the current processes:

- The "Procedure for Invoice Payment" document has not been updated to reflect the current OGC requirement that all invoices over \$5000 are approved by the General Counsel.
- The "Guidelines for Outside Counsel" details the use of a quarterly status report from outside counsel that has been deemed redundant and discontinued due to the current levels of ongoing communications between the outside counsel and the OGC staff.
- The "Litigation Team Reporting Procedures" and the "Tax Lien Procedures" do not identify the specific employees responsible for performing tasks. The procedures are written as instructions stating "you" rather than a procedure document stating employee positions and their respective responsibilities.

#### **Recommendation:**

Internal Audit recommends that Management review, update and distribute process & procedure documents on a consistent, recurring basis to assure that they are representative of the current operating environment and all associated requirements. Management should ensure that all documents are properly approved and dated to reflect the most recent revisions.

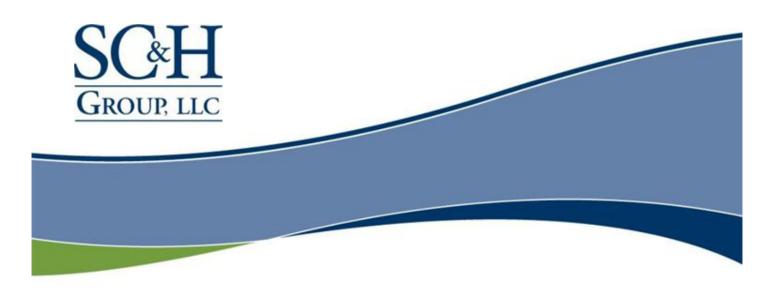
#### **Management's Action Plan:**

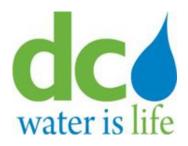
The Office of the General Counsel agrees with the administrative recommendations made and will develop a process to implement them.

#### **Implementation Date:**

September 30, 2014

DC Water – 2014 Internal Audit Legal Operations	SC*H GROUP LLC
Additionally, Internal Audit noted that six of twelve OGC procedure documents did not include evidence of proper approval, or of the date of the most recent revision.	
Risk: Lack of current, updated procedure documentation may result in inconsistent practices and an inability to communicate procedural changes to employees.	





## Clean Rivers Project Management Internal Audit Report

February 11, 2014

#### **INTERNAL AUDIT TEAM**

Director: Joe Freiburger

Manager: Russell Ojers

Staff: Jackie Kosovich



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#### **EXECUTIVE SUMMARY**

#### **Background**

The DC Water Clean Rivers Project ("DCCR") is a 20-year project: a Long Term Control Plan ("LTCP") mandated by a consent decree to clean the waterways in the District of Columbia. The consent decree was entered by the court on March 23, 2005 by DC Water and the U.S. Government.

About one-third of DC's sewer system is a combined sewer system ("CSS"). During rain or snow, the runoff drains into these combine sewer pipes and mixes with raw sewage. The combined sewer pipes convey the mixture to the Blue Plains Wastewater Treatment Plant ("BPWWTP") to be treated and discharged into the Potomac River. When rain or snow exceeds the capacity of the system, the excess flow, called a combined sewer overflow ("CSO"), is discharged into the Anacostia River, Potomac River, and Rock Creek. The LTCP is predicted to reduce CSO events by 96% through several selected CSO controls, including underground storage tunnels, diversion sewers, consolidation of CSO outfalls, and pumping stations. Per the consent decree, the Anacostia River projects are implemented first and the facilities from Blue Plains to RFK Stadium are to be placed in operation by March 23, 2018, with the remainder of the Anacostia facilities placed in operation by March 23, 2025. The Potomac River and Rock Creek projects are scheduled to be placed in operation by March 23, 2025. DC Water is currently negotiating with the EPA to replace or implement a hybrid approach for the Potomac River and Rock Creek projects to reduce or eliminate tunnel construction with green infrastructure. Additionally, DC Water is collaborating with the EPA to modify the consent decree, as many requirements have been adjusted.

The project management team consists of DC Water employees, the Project Consultants Organization ("PCO"), and Contract Construction Managers ("CCM"). The project management team performs many functions to ensure the project stays on schedule and within budget, as well as ensure quality, safety, and risk management.

#### **Objectives**

Our overall audit objectives included an evaluation of the activities performed by the Clean Rivers project management team. Specific audit objectives included:

To assess the adequacy of the project management team's monitoring and tracking activities
relating to the progress of the Clean Rivers project;
To ensure the existence and effectiveness of communication between the project
management team and the stakeholders and regulators;
To evaluate the adequacy of the project management team's oversight of project budgets an
funding;



To	assess	the	effectiveness	and	efficiency	of	the	project	management	organization	and
rela	ited QA	\/QC	and safety pro	ocedu	ires; and,						

☐ To ensure that the management of the Clean Rivers Project complies with DC Water processes and procedures, as well as applicable laws and regulations.

#### **Audit Scope and Procedures**

This audit was conducted in accordance with the approved FY2014 internal audit plan. The audit was initiated in November 2013, completed in January 2014, and included an evaluation of the Clean Rivers Project Management during the period of October 2012 through September 2013. The audit procedures consisted of interviews with the appropriate parties, observations of daily operations, a review of pertinent documents and reports and testing of a sample of activity.

#### **Summary of Work**

Internal Audit concludes that the DCCR Project Management Team effectively monitors the progress of the LTCP and adherence to the requirements of the consent decree. We conclude that the internal controls surrounding the LTCP activities are effective.

Internal Audit has identified some items that should be addressed by management in order to further strengthen DC Water's DCCR project management. In particular, there is a need to address the following:

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#### II. DETAILED OBSERVATIONS & RECOMMENDATIONS

#### I. Project Management Team Staffing

#### **Observation:**

unable to fill open project manager positions. Currently, four of the nine project manager positions are vacant. Two of the four open positions have been vacant since February 2012.

Internal Audit notes that the project management team is experiencing difficulty hiring qualified individuals due to salary constraints, as they are tied to DC Water's pay scale and due to the limited availability of qualified candidates with the specialized skills required. The positions for the Clean Rivers project are more risky and specialized; therefore, requires higher compensation compared to other DC Water positions. Additionally, the project management team is unable to offer competitive salaries to contracting firms or to personnel on the west coast, in which underground construction is thriving.

#### **Recommendation:**

The project management team has been Internal Audit recommends that the Project Management team take the steps necessary to attract and hire qualified candidates and fill the vacant project manager positions. These steps should include an analysis of alternative benefits, along with the fixed salary, to attract qualified candidates. These benefits could include, bonuses, additional paid time off, etc. The Project Management team should also explore any available exceptions to the DC Water pay scale that could bring available compensation in-line with similar positions in other organizations.

> Implementation of either recommendation could assist the Project Management team to close the gap that prevents attracting and hiring qualified candidates.

#### **Business Owner(s):**

Carlton Ray, Clean Rivers Project Director

#### **Management's Action Plan**

- DCCR has already reached out to the major underground construction organizations and held job fairs at tunneling conventions, advertised in tunneling publications and hired head hunters who have not produced viable candidates. We have broadened the educational requirements to include Geotechnical and Construction Management degrees and the Grade 18 bracket has been increased
- Further expand the use of recruiting firms
- Increase advertising and expand to publications with national readership.
- Continue using contract consultants to fill gap until staff is hired.
- Implement finder's fee incentive to apply to current staff. (A recent forum of engineering firm CEOs identified the mid Atlantic as the most difficult market in the country for recruiting engineering staff).



#### Risk:

Inadequate staffing levels could result in increased workloads for current project managers, which could have an adverse impact on the oversight of the LTCP and adherence to the consent decree requirements. Additionally, it may place a constraint on achieving milestones.

• Have technical staff personally reach out to potential candidates.

#### **Implementation Date:**

June 1, 2014

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#### **II.** Management Reporting

#### **Observation:**

Internal Audit identified three instances where reports distributed to the senior Clean Rivers project management team contained inconsistent and inaccurate information. Specifically:

The CIP budgets reported in the September, 2013 Monthly Progress Report for project FS (Boiling Overflow and Diversion) and CY (CSO LTCP Anacostia Projects) were significantly higher because requested budgets were reported instead of approved budgets. The Primavera system used to produce the Appendix I - CIP Budget Status report of the monthly progress reports is | Business Owner(s): configured to provide multiple options to present data. Internal Audit determined that a reporting option was selected in producing this report that produced requested budgets instead of approved budgets.

#### **Recommendation:**

Internal Audit recommends the formalization of the process to produce the CIP Budget Status report to ensure the correct option is selected to present the CIP budget information accurately and consistently.

Additionally, Internal Audit recommends that management identify DETS personnel that are authorized to make changes within Primavera for projects administered by DCCR project management team in order to avoid unauthorized changes to project data.

Carlton Ray, Clean Rivers Project Director

#### **Management's Action Plan**

- In the September 2013 Monthly Progress Report, an incorrect filter was utilized in Primavera, resulting in the reporting of proposed budgets instead of approved budgets. To prevent future reoccurrences, this report is now produced in more detail showing individual lines in the CIP so that requested versus approved budgets will Lastly, the Monthly be indicated. Progress Report is a document internal to the Clean Rivers project/management staff and was not used to report to the General Manager, Board or other senior management.
- DCCR will improve the OC on the GM Monthly reports by adding a second tier review. Previous QC reviews caught the observation regarding the omission of JBAB OF and Diversion Structures (Div D) from Project/Schedule table and subsequently added it to the table.



- The Primavera system utilized to monitor CIP budgets is a Department of Technical Services (DETS) system. Several DETS employees have read/write access to this system. Additionally, some of the projects listed under the Clean Rivers project are DETS projects. Internal Audit identified one instance where an incorrect adjustment of \$65,000 was added to the CIP budget for CSO Permitting by a DETS employee.
- The January, March, and April, 2013 reports titled "General Manager's Report for DC Clean Rivers Project" omitted status updates on JBAB Overflow and Diversion Structures (Division D) and Low Impact Development Retrofit at DC Water **Facilities** (Division Furthermore, the consent decree milestone for Monitoring at CSOs 033, 036, 047, and 057 placed in operation was not listed in the section called Consent Decree Deadlines Upcoming in the Next Two Years for the January 2013 General Manager report. Note that these reports were provided by project staff to DC Clean Rivers senior managers.

• Low Impact Development Retrofit at Various DC Water Facilities (Div N) has been monitored via the Consent Decree Deadline in the Upcoming 2 Years table; however, it is now also added to the Project/Schedule table. Finally, previous QC reviews also caught the omission of the consent decree milestone for Monitoring at CSOs 033, 036, 047, and 057 and it has been included in subsequent reports.

## **Implementation Date:** March 7, 2014.

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#### Risk:

The presentation of inaccurate and/or incomplete information in the monthly progress reports could potentially affect management's ability to make well-informed decisions.

#### **III. Risk Management Procedures**

#### Observation:

Internal Audit noted that the Risk Management Recommendations procedure document had not been updated to reflect the current processes. We noted the following regarding the current document:

- The Risk Management Recommendations procedure was not formalized or approved;
- The process described to Internal Audit does not agree to the process documented in the Risk Management Recommendations procedure document;
- The monthly Risk Priority Summary report described in the procedure document is not currently being produced; and,

#### **Recommendation:**

Internal Audit recommends that the DCCR project management team ensure that all procedure documents are reviewed, updated and approved on a recurring basis so that the procedure documents reflect the current process utilized by the Risk Management team.

#### **Business Owner(s):**

Carlton Ray, Clean Rivers Project Director

#### **Management's Action Plan**

When originally developed, the Risk Management Recommendations document (i.e., PM-17 dated Dec 24, 2009) laid out a proposed approach to managing risk across the construction projects of the Clean Rivers Project. The recommendations formed the basis of the risk management process that is and has been utilized effectively by the team to date. As observed by Internal Audit, the process has been improved since the preparation of the original memo based on actual experience on projects and based on the changing character of the work.

The procedure document will therefore be updated to reflect the improvements in the process.

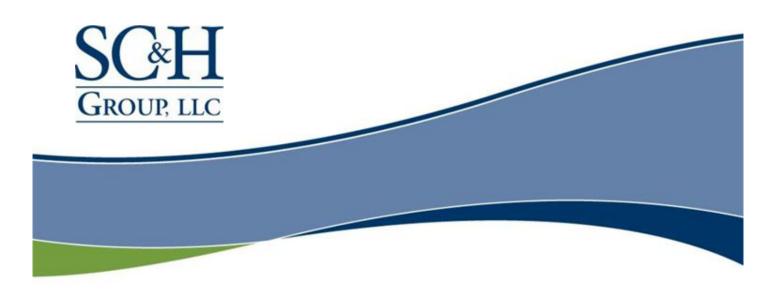


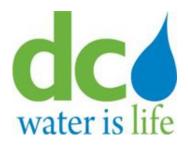
Management provided information outlining an informal process of updating the Risk Registers that is not explained in the procedure document.

**Implementation Date:** March 7, 2014

#### Risk:

Lack of current, updated procedure documentation may result in inconsistencies in the risk management of each of the projects.





## Disposal of Assets Internal Audit Report

February 18, 2014

#### **INTERNAL AUDIT TEAM**

Director: Joe Freiburger

Manager: Russell Ojers

Associate: Dominic Usher



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#### **EXECUTIVE SUMMARY**

#### **Background**

Through the normal course of DC Water operations, new parts and materials are used that sometimes result in excess materials that cannot be used for future projects. As part of this work, existing parts and materials may be removed from the plant and replaced with newer assets, which also results in the return of older, unusable assets from the field that cannot be reused. DC Water has several programs in place that are designed to collect and sell these parts and materials that are deemed unusable in support of future operations, but that retain a residual "scrap" or "salvage" value.

For the purpose of this Disposal of Assets review, Internal Audit has focused on the processes and controls around the collection, safeguarding and disposal of excess materials collected through the operations of the Meter Services and Water Services departments. Please note that the disposal/recycling programs of the Maintenance Services and Warehouse Operations departments will be addressed separately through reviews that are included in the FY2014 Internal Audit plan.

The parts that are collected and disposed by the Meter Services department primarily consist of used water meters that are replaced and returned from the field. The smaller water meters (</=2" in diameter) are not repaired and returned to service. Rather, these water meters are collected by a recycling vendor and sold for the scrap value of the metal (primarily brass) that comprises the meter casings. Larger water meters (>/=3" in diameter) are sometimes reconditioned and placed back into service, depending on the nature, complexity and cost of the work that needs to be performed; otherwise they are also sold for the value of their scrap metal.

The materials that are collected and disposed by the Water Services department primarily consist of lengths of metal pipe that are removed from the plant and replaced. These lengths of metal pipe vary in diameter and length, and also in the material from which they are made. The majority of the lengths of pipe that are collected and sold for scrap are made from cast iron; however, there are some lengths of pipe that are collected and sold that are made from brass, steel, tin and copper. The materials collected also include unusable scrap remnants that are produced from the custom-fitting of new pipes in the field.

During the previous 12 months, the total value of payments owed to DC Water for the Meter Services and Water Services' water meter and scrap metal recycling programs totaled approximately \$17,200. Please note that this amount does not necessarily represent the total potential for income that could have been reclaimed by the Authority through their sale of scrap parts and materials, only the actual amount that was realized from payment invoices submitted by the recycling vendor.



#### **Objectives**

Our overall audit objective was to evaluate the effectiveness and efficiency of the operations and activities around the disposal of specific types of DC Water assets. Specific audit objectives included:

Evaluate the effectiveness of the controls around the disposal of scrap materials or obsolete/unusable inventory;
 Determine whether proceeds from the disposal of scrap materials or obsolete/unusable inventory are adequately maximized and properly accounted for;
 Assess the processes in place to assure that materials purchases and issuances are designed to minimize the amount of subsequent scrap materials or obsolete/unusable inventory;
 Verify that scrap materials and obsolete/unusable inventory are properly safeguarded prior to disposal; and,
 Ensure that DC Water maintains adequate standard operating procedures around the disposal of scrap materials or obsolete/unusable inventory.

#### **Audit Scope and Procedures**

This audit was conducted based on the approved FY2014 internal audit plan. The audit was initiated in October, 2013 and completed in November, 2013. The audit included an evaluation of the processes and procedures of the Water Services and Meter Services departments around the reclamation, storage and disposition of scrap parts and materials with residual value. The audit also included an examination of the process to acquire the scrap vendor and the overall effectiveness of the departments' vendor management controls. The audit process included interviews with appropriate members of the Water Services and Meter Services departments, and also personnel within other departments, where applicable.

#### **Summary of Work**

Internal Audit concludes that the Water Services and Meter Services departments do not have effective scrap recycling processes and controls in place. In our opinion, there exists a significant opportunity to reclaim additional revenue through the increased control over the parts and materials that are returned from the field, as well as the process to quantify and approve those parts and materials to be sold off as scrap. Additionally, the increased oversight of the vendor's process to collect and remunerate DC Water for the scrap parts and materials collected for recycling should allow the Authority to recover additional revenue.

Internal Audit has identified several items that should be addressed by management in order to further strengthen the Meter Services and Water Services departments' disposal of assets processes.



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

ա	barticular, there is a need to address the following.
	The Procurement department should re-bid the vendor responsible for the disposal or recycling of scrap water meters and metals, using a competitive bidding process;  O Procurement should require that the selected vendor sign an agreement with DC Water that specifies the services to be performed, as well as the prices to be paid for each type of asset recycled – accounting for the potential fluctuation in market pricing;  Assure that the Meter Services and Water Services departments both develop and implement
_	a process to document specifically what assets are to be sent off for recycling;
	<ul> <li>The aforementioned processes should be designed to assure that a) the assets to be recycled are listed and quantified, and b) the asset listing is reviewed and approved by individuals selected by DC Water as appropriate (such as Department Management, Asset Management and Finance) prior to the assets being picked up by the vendor;</li> <li>The aforementioned documentation should be compared to the invoice provided by the vendor once the materials have been collected to assure that all materials are reflected in</li> </ul>
	the amount to be paid;
	o The Treasury group should be included in the invoicing process so that they are aware of the checks that they should be receiving, and the amount of each check. Once received, the check should be compared to the invoice to assure that it is for the correct amount;
	Any process redesign regarding the scrap water meter and metals disposal and recycling
	procedures should include an analysis of whether the processes are managed at the proper levels, and by the most appropriate individuals, and whether the designated individuals are held accountable for process failures;
	The Meter Services and Water Services departments should both develop and implement
	processes to properly account for all materials returned from the field; The Meter Services and Water Services departments should enhance the security of their
_	scrap materials to assure that the materials are properly safeguarded from the time they are returned from the field, until they are collected by the recycling vendor; and,
	The Meter Services and Water Services departments should develop process and procedure documents that specifically cover the disposal or recycling of scrap water meters and metal
	pipe;  These decuments should be specific enough to cover the receipt of the meterials heak
	o These documents should be specific enough to cover the receipt of the materials back from the field, the storage of the materials while awaiting vendor collection, the identification and quantification of the materials, and the proper approval of disposal/recycling requests prior to their disposition.
	SC&H Consulting
	By:
	Joe Freiburger, CPA, CIA

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#### II. DETAILED OBSERVATIONS & RECOMMENDATIONS

#### I. Evaluate the effectiveness of the controls around the disposal of scrap materials or obsolete/unusable inventory.

#### 1. Observation:

Internal Audit concludes that there does not appear to be a clearly defined "owner" of the asset disposal programs as they relate to the scrap water meters and metals. It appears that the responsibility for these processes has fallen to certain individuals out of necessity, rather than by design. As such, the management of the asset disposal processes may not be optimal to assure that: scrap resulting from business operations has been minimized, scrap assets have been properly disposed of, and reclaimed revenue has been maximized. Further, it does not appear that anyone is accountable for potential failures in these processes.

#### Risk:

If the scrap asset disposal process isn't appropriately managed, then it is possible that some parts or materials could be inappropriately selected for recycling, resulting in a loss of assets and their related value.

#### **Recommendation:**

Internal Audit recommends that the process be redesigned and include an indication of the procedures to be followed regarding the scrap water meter and metals disposal and recycling activities. It should address the management at the proper levels, by the most appropriate individuals, and the designated individuals to be held accountable for process failures.

#### **Management's Action Plan:**

The Manager of Metering Services and the Manager of the Distribution Maintenance Branch (DMB)/Department of Water Services will write operating procedures for Scrap recycling including storing, measuring, and vendor oversight. Procedures for secure storing of materials awaiting pickup will be written by the Materials Manager and the Manager of Meter Services.

#### **Implementation Date:**

Draft procedures to be written by April 30, 2014. Final documents to be approved by May 30, 2014.



It is also possible that a lack of proper oversight and accountability could result in the misappropriation of scrap assets – either by DC Water personnel or by the scrap vendor, resulting in a loss of potential reclaimed funds.

#### 2. Observation:

Internal Audit notes that the current vendor used for the disposal or recycling of scrap water meters and metals, Global Metals Recovery, was engaged without the involvement of the Procurement department, and the selection was not based on the results of competitive bidding.

The vendor was selected based on independent research by the Meter Services manager to be the recycling vendor for scrap water meters. The vendor was subsequently recommended to the Assistant Facilities Manager for scrap metal recycling services.

Internal Audit further notes that there is not a signed agreement in place between DC Water and Global Metals Recovery.

#### Risk:

The vendor could have a prohibited relationship with DC Water personnel that would violate DC Water policy and prohibit their use.

#### **Recommendation:**

Internal Audit recommends that the Procurement department re-bid the vendor responsible for the disposal or recycling of scrap water meters and metals, using a competitive bidding process. This should assure the appropriateness of the vendor selected, and also that DC Water is receiving the most beneficial pricing for the items they recycle.

Procurement should require that the selected vendor sign an agreement with DC Water that specifies the services to be performed, as well as the prices to be paid for each type of asset recycled — accounting for the potential fluctuation in market pricing.

#### **Management's Action Plan:**

The Manager of Metering Services and the Manager of the Distribution Maintenance Branch (DMB)/Department of Water Services will write a Scope of Work for Procurement to issue an RFP for these services.

#### **Implementation Date:**

The Scope of Work will be written by April 30, 2014, and Procurement will advertise an RFP within five (5) days of receiving the completed scope of work. The revised vendor selection process should be complete by September 30, 2014.



The vendor selected might not offer the best pricing available for the services provided, resulting in a loss of potential recaptured revenue.

#### 3. Observation:

Internal Audit notes that the recycling of scrap water meters and metal is not properly documented, reviewed and approved prior to execution.

Meter Services: There is no form that is currently used to quantify or list the smaller scrap water meters (</=2") that are sent off for recycling. Additionally, there is no formal review or approval process prior to the vendor collecting the assets for recycling. Rather, the Meter Services Manager makes the determination of what water meters will be recycled and calls the vendor to schedule pickup.

Internal Audit notes that there is a form on which the serial numbers of the larger meters (>/=3") that are sent off for recycling are noted.

#### **Recommendation:**

Internal Audit recommends that the Meter Services and Water Services departments both implement a process to document specifically what assets are to be sent off for recycling.

For Meter Services this could be an enhancement of the listing of all the larger meters (>/=3") by serial number, and the additional quantification of the number of smaller meters (</=2") to be sent off.

For Water Services this could be a document that breaks out the type and total weight or length of each type of metal to be sent off for disposal or recycling.

#### **Management's Action Plan:**

The Manager of Metering Services and the Manager of the Distribution Maintenance Branch (DMB)/Department of Water Services in the short run will create forms to be filled out by the meter technicians and water service technicians to quantify the number and type of materials added to the pick up bins. Completed forms will be submitted to their immediate supervisors for review and acceptance.

In the longer run, they will work with the Materials Department to evaluate the feasibility of using Maximo or Lawson or another system to automate the tracking off Assets taken out of service and sent for recycling. This effort will require an analysis of the relative costs of automation compared to the incremental value of scrap materials recovered through this tracking.



Water Services: There is no form that is currently used to quantify or list the scrap metal that is sent off for recycling. Additionally, there is no formal review or approval process prior to the vendor collecting the assets for recycling. Rather, someone from Water Services will call the Assistant Facilities Manager, who calls the vendor to schedule pickup.

Under the current process, the vendor picks up the scrap water meters or materials and provides an invoice back to the department contacts that lists how many pounds of materials were picked up. There is no prior notification to department management or finance regarding the type or quantity of assets that will be collected and sold for scrap.

#### Risk:

Without the proper documentation, review and approval of the parts or materials to be sent off for recycling, it is possible that some parts or materials could be inappropriately selected for recycling, resulting in a loss of assets and their related value.

Additionally, the Meter Services and Water Services departments should ensure that their asset scrap/recycling process ensures that the completed asset listing is reviewed and approved by individuals selected by DC Water as appropriate (such as Department Management, Asset Management and/or Finance) prior to the assets being picked up by the vendor.

#### **Implementation Date:**

Tracking forms will be created and submitted to the meter technicians and water technicians' immediate supervisor in each area on a daily basis, as applicable. The forms will be created by April 30, 2014.

The project evaluation for possibly automating scrap quantities through Maximo or Lawson will be done by August 30, 2014.



It is also possible that a lack of proper documentation, review and approval could result in the misappropriation of scrap assets – either by DC Water personnel or by the scrap vendor, resulting in a loss of potential reclaimed funds.

### II. Determine whether proceeds from the disposal of scrap materials or obsolete/unusable inventory are adequately maximized and properly accounted for.

#### 4. Observation:

Internal Audit notes that the current scrap recycling process involves the time and effort of Water Services and Meter Services personnel, and any potential process redesign would likely increase the involvement of these employees. Internal Audit further notes that the proceeds from the recycling of scrap materials are deposited into the general fund and are not available for use by the departments.

#### Risk:

The redesign of the scrap recycling process for the Water Services and Meter Services departments will likely result in additional labor costs for each department.

#### **Recommendation:**

Internal Audit recommends that the Meter Services and Water Services departments both explore the possibility of reclaiming the proceeds from their scrap materials recycling back into their departments to help offset the added labor costs associated with the anticipated levels of control and oversight.

#### **Management's Action Plan:**

We do not believe the current accounting practices allow for the scrap proceeds to be transferred as additional funding to the operating budgets to support additional tracking and inventorying activity. However, we will talk with Payroll and Accounting to see if a labor allocation code could be used to track the cost of this work, and then compare labor costs charged to this activity annually to the incremental Scrap revenues we obtain to see if they exceed the cost of extra controls.

#### **Implementation Date:**

We will ask Payroll and Accounting for a labor cost code by March 1, 2014, and will use this data as part of the automation business case analysis due in August 2014.



#### 5. Observation:

There is no process in place to verify the Internal Audit recommends that the Meter accuracy or completeness of the invoice provided to DC Water from the scrap vendor following each pick-up.

As stated above, DC Water does not quantify or list the scrap water meters or metals to be recycled. Under the current process, the vendor picks up the scrap water meters or materials and provides an invoice back to the department contacts that lists how many pounds of materials were picked up. As such, there is nothing to which this invoice can be compared to assess its accuracy or completeness.

#### Risk:

Without a process to validate the accuracy and completeness of the vendor's invoice, it is possible that the vendor could misrepresent the amounts and types of assets collected, resulting in a loss of potential reclaimed funds.

#### **Recommendation:**

Services and Water Services departments both implement a process to document specifically what assets are to be sent off for recycling.

For Meter Services this could be a listing of all the larger meters (>/=3") by serial number, and the quantification of the number of smaller meters (</=2") to be sent off.

For Water Services this could be a document that breaks out the type and total weight of each type of metal to be sent off for disposal or recycling.

Once implemented, this documentation can be compared to the invoice provided by the vendor to assure that all materials are reflected in the amount to be paid.

#### **Management's Action Plan:**

The Bryant St. facility does not have a weighing station to provide independent verification of the quantity of materials picked up. The Manager of Metering Services and the Manager of the Distribution Maintenance Branch (DMB)/Department of Water Services in the short run will create forms to be filled out by the meter technicians and water technicians to quantify the number and type of materials added to the pick up bins. We will use weight records for these materials to calculate our estimate of what was picked up. Completed forms will be submitted to their immediate supervisors for review and acceptance.

In the longer run, they will work with the Materials Manager to evaluate the feasibility of using Maximo or Lawson or another system to automate the tracking off Assets taken out of service and sent for recycling. This effort will require an analysis of the relative costs of automation compared to the incremental value of scrap materials recovered through this tracking.



#### 6. Observation:

There is no process in place to verify whether checks sent by the vendor for recycling revenue are received by the Treasury group on a consistent basis, and each check received matches the amount per the invoice provided.

Internal Audit obtained the population of invoices provided by the vendor to the Meter Services and Facilities groups. We also obtained the population of checks received from the vendor by the Treasury group. Internal Audit noted one instance where a check in the amount of \$2,794.00 was never received and deposited. The vendor was contacted and mailed a replacement check which was received by the Treasury department.

#### **Recommendation:**

Internal Audit recommends that the Meter Services and Water Services departments both implement a process to assure that the Treasury group is included in the invoicing process so they are aware of the checks that they should be receiving, and the amount of each check. Once received, the check should be compared to the invoice to assure that it is for the correct amount.

# technicians and water technicians immediate supervisor in each area on a daily basis, as applicable. The forms will be created by April 30, 2014. If an automated system as described in Observation #3 is feasible, then this verification will be included as part of that IT project plan.

**Implementation Date:** Tracking forms will be created and submitted to the meter

#### **Management's Action Plan:**

We implemented a procedure to notify Treasury and provide them a duplicate copy of the invoice documenting the quantities picked up and payment due.

#### **Implementation Date:**

E-mail communication sent to Robert Mitchell of Global Metals Recovery on November 18, 2013 advising him to include Quinton Wilkinson of Facilities Management and Sylvia Riley of Finance Department on all future invoices of scrap metal weight and expected payment amounts.



#### Risk:

Loss of revenue. Without a process to validate that each check is received, it is possible that the vendor could fail to send the check as promised, resulting in a loss of potential reclaimed funds. Additionally, without a verification process to assure that the check is for the correct amount, it is possible that a check could be sent for a different amount, which could go undetected.

III. Assess the processes in place to assure that materials purchased and issued are designed to minimize the amount of subsequent scrap materials or obsolete/unusable inventory.

#### 7. Observation:

Internal Audit notes that there is not currently a process to assure that all assets returned from the field are properly stored in the scrap/recycling bins until they are collected by the vendor.

Meter Services: The smaller water meters that are removed and brought back by the crews are placed into bins on top of the Bryant St. rooftop parking structure. There is no process to count the water meters being returned and agree them to work orders to assure that all scrap meters are returned for recycling.

#### **Recommendation:**

Internal Audit recommends that the Meter Services and Water Services departments both develop and implement processes to properly account for all materials returned from the field. This will assure that all scrap materials will be included as part of their materials recycling programs and not exposed to potential loss or misappropriation.

#### **Management's Action Plan:**

The Manager of Metering Services and the Manager of the Distribution Maintenance Branch (DMB)/Department of Water Services will write operating procedures for Scrap recycling including storing, measuring, and vendor oversight. They will work with the Materials Manager and the Managers of Security and Facilities on ways to better secure the bins and contents.

#### **Implementation Date:**

Preliminary measures and improvements will take place no later than March 15, 2014. The standard operating procedures will be written and implemented by August 30, 2014.



The larger water meters that are removed and brought back by the crews are placed in the warehouse receiving area. These meters are entered on a "Meter Services Division Scrap Meter Report" that notes the Meter#, Manufacturer and Date of return. There is no process to agree this report to the work orders to assure that all scrap meters are returned for recycling.

Water Services: The old metal pipe that is removed and brought back by the crews is placed into a large dumpster near the McMillan Dr. guard station. There is no process to quantify or categorize the scrap pipe being returned and agree it to the associated work orders to assure that all scrap metal is returned for recycling.

#### Risk:

Without a process to accurately identify the assets that should be coming back in from the field, and assure that they are all retained for recycling, it is possible that some parts or materials could be misappropriated – either by DC Water personnel or by the scrap vendor, resulting in a loss of potential reclaimed funds.



#### IV. Verify that scrap materials are properly safeguarded prior to disposal.

#### 8. Observation:

Internal Audit notes that the scrap materials are not properly safeguarded prior to vendor collection.

Meter Services: The smaller meters (</=2") are placed into open wire-mesh bins on the top level parking deck of the Bryant St. Meter Services building.

<u>Water Services:</u> The scrap materials are placed into an open dumpster near the security gate at the McMillan St. entrance to the Bryant St facility.

Specific details regarding the security of the scrap materials have been provided to management.

#### Risk:

Failing to properly safeguard the scrap parts and materials creates the risk for their loss or misappropriation and the potential loss of revenue that could be gained from their recycling.

#### **Recommendation:**

Internal Audit recommends that the Meter Services and Water Services departments enhance the security of their scrap materials to assure that the materials are properly safeguarded from the time they are returned from the field, until they are collected by the recycling vendor.

#### **Management's Action Plan:**

The Manager of Metering Services and the Manager of the Distribution Maintenance Branch (DMB)/Department of Water Services will work with the Materials Manager, and the Managers of Security and Facilities on ways to better secure the bins and contents.

#### **Implementation Date:**

We will begin work on securing the bins and contents as soon as possible. Further security measures will be implemented with the warehouse moves. Expected full implementation date is August 30, 2014.



## V. Ensure that DC Water maintains adequate policies and procedures and standard operating procedures pertaining to the disposal of scrap materials or obsolete/unusable inventory.

#### 9. Observation:

There are currently no existing process or procedure documents that relate to the disposal or recycling of scrap water meters or metal pipe.

#### Risk:

Failing to establish and maintain accurate process or procedure documentation could allow for inconsistent practices, failure to identify and implement procedural changes, and could disrupt operations in the event of turnover within key positions.

#### **Recommendation:**

Internal Audit recommends that the Meter Services and Water Services departments develop process and procedure documents that specifically cover the disposal or recycling of scrap water meters, metal pipe and any other assets that they might select for recycling.

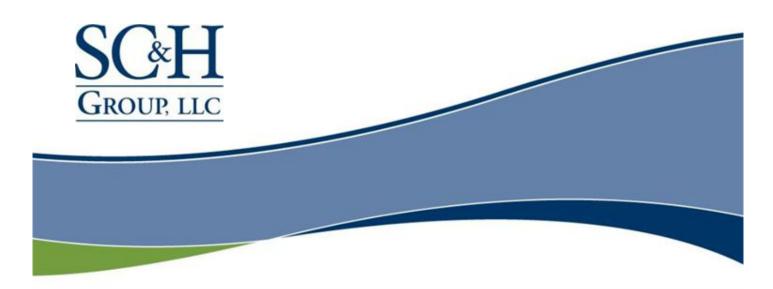
These documents should be specific enough to cover the receipt of the materials back from the field, the storage of the materials while awaiting vendor collection, the identification and quantification of the materials, and the proper approval of disposal/recycling requests prior to their disposition.

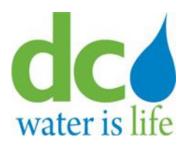
#### **Management's Action Plan:**

The Manager of Metering Services and the Manager of the Distribution Maintenance Branch (DMB)/Department of Water Services will write operating procedures for Scrap recycling including storing, measuring, and vendor oversight. Procedures for secure storing of materials awaiting pickup will be written by the Materials Manager and the Managers of Meter Services and Water Services.

#### **Implementation Date:**

Preliminary measures and improvements will take place no later than March 15, 2014. The standard operating procedures will be written and implemented by August 30, 2014.





# OSHA Compliance Internal Audit Report

February 18, 2014

#### **INTERNAL AUDIT TEAM**

Director: Joe Freiburger

Manager: Russell Ojers

Associate: Kaitlin O'Hara

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#### **EXECUTIVE SUMMARY**

#### **Background**

The Occupational Safety and Health Administration (OSHA) is an agency within the US Department of Labor that was established by the Occupational Safety and Health Act of 1970. OSHA is responsible for the issuance of workplace health and safety regulations such as limits on chemical exposure, employee access to information, requirements for the use of personal protective equipment, and requirements for safety procedures. OSHA performs workplace inspections of employer facilities to assure compliance with safety requirements and has the authority to issue citations and assess penalties for instances of non-compliance. As an employer, DC Water must adhere to the safety regulations established and enforced by OSHA, and is subject to inspection by Compliance Safety and Health Officers.

#### **Objectives**

Our overall audit objective was to evaluate the effectiveness and efficiency of the operations and activities around DC Water's compliance with OSHA safety requirements. Specific audit objectives included:

- ☐ Complete OSHA safety requirement checklists for a selection of DC Water buildings;
- ☐ Evaluate whether the selected DC Water buildings meet the safety requirements imposed by the Occupational Safety and Health Act of 1970 and other regulations; and,
- ☐ Identify areas of potential non-compliance and communicate them to management for investigation and remediation.

#### **Audit Scope and Procedures**

This audit was conducted based on the approved FY2014 internal audit plan. The audit was initiated in December, 2013 and completed in January, 2014. The audit included an evaluation of compliance with OSHA safety standards for work environments at six DC Water buildings across three locations. The selected buildings included:

- Blue Plains COF Building
- Blue Plains CMF Building
- Blue Plains Nitrification Blower Building
- Bryant Street Meter Services Building
- Bryant Street Pumping Station Building
- O Street Fleet Services Building.

The audit process included the physical inspection of each of the six buildings, and the completion of an OSHA safety compliance checklist comprised of specific OSHA requirements that were applicable for each of the buildings. A primary focus was placed on items that were observable by Internal Audit staff during our walkthroughs of each selected building.

#### **Summary of Work**

Internal Audit concludes that the DC Water buildings included in the scope of our walkthroughs are largely in compliance with OSHA workplace safety requirements. Internal Audit noted some instances of non-compliance. The details of each instance were communicated to management for them to address in order to strengthen DC Water's adherence to OSHA safety requirements.

	SC&H Consulting
By:	
	Joe Freiburger, CPA, CIA



#### II. DETAILED OBSERVATIONS & RECOMMENDATIONS

#### Evaluate whether the selected DC Water buildings meet OSHA safety requirements.

#### Observation:

Internal Audit noted that DC Water does not currently have a process to inspect each building site on a recurring basis to ensure compliance with OSHA safety requirements.

Further, through our walkthroughs of selected DC Water building sites, we identified several instances of potential noncompliance. The details of each of these instances have been communicated to management for investigation and remediation, as applicable.

#### Risk:

Failure to comply with all OSHA safety requirements could expose DC Water personnel to potential harm, and could expose the organization to financial penalties for violations.

#### **Recommendation:**

Internal Audit recommends that management implement a process to conduct and document OSHA safety inspections for each DC Water building on a recurring basis.

We further recommend the timely remediation of any instances of non-compliance identified through this process.

#### **Management's Action Plan:**

- 1. Management will implement a program to inspect each DC Water building site on a recurring basis to ensure compliance with OSHA safety requirements.
- 2. Management will validate and track to resolution the instances of noncompliance identified by Internal Audit during walkthroughs of selected building sites.

#### **Implementation Date:**

- 1. By May 30, 2014 management will complete a plan to implement a process to conduct and document OSHA safety inspections for each DC Water building on a recurring basis. The plan will include the implementation schedule, budget, and people to perform the work. The implementation of the plan will begin on August 1, 2014.
- 2. By April 1, 2014 management will provide an update on the status of any instances of noncompliance found through this process will be reported to Internal Audit.