

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Board of Directors

Audit Committee
Tuesday, February 14, 2017
9:30 a.m.

1.	Call to Order	Nicholas A. Majett, Chairperson
2.	Executive Session*	Nicholas A. Majett, Chairperson
3.	FY 2016 Financial Statements	Mark Kim, CFO
4.	External Audit Exit Conference	KPMG
	Internal Audit Update	
6.	Adjournment	Nicholas A. Majett, Chairperson

^{*} The DC Water Board of Directors may go into executive session at this meeting pursuant to the District of Columbia Open Meetings Act of 2010, if such action is approved by a majority vote of the Board members who constitute a quorum to discuss: matters prohibited from public disclosure pursuant to a court order or law under D.C. Official Code § 2-575(b)(1); contract negotiations under D.C. Official Code § 2-575(b)(4); collective bargaining negotiations under D.C. Official Code § 2-575(b)(5); facility security under D.C. Official Code § 2-575(b)(8); disciplinary matters under D.C. Official Code § 2-575(b)(9); personnel matters under D.C. Official Code § 2-575(b)(10); proprietary matters under D.C. Official Code § 2-575(b)(11); decision in an adjudication action under D.C. Official Code § 2-575(b)(13); civil or criminal matters where disclosure to the public may harm the investigation under D.C. Official Code § 2-575(b)(14), and other matters provided in the Act.





PRESENTATION TO AUDIT COMMITTEE FY 2016 FINANCIAL STATEMENTS

February 14, 2017





FY 2016 Financial Overview

- The Authority's balance sheet remains strong and is growing
 - Total net position of \$1.7 billion (increase of \$173.3 million or 11.3%)
- The Authority posted financial results from operations generally in line with expectations and consistent with historical performance
 - Operating revenues increased by \$45.9 million (8.3%) to \$595.8 million
 - Operating expenses increased by \$9.7 million (2.6%) to \$388.4 million
 - Total unrestricted cash & investment of \$219.3 million (vs. \$197.1 million in FY15)
 - Total restricted cash & investment of \$252.5 (vs. 175.6 million in FY15)
 - Total long-term debt increased to \$2.9 billion (15.1% increase)
- Credit Rating Upgrades
 - Standard and Poor's Investors Service upgraded DC Water's credit rating for senior lien revenue bonds from AA+ to AAA, the highest rating available by a rating agency.
 - Moody's Investor Service upgraded DC Water's credit rating for senior lien revenue bonds from Aa2 to Aa1.



FY 2016 Financial Overview

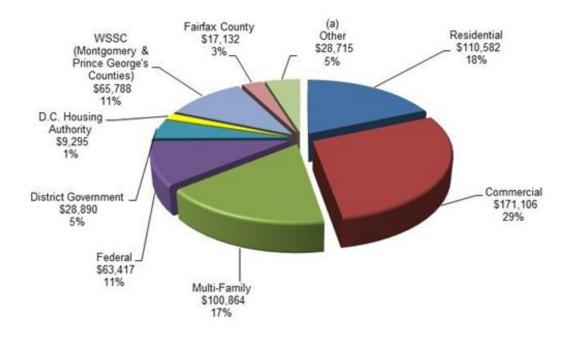
Summary of Fiscal Year 2016 Debt Financing

- Issued \$100.0 million of 2015 Series A and \$250.0 million of 2015 Series B subordinate lien revenue bonds with fixed interest rates ranging from 2.0% to 5.25%. The 2015 Series A green bonds mature in 2045 and are being used to fund the Clean Rivers Project. The 2015 series B bonds mature in 2044 and \$62.0 million is being used to make principal and interest payments on all or a portion of the Authority's outstanding commercial paper notes and the balance is being used to fund the Authority's capital improvement program..
- Issued the subordinate lien revenue refunding bonds, 2016 Series A in the amount of \$389.1 million. The proceeds from the bonds were used to refund \$401.9 million of the Authority's outstanding bonds. The interest on the bonds are at fixed rates ranging from 2.0% to 5.0%.
- Issued \$25.0 million of 2016 Series B (Environmental Impact Bonds) subordinate lien revenue bonds. The 2016 Series B Bonds are multimodal variable rate bonds, initially issued bearing a 3.43% fixed rate through the mandatory tender date, April 1, 2021. The net issuance proceeds (after payment of \$0.5 million of issuance expenses) of \$24.5 million will be used for construction of Green Infrastructure (GI) for the Rock Creek Project A (RC-A).



FY 2016 Operating Revenues

 The Authority's operating revenues remain well diversified and stable





FY 2016 Operating Revenues

■ The Authority 's operating revenues increased by \$45.9 million (or 8.3%) to \$595.8 million

	_	FY 2016	_	FY 2015
Residential, commercial and multi-family customers	\$	382,552	\$	335,711
Federal government		63,417		54,274
District government and D.C. Housing Authority		38,185		32,948
Charges for wholesale wastewater treatment		91,873		112,522
Other		19,762		14,460
Total operating revenues	\$	595,789	\$	549,915



FY 2016 Operating Expenses

■ The Authority's operating expenses increased by 2.6% (or 9.7 million) to 388.4 million.

	FY 2016	 FY 2015
Personnel services	\$ 124,239	\$ 115,233
Contractual services	74,086	66,241
Chemicals, supplies and small equipment	29,524	32,935
Utilities and rent	23,934	30,848
Depreciation and amortization	89,512	83,857
Water purchases	26,345	29,109
Payment in lieu of taxes and right of way fee	 20,744	 20,437
Total operating expenses	\$ 388,384	\$ 378,660

 Personnel, depreciation expense and contractual services expense were the primary drivers offset by a decrease in chemicals and supplies, utilities and water purchases.



Net Capital Assets

■ The Authority 's net capital assets, including construction in progress and less depreciation, increased by \$518.0 million (or 9.5%) to \$6.0 billion

	As of September 30,				
		2016		2015	2014
Wastewater treatment plant	\$	2,383,176	\$	2,367,163	\$ 2,057,116
Wastewater collection facilities		843,095		828,130	758,603
Water distribution system		1,095,216		1,054,046	981,047
Purchased capacity		349,210		341,974	334,174
Capital equipment		220,584		203,573	191,409
Construction in progress		2,544,698		2,033,657	1,879,678
Less accumulated depreciation		(1,440,632)		(1,351,216)	(1,268,009)
Net capital assets	\$	5,995,347	\$	5,477,327	\$ 4,934,018



Change in Net Position

The Authority 's net position increased by \$173.3 million (or 11.3%)
 to \$1.7 billion

	Fiscal Year					
		2016		2015		2014
Operating revenues Operating expenses Net non-operating revenues (expenses)	\$	595,789 388,384 (66,489)	\$	549,915 378,660 (60,093)	\$	473,824 356,024 (68,311)
Change in net position before capital contributions		140,916		111,162		49,489
Capital contributions		32,431		67,965		94,690
Change in net position		173,347		179,127		144,179
Net position - beginning of year, as restated		1,529,942		1,350,815		1,206,636
Net position - end of year	<u>\$</u>	1,703,289	\$	1,529,942	\$	1,350,815



FY 2016 Financial Statement and Uniform Guidance Audits

Exit Conference

February 14, 2017

Agenda

- -Responsibilities
- —Significant findings or issues from the audit
 - Financial statement audit results
 - Accounting policies, practices, and estimates
 - Summary of corrected and uncorrected misstatements
 - Significant deficiencies and material weaknesses in internal control
 - Other matters
- Material written communications between KPMG and management
- —Independence
- —Uniform Guidance audit results (Single Audit)
- —KPMG Ethics and Compliance hotline, and Government Institute information





Responsibilities

Management is responsible for:

- Adopting sound accounting policies
- —Fairly presenting the financial statements, including disclosures, in conformity with generally accepted accounting principles (GAAP)
- Establishing and maintaining effective internal control over financial reporting (ICOFR), including internal controls to prevent, deter, and detect fraud
- —Identifying and ensuring that the Authority complies with laws and regulations applicable to its activities, and for informing the auditor of any known material violations of such laws and regulations
- —Making all financial records and related information available to the auditor
- —Providing unrestricted access to personnel within the entity from whom the auditor determines it necessary to obtain audit evidence



Management is also responsible for:

- —Providing the auditor with a letter confirming certain representations made during the audit that includes, but is not limited to, management's:
 - Disclosure of all significant deficiencies, including material weaknesses, in the design or operation of internal controls that could adversely affect the Authority's financial reporting
 - Acknowledgement of their responsibility for the design and implementation of programs and controls to prevent, deter, and detect fraud; and
 - Affirmation that the effects of any uncorrected misstatements aggregated by the auditor are immaterial, both individually and in the aggregate, to the financial statements taken as a whole



The Audit Committee is responsible for:

- —Oversight of the financial reporting process and oversight of ICOFR
- —Oversight of the establishment and maintenance of programs and internal controls designed to prevent and detect fraud

Management and the Audit Committee are responsible for:

—Setting the proper tone and creating and maintaining a culture of honesty and high ethical standards

The audit of the financial statements does not relieve management or the Audit Committee of their responsibilities.



KPMG is responsible for:

- —Forming and expressing an opinion about whether the financial statements that have been prepared by management with the oversight of the Audit Committee are presented fairly, in all material respects, in conformity with GAAP
- —Planning and performing the audit with an attitude of professional skepticism
- —Conducting the audit in accordance with professional standards and complying with the Code of Professional Conduct of the American Institute of Certified Public Accountants, and the ethical standards of relevant CPA societies and relevant state boards of accountancy
- —Evaluating ICOFR as a basis for designing audit procedures, but not for the purpose of expressing an opinion on the effectiveness of the entity's ICOFR



KPMG is responsible for *(continued)*:

- Communicating to management and the Audit Committee all required information, including significant matters
- —Communicating to management and the Audit Committee in writing all significant deficiencies and material weaknesses in internal control identified in the audit and reporting to management all deficiencies noted during our audit that are of sufficient importance to merit management's attention



Responsibilities for other information in documents containing audited financial statements

- —The auditors' report on the financial statements does not extend to other information in documents containing audited financial statements, excluding required supplementary information.
- —We are required to:
 - Read the other information to identify material inconsistencies with the audited financial statements or material misstatements of fact, and
 - Make appropriate arrangements with management or the Audit Committee to obtain the other information prior to the report release date.
- —We have performed the above with respect to required supplementary information (Management's Discussion and Analysis) and other information in the Comprehensive Annual Financial Report (Letter of Transmittal and Statistical Section) noting no exceptions.





Significant findings or issues from the audit

Financial statement audit results

- —Opinion on the Basic Financial Statements
 - Unmodified or "clean" opinion
- —Report on Internal Control over Financial Reporting
 - No Material Weaknesses identified
 - No Significant Deficiencies identified
- Report on Compliance with Laws, Regulations, Contracts and Grants
 - No instances of non-compliance noted
- —Management Letter
 - Control Deficiencies noted



Accounting policies, practices, and estimates

Significant accounting policies

- —Described in Note 2 of the basic financial statements
- —No significant changes to accounting policies in FY 2016 as a result of implementation of new GASB standards

Significant estimates

Accounting estimate	Management process used to develop accounting estimates	Significant assumptions used that have a high degree of subjectivity
Allowance for Doubtful Accounts	Historical A/R aging analysis by significant customer category	None



Accounting policies, practices, and estimates (continued)

Concerns regarding application of new accounting pronouncements

—None noted as no new accounting pronouncements had a material effect on the financial statements in FY 2016.

Alternative accounting treatments

—None noted.

Recently issued standards

—Next slide list new accounting pronouncements that have been issued that will be implemented in future periods. Management is currently assessing impact on the Authority's financial statements.



Accounting policies, practices, and estimates (continued)

No.	Title	Required implementation date (Period beginning after)	Authority fiscal year
73	Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68	June 15, 2015 and 2016	2016 and 2017
74	Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans	June 15, 2016	2017
75	Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions	June 15, 2017	2018
77	Tax Abatement Disclosures	December 15, 2015	2017
78	Pensions Provided through Certain Multiple-Employer Defined Benefit Pension Plans	December 15, 2015	2017
80	Blending Requirements for Certain Component Units	June 15, 2016	2017
81	Irrevocable Split-Interest Agreements	December 15, 2015	2018
82	Pension Issues	June 15, 2016	2017



Summary of uncorrected misstatements – Fiscal Year 2016

\$(Million)		
Description of misstatement	Debit	Credit
Difference between AP accrual estimate and actual invoices received per look-back analysis (factual)		
Construction in Progress (DR)	\$4.9	
Accounts Payable (CR)		\$4.9
To record the current year effect of a prior year understatement of accounts payable identified in the current year (projected)		
Unrestricted Net Position (DR)	\$3.7	
Chemicals, Supplies, and Small Equipment Expense (CR)		\$3.7
To record the current year effect of a prior year understatement of revenue resulting from the incorrect application of the estimated usage methodology (projected)		
Commercial Revenue (DR)	\$6.5	
Unrestricted Net Position (CR)		\$6.5

Note: The impact on the financial statement line items are reflected on the next slide.



Impact of uncorrected misstatements – Fiscal Year 2016

	Debits (Credits) in Millions			
Description of misstatement	Increase in net position	Net position	Total assets and deferred outflows	Total liabilities
Difference between Accounts Payable accrual estimate and actual invoices received per look- back analysis (factual)	\$-	\$-	\$4.9	(\$4.9)
Prior year understatement of accounts payable identified in the current year (projected)	(\$3.7)	\$-	\$-	\$-
Prior year invoice not billed in accordance with Authority's estimation methodology (projected)	\$6.5	\$-	\$-	\$ -
Total Impact of Uncorrected Adjustments	\$2.8	\$-	\$4.9	(\$4.9)
Financial Statement Line Item Balance	(\$173.3)	(\$1,703.3)	\$6,740.0	(\$5,036.6)
Percentage	1.61%	-%	0.07%	0.10%



Corrected Misstatements – Fiscal Year 2016

\$(Million)		
Description of misstatement	Debit	Credit
To correct the classification of a new restricted cash account that is used to fund interest payments on maturity of the new extendable municipal commercial paper in the computation of components of net position.		
Net Investment in Capital Assets (DR) Net Position Restricted for Debt Service (CR)	\$2.3	\$2.3
To remove restricted cash and related accrued interest balances associated with series 2007A, 2008A and 2009A defeased bonds.		
Net Investment in Capital Assets (DR) Net Position Restricted for Debt Service (CR)	\$17.9	\$17.9



Significant deficiencies and material weaknesses in internal control

Material weaknesses

None noted

Significant deficiencies

None noted

All other deficiencies in ICOFR noted during our audit that are of sufficient importance to merit management's attention have been communicated to management.



Other matters

Other Matters to be Communicated	KPMG Response
Related-party transactions	No significant matters regarding transactions with related parties were noted
Litigations, claims, and assessments	No significant matters noted
Illegal acts or fraud	None noted
Noncompliance with laws and regulations	None noted
Significant difficulties encountered during the audit	None
Disagreements with management	None
Significant issues discussed, or subject to correspondence, with management	None noted
Scope limitation	None
Other findings or issues relevant regarding oversight of the financial reporting process	No matters to report





Material written communications between KPMG and management

Material written communications between KPMG and management

- —Engagement letter
- Management representation letter(s) including summary of uncorrected misstatements





Independence

Nonaudit services provided during the period:

- —Green bond attestation
- —IT systems assessment
- —2nd Quarter Agreed Upon Procedures

In our professional judgment, we are independent with respect to the Authority, as that term is defined by the professional standards.





Uniform Guidance audit results (Single Audit)

Uniform Guidance audit results (Single Audit)

- —Major program tested:
 - CFDA# 99.UNK, Combined Sewer Overflow
- —Opinion on Compliance For Major Program
 - Unmodified opinion
 - No questioned costs identified
- —Internal Control over Major Program
 - No significant deficiencies or material weaknesses noted
- —Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance
 - Unmodified opinion in relation to the DC Water financial statements as a whole





KPMG Ethics and compliance hotline, and government institute information

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KPMG Ethics and compliance hotline

- Scope To provide a confidential, non-retaliatory, and anonymous hotline to the following individuals/organizations for the good faith reporting of concerns about possible violations of law, professional and ethical standards, and KPMG policy.
- Contact information

- Phone: 1-877-576-4033

- Website: www.kpmgethics.com

KPMG Government institute*

- Scope To serve as a strategic resource for government at all levels, and also for higher education and non-profit entities seeking to achieve high standards of accountability, transparency, and performance. The institute is a forum for ideas, a place to share leading practices, and a source of thought leadership to help governments address difficult challenges such as effective performance management, regulatory compliance, and fully leveraging technology.
- Contact information
 - Jeff Steinhoff, Executive Director (jsteinhoff@kpmg.com)
 - Website: www.kpmginstitutes.com/government-institute/



^{*}The KPMG Government Institute is a member of the KPMG Institute Network (www.kpmginstitutes.com).





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DC WATER

Audit Committee Meeting

February 14, 2017



Agenda

- Executive Session
- Internal Audit Plan Status Update
- Status Update on Prior Audit Findings
 - COR/COTR Training Update
- Billing and Collections Internal Audit
- Business Development Plan Internal Audit
- Engineering Contract Management Phase II Internal Audit
- Hotline Update



FY 2016 Internal Audit Status Update

Audit	Status
FY 2016	
Retail Rates Implementation Progress Report	Report Issued
Overtime Audit and Analysis	Report Issued
Contract Monitoring and Compliance Audit (Part 1 and Part 2)	Reports Issued
Training, Licensing and Certification Internal Audit	Report Issued
ROCIP Savings Analysis	Report Issued
Enterprise Project Governance Maturity Assessment	Report Issued (executive session)
Annual Budgeting & Planning	Reporting In-Process
Engineering – Contractor Management Phase II	Report Complete
Blue Horizon 2020 Strategic Plan Monitoring	Report Issued
Incident Management and Response Review	Report Complete (executive session)
Business Development Plan	Report Complete
Customer Billing and Collections	Report Complete
Remediation Follow Up Procedures	On-going
Hotline Management	On-going



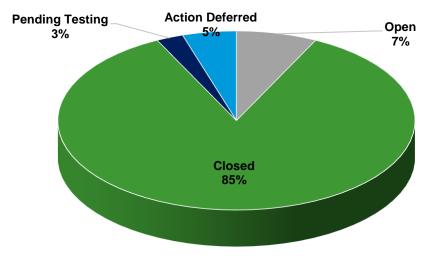
FY 2017 Internal Audit Status Update

Audit	Status
FY 2017	
Automated Meter Reading Implementation	Fieldwork In-Process
Employee Recruitment and On-Boarding	Planning In-Process
Maintenance Services Work Order Management	Fieldwork In-Process
Human Resource / Employee Privacy Review	Fieldwork In-Process
P-Card Program	Fieldwork In-Process
Inter-municipal Agreement	Not Started
Engineering - Contractor Management Phase III	Not Started
Entity Level Assessment	Planning In-Process
Materials Management – Operations and Inventory	Not Started
Contract Monitoring & Compliance Review	Not Started
IT Risk Management & Compliance	Not Started
Vulnerability Management Review	Not Started
Platform Technical Audit (Windows/UNIX)	Not Started
Remediation Follow Up Procedures	On-going
Hotline Management	On-going



Status Update on Prior Audit Findings

	Donort		Cori	ective Act	ons	
Audit Report/Subject	Report Issue Date	Total	Open	Closed	Pending Testing	Action Deferred*
Prio	or to FY 2015 Au	dit Findings				
Organizational Policies & Procedures	02/23/2010	1	0	0	0	1
Safety Program Training & Compliance	10/07/2010	1	0	0	0	1
Human Capital Management	11/29/2011	1	0	0	0	1
Maintenance Services	04/18/2012	2	2	0	0	0
Fleet Management	04/17/2013	1	0	0	0	1
Water Services - Distribution Maintenance Branch	10/28/2013	1	1	0	0	0
OSHA	02/18/2014	1	0	0	1	0
Disposal of Assets	02/18/2014	1	0	0	0	1
Warehouse Operations	09/15/2014	1	1	0	0	0
GIS Mapping	06/23/2014	2	2	0	0	0
	Total	12	6	0	1	5



Status update as of January 26, 2017.

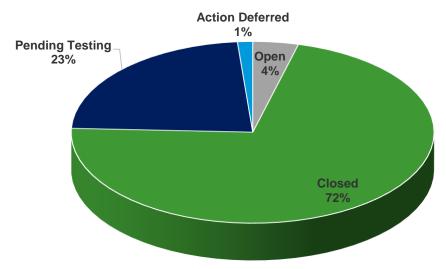


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Status Update on Prior Audit Findings (continued)

	Donort		Cori	rective Act	ions		
Audit Report/Subject	Report Issue Date				Pending	Action	
	issue Date	Total	Open	Closed	Testing	Deferred*	
	FY 2015 Audit Findings						
Intellectual Property Program Assessment	01/08/2015	5	0	3	1	1	
IT Policy and Procedure	01/21/2015	10	1	9	0	0	
Timekeeping Audit	04/08/2015	4	0	4	0	0	
Network Security Assessment	04/16/2015	26	1	25	0	0	
Procurement – Pre-Award, Selection and Award	05/18/0215	2	0	2	0	0	
SCADA / PCS Review	08/28/2015	21	1	10	10	0	
IT Vendor Management	12/21/2015	6	0	0	6	0	
	Total	74	3	53	17	1	



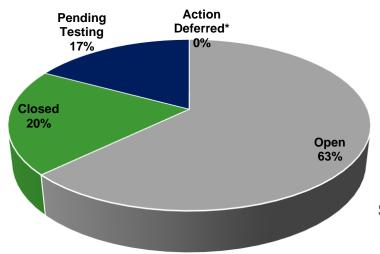
Status update as of January 26, 2017.



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Status Update on Prior Audit Findings (continued)

	Poport		Cor	rective Act	ions	
Audit Report/Subject	Report Issue Date				Pending	Action
	issue Date	Total	Open	Closed	Testing	Deferred*
FY 2016 Audit Findings						
Overtime Audit and Analysis	01/21/2016	3	3	0	0	0
Contract Compliance and Monitoring Part I	04/28/2016	4	0	2	2	0
Contract Compliance and Monitoring Part II	07/28/2016	11	3	4	4	0
ROCIP Savings Analysis	07/28/2016	4	4	0	0	0
Training, Licensing & Certification	07/28/2016	7	6	1	0	0
Blue Horizon 2020 Strategic Plan Monitoring	11/18/2016	3	3	0	0	0
Incident Management and Response Review	11/18/2016	3	3	0	0	0
	Total	35	22	7	6	0



Status update as of January 26, 2017.

Note that this slide does not include findings that are being issued during this meeting (Business Development Plan, Engineering – Contractor Management Phase II, and Billings and Collections)



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COTR Training Update

- Internal Audit presented to Audit Committee on 7/28/16 the findings from Contract Monitoring & Compliance Audit Part II.
- One of the high risk findings was a lack of COR/COTR training. Audit Committee requested a periodic update on the management action plan.

Authority-Wide Observations	Risk Rating
1. COR/COTR Training	High

Management Action Plan: Department of Procurement will implement several steps to COR/COTR training and compliance monitoring:

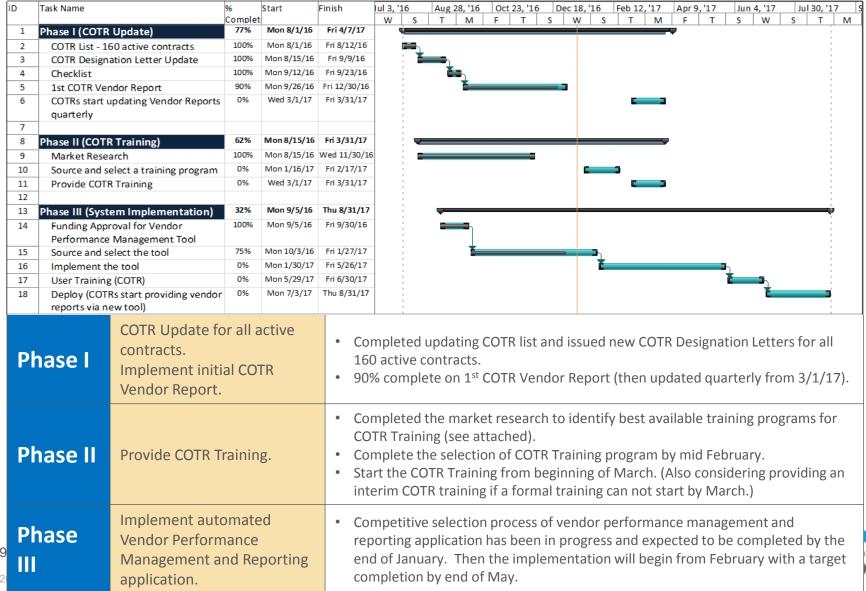
<u>Phase I:</u> Procurement jointly with each COR/COTR for all active contracts will review and develop a contract compliance monitoring checklist for each of 160 active Goods and Services contracts. The items in the checklist will consist of key deliverables, milestones, key vendor performance, and key contractual obligations that should be actively monitored. Then COR/COTR will be responsible for monitoring the items in the checklist and submit a report to Procurement at the beginning of each quarter.

<u>Phase II:</u> Procurement along with the Office of Chief Operating Officer (OCCO), Learning and Development (L&D), and Information Technologies (IT) will implement Vendor Performance Management Training programs for COR/COTR.

Phase III: Procurement will source and implement a Vendor Performance Management application (an added module to the eSourcing application that Procurement will source and implement in early FY2017) to automate the contract compliance and vendor performance monitoring and reporting.



COTR Training Plan



Billing and Collection Internal Audit

The scope of the Billing and Collection Internal Audit included the following:

- Assess and document the billing process surrounding Federal and Municipal customers to identify risks, controls and process improvements.
- Assess and document the collections process to identify risks, controls, and process improvements in the following areas:
 - o Liens
 - Bankruptcy
 - Receivership
 - o Tax Sale
- Evaluate segregation of duties within the processes.
- Assess the 'baseline consumption' estimation process as part of the development of the Federal Group Bill to identify trends and risks.
- Determine if there are controls for monitoring receivables for authority, including controls around an allowance for doubtful accounts.
- Evaluate if control documentation is sufficient to establish an audit trail that provides confidence that controls are completed as intended.



Billing and Collection Internal Audit (continued)

Observations	Risk Rating
1. Federal Group Billing Process	Moderate

Management Action Plan: DC Water Senior Management will determine the roles and responsibilities for the preparation of future Federal bills. After roles and responsibilities have been determined, an SOP will be developed / revised taking into consideration the automation implemented by the new ECIS / Billing system (Vertex- One).



Business Development Plan Internal Audit

The scope of the Business Development Plan Internal Audit included the following:

- Determine compliance with the EPA's fair share objective and good faith effort requirements
- Understand the method and guidelines under which Local Business Enterprise (LBE),
 Minority Business Enterprise (MBE) and Women-owned Business Enterprise (WBE)
 participation is being pursued, tracked, and reported
- Determine if information reported on MBE/WBE participation in DC Water projects is accurate, adequately compiled, and verified
 - Review Department of Engineering and Technical Services' (DETS) Database used to track MBE/WBE program actuals
- Identify process improvement opportunities and recommend internal control enhancements to improve the overall Business Development Plan process



Business Development Plan Internal Audit (continued)

Observations	Risk Rating
1. Documentation of Good Faith Efforts	High

Management Action Plan: Management has implemented an SOP to detail the procedures around the M/WBE procurement, monitoring, and reporting at DC Water. A "Good Faith Effort Checklist" must now be submitted to DC Water by the prime contractor through the bid process, signed off by the EPA Grants Coordinator and the DC Water Contract Compliance Officer.

2. Documentation of Related Party

High

Management Action Plan: Management is in the process of revising conflict of interest forms.

3. Utilization of non-EPA Certified Firms

High

Management Action Plan: The new SOP addresses roles and responsibilities surrounding M/WBE certified firm validation.

4. Compliance Monitoring and Reporting Procedures

High

Management Action Plan: Management has created an SOP to detail the procedures around the M/WBE procurement, monitoring, and reporting at DC Water. A mandatory orientation has been designed that all prime and subcontractors must attend to be trained on Davis Bacon requirements, completion of DBE SVFs, PVFs, DC Water Works, and reporting through the DC Water Online Compliance Database. Additionally, DC Water's new Online Compliance Database will track actual participation, and reports based on actuals will then be presented to the Governance Committee annually.

Please refer to the Business Development Plan Internal Audit Report for additional detail on these findings.



Engineering – Contractor Management Phase II Internal Audit

The scope of the Engineering – Contractor Management Phase II Internal Audit included the following:

- Assess the operating effectiveness of key controls identified during the Phase I Engineering Contractor Management Internal Audit
 - Test weekly/monthly/quarterly/annual status reporting
 - Test M/WBE reporting and monitoring
 - Evaluate DC Water's regulatory compliance
 - Evaluate the invoice and change order review and approval process

This audit included the review of active vendor/contractor agreements being administered under the supervision of DETS and/or DCCR, as well as sample basis testing of the operating effectiveness of key monitoring controls in place for ensuring contractual compliance with high risk processes governed by these outsourced agreements.



Engineering – Contractor Management Phase II Internal Audit (continued)

Observations Risk Rating 1. Inconsistent Monitoring of M/WBE Requirements High

Management Action Plan: Management has implemented an SOP to detail the procedures around the M/WBE procurement, monitoring, and reporting at DC Water. Training has been provided for internal and external staff and contractors to ensure proper documentation of pay applications going forward.

2. Inconsistent Documentation of Invoice Review by Project Managers

High

Management Action Plan: DETS has created two invoice review checklists. DETS and DWS have uniformly instituted the use of the PM and CM checklist as of August 8, 2016. The PM/CM checklists will be reviewed quarterly and revised as contract conditions, policies and procedures change.

3. Inconsistent Documentation of Davis Bacon Monitoring

High

Management Action Plan: DC Water will disseminate a copy of its internal monitoring procedures with the applicable third parties and request that they adopt a similar process, prior to the start of their assigned task, in order to convey performance and compliance expectations. Third parties will be asked to submit monthly summary reports to DC Water concerning their monitoring activities and promptly share any findings of non-compliance with the appropriate DC Water Project Manager and the DC Water Contract Compliance Officer.

Please refer to the Engineering – Contractor Management Phase II Internal Audit Report for additional detail on these findings.



Hotline Update

Last Audit Committee meeting we reported that 10 cases were open. Since the November 2016 Audit Committee meeting:

Hotline Calls	
Calls Received	2
Fraud Claims	1
Other	1
Cases Currently Open	9

Additionally, we held our quarterly meeting with the OGC, Labor Relations and Department of Security.

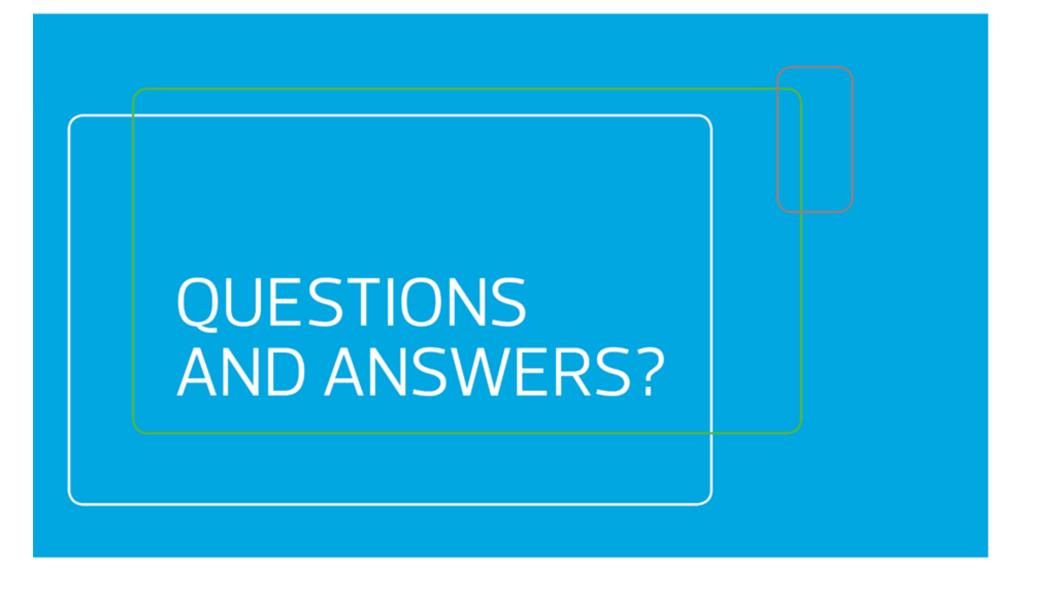
FY 2016 Hotline calls received:

FY 2016	
Calls Received	38
Fraud Claims	11
Other	27

Total calls by Fiscal Year:

FY 13	FY 14	FY 15
10	20	16







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Internal Audit Report Billing and Collections

February 2017

Billing and Collections Internal Audit Report Issued: February 2017



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TRANSMITTAL LETTER

February 2017

The Audit Committee of DC Water 5000 Overlook Avenue, SW Washington, DC 20032

Pursuant to the approved 2016 internal audit plan for the District of Columbia Water and Sewer Authority ("DC Water" or the "Authority"), we hereby present our assessment of Billing and Collections. We will be presenting this report to the Audit Committee of DC Water at the next scheduled meeting. Our report is organized in the following sections:

Executive Summary	This provides a summary of the observations and opportunities related to our internal audit of the Billing and Collections processes.			
Background	This provides an overview of the Billing and Collections processes.			
Objectives and Approach	The internal audit objectives and focus are expanded upon in this section, as well as a review of the various phases our approach.			
Detailed Observations This section gives a description of the observations noted during our work and recommended actions as well management's response, responsible party, and estimated completion date.				
Appendices	This includes various supporting visuals and documentation referenced throughout the report.			

We would like to thank the staff and all those involved in assisting Internal Audit in connection with this review.

Respectfully Submitted,

Internal Auditors



Internal Audit Report Issued: February 2017



EXECUTIVE SUMMARY

Background

DC Water bills for and collects revenue from a wide and diverse customer base, primarily consisting of the "Federal government, the District of Columbia government, surrounding jurisdictions in Maryland and Virginia, and commercial and residential customers within the District," according to the Fiscal Year (FY) 2015 Comprehensive Annual Financial Report (CAFR). The CAFR identifies that revenues generated from any one customer base does not exceed 28% of total revenues.

For FY 2016, DC Water anticipated earning \$580,514,000 in total operating revenue, as specified within the approved FY 2017 budget. Of which \$62,989,000 was anticipated revenue from the Federal government. Over the past two fiscal years (FY 2013 – FY 2014), operating revenues have consistently increased. The CAFR continues to identify a similar increase in operating revenues from FY 2014 to FY 2015, primarily due to a 7.5% rate increase on water and wastewater charges. Of those increases, the Federal government accounted for a \$15.3 million increase, or 39.2%, primarily due to the rate increase, but was also off-set by consumption adjustments for several Federal agencies during the year and a temporary Federal government shutdown. DC Water is utilizing rate structure adjustments to better align the Authority's revenues and expenditures, and the rate adjustments have and will continue to result in increased revenue. DC Water is using the additional revenue to fund increased capital expenditures related to necessary improvements to infrastructure, in addition to other uses.

Based on the FY 2015 CAFR DC Water Collections Department successfully collects an estimated 98% of outstanding balances. Well above standard accounts receivable collection rates for most utility entities. To do so, DC Water employs various tools including Liens, Receivership, Tax Sale, automated collection calls, and automatically mails notices based on days outstanding.

Objective and Scope

The purpose of this review was to gain an understanding and assess unique areas of the business that follow procedures which deviate from the DC Water standard for billing and collections. Additionally, we updated our previous understanding of how billing and collections processes are performed at DC Water in order to identify any additional risks not appropriately addressed by controls in the process. The audit scope was based on the following objectives:

- Assess and document the billing process surrounding Federal and Municipal customers to identify risks, controls and process improvements.
- Assess and document the collections process to identify risks, controls, and process improvements in the following areas:
 - o Liens
 - Bankruptcv
 - o Receivership
 - o Tax Sale
- Evaluate segregation of duties within the processes.
- Assess the 'baseline consumption' estimation process as part of the development of the Federal Group Bill to identify trends and risks.
- Determine if there are controls for monitoring receivables for authority, including controls around an allowance for doubtful accounts.
- Evaluate if control documentation is sufficient to establish an audit trail that provides confidence that controls are completed as intended.

Overall Summary / Highlights

The observations identified during our assessment are summarized on the next page. We have assigned relative risk or value factors to each observation. Ratings are not assigned to opportunities as these items represent best practices and/or recommended initiatives. Risk ratings are the evaluation of the severity of the concern and the potential impact on the operations of each item. Only observations will require management action plans with estimated completion dates that will be included in the routine follow up of internal audit observations.

We would like to thank all DC Water team members who assisted us throughout this review.



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EXECUTIVE SUMMARY (CONTINUED)

Ratings and Conclusions

Following is a summary of the observations noted in the areas reviewed. Definitions of the rating scales are included in the Appendices.

Observations and Improvement Opportunities			
Observations	Rating		
1. FEDERAL GROUP BILLING PROCESS A current Standard Operating Procedure (SOP) is not in place for the Federal Group Bill process completed by the Rates and Revenue and Customer Service Billing Department.	Moderate		
Process Improvements			

1. RECEIVERSHIP AND TAX SALE REVIEW DOCUMENTATION

Review of the bi-weekly tax sales report, 90-day aging report, and monthly Receivership tracking report utilized for tax sales and receivership processes are partially documented, however adjustments to formalize and / or automate the process would further improve the process overall.



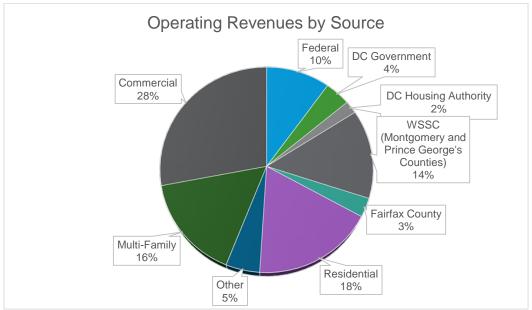
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BACKGROUND, OBJECTIVES AND APPROACH

Background

DC Water collects revenue from a wide and diverse customer base, primarily consisting of the "Federal government, the District government, surrounding jurisdictions in Maryland and Virginia, and commercial and residential customers within the District," according to the FY 2015 Comprehensive Annual Financial Report (CAFR). The CAFR identifies that revenues generated from any one customer base does not exceed 28% of total revenues, as illustrated below.



Source: Fiscal Year 2015 Comprehensive Annual Financial Report

According to the approved FY 2017 budget, DC Water anticipated earning \$580,514,000 in total operating revenue for FY 2016. Based on the FY 2015 CAFR, over the past two fiscal years (FY 2013 – FY 2014), overall operating revenues have increased 7.9% and 16.1%, respectively. These increases are primarily due to a rate increases on retail water and wastewater charges of 5.5% and 7.5%, respectively. DC Water is utilizing rate increases to offset increased capital expenditures related to necessary improvements to D.C. water and sewer infrastructure.

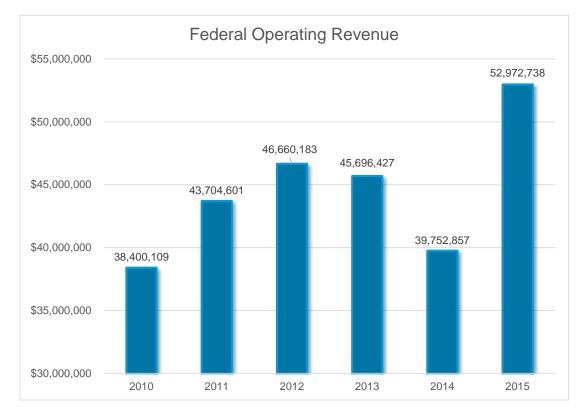


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BACKGROUND, OBJECTIVES AND APPROACH

Background, continued



According to the approved FY 2017 budget, DC Water anticipated earning \$62,989,000 in operating revenue from the Federal government for FY 2016. During FY 2015 revenue from the Federal government increased \$15.3 million, or 39.2%, primarily due to rate increases and other unexpected factors. FY 2014, Federal government revenue was significantly impacted by consumption adjustments for federal accounts that utilize estimated meter readings which reduced water and sewer consumption causing FY 2014 revenues to be lower than expected. Since FY 2014 Federal government revenue was abnormally low, the growth in revenue between FY 2014 and FY 2015 appears dramatically greater than other recent years, and Federal consumption since then has been somewhat stable.

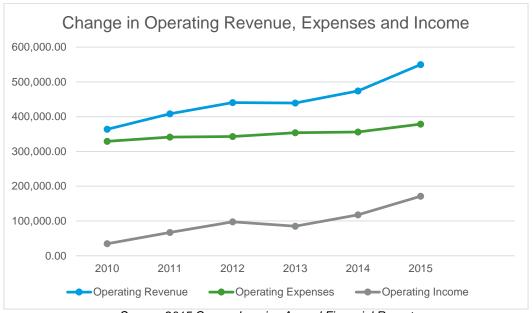


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BACKGROUND, OBJECTIVES AND APPROACH

Background, continued



Source: 2015 Comprehensive Annual Financial Report

Beginning in FY 2016, in an effort to better align consumption and revenue, DC Water customers are now subject to specific rates that are contingent on each customer's premise classification. Internal Audit previously performed a review of the new retail rates implementation to validate the accuracy and completeness of the processes involved in the transition to the new rate structure. Therefore, the focus of this audit was not on standard rate and billing accuracy, but the unique areas of the business that fall outside of that general process.



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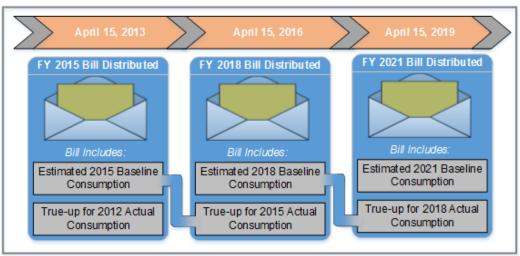
BACKGROUND, OBJECTIVES AND APPROACH

Background, continued

Billing Process - Federal Group Billing

Group billings are utilized by DC Water for customers who own and/or manage a large quantity of premises. One bill is generated for all premises included in the customer's portfolio, opposed to one bill for each premise. DC Water issues approximately 30 group bills, mostly universities and municipalities. The Federal Group Bill is the largest, accounting for an estimated 10% of DC Water's annual revenue.

The Federal Group Bill includes all charges for all services furnished by DC Water two years in advance, in accordance with DC Public Works Act of 1954 and Public Laws 103-334, 107-96, 108-335, and 111-378. Since the bill is for services not yet incurred, estimates are calculated to develop the bill based on actual consumption from previous years, consumption trends, meter testing, various research, known rate increases, and new fees. The Federal Group Bill is paid quarterly during the year for which the bill is estimated. Currently, 43 federal departments are included in the group bill which amounts to more than 500 active accounts, each with an associated premise. A 'true-up' occurs after the estimated fiscal year being billed for has ended, based on the actual consumption incurred, to correct overbilling underbilling. The correction is applied to the Federal Group Bill, so that the charges for services furnished two years in advance are net of each departments overbilling or underbilling. The Federal Group Bill process occurs annually and is distributed to U.S Treasury, Federal Office of Management and Budget as well as the applicable agencies involved by April 15th. See below for an example timeline of the Federal Group Bill process for FY2018 showing the input (from FY 2015 bill) and output (to FY2021 bill).





Billing and Collections Internal Audit Report

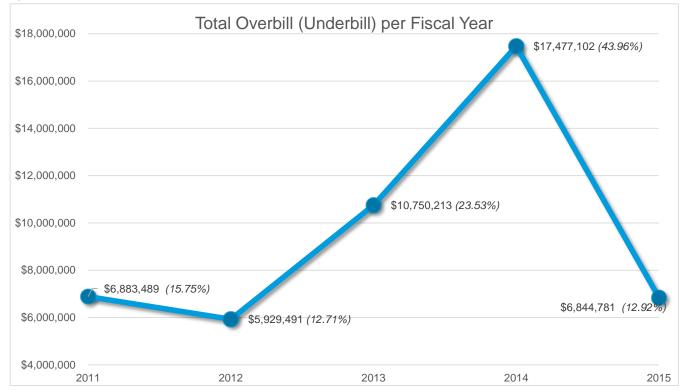
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BACKGROUND, OBJECTIVES AND APPROACH

Background, continued

Between Fiscal Year 2011 and 2015, DC Water has overbilled the Federal Government by an average of \$7,980,848 or 21.7% (see chart below). FY 2014 incurred the most significant overbilling \$17,477,102 or 43.96% due to unanticipated consumption adjustments for estimated meters made for several Federal agencies during the year and a temporary government shutdown, which could not have been taken into account during FY 2012 when the consumption was estimated. As mentioned above, the overbilling is reconciled and corrected as part of the annual 'true-up' process.





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BACKGROUND, OBJECTIVES AND APPROACH

Background, continued

Between Fiscal Year 2011 and 2015, each year an average of 28 departments were overbilled and an average of 12 departments were underbilled (see chart below). Of these, an average of 23 were overbilled by greater than 10% and an average of 6 were underbilled by greater than 10%.

		Count of Departments Estimate vs. Actual Accuracy								
	2011		2012		2013		2014*		2015	
	#	# >10%	#	# >10%	#	# >10%	#	# >10%	#	# >10%
Overbilled Depts.	23	16	22	16	29	25	37	32	30	25
Underbilled Depts.	14	8	19	11	13	8	3	3	10	3
No Variance	5		1		1		3		3	

*Note: FY2014 was abnormal requiring substantial consumption adjustments for estimated meter reads

Per discussions with management, some probable causes of the over / under billings include the following:

- Consumption estimates are developed two years in advance and the use / consumption habits of Federal buildings and property vary greatly based upon the needs of the government which can change frequently.
- Consumption estimates may be challenging to generate if actual consumption is unknown because automated meter reads may not be possible and access to meters located on Federal property for manual reads is often restricted. As needed, Customer Service may provide unexpected adjustments to water and sewage consumption for federal accounts that utilize estimated meter readings;
- The Federal government consciously plans to reduce its 'footprint' in property and consumption over the course of a prescribed time period.

Billing Process - DC Municipal Group Billing

DC Water provides a group bill to the District of Columbia for all municipal premises which includes police stations, fire departments, schools, libraries, etc. The Municipal Group Bill follows the standard monthly billing process, except the Department of General Services (DGS) customer is provided a memo, Summary Report, and extract file which includes details for each premise. As of August 2016, there were 1,301 active accounts included in the Municipal Bill which each have an associated premise. DC Water earned \$24,452,000 in revenue, 4.5% of total revenue, from the DC Government during FY 2015.



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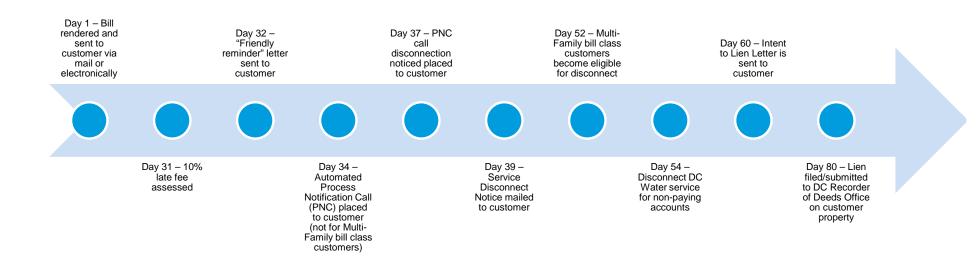


BACKGROUND, OBJECTIVES AND APPROACH

Background, continued

Collections Process

After the billing process has concluded and services have been rendered for a customer, the collections process begins. While there are differences to the collections process between the multiple customer categories (residential, multi-family, and commercial), the nature of the process is similar. The billing and collections process is continuous, and customers are billed at different frequencies and timeframes. See below for the general collections process timeline.



DC Water has a very high collections rate (98%) due to the various tools available for use if customers fail to make payments timely. Such tools include, Liens, Tax Sale, and Receivership. These tools can negatively affect a customer's credit score and force outstanding balances to be collected by circumventing the customer themselves.



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BACKGROUND, OBJECTIVES AND APPROACH

Background, continued

Lien Process

A Lien is a public record notice attached to a property notifying that a creditor claims the owner owes money to the creditor. A lien causes the title of a property to become 'unclean' and a property owner cannot sell their property without a clean title. DC Water utilizes the lien process to obtain outstanding customer balances. As depicted above, after a customer bill has been outstanding for 80 Days (78 for Multi-Family) a Lien can be filed / submitted. Once a customer has paid the outstanding balance on the account, a Release of Lien is filed / submitted at the Recorder of Deeds office. Reference 'Collections – Lien Process' flowchart in Appendix B below for detailed depiction of the lien process.

Collections Process:	Area Data:	Time Period:
Liens Processed	3065 Liens filed	January 1st to August 31, 2016
Liens Released	166 Liens were released	January 1st to August 31, 2016

Additional Collections Considerations

Receivership: Receivership occurs when a rental property tenant's rent payment is redirected to pay for bad debts, specifically in the case of DC Water, delinquent water and sewage bills. A receivership status only applies to multi-family bill classes and is utilized by DC Water to forego disconnecting water services on applicable Multi-Family dwellings. A Multi-Family premise includes four or more residential units as classified by DC Water. Receivership is appointed by the DC Courts, who assign a third party "receiver" to accept rent payments and distribute funds to applicable parties (DC Water) included in the court order. The Collection Coordinator is responsible for identifying and submitting accounts that meet the criteria for receivership to the DC Water Legal Department, who will submit the receivership claim, and will ultimately meet the account holders in court. Any judgments rendered on receivership accounts are inputted into the DC Water's Customer

Management and Billing System, eCIS. Each account is then managed based on the specific details / terms of the Court's judgment. Reference 'Collections – Receivership' flowchart in Appendix B below for a detailed depiction of the receivership process.

Collections Process	Quantity Processed	Time Period	
Receivership Accounts	20 accounts in receivership	As of October 31, 2016	



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BACKGROUND, OBJECTIVES AND APPROACH

Background, continued

Tax Sale: The District of Columbia performs a Tax Sale once a year, which involves the sale of properties in order to fulfill owed taxes as well as any liens on the property title. In an effort to collect funds on delinquent accounts, DC Water will utilize DC's annual Tax Sale. After sale of property has occurred, the property owner has a year to pay the outstanding debts before the sale is final. Customer accounts eligible for Tax Sale must have balances greater than \$1000 and be unpaid for over 180 days. Additionally, a lien must have been filed at least one year prior to the current tax year. Collection's Specialist identify accounts / premises with recovered funds on Tax Office website and make formal wire transfer requests.

Collections Process	Quantity Processed	Time Period		
Tax Sale	\$10.6 million was referred and \$8.7 million recovered	January 1, 2004 to January 1, 2016		

Bankruptcy: When a DC Water customer files for bankruptcy (primarily Chapter 7, 11, 13) the customer must notify DC Water. The customer's account is split into two accounts a pre-petition account and a post-petition account. If bankruptcy filing is upheld by the Clerk's Office, a discharge notification is sent to DC Water and the bankruptcy amount is adjusted off of the pre-petition account. Note: if a lien was applied prior to bankruptcy filing, the bankruptcy amount is not adjusted off unless the discharge order states to do so. Reference 'Collections – Bankruptcy' flowchart in Appendix B below for detailed depiction of the bankruptcy process.

Collections Process	Quantity Processed	Time Period
Bankruptcy	42 accounts in bankruptcy status (\$57,997)	As of September 9, 2016

Bad Debt: Customer accounts inactive for 365 days or greater with an unpaid balance greater than \$5 are considered 'Bad Debt'. In most entities, outstanding accounts receivable identified as 'Bad Debt' are commonly written off as an expense or potentially sold to collectors for residual value. DC Water rarely writes off 'Bad Debt' the last write off occurring in 2009.

Collections Process	Quantity Processed	Time Period
Bad Debt	\$892,271 in Bad Debt	As of September 30, 2016

Recent and Expected Changes to the Billing and Collections Process

No significant changes have occurred to the Billing or Collections Department since the FY 2015 Retail Rates Implementation audit performed by Internal Audit.

DC Water is currently transitioning to a new customer management and billing system which will allow for greater functionality and system integration. The transition may alter billing and collections processes as documented in this report.



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BACKGROUND, OBJECTIVES AND APPROACH

Background, continued

DC Water is currently improving their Automated Meter Reading (AMR) / Advanced Meter Infrastructure by replacing 89,000 Meters and Meter Transmitting Units (MTUs), installing 26 new Data Collection Units (DCUs), and implementing a new STAR application. The initiative should improve the accuracy and reliability of meter reads going forward which will help ensure DC Water is obtaining revenue for services rendered.



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BACKGROUND, OBJECTIVES AND APPROACH

Objectives and Approach

Objectives

The purpose of this review was to gain an understanding and assess unique areas of the business that follow procedures which deviate from the DC Water standard for routine billing and collections procedures. Additionally, we updated our previous understanding of how billing and collections processes are performed at DC Water in order to identify any additional risks not appropriately covered by controls in the process.

The audit scope is based on the following objectives:

- Assess and document the billing process surrounding Federal, Municipal, and DC Housing customers to identify risks, controls and process improvements.
- Assess and document the collections process to identify risks, controls, and process improvements in the following areas:
 - Liens
 - o Release of Liens
 - Bankruptcy
 - Receivership
 - o Tax Sale
- Evaluate segregation of duties within the processes.
- Assess the 'baseline consumption' estimation process as part of the development of the Federal Group Bill to identify trends and risks.
- Determine if there are controls for monitoring receivables for authority, including controls around an allowance for doubtful accounts.
- Evaluate if control documentation is sufficient to establish an audit trail that provides confidence that controls are completed as intended.

As part of the FY 2015 Retail Rates Implementation internal audit, the general billing process was tested for rate classification, system accuracy, among other criteria. Please reference the FY 2015 Retail Rates Implementation Audit report for more details pertaining to the detailed testing completed. Since these areas of the billing process were previously audited, this audit primarily focused on the Federal Group Billing, and DC Government (Municipal) Group Billing processes. The Federal and Municipal Group bill are significant customers, accounting for roughly 15% of DC Water's total revenue based on the FY 2015 CAFR. Therefore, detailed testing focused on the Federal and Municipal Group bill.

Approach

Our audit approach consisted of the following phases:

Understanding of the Process

During the first phase of our approach, we conducted interviews with key personnel within the Billing, Collections, and Rates and Revenue Departments.

We performed process walkthroughs with management from each of the departments included above as well as inquiry of documentation.

Specific procedures performed include:

Inquired and documented Collection Department's processes including, general collections, liens, bankruptcy, receivership, and bad debt.



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BACKGROUND, OBJECTIVES AND APPROACH

Objectives and Approach, continued

- Inquired and documented Billing Department's group billing processes including, Federal Group Bill, Municipal Group Bill, and DC Housing Authority Group Bill.
- Inquired and documented Rates and Revenue Department's process to develop the annual Federal Group Bill.
- Developed process flowcharts based on the inquiry and documentation (walkthroughs) included above, including flowchart verification with applicable personnel.
- Obtained standard operating procedures (SOPs) currently being used in the billing and collections processes.
- Identify controls utilized and inherent in the billing and collection processes.



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BACKGROUND, OBJECTIVES AND APPROACH

Objectives and Approach, continued

Detailed Testing

The purpose of this phase was to test internal controls and process effectiveness based on our understanding of the Collections, Federal Group Bill, and DC Municipal Group Bill processes. This included transactional testing to validate controls were operating effectively as described during walkthroughs. Additionally, tests of compliance were executed based on current Collections Standard Operating Procedures (SOP). The time period covered by testing was January 1, 2016 through August 31, 2016.

Specific procedures performed include validating that:

- Federal and Municipal bills were mathematically accurate and complete.
- Estimates utilized in the Federal billing process were appropriate based on data and research performed at time of bill creation.
- Federal bill 'True-up' was appropriate based on actual consumption incurred during the applicable period.
- eCIS data reconciled to actual Federal and Municipal bills distributed to customers.
- Required review and approvals were performed and obtained for the Federal and Municipal bills.
- Required review and approvals were performed and obtained for collection processes tested and applicable controls including, release of lien reports, biweekly tax sale review, 90-day aging report review for receivership candidates, and the monthly receivership status report.
- Appropriate criteria was met for Lien, Release of Lien, Receivership, Tax Sale, and Bankruptcy actions taken on customer accounts based on standard operating procedures.
- Documentation pertaining to Liens, Release of Liens, Receivership, Tax Sale, and Bankruptcy were effectively retained.
- As part of our review of the Release of Lien, Receivership, and Bankruptcy areas, accounts that met the criteria for applicable actions were identified and processed by design.
- Customer accounts were appropriately updated in eCIS, the billing system, as changes in the status of Liens, Receivership, Tax Sale, and Bankruptcy occur.

Reporting

At the conclusion of this audit, we summarized our observations and improvement opportunities related to billing and collections at DC Water. We have reviewed the results of our testing with management, and action plans are included herein.



Billing and Collections Internal Audit Report Issued: February 2017



DETAILED OBSERVATIONS

1.	Federal Group Billing process	Recommendation	Management's Action Plan
Observa	ition Rating: Moderate		
and sew submits known as the estimated bill). The The Federal I bill). The The Federal I bill). The Estimated personner the Federal I version in 2011 version in 2011 version in The document of the Estimated process part of the information be document of the Estimated process provides being transfer of the Estimated process provides being transfer of the Estimated process provides being transfer of the Estimated process provides pro	er creates an annual Federal Group Bill for all federal buildings for water for services two years in advance (e.g., during FY 2016 DC Water the bill for FY2018). This bill is created based on consumption data, assumptions, and expected rate changes for each federal building. After lated year has occurred, a 'true-up' takes place to credit / debit accounts in actual consumption. The credits / debits are incorporated into the Billing Estimate (ex. FY 2015 'actual' is credited / debited to FY2018's following observations were identified as part of our review: Peral Group Bill process (and other unique billing that areas based upon so) relies on a cross-functional team from customer service and Finance led. A current Standard Operating Procedure (SOP) is not in place for eral Group Bill process, although some process documentation does incumentation of the Federal Group Billing process was first developed and was updated during our review in October 2016. The updated has not been reviewed or approved by all applicable parties involved. The updated has not been reviewed or approved by all applicable parties involved. The updated has not been reviewed or approved by all applicable parties involved. The updated has not been reviewed or approved by all applicable parties involved. The updated has not been reviewed or approved by all applicable parties involved. The updated has not been reviewed or approved by all applicable parties involved. The updated has not been reviewed or approved by all applicable parties involved. The updated has not been reviewed or approved by all applicable parties involved. The updated has not been reviewed or appropriate to provide guidance to the Federal Group Billing process. An SOP a reference guide for individuals completing the process as well as ined. Without an SOP for the Federal Group Billing process the risk of consistent completion, and improper training is increased. If the Federal Group Silver has not appropriate DC Water may lose anticipated revenue and coor customer servic	Based on process walkthroughs for the Federal Group Bill and review of existing documentation, DC Water should evaluate the current roles and responsibilities for the development, review and approval of the Federal Group Bill process, to determine who should own the billing and create buy-in across the organization. Subsequent to agreeing upon defined roles and responsibilities, Customer Service and the Rates and Revenue team should create / update an SOP documenting the step by step process to create the Federal Group Bill. The current Federal Group Billing process documentation should be incorporated into this SOP document. This document should include: a. Roles and responsibilities of all parties involved in the process b. Regulations that impact and dictate the current process c. Any reports / documents utilized to complete the process including, visual examples for critical reports / documents d. Any thresholds / considerations utilized during the annual federal consumption baseline estimation process	DC Water Senior Management will determine the roles and responsibilities for the preparation of future Federal bills. After roles and responsibilities have been determined, an SOP will be developed / revised taking into consideration the automation implemented by the new ECIS / Billing system (Vertex- One). Estimated Completion Date: April 2018



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1.	Federal Group Billing process (continued)	Recommendation	Management's Action Plan
Representat the federal	ere is partial documentation surrounding the Federal Group Bill ive, there are no defined roles and responsibilities documented for billing process overall. Lastly, there is no backup personnel on for contingency when key positions experience turnover.	e. All controls, including review and approvalsf. A contingency for back-up / cross-training in the event of turnover in key positions	
billing and r	ese items expose the Authority to erroneous assumptions in the reconciliation process for Federal Group Billing, which currently 10% of total revenue for DC Water.	The Flowcharts created as part of this review may be incorporated in the SOP if deemed appropriate and effective.	



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PROCESS IMPROVEMENTS

1. Receivership and Tax Sale Review Documentation

The Collections Department utilizes various reports from eCIS to collect revenue and to identify actions that may be taken on customer accounts when payments have not been made. As part of our review of the Lien, Release of Lien, Receivership, Bankruptcy, and Tax Sale collection processes we identified the following process improvements:

1. A bi-weekly report is generated from eCIS identifying the current accounts with a tax requested on XX/XX/XX". After all accounts have been researched the sale status. The report is utilized by a Collection Specialist for online research purposes to determine if tax sale (funds) have been collected for the associated account. If so, the applicable amount is requested from the District's Office of Tax and Revenue. The biweekly tax sale review is very manual and evidence of the review is not documented. DC Water only receives funds for tax sale accounts if they request them after the tax sale has occurred. Therefore, if the bi-weekly review is not taking place effectively, DC Water will not obtain applicable revenue.

Note: After our fieldwork, we understand that alterations were made to the review process to include the notation of revenue received from tax sales.

- 2. A 90-day aging report is generated from eCIS and reviewed to identify potential receivership accounts. If researched accounts meet all required criteria the account is submitted to the Office of the General Counsel to begin the receivership request process with the courts. Evidence of the 90-day aging report receivership review is not documented. Candidates for receivership are only identified through the review of the 90-day aging report. Therefore, if an appropriate review is not taking place, revenue may not be collected for delinquent accounts.
- 3. A monthly Receivership report is manually generated and utilized to monitor and track all accounts in Receivership. There is no evidence that the Receivership report was reviewed / updated. The Excel spreadsheet utilized includes the following information: Year, Account #, Service Address, Owner, Amount Referred to Legal, Referred to Legal Date, and Comments. An effective monitoring document includes fields that are updated periodically to appropriately reflect current status. This requires the process owner to inspect each account and should also allow for the identification

Recommendation

1. The Collection Specialist performing online research to identify obtainable tax sale revenue should document the result of research for each account included on the bi-weekly tax sale report. Examples of potential results documented may include: "No Tax Sale Occurred" or "Tax Sale Dismissed" or "Tax sale occurred on XX/XX/XX funds collections specialist should initial (sign) and date as evidence of completion.

A report can be created utilizing 'contact types', which are codes applied to actions that occur on customer accounts, in eCIS to identify accounts submitted for tax sale and applicable funds recovered (if any). Utilizing the report described above would reduce manual steps taken by the Collection Specialist and increase review efficiency overall.

2. The Collections Department should develop a report utilizing eCIS 'contact types' to identify accounts that meet the criteria for receivership. Many variables may cause an account to be included on the 90-day aging report, but not be applicable for receivership, therefore a separate and specific report would improve effectiveness. The Collection Specialist performing the review should document the result of research for each account, such as, 'Account submitted to Legal on XX/XX/XX." After all accounts have been researched, the Collections Specialist, should initial (sign) and date as evidence of completion.

If the recommended report above is not plausible or reasonable to generate, the Collection Specialist performing the 90-day aging report receivership review should document the result of the research for each account included on the report as described above. After all accounts have been researched the Collections Specialist should initial (sign) and date as evidence of completion.



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Billing and Collections Internal Audit Report Issued: February 2017



PROCESS IMPROVEMENTS (CONTINUED)

1.	Receivership and Tax Sale Review Documentation	Recommendation
monthly F	oneous items or issues. This information is not currently included in the Receivership report. If accounts in receivership are not properly monitored, it to loss of revenue.	3. The monthly Receivership report should be amended to include a "remaining balance" column showing the amount that remains due to DC Water. This column should be updated monthly to display the most current pertinent information and encourage the reviewer to determine any changes or issues to accounts in receivership. If it is not reasonable to include the remaining receivership balance for each account, then a status update should be provided each month for each account in receivership. This will provide evidence that the review was completed and allow the Collections Department to receive the status of accounts in receivership without reviewing eCIS accounts individually. After all accounts have been researched the Collections Specialist should initial (sign) and date as evidence of completion. Evidence of the completion of each of these controls should be included as part of any existing bi-weekly or monthly checklist(s) that is reviewed and approved by a Collections Manager.



Billing and Collections Internal Audit Report Issued: February 2017



APPENDIX A – RATING DEFINITIONS

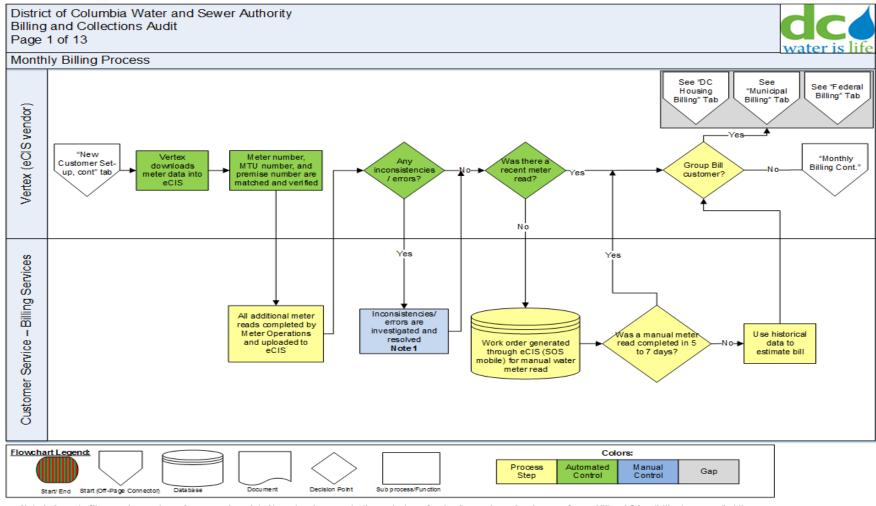
Observation Risk Rating Definitions			
Rating	Definition		
Low	Observation presents a low risk (i.e., impact on financial statements, internal control environment or business operations) to the organization for the topic reviewed and/or is of low importance to business success/achievement of goals. Action should be taken within 12 months (if related to external financial reporting, must mitigate financial risk within two months unless otherwise agreed upon).		
Moderate	Observation presents a moderate risk (i.e., impact on financial statements, internal control environment or business operations) to the organization for the topic reviewed and/or is of moderate importance to business success/achievement of goals. Action should be taken within nine months (if related to external financial reporting, must mitigate financial risk within two months).		
High	Observation presents a high risk (i.e., impact on financial statements, internal control environment or business operations) to the organization for the topic reviewed and/or is of high importance to business success/achievement of goals. Action should be taken immediately, but in no case should implementation exceed six months (if related to external financial reporting, must mitigate financial risk within two months).		



Internal Audit Report Issued: February 2017



APPENDIX B - BILLING AND COLLECTIONS FLOWCHARTS

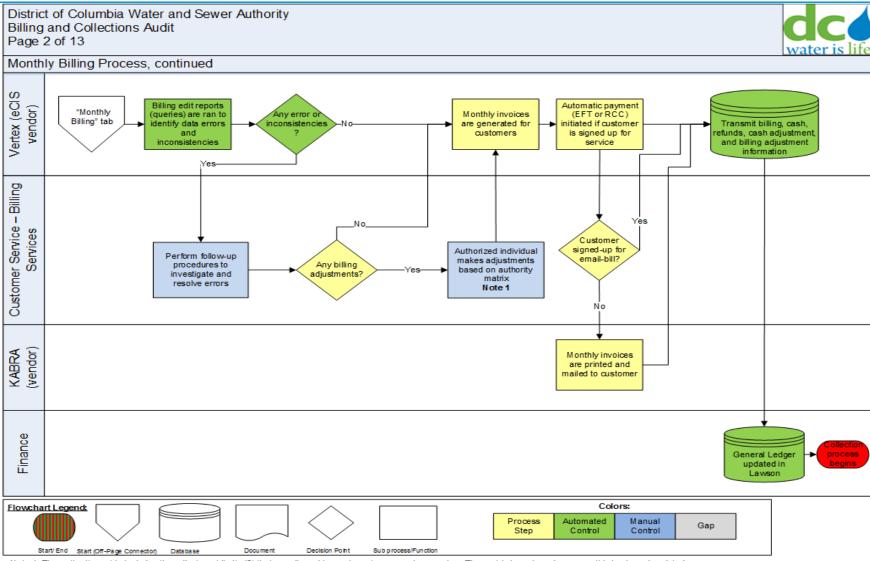


Note 1: As part of the ongoing service order processing related to meter change-outs, the analysts performing the service order close, perform additional QA activities to ensure that the Premise Number, Meter Number, and MTU match between the service order, CIS, and Star application, as well as check to ensure the meter is transmitting. Anomalies are reported to Meter Operations for research and resolution.



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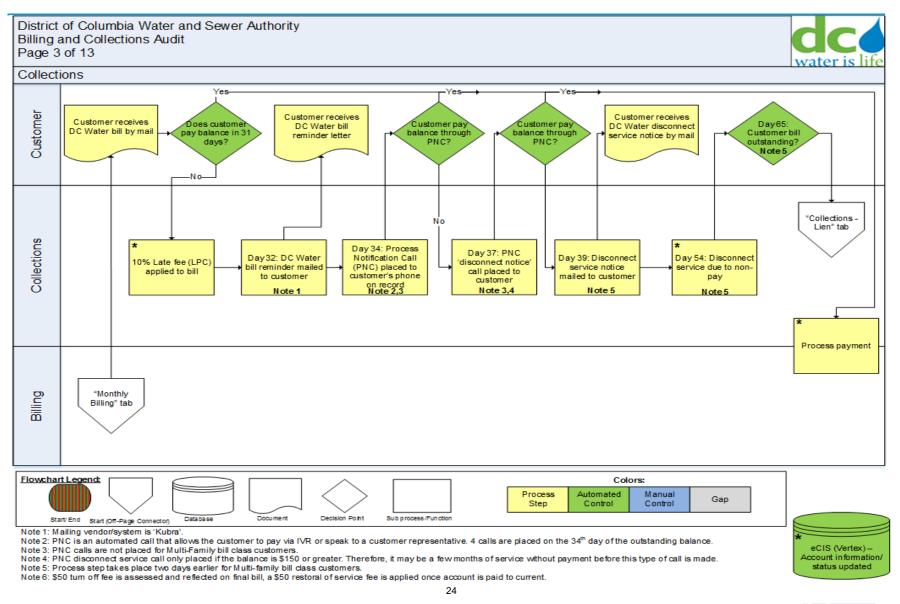


Note 1: The authority matrix includes the adjustment limits (\$) that are allowed by each customer service member. The matrix is reviewed on a monthly basis and updated as necessary.

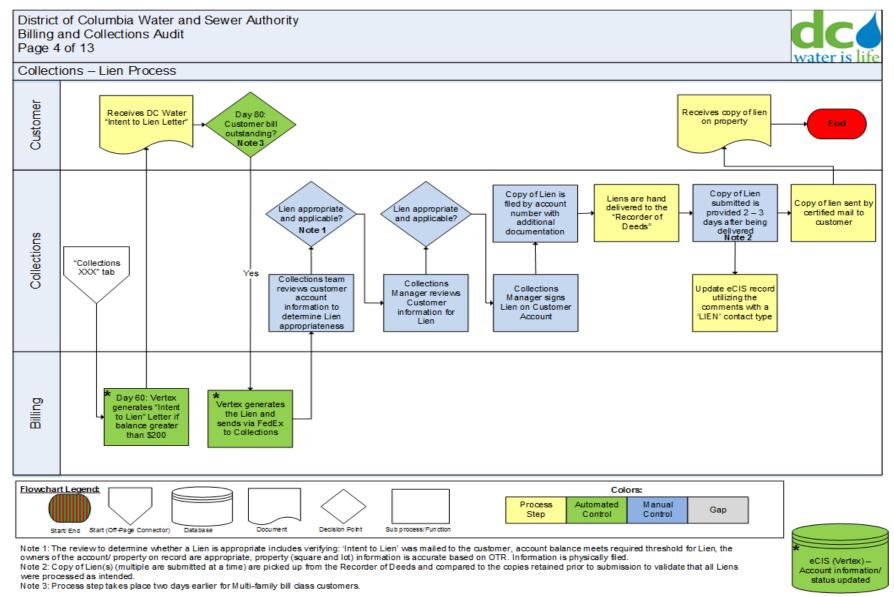


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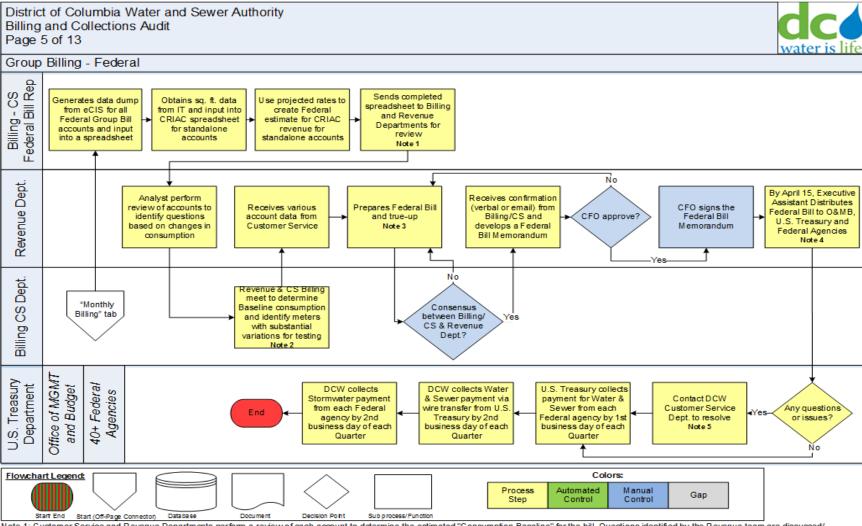








RSM



Note 1: Customer Service and Revenue Departments perform a review of each account to determine the estimated "Consumption Baseline" for the bill. Questions identified by the Revenue team are discussed/resolved during the meeting. After the meeting concludes, tasks are emailed to Customer Service to validate resolutions (ex. eCIS meter data).

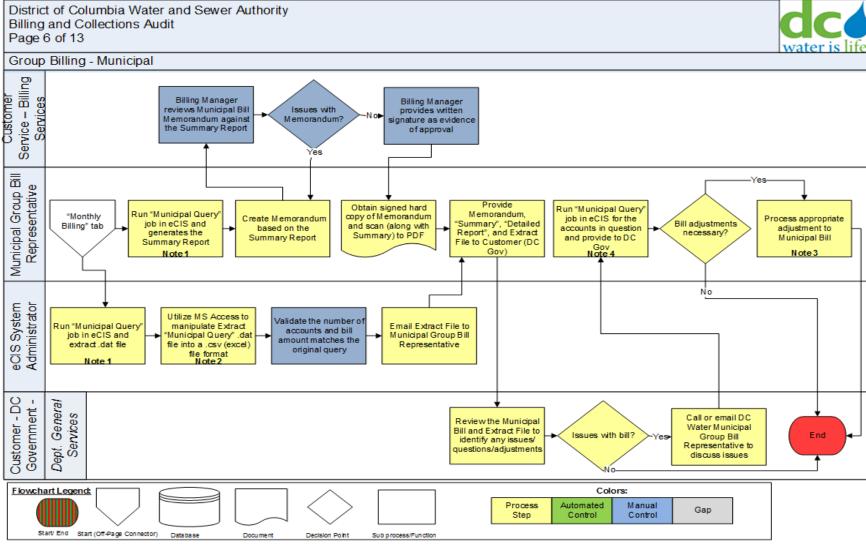
Note 5: Agencies contact Customer Service Department for questions pertaining to how the bill was developed (estimates) or for specific account/premise questions.



Note 2: Actual usage from three years, first quarter of current year, news/media and Customer Service interactions that provide insight on federal premise changes is taken into account when estimating usage.

Note 3: Although the annual estimate utilized in Federal billing is ideally as close to actual as possible, the true-up based on actual usage ensures that DC Water will receive the accurate revenue over the long-run (unless various discrepancies occurred) and reduces the risk to a cash flow/reporting risk. Customer Service provides data on actual consumption/ERUs and Revenue Department creates true-up.

Note 4: O&MB stands for the O ffice of Management and Budget



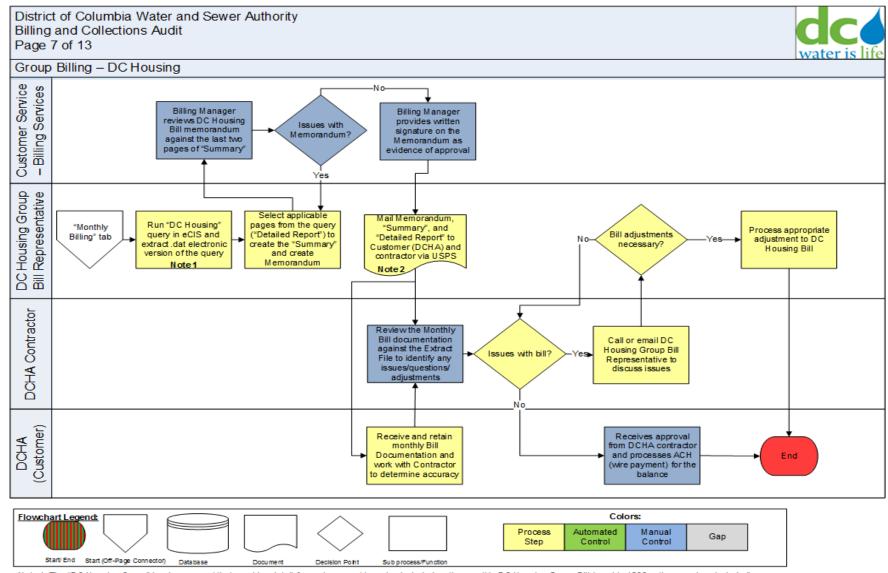
Note 1: The "Municipal Query" is a large report that provides detail for each account/premise included on the month's Municipal Group Bill (roughly 1340 active premises included).

Note 2: The "Extract File" is provided to DC Government (Department of General Services) to be used for their budgeting and planning purposes.

Note 3: Any necessary bill adjustments identified follow the standard adjustment approval matrix and are applied to the following month's Group Bill.

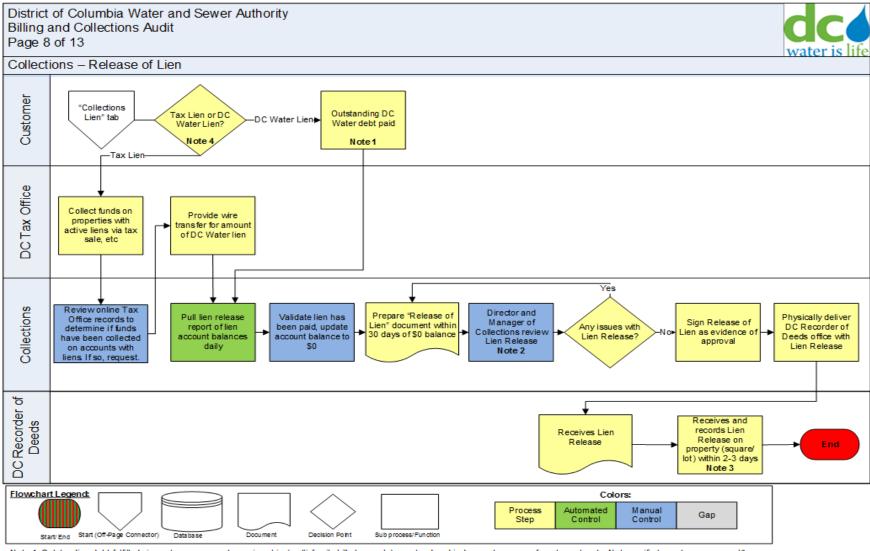
Note 4: The Group Bill Representative will run a detail report if questions pertain to multiple accounts, if just one she will simply review in eCIS. (Ex. Detail on account to verify adjustment applied from previous month)











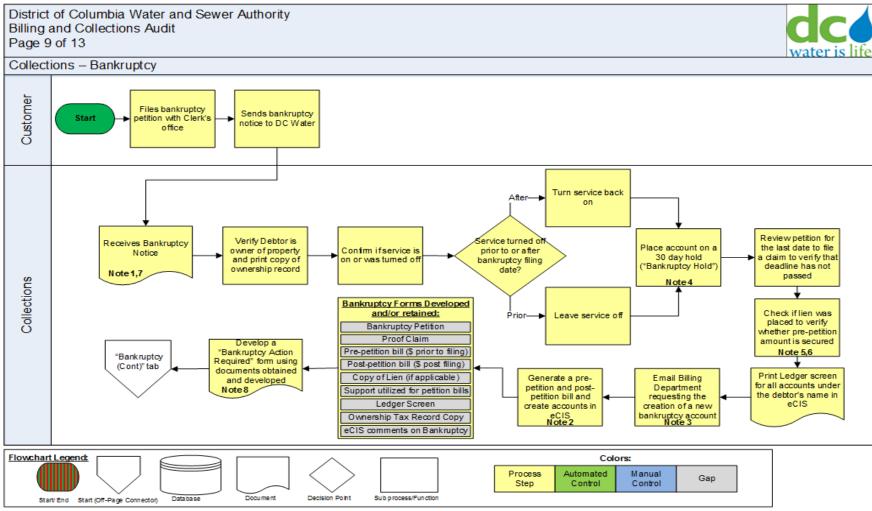
Note 1: Outstanding debt fulfilled via customer payment, receivership (multi-family bill class only), court ordered judgement, revenue from tax sale, etc. Not specific to customer payment*.

Note 2: If Director if unavailable, Manager and Supervisor will review and approve

Note 3: Release of lien is available online for public viewing.

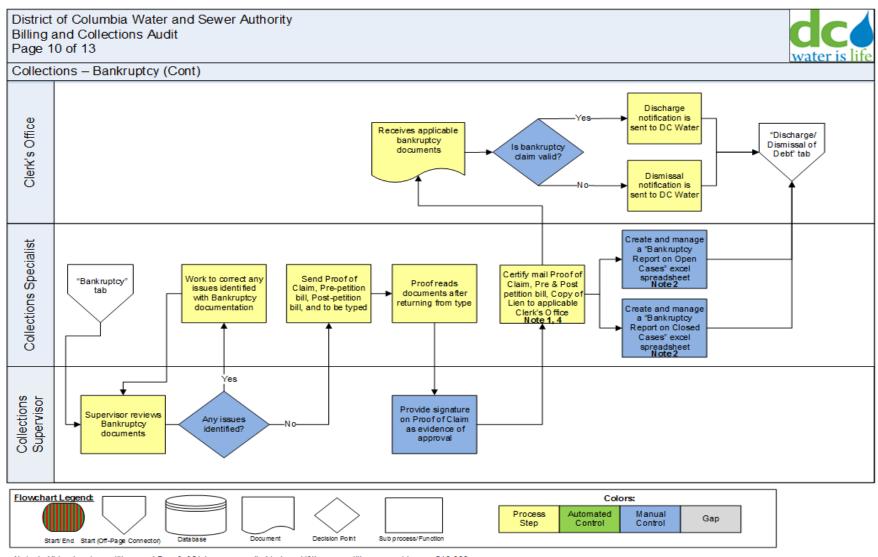
Note 4: A Tax Lien is a DC Water lien that has been converted, so outstanding debts are paid directly to the office of Tax and Revenue. DC Water Lien would not involve tax sale.





- Note 1: Upon receipt of a Bankruptcy Petition (Chapters 7, 11, 13) via mail, fax or walk-in, "Received" and "Date" is stamped on the petition.
- Note 2: On post-petition bills, all 1% late fees assessed after the filing of the bankruptcy are waived, but the 10% late fees on the post-petition bills shall remain.
- Note 3: Bankruptcy account number is for service addresses, old account number is closed out and new account number should be billing with the current meter reads.
- Note 4: Collections specialist must check the account periodically to determine if the hold date needs to be extended. The Collections Specialist utilizes the self-created/managed bankruptcy reports for check.
- Note 5: If pre-petition amount is unsecured (no lien) then DC water may not collect the pre-petition debt (reference Discharge/Dismissal of Debt' flowchart).
- Note 6: Create a "BKI" contact type and in the comments section enter the Bankruptcy Case No #, Filing Date, Chapter Filed and the debtor's name. Indicate if service was restored.
- Note 7: If petition states "Please do not file a Proof of Claim unless you receive notice to do so", complete all steps up to the Bankruptcy Action Required form but do not file the claim until Court Order.
- Note 8: Create hard copy folder and include all developed/retained occuments with the bankruptcy case number and service address on inside tab of folder. Attach the Bankruptcy Action Required form.



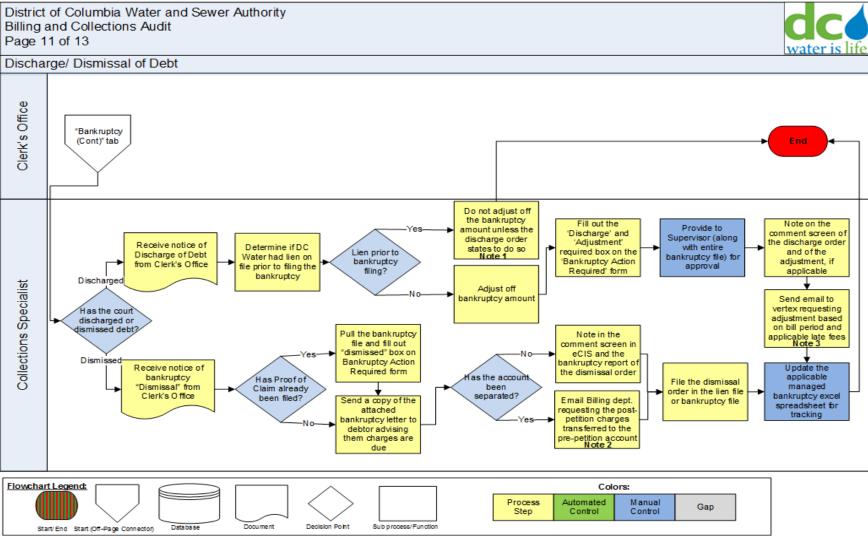


Note 1: All bankruptcy petitions and Proof of Claims are emailed to Legal if the pre-petition amount is over \$10,000.

Note 2: These reports should list: the case no. (current to latest), date petition was received, account no., debtor name, service address, file date, chapter filed, pre-petition amount, post petition amount, disposition date and comments. The only difference is on the Closed Cased report the comments in the disposition & date column should be different.

Note 4: A copy of the documentation is also mailed to the Trustee listed on the bottom of the claim.



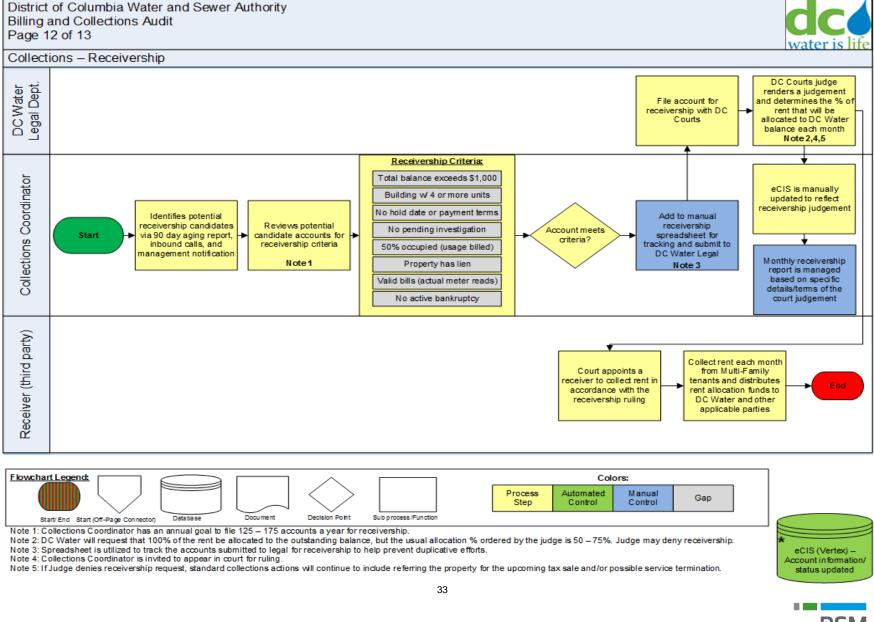


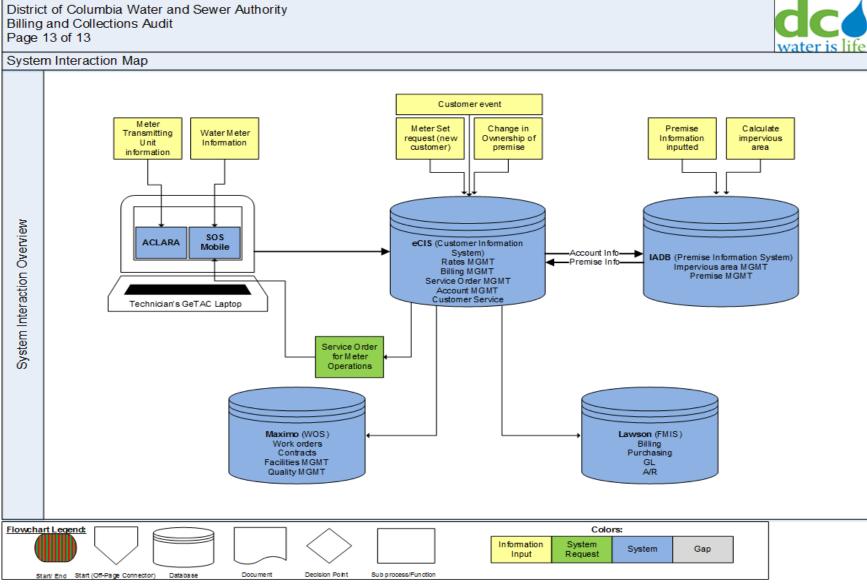
Note 1:The creditor may have the right to enforce a valid lien against the debtor after the bankruptcy, if that lien was not avoided or eliminated in the bankruptcy case. Also a debtor may voluntarily pay any debt that has been discharged. Collections specialist should note the comments of the discharge order and indicate what action is being taken.

Note 2: The Collections Specialist adds comments in the comment box advising the Supervisor to transfer the post-petition amount to the pre-petition account to be collected with the current bills.

Note 3: The request sent to Vertex to adjust a customer's balance is a formatted email sent by the Collections Specialist with a copy to the Supervisor and Senior Collections Analyst for content tracking consistency. The turnaround time is within 72 hours for an account to be adjusted.









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Internal Audit Report Business Development Plan

February 2017





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TRANSMITTAL LETTER

February 2017

The Audit Committee of DC Water 5000 Overlook Avenue, SW Washington, DC 20032

Pursuant to the approved 2016 internal audit plan for the District of Columbia Water and Sewer Authority ("DC Water" or the "Authority"), we hereby present our assessment of DC Water's Business Development Plan. We will be presenting this report to the Audit Committee of DC Water at the next scheduled audit committee meeting. Our report is organized in the following sections:

Executive Summary	This provides a summary of the observations and related to our internal audit of the Business Development Plan.	
Background	This provides an overview of the Business Development Plan.	
Objectives and Approach	The internal audit objectives and focus are expanded upon in this section, as well as a review of the various phases of our approach.	
Detailed Observations	This section gives a description of the observations noted during our work and recommended actions as well as management's response, responsible party, and estimated completion date.	

We would like to thank the staff and all those involved in assisting the Internal Auditors in connection with this review.

Respectfully Submitted,

Internal Auditors





EXECUTIVE SUMMARY

Background

Certified Local and Local Small Business Enterprise (LBE/LSBE) Program

The Board establishes LBE and LSBE participation goals for Goods and Services and Construction and Architecture/Engineering (A/E) contracts, expressed as percentages of total dollar volume of all non-federally assisted contracts. Participation goals may be achieved through LBE/LSBE participation as a vendor, prime contractor, subcontractor, or joint venture.

Federally Funded Projects

DC Water has implemented an outreach, training/orientation, and fair share objective program to encourage the participation of Minority and Women-Owned Business Enterprises (MBEs and WBEs) in procurement of federally financed contracts, as required by the United States Environmental Protection Agency (EPA) regulations found at 40 CFR Section 33. During the course of this audit, these regulations have changed.

Business Development Plan Monitoring

DC Water monitors contract awards and subcontractor participation to determine LBE, LSBE, MBE, and WBE participation through multiple databases and tools. Historically, the Department of Engineering and Technical Services (DETS) has utilized the Engineering Management Information System (EMIS) database to monitor the actual participation of subcontractors on Construction and A/E projects. LBE and LSBE participation are tracked in an access database maintained by the Department of Procurement.

Overall Summary / Highlights

The observations identified during our assessment are summarized on the next few pages. We have assigned relative risk or value factors to each observation. Risk ratings are the evaluation of the severity of the concern and the potential impact on the operations of each item. Observations will require management action plans with estimated completion dates that will be included in the routine follow-up of internal audit observations.

Objective and Scope

The purpose of this review is to obtain an understanding of how expectations and requirements laid out in the Business Development Plan are managed. The audit scope is based on the following objectives:

- To determine compliance with the EPA's fair share objective and good faith effort requirements;
- To understand the method and guidelines under which Local Business Enterprise (LBE), Minority Business Enterprise (MBE) and Women-owned Business Enterprise (WBE) participation is being pursued, tracked, and reported,
- To determine if MBE/WBE program goals and requirements for purchases are adequately communicated with potentially interested vendors on projects open for bids, quotes or proposals;
- To determine if information reported on MBE/WBE participation in DC Water projects is accurate, adequately compiled, and verified.
 - Including a review of Department of Engineering and Technical Services' (DETS) Database used to track MBE/WBE program actuals; and,
- To identify, during the course of the procedures designed to meet the stated objectives, process improvement opportunities and recommend internal control enhancements to improve the overall business development plan process.

Fieldwork was performed June 2016 through October 2016

Summary of Observation Ratings (See Appendix A for definitions)			
	Number of Observations by Risk Rating		
High Moderate Low		Low	
Business Development Plan	4	5	1

We would like to thank all DC Water team members who assisted us throughout this review.





EXECUTIVE SUMMARY (CONTINUED)

Ratings and Conclusions

Following is a summary of all observations noted in the areas reviewed (see "Detailed Observations" section for additional information). Definitions of the rating scales are included in the Appendices.

Summary of Observations		
Observations	Rating	
1. Documentation of Good Faith Efforts		
For 3 of 4 projects tested, DC Water did not maintain evidence that the prime contractor conducted good faith efforts related to subcontractor outreach. This is one of the six affirmative action steps that is required by the EPA, and evidences that the prime contractors allow for open, fair competition while encouraging M/WBE firms to participate in projects that they may not otherwise bid on their own.	High	
2. Documentation of Related Party		
As part of our review, we identified a potential related-party between the prime contractor and one of the MBE subcontractors that had not been documented by DC Water.	High	
3. Utilization of non-EPA Certified Firms		
At time of award, the WBE firm selected for a project met EPA WBE certification requirements. Subsequent to contract award, the certification expired. There are no procedures in place to evaluate the ongoing status of M/WBE subcontractors after the contract award.	High	
4. Compliance Monitoring and Reporting Procedures		
During our testing, we identified a lack of standardized procedures around the overall monitoring of M/WBE compliance during project completion. There were inconsistencies in the roles and responsibilities of the Project Managers, the Compliance team, and other members of Department of Engineering and Technical Services. Formalized SOPs and PM training were not in place. Additionally, the EPA does not currently require DC Water to report instances of specific noncompliance with the fair share objectives; however, during the contract approval process, DC Water does report expected participation to the Board.	High	





EXECUTIVE SUMMARY (CONTINUED)

Ratings and Conclusions (continued)

Summary of Observations	
Observations	Rating
5. Use of Engineering Management Information System (EMIS)	
DETS utilizes a tracking database, EMIS, to track M/WBE participation. However, EMIS does not capture actual prime contractor costs in the current M/WBE participation calculations. Currently, it is calculated as a percentage of the prime contract value. Through our review we identified an instance where EMIS was populated based on incorrect information. Therefore, M/WBE participation may be over or understated based on the actual contract costs to the prime by DC Water and subcontractor payments made by the prime.	Moderate
6. Subcontractor Approval Request Forms	
The Subcontractor Approval Request (SAR) form could not be located for one subcontractor for one project tested and two subcontractors for another project tested. These forms are required by DC Water during the contract period to approve any subcontractors that have been added or removed from the project. However, the EPA 6100-3 form, indicating which M/WBE firms would be utilized, was completed.	Moderate
7. Submission and Use of EPA 6100-2 Forms	
DC Water and the prime contractors were utilizing the 6100-2 forms above and beyond the scope of the EPA's intended purpose. The EPA established the 6100-2 as an optional form for the subcontractor to report the work received and/or report any concerns the subcontractor may have, such as late payment from the prime contractor or termination. DC Water required these forms to be submitted by the prime contractor and certified by the subcontractors to verify payments made to subcontractors for each pay application. DC Water's intention in this requirement was to gain additional transparency in the utilization of MBE/WBE throughout the life of each project. For one project tested, 6100-2 forms were not submitted until approximately four years into the project. For another project tested, eight 6100-2 forms were not submitted.	Moderate
8. Submission and Use of Utilization Summary	
Utilization Summaries (or Pay Verification Forms) are submitted with the pay applications by the prime and used to track subcontractor contract amounts with the prime, payments made to-date to the subcontractor and payments made during the invoice period. These summaries were not always submitted, did not reconcile from one pay application to another, and contained inaccurate information.	Moderate
9. LBE/LSBE Monitoring and Reporting	
LBE/LSBE participation has been reported inconsistently to the Governance Committee. RSM was unable to validate prior reports, as different workbooks and data have been used to monitor LBE/LSBE participation over time. Without proper reporting, DC Water may be misrepresenting the actual LBE/LSBE participation and inaccurately reporting information to the Board.	Moderate





EXECUTIVE SUMMARY (CONTINUED)

Ratings and Conclusions (continued)

Summary of Observations	
Observations	Rating
10. M/WBE Participation Updates	
DC Water's Business Development Plan requires the Authority to submit quarterly M/WBE utilization reports to the EPA. These reports have not been formally submitted, as the reporting requirement was changed by the EPA in 2014, from quarterly to annually. Although DC Water complied with the annual reporting requirement, the Business Development Plan was not updated to reflect that change.	Low

Timing of Report and Related Observations

This internal audit was performed concurrently with management's initiative to update the Authority's Compliance process. As a result, management represents that many of the observations included herein have been or will be addressed by the changes. The activities implemented include the following:

- Development and implementation of a new Standard Operating Procedure (SOP) around the M/WBE procurement, monitoring, and reporting at DC Water. This SOP is owned by the Chief Procurement Officer, and will be approved upon review by the Office of the General Counsel. While some of the procedures were in place beforehand, the formal implementation date is October 1, 2016.
- Personnel changes and restructuring of the Procurement and Compliance functions, to include the following:
 - o Creation of a Chief Procurement Officer position
 - In the fall of 2014, DC Water created the position of Chief Procurement Officer (CPO). As part of his duties, the CPO ensures that contracts adhere to the Authority's efforts to promote economic and business development in the District and the service region (e.g., the Certified Enterprises Program and/or the Federal Fair Share Objective).
 - The CPO's role was further defined in July 2016 when DC Water re-aligned the Department of Procurement to be placed under the Chief Procurement Officer.
 - Expansion of the Compliance team
 - In the spring of FY 2015, DC Water reorganized part of the Department of Procurement and created the Contract Compliance Team. This included the elevation of the Contract Support Specialist II position to the DC Water Contract Compliance Officer. Included in the new duties of the DC Water Contract Compliance Officer was the responsibility of the annual Business Development Report to the Board of Directors. In 2016, the in-house Compliance team increased from one (1) permanent staff to five (5).
- Competitive selection of an updated Compliance database, "DC Water Online Compliance Database" from the external vendor Early Morning Software that will be used as the central repository and primary source for compliance monitoring and reporting for certified business utilization. The database will be updated as part of the pay application review process, and will capture certified business utilization awards and payments, streamline data collection, provide simpler reporting for contractors, and allow for the generation of management canned/ad-hoc reporting. The database is in the testing phase and DC Water anticipates launching the database in January 2017.

We acknowledge management's representation of these changes and will evaluate the effectiveness of the changes during the routine internal audit follow-up procedures.





BACKGROUND, OBJECTIVES AND APPROACH

Background

Overview

DC Water has committed to promoting economic and business development in the District of Columbia and the region it services, which includes supporting the participation of certified local business enterprises (LBEs), local small business enterprises (LSBEs), minority business enterprises (MBEs) and woman-owned business enterprises (WBEs). In 2009, DC Water established the "Business Development Plan" as a framework for implementation of programs and activities. As part of this internal audit, we analyzed how DC Water meets the expectations and requirements within the Business Development Plan. This review did not include a review of contractor management, which was the scope of the Engineering – Contractor Management Phase 2 Internal Audit.

Certified Local and Local Small Business Enterprise (LBE/LSBE) Program

The Board establishes participation goals for Goods and Services and Construction and Architecture/Engineering (A/E), expressed as percentages of total dollar volume of all non-federally assisted contracts. Participation goals may be achieved through LBE/LSBE participation as a vendor, prime contractor, subcontractor, or joint venture.

To encourage LBE/LSBE utilization in the procurement process, preference points apply to competitive solicitations for goods and services and A/E as follows:

LBE/LSBE Procurement Preferences		
Preference Po	ints for Proposals:	
Local	5 points	
Small	5 points	
The maximum number of eligible preference points for a proposal is ten (10) points		
Preference Price Reductions for Bids:		
Local	5%	
Small	5%	
The maximum eligible preference price reduction for a single bid is a total of 10% or \$100,000, whichever is less		

To ensure fair competition of all potential vendors/contractors, DC Water's Business Development Plan requires the Authority to satisfy the following four outreach efforts: Advertisement targeted towards the vendor and contracting community, sponsor at least one procurement fair each year, host project-specific workshops for large and specialized projects, and require that similar outreach efforts are implemented by prime contractors and vendors looking to subcontract work.





BACKGROUND, OBJECTIVES AND APPROACH (CONTINUED)

Background (continued)

Federally Funded Projects

DC Water has implemented an outreach, training/orientation, and fair share objective program to encourage the participation of MBEs and WBEs in procurement of federally financed contracts, as required by the United States Environmental Protection Agency (EPA) regulations found at 40 CFR Section 33.

During the course of this audit, the EPA was reviewing and revising the Disadvantaged Business Enterprise (DBE) program, resulting in the suspension of contract administration forms. Specifically, the EPA revoked the MBE/WBE 6100-series forms as of 3/7/2016. Despite the suspension of the forms, the remaining requirements under 40 CFR Section 33 were still in effect, such as the Good Faith Efforts, fair share objectives and record keeping and reporting. New guidance on Good Faith Efforts has been presented, but has still not been approved and is not yet in effect. See the table below for more information on current Good Faith Requirements.

Fair Share Objectives are MBE/WBE participation goals determined by DC Water and approved by the EPA. These participation goals may be achieved by MBE/WBE firms participating as a vendor, prime contractor, subcontractor, or joint venture for a federally assisted project. The Authority tracks annual spending over the life of the project. EPA 40 CFR 33.410 specifies that a grant recipient cannot be penalized if MBE/WBE participation does not meet its fair share objective, as the objective is not a quota.

Additionally, DC Water must take six affirmative action steps (referred to as Good Faith Efforts by the EPA), which are as follows:

Good Faith Efforts

- 1. Place qualified MBEs and WBEs on the solicitation lists.
- 2. Assure MBEs and WBEs are solicited whenever they are a potential source.
- 3. Divide total requirements, when feasible, into smaller tasks to permit maximum MBE/WBE participation.
- 4. Establish delivery schedules which encourage MBE/WBE participation.
- 5. Use the services of the Small Business Administration (SBA) and the Minority Business Development Agency (MBDA) or the Department of Commerce.
- 6. Require prime contractors, when subcontractors are being utilized to undertake steps 1 through 5 above.

Business Development Plan Monitoring

DC Water monitors contract awards and subcontractor participation to determine LBE, LSBE, MBE, and WBE participation through multiple databases and tools.

Historically, the Department of Engineering and Technical Services (DETS) has utilized the Engineering Management Information System (EMIS) database to monitor the actual participation of subcontractors on Construction and A/E projects. Prime contract award values, subcontractor goals and subcontractor actual participation are entered into EMIS upon receipt of pay applications. Contract progress (percent of project complete) is updated monthly based on inquiry with Project Managers. Changes orders to the prime contract are also entered into EMIS, as they occur.



7



BACKGROUND, OBJECTIVES AND APPROACH (CONTINUED)

Background (continued)

LBE and LSBE participation are tracked in an access database maintained by the Department of Procurement. The Compliance Office reviews large purchases, solicited as open market with Preference Points, to determine how many preference points can be awarded to competitive solicitations for goods and services and construction and A/E. If an LBE or LSBE certified firm is selected for award, the Compliance team manually enters contract information into their access database, including the contract start and end date, the current procurement value for the applicable fiscal year, and points awarded.

If a contractor lists a certified LBE/LSBE subcontractor(s) in their project plans, the Compliance team contacts all certified subcontractors to confirm their anticipated scope of work and participation amount. Annually, The Compliance team performs an extensive review of the database and updates actual participation amounts for prime and subcontractors. A Compliance team member will contact any certified subcontractors to inquire about their year-to-date payments received, and then contact the prime to agree the subcontractor participation amount. For certified prime contractors, the Compliance team checks ImageNow to confirm that the prime is getting paid for the work being performed. Procurement then provides a total of all POs processed for the fiscal year to the Compliance team, and the team validates every field of the database based on this information.

Annually, the Compliance team performs a review of all new procurement actions for the fiscal year to determine LBE/LSBE participation based on award. Beginning in FY 2016, the team typically presents observations and recommendations for the LBE/LSBE program to the Governance Committee.

Business Development Plan Reporting

DC Water submits an annual "MBE/WBE Utilization" reports to the EPA, which reports the procurements awarded to MBE and WBE participation by contract type (construction, equipment, services or supplies). Based on the Business Development Plan, management provides and update on all certified business enterprise participation, based on awards made to LBE, LSBE, MBE and WBE firms on an annual basis.





BACKGROUND, OBJECTIVES AND APPROACH (CONTINUED)

Background (continued)

Statistical Information

DC Water had a total of 19 active grant-funded contracts during FY 2016. Five vendors serve as a prime contractor for more than one of these contracts, and 11 total vendors serve these grant-funded projects as prime contractors in total. The grant-funded portion of individual contracts active during FY 2016 ranged in size from \$291,000 to \$28,521,918. During our audit, we examined four specific grant-funded contracts for objectives that are detailed on the next page. The four contracts are broken down in the second table below.

EPA Grant Funding	
Number of active grant-funded contracts in FY16	19
Total value of all grants active in FY16	\$125,224,769

Audited Contracts									
Contract #	Contract Name	Prime Contractor	Procurement Value	Number of M/WBE Subcontractors	Contract Start Date*	Percent Complete**			
12-0180	16 th & Alaska Ave & Anacostia Pumping Stations Improvement	Alpha Construction	\$2,462,000	2	3/20/2014	99%			
12-0080	Small Diameter Water Main Replacement 8	Capitol Paving of DC	\$16,654,450	2	5/2/2013	99%			
12-0100	Large Valve Replacement 10	Capitol Paving of DC	\$2,020,300	2	2/1/2013	100%			
07-0110	Rehabilitation of the Fort Reno Pumping Station	CPP Construction	\$4,100,000	3	5/9/2011	91%			

^{*}Start date information per Board of Directors Fact Sheet



^{**}Percent complete as of 8/10/2016



BACKGROUND, OBJECTIVES AND APPROACH (CONTINUED)

Objectives and Approach

Objectives

The purpose of this review is to obtain an understanding of how expectations and requirements laid out in the Business Development Plan are managed. The audit scope is based on the following objectives:

- To determine compliance with the EPA's fair share objective and good faith effort requirements;
- To understand the method and guidelines under which Local Business Enterprise (LBE), Minority Business Enterprise (MBE) and Women-owned Business Enterprise (WBE) participation is being pursued, tracked, and reported,
- To determine if MBE/WBE program goals and requirements for purchases are adequately communicated with potentially interested vendors on projects open for bids, quotes or proposals;
- To determine if information reported on MBE/WBE participation in DC Water projects is accurate, adequately compiled, and verified,
 - o Including a review of Department of Engineering and Technical Services' (DETS) Database used to track MBE/WBE program actuals; and,
- To identify, during the course of the procedures designed to meet the stated objectives, process improvement opportunities and recommend internal control enhancements to improve the overall business development plan process.

Approach

Our audit approach consisted of the following phases:

Understanding of the Process

The purpose of this phase was to gain an understanding of DC Water's Business Development Plan and how it is currently monitored. This phase included a process walkthrough with the Contract Compliance Officer and inquiry of documentation.

Specific procedures performed include:

- Obtained and reviewed the Business Development Plan;
- Determined if standard operating procedures (SOPs) were maintained to document internal policies and procedures related to monitoring certified subcontractor participation:
- Conducted walkthroughs to determine how information is captured in EMIS for M/WBE participation and how information is captured in the Compliance Department's databases for LBE/LSBE participation; and,
- Obtained reports submitted to the Governance Committee on LBE/LSBE participation and M/WBE participation.





BACKGROUND, OBJECTIVES AND APPROACH (CONTINUED)

Objectives and Approach (continued)

Detailed Testing

The purpose of this phase was to test compliance with the Business Development Plan, validate the accuracy of reporting and ensure that proper documentation was maintained by DC Water or the appropriate contractors.

Federally-Funded Projects

In order to test for compliance with EPA's fair share objective and good faith effort requirements, we obtained a listing of EPA-funded contracts. From this list we selected a sample of four contracts to validate that:

- Documentation existed to evidence compliance with the six good faith efforts, in accordance with the fair share objective;
 - o Contractor's Intent to Subcontractor MBE-WBE Form was submitted by the prime contractor
 - MBE-WBE Intent to Subcontract Form was submitted by all M/WBE subcontractors
 - Subcontractor Participation Form (EPA Form 6100-2) was submitted by all M/WBE subcontractors
 - Subcontractor Performance Form (EPA Form 6100-3) was completed by all M/WBE subcontractors
 - o Subcontractor Utilization Form (EPA Form 6100-4) was completed by the prime contractor
 - o Evidence of outreach and recruitment activities by DC Water and the selected prime contractor
- Subcontractors identified as either an MBE or WBE held a current certification as defined by the EPA, the SBA, another Federal Agency, a State or State Agency, or local jurisdiction, and:
- Subcontractor Approval Forms were submitted by the prime contractor.

In order to validate that participation was calculated and reported accurately, we utilized the same four contracts and obtained subcontractor invoices, cancelled checks from the prime contractor, prime contractor invoices to DC Water and supporting documentation to validate that:

- Subcontractor was paid for all amounts invoiced to the prime contractor:
- Prime contractor reported accurate payments to the subcontractor through the 6100-2 and other supporting spreadsheets;
- Actual participation was captured in EMIS, and;
- Participation met the fair share objectives.

In order to validate that DC Water was reimbursed appropriately and accurately for EPA-funded projects, we utilized the same four contracts and obtained all prime contractor invoices, request for reimbursement letters from DC Water to the U.S Army Corps of Engineers, reimbursement approval letters from the U.S. Army Corps of Engineers to DC Water, Standard Form 271, supporting documentation from DC Water for the request and the authorization to award letters from the U.S. Army Corps of Engineers to DC Water to validate that:

- Reimbursement up to final payment did not exceed 90% of total grant amount if Clean Water project or 95% of total grant amount if Safe Drinking Water project;
- Prime contractor invoices match payments made to prime contractor;
- EPA share was accurately calculated;





BACKGROUND, OBJECTIVES AND APPROACH (CONTINUED)

Objectives and Approach (continued)

- · Periods of reimbursement did not overlap, and;
- Reimbursement amount received by DC Water reconciled to amount requested.

Certified Local and Local Small Business Enterprise Program

In order to test for compliance with the Business Development Plan's LBE/LSBE program requirements, we obtained a listing of contracts and selected a sample of 6 contracts with a fiscal year 2016 procurement action value greater than \$1 million. We used these contracts to validate that:

- Preference points were appropriately awarded/recorded in Compliance's access database;
- The number of certified contractors was accurately reflected in the access database, and:
- The certified participation dollar amount in the access database was appropriately stated.

Reporting

At the conclusion of this audit, we summarized our observations related to the Business Development Plan. We have reviewed the results of our testing with management and included their responses in the detailed observations section.





DETAILED OBSERVATIONS

Business Development Plan Internal Audit							
1.	Documentation of Good Faith Efforts	Recommendation	Management's Action Plan				
	Observation Rating: High						
	For three of the four projects tested, one of the EPA good faith efforts requirements was not sufficiently supported by documentation during the bidding process, as DC Water did not maintain evidence that the prime contractor conducted the good faith efforts for subcontractor outreach. DC Water maintained evidence of all other good faith efforts. An advertisement by the prime contractor to solicit M/WBE subcontractors was not maintained in DC Water's documentation. The MBE certification form for one subcontractor for one project tested was not submitted with the bid or proposal package. This subcontractor was selected as a subcontractor subsequent to award, but the prime did not submit the appropriate documentation evidencing that this firm was a certified MBE. Additionally, for one project tested, the prime contractor or DC Water did not maintain a copy of the "Contractor's Intent to Subcontract MBE-WBE Form" for one subcontractor. This form is utilized by DC Water for the prime contractor to certify that they will comply with Special Provisions in the contract titled "Subcontracting Goals (MBE & WBE)" and will maintain records for compliance with the requirements of the MBE/WBE Program. These documents are utilized as evidence for DC Water's good faith efforts, as required by the EPA. Failure to retain proper documentation may constitute noncompliance and result in remedial action.	DC Water should document and monitor Contractors to ensure that these requirements are passed down to all sub-recipients/prime contractors. Documentation should be reviewed by DETS and the DC Water Contract Compliance Office on a routine basis for each contract. We understand an Authority-wide SOP for compliance monitoring was in process at the time of fieldwork. As part of the SOP, we recommend DC Water determine who within the organization is responsible for housing M/WBE related documentation (Procurement, Compliance or DETS) and assign responsibility for ensuring these documents are complete, accurate and maintained in a centralized location. These roles are responsibilities should be documented in the SOP.	Response: Management created a new SOP to detail the procedures around the M/WBE procurement, monitoring, and reporting at DC Water. Implementation of the SOP which began in October 2016, includes a process for confirming the outreach efforts and documentation by the bidding primes. This includes the use of a new "Good Faith Efforts" checklist, which must be submitted to DC Water by the bidding prime contractors as part of the bid response. Additionally, the checklist must be supported by documentation such as phone logs, email logs, handouts, flyers, electronic communications, etc. which must also be included in the bid package. Moreover, to ensure that contractors are aware of the outreach process and the checklist, a member of the compliance team is responsible for discussing the outreach requirements at the scheduled pre-bid meeting.				





DETAILED OBSERVATIONS (CONTINUED)

Business Development Plan Internal Audit							
1.	Documentation of Good Faith Efforts (continued)	Recommendation	Management's Action Plan				
	Observation Rating: High						
			The EPA Grants Coordinator and DC Water Contract Compliance Officer review bid packages to determine responsiveness to the EPA good faith efforts. Issues or questions are submitted to the Chief Procurement Officer, who makes the final determination regarding EPA good faith efforts. If the lowest bidder is determined non-responsive to the Good Faith Effort requirements, DC Water will reject the bid and the same review process will occur for the next lowest bidder.				
			Responsible Party:				
			EPA Grants Coordinator and DC Water Contract Compliance Officer				
			Target Date:				
			January 31, 2017				





Business	Development Plan Internal Audit		
2.	Documentation of Related Party	Recommendation	Management's Action Plan
	Observation Rating: High		
	Per our review, one prime contractor did not provide evidence of good faith efforts specifically for one subcontractor as noted in Issue 1. Upon further review, we identified a related party between these two organizations that was not documented. In response to Article 13.1.1 of the invitation to bid, the Vice President was noted as a key personnel from prime contractor to be utilized on the project. Within the Pre-Qualification Statement, this individual was also noted as the prime contractor's Treasurer and in the payment bonds, was also noted as the prime contractor's Secretary. On the Subcontractor Approval Request Form, the contract person for the subcontractor had the same last name as Vice President of prime contractor. Based on a basic Google people search, the Vice President of the prime contractor and contact person for the subcontractor have a relationship and potentially live in the same household. As part of the contract, the prime contractor signed a collusion affidavit, and a conflict of interest statement was written into the "Instructions to Bidder" section of the original invitation for bid (IFB). The response to the IFB did not include a disclosure of any relationship between the prime and a subcontractor, which is a potential violation of this section of the IFB.	DC Water should require any prime contractor that intends to subcontract to sign a conflict of interest or related party form, disclosing any relationship between the two companies. The subcontractors should also disclose any known relationships with the prime and/or DC Water. DC Water should maintain this documentation with the contract file.	Response: DC Water is in the process of revising its conflict of interest forms and language will be added to its Subcontractor Approval Request forms and bid documents. Responsible Party: Chief Procurement Officer Target Date: January 31, 2017





Business	Business Development Plan Internal Audit		
2.	Documentation of Related Party (continued)	Recommendation	Management's Action Plan
	Observation Rating: High		
	In addition to this prime contractors lack of evidence of properly advertising the opportunity for M/WBE firms, we noted discrepancies with the submission of the 6100-2s for the potentially related subcontractor. We identified missing 6100-2s within the original submission of pay applications to DC Water. As part of our testing, we requested all of the 6100-2s from the prime contractor to reconcile to the original 6100-2s submitted with the payment applications. The prime contractor subsequently provided 6100-2s that did not match the original submissions. Though the new 6100-2s tied to the actual payments made to the subcontractor, the original submissions were incorrect. It appears that the Vice President of prime contractor signed off on all of the 6100-2 forms on behalf of subcontractor.		





Business	Business Development Plan Internal Audit				
3.	Utilization of non-EPA Certified Firms	Recommendation	Management's Action Plan		
	Observation Rating: High				
	At time of award, the WBE firm selected for a project met EPA WBE certification requirements. Subsequent to contract award, the certification expired. DC Water is not required to establish its own MBE/WBE certification process; however, the Federal Acquisition Regulations (FAR) only consider MBE/WBE status as of the subcontract procurement award date, and not the close of the overall project. DC Procurement Manual provides that to be eligible and an MBE or WBE, the entity "must be currently certified." The EPA provides that "in order for a firm to be counted towards a recipient's [MBE] and [WBE] utilization, a firm must be certified." There are no procedures in place to evaluate the ongoing status of M/WBE subcontractors after the contract award. The WBE subcontractor percentage of participation was 4.7% of the contract value (including change orders).	As previously recommended, DC Water should determine who is responsible for validating that M/WBE firms meet the EPA requirements to be a certified firm. Further, the supporting documentation should be maintained in a centralized location, including any evidence for why an EPA certified DBE could not be utilized, why the subcontractor selected was utilized and evidence of good faith efforts. These roles are responsibilities should be documented in the SOP that is in process.	Response: Going forward, at the bid review stage, the EPA Grants Coordinator will be responsible for reviewing the MBE/WBE compliance documentation of the lowest bidder, to determine if the bidder is responsive to the EPA Fair Share Objectives and the level of MBE/WBE participation to be achieved. MWBE participation is based only on those certifications recognized by the U.S. Environmental Protection Agency. If it is determined that the bidder is responsive to the EPA Fair Share Objectives, the EPA Grants Coordinator forwards the bid documents to the DC Water Contract Compliance Officer for review and concurrence. Disagreements, issues, or questions concerning a bidder's response to the Fair Share Objectives and/or the actual MBE/WBE participation are brought, by the DC Water Contract Compliance Officer, to the Chief Procurement Officer for review. The decision by the Chief Procurement Officer is final.		





Business	Business Development Plan Internal Audit			
3.	Utilization of non-EPA Certified Firms (continued)	Recommendation	Management's Action Plan	
	Observation Rating: High			
			The same process will be used as part of the ongoing monitoring efforts to review and confirm Subcontractor Approval Requests that involve certified firms (L/SBE or M/WBE).	
			Responsible Party:	
			DC Water Contract Compliance Officer and EPA Grants Coordinator	
			Target Date:	
			January 31, 2017	





Business	Development Plan Internal Audit		
4.	Compliance Monitoring and Reporting Procedures	Recommendation	Management's Action Plan
	Observation Rating: High		
	Through our testing, we identified a lack of standardized procedures around the monitoring of M/WBE compliance. There were inconsistencies in the roles and responsibilities of the Project Managers, the Compliance team and other members of DETS. Additionally, there was not a formal procedure for when a contractor is used to monitor compliance, what that contractor is required to submit to DC Water or who within DC Water is responsible for monitoring that contractor. For a majority of the contracts tested, DC Water did not meet the fair share objective, which is not a noncompliance concern, but hasn't been reported back to the Board. Specifically, of the four contracts tested, none met the MBE fair share objective and only one met the WBE fair share objective. Three of the contracts tested were still in progress, ranging from 91% to 99% complete. These goals are represented to the Board of Directors through the procurement "Fact Sheets", at which time they may become 'expectations'. DC Water does not have a process in place for reporting back to the Board on when and why these goals are not met.	We understand an Authority-wide SOP for compliance monitoring was in process at the time of fieldwork. As part of the SOP, DC Water should clearly define the roles and responsibilities of the Project Managers, the Compliance team and contractors performing compliance activities, and incorporate procedures to address the other observations within this report. The intent of the SOP and the recommendations contained herein is not to create additional paperwork for DC Water contractors, subcontractors, but to enhance and ensure compliance accountability for all parties, and reduce potential liability for unintended noncompliance or lack of compliance documentation.	Response: Included in the new SOP are revisions to the solicitation master spec, as well as set of new contractor reporting forms which replace the outdated EPA forms (6100-2, 6100-3, and 6100-4). These forms will be used for new projects, once the SOP is formally implemented. To ensure all appropriate DC Water personnel are aware of and understand the new SOP, a SOP orientation was developed and trainings scheduled. As of December 2016, the contract compliance team conducted six (6) SOP orientations for DC Water Project Managers, which included forty two (42) participants. Moreover, contractors and subcontractors will receive training on the relevant procedures through the mandatory project specific compliance orientations. All prime and subcontractors must attend to be trained on Davis Bacon requirements, completion of DBE SVFs, PVFs, DC





Business Development Plan Internal Audit			
4.	Compliance Monitoring and Reporting Procedures (continued)	Recommendation	Management's Action Plan
	Observation Rating: High		
	According to EPA guidelines, a recipient cannot be penalized, or treated by the EPA as being in noncompliance solely for failing to meet its fair share objectives, although a recipient can be penalized for failure to satisfy Good Faith Efforts. Goals may not be met due to change in scope in the project, qualifications or performance of the subcontractor(s) or other valid reasons. DC Water does communicate these explanations to the EPA in writing at the close of each contract for which goals are not met, even though the EPA does not require DC Water to report that the fair share objectives are not met. However, these explanations are not communicated back to the Board, so the Board lacks insight into actual M/WBE participation.	If there are discrepancies between actual participation and the fair share objectives at the close of a project, DC Water should obtain, in writing, reasons for the differences and communicate these to the Board, in addition to the current explanations already being sent to the EPA.	Water Works, and reporting through the DC Water Online Compliance Database. In addition to the pay app monitoring process identified above, DC Water will also implement a new reporting process, where, using the data from the approved pay applications, by the 10th of the month, a monthly compliance report will be prepared for DC Water management. This report will identify the following: Number and value of active projects Projects will be identified by funding source (federal, eligible, O/P for Local Small) Projects' achievement with certified business goals (by award and payments). Number of compliance trainings conducted Number of pay apps reviewed and which ones, if any were recommended for non-payment (and why).





Business	Business Development Plan Internal Audit			
4.	Compliance Monitoring and Reporting Procedures (continued)	Recommendation	Management's Action Plan	
	Observation Rating: High			
			In addition to the monthly report, a summary update of DC Water's certified business utilization achievement will be presented during the Governance Committee meetings.	
			Responsible Party:	
			DC Water Contract Compliance Officer	
			Target Date:	
			January 31, 2017	





Recommendation	Management's Action Plan
DC Water should evaluate the purpose of EMIS and whether future databases will track actual participation or anticipated participation based on contract award (fair share objectives), based upon the needs of management and the Board. EPA reporting requirements do not require that DC Water provide a report on actual participation, but should report M/WBE participation funds for procurement as a percentage of total financial assistance agreement project procurement cost. If DC Water wants to track actual M/WBE participation, DC Water should obtain subcontractor invoices, in addition to independent certification from the subcontractors of what they have been paid. Though EMIS may be needed for the tracking of past projects, we understand DC Water has begun exploring another database for tracking participation and monitoring compliance throughout the life of the project. See also observation 10	Response: DC Water Management will be implementing the "DC Water Online Compliance Database". This system will be the central repository and primary source for compliance monitoring and reporting for certified business utilization. The database will be updated as part of the pay application review process, and will capture certified business utilization awards and payments, streamline data collection, provide simpler reporting for contractors, and allow for the generation of management canned/ad-hoc reporting. DC Water does not have a contractual relationship with a prime's subcontractors. Therefore management is weighing the practical and legal ramifications/implications of obtaining subcontractor invoices.
	DC Water should evaluate the purpose of EMIS and whether future databases will track actual participation or anticipated participation based on contract award (fair share objectives), based upon the needs of management and the Board. EPA reporting requirements do not require that DC Water provide a report on actual participation, but should report M/WBE participation funds for procurement as a percentage of total financial assistance agreement project procurement cost. If DC Water wants to track actual M/WBE participation, DC Water should obtain subcontractor invoices, in addition to independent certification from the subcontractors of what they have been paid. Though EMIS may be needed for the tracking of past projects, we understand DC Water has begun exploring another database for tracking participation and monitoring compliance





Business	Development Plan Internal Audit		
5.	Use of Engineering Management Information System (continued)	Recommendation	Management's Action Plan
	Observation Rating: Moderate		
	2. EMIS captures the initial prime contract value and change orders that have been issued during the life of a project. Contractor payment applications are captured in EMIS, but are not reconciled to Lawson for actual payments made. For one completed project tested, the project had "underruns" or costs that were not incurred. Therefore, the M/WBE participation was understated because it was based on the original contract value and not actual prime contractor payments. 3. Though we noted that EMIS captures change order information, EMIS only utilizes the initial contract value to calculate the percentages of M/WBE subcontractor award participation, although reports can be set up to calculate participation differently. M/WBE participation may therefore be overstated on certain award based reports generated from EMIS. We acknowledge that the EPA may not reimburse DC Water for change orders, however not all projects within EMIS are EPA grant-funded. If EMIS is not populated based on accurate and/or actual information, DC Water may be misrepresenting the actual M/WBE participation and inaccurately reporting information to the Board. Also reference observation 4 and observation 10 regarding inconsistencies and lack of defined processes for		However, to better ensure that contractors and subcontractors are reporting numbers correctly, DC Water is implementing a new Subcontractor Verification Form (SVF) per the new SOP which is to be submitted by all certified subs each billing period. This form, which requires the subcontractor to specify its current contract value, current and job-to-date invoicing, the current and job-to-date payments, and is signed by the subcontractor, will be used to cross check the information provided by the prime contractor on the Payment Verification Form. The assigned Compliance Specialist will review the payment application and the Subcontractor Verification Form for completeness/correction before payment is authorized. To ensure that the review is done, the Compliance Specialist completes a Compliance Checklist for the payment application. Once completed, the checklist is signed off by the Compliance Specialist, Project Manager, and prime contractor.





Business	Business Development Plan Internal Audit		
5.	Use of Engineering Management Information System (continued)	Recommendation	Management's Action Plan
	Observation Rating: Moderate		
			Semi-annually, Compliance Specialists will conduct "desk audits" of a construction project to confirm M/WBE utilization, and findings will be submitted to the DC Water Contract Compliance Officer, Project Manager, and, if necessary, the prime contractor. Annually, the DC Water Contract Compliance Officer prepares a summary of M/WBE participation to be presented to the Board of Directors. Finally, DC Water is changing its procedures as it relates to annual reporting to the Board. Going forward, the DC Water Contract Compliance Officer will present the annual report to the Board (Governance Committee). Additionally, the report format will change and no longer mimic the report template of the EPA - which requires information on awards made during the particular fiscal year (FY) only. Instead the new report will summarize both awards and payments on all active projects during the particular FY.





Business	Business Development Plan Internal Audit			
5.	Use of Engineering Management Information System (continued)	Recommendation	Management's Action Plan	
	Observation Rating: Moderate			
			Responsible Party: DC Water Contract Compliance Officer Target Date: January 31, 2017	





Business	Business Development Plan Internal Audit		
6.	Subcontractor Approval Request Forms	Recommendation	Management's Action Plan
	Observation Rating: Moderate		
	The Subcontractor Approval Request Form (SAR) was missing for one subcontractor for one project tested and two subcontractors for another project tested. SARs are required by DC Water in order to document if a subcontractor has been added or removed from a project. Historically, DETS was responsible for obtaining, reviewing and approving subcontractors. Failure of the contractor to submit or DC Water to maintain SARs may lead to improper vetting of a subcontractor. However, we did note that DC Water obtained a 6100-3 form for each subcontractor, which is supposed to be provided as notification to the EPA of the M/WBE that will be utilized on the project.	As part of the SOP implementation, DC Water should determine who is responsible for housing subcontractor related documentation (Procurement, Compliance, and/ or DETS), including the SARs, and assign responsibility for ensuring these documents are complete, accurate and maintained. For M/WBE compliance purposes, we recommend that the Compliance Office review the SARs to ensure these subcontractors meet the appropriate EPA M/WBE requirements. Additionally, the current SAR only has to be signed by DC Water's Construction Manager and Manager of Engineer Management Services. A signature line should be added to document the Compliance Officer review and approval of the SAR.	Response: Management has indicated the SARs will be reviewed by multiple parties. If a change in subcontractor occurs during the life of the project, a new SAR must be submitted. SARs will be submitted to the DC Water Project Manager, sent to the EPA Grants Coordinator, and if the request changes M/WBE participation, the EPA Grants Coordinator must forward the SAR to the DC Water Contract Compliance Officer for review. The DC Water Contract Compliance Officer will submit any questions regarding the SAR to the EPA Grants Coordinator within 24 hours of receipt. The Grants Coordinator then approves the SAR and sends to the Manager of Program Services for sign-off, at which point the SAR can be sent back to the DC Water Project Manager. The EPA Grants Coordinator will house the official SARs at all times and send copies to the DC Water Contract Compliance Officer.





Business	Business Development Plan Internal Audit		
6.	Subcontractor Approval Request Forms (continued)	Recommendation	Management's Action Plan
	Observation Rating: Moderate		
			Moreover, as a check on the SAR process, when reviewing payment applications, Compliance Specialists will review the PVF's to ensure that a SAR is on file for each contractor. Responsible Party:
			EPA Grants Coordinator
			Target Date:
			January 31, 2017





Business	Business Development Plan Internal Audit		
7.	Submission and Use of EPA 6100-2 Forms	Recommendation	Management's Action Plan
	Observation Rating: Moderate		
	DC Water and the prime contractors were utilizing the 6100-2 forms above and beyond the scope of the EPA's intended purpose. The 6100-2 form was created by the EPA as an optional form for the subcontractor report the work received and/or report any concerns regarding the EPA-funded project, such as late payment or termination from the prime contractor. Although this was an optional form from the EPA, DC Water was requiring the forms to be provided by prime contractors and certified by the subcontractors to verify payments made to subcontractors and to support the Utilization Summaries that are submitted with the pay applications. DC Water's intention in this requirement was to gain additional transparency in the utilization of MBE/WBE throughout the life of each project. Project #1 Out of 12 pay applications submitted by the prime contractor to DC Water, 6100-2 forms were missing twice (once for each subcontractor utilized). Project #2 The 6100-2 forms were not submitted by the prime contractor until approximately four years into the project (first pay application submitted October 28, 2011 and first 6100-2 was received on November 20, 2015).	As of March 10, 2016, the EPA suspended the use of the 6100-2, 6100-3 and 6100-4 forms. As part of the SOP implementation, DC Water should establish a similar form to the 6100-2 for subcontractors, which would provide independent verification that the subcontractor had been paid for what has been invoiced. As appropriate, DC Water should also require the submission of subcontractor invoices, or other documentation as needed to establish compliance. The 6100-2 (or equivalent) form alone is not sufficient evidence, as our testing has shown. This form should be required as part of the submission for every pay application, even if payments had not been made to the subcontractors during the pay application invoice period.	Response: As of March 10, 2016, the EPA suspended the use of the 6100-2, 6100-3 and 6100-4 forms. In place of the monthly subcontractor participation reporting that had been occurring in the 6100-2 Form, DC Water has established a Subcontractor Verification Form (SVF). The SVF will be required to be submitted for every subcontractor with every pay application, even if no work has been invoiced for the period. A Compliance Specialist will review the attached SVFs for each pay application to ensure invoiced amounts on each form are correct, the W/MBE participation is consistent with the performance schedule, and there are no outstanding certified payroll issues. The results of the Compliance Specialist's review will be documented in the Compliance Confirmation Checklist (CCC), which will be signed off by the Compliance Specialist after completion.





Business	siness Development Plan Internal Audit		
7.	Submission and Use of EPA 6100-2 Forms (continued)	Recommendation	Management's Action Plan
	Observation Rating: Moderate		
	Project #3 Out of 13 pay applications submitted by the prime contractor to DC Water, 6100-2 forms were missing eight times (three were missing for one subcontractor and five for the other subcontractor). In all of these instances, the prime contractor represented that additional payments had not been made to the subcontractor via the Utilization Summary (or Payment Verification Form), meaning that 6100-2s were not submitted since additional payments had not been made. Project #4 Out of 26 pay applications submitted by the prime contractor to DC Water, a 6100-2 form was missing once for one of two subcontractors utilized on the project. Inconsistent documentation can lead to inaccurate calculation of M/WBE participation.		Any deficiencies will be shared with the DC Water Project Manager to share with the prime contractor. Additionally, DC Water has implemented a Subcontractor Progress Report for certified subcontractors to report any potential violation of DC Water's M/WBE program. The Subcontractor Progress Report is a confidential form that certified subcontractors may submit at any time, but at least quarterly, directly to the DC Water Compliance Specialist. The Compliance Specialist works to resolve any issues identified on the Subcontractor Progress Report, and will include the issues in a monthly status report to the DC Water Contract Compliance Officer. Responsible Party: DC Water Contract Compliance Officer Target Date: January 31, 2017





Business	Business Development Plan Internal Audit		
8.	Submission and Use of Utilization Summary	Recommendation	Management's Action Plan
	Observation Rating: Moderate		
	Utilization Summaries (or Pay Verification Forms), which are submitted with pay applications and used to track subcontractor contract amounts with the prime, payments made to subcontractors to-date and payments made during the invoice period, were not always submitted, did not reconcile from one pay application to another, and contained inaccurate information. Project #2 For 2 of the 18 pay applications submitted by the prime contractor, a Utilization Summary was not submitted. For 7 of the 16 Utilization Summaries submitted, a subcontractor was listed as an MBE. This was a subcontractor that performed work on the contract but was not a certified MBE. For one of the subcontractors utilized, the amounts on the Utilization Summary would not reconcile from pay application to pay application. The "previously paid" columns would be updated but the "this month" column, indicating that amount that has been paid since the last pay application was incomplete. Though it should be recognized that delays in reporting may occur because pay applications are not always submitted monthly, the forms should reconcile from pay application to pay application.	Upon receipt of a pay application, DC Water should validate the following: 1. Utilization Summary of subcontractor usage was submitted; 2. Subcontractors listed were approved, as evidenced on the SARs; 3. Subcontractors listed as an M/WBE were approved as M/WBE firms during the award of contract; 4. Utilization Summary submitted during this pay application reconciles to prior pay applications. If there are discrepancies with the support provided, DC Water should require the prime contractor to resubmit the Utilization Summary. Additionally, a Utilization Summary should be provided for all pay applications, even the final, to ensure that all subcontractor participation has been captured.	Response: DC Water will continue to utilize a similar form, now called the Payment Verification Form (PVF). The PVF will be required to be submitted with every pay application. A Compliance Specialist will review the PVF to ensure invoiced amounts on the form are correct and consistent with amounts reported on the SVFs, the W/MBE participation is consistent with the performance schedule, and there are no outstanding certified payroll issues. The results of the Compliance Specialist's review will be documented in the Compliance Confirmation Checklist, which will be signed off by the Compliance Specialist after completion. Any deficiencies will be shared with the DC Water Project Manager to share with the prime contractor. Responsible Party: DC Water Contract Compliance Officer Target Date: January 31, 2017





Business	Business Development Plan Internal Audit		
8.	Submission and Use of Utilization Summary (continued)	Recommendation	Management's Action Plan
	Observation Rating: Moderate		
	Project #3 For 1 of the 13 pay applications submitted by the prime contractor, a Utilization Summary was not submitted. Per discussion with DETS, the Utilization Summary is not always provided for the last pay application if it is for a retention release. However, if payments were made to subcontractors between the last two pay applications, DC Water may not have been notified. For 1 of the 12 Utilization Summaries submitted, the prime contractor did not include a payment to two of the subcontractors. Though the "total paid" to subcontractor reconciled at the conclusion of the project, the amounts on the allocation detail support forms did not reconcile from pay application to pay application due to the missed information. Project #4 For 3 of the 26 pay applications submitted by the prime contractor, a Utilization Summary was not included in the package. For 3 of the 23 Utilization Summaries provided, we could not reconcile the "Previous Invoice" column to the "Paid to Date" information from the prior Utilization Summary. Though the total paid to subcontractor reconciled at the conclusion of the project, the amounts on the Utilization Summary did not reconcile between pay applications.		





Business	Business Development Plan Internal Audit		
9.	LBE/LSBE Monitoring and Reporting	Recommendation	Management's Action Plan
	Observation Rating: Moderate		
	LBE/LSBE participation has been reported inconsistently to the Governance Committee. RSM was unable to validate prior reports, as different workbooks and data have been used to monitor LBE/LSBE participation over time. Per the Business Development Plan, the General Manager is to submit a report on DBE participation results to the Board annually. Additionally, the Board is to review the LBE/LSBE participation goals every two years to determine whether, based on performance, the Board's objectives are being achieved. In FY 2014, M/WBE participation for the year was presented to the Board of Directors, but LBE/LSBE participation was not included in this report. We were unable to obtain evidence of a report for LBE/LSBE participation in FY 2015. In FY 2016, M/WBE and LBE/LSBE participation was reported to the Governance Committee in January. The participation presented was based on award amounts and not actual participation (expenses incurred by DC Water). Without proper monitoring, DC Water may be misrepresenting the actual LBE/LSBE participation and inaccurately reporting information to the Board. There may be a lack of transparency in certified firms' participation in DC Water's projects, leaving the Board unable to determine the effectiveness of the Authority's Business Development Plan.	We understand DC Water has begun exploring another database for tracking participation and monitoring compliance throughout the life of the project, as well as developing and implementing a Compliance Confirmation Checklist (CCC) for all projects, similar to that being implemented for federally-funded projects. This would ensure that DC Water is receiving complete and accurate certified participation information with every pay application or invoice. The CCC should be reviewed by a Compliance Specialist with each pay application. Most certified participation comes in the form of LBE/LSBE prime contractors. However, for those projects that subcontract to LBE/LSBE firms, DC Water should consider implementing Subcontractor Payment Forms and Payment Verification Forms, similar to those being implemented for federally-funded projects, to accurately track subcontractor participation.	Response: In 2015, the DC Water Contract Compliance Officer became responsible for submitting the annual LBE/LSBE participation goals. Going forward, as part of the new reporting structure LBE and LSBE participation will be tracked in the compliance database maintained by the Compliance team. Beginning in January 2016, the Compliance team performs a review of all new procurement actions for the fiscal year to determine LBE/LSBE participation based on award annually. The team presents observations and recommendations for the LBE/LSBE program to Management in January for the preceding fiscal year. The DC Water Contract Compliance Officer then submits a report to the Governance Committee each March. LBE/LSBE reporting will be based on awards of all active projects and expenditures during the fiscal year. Responsible Party: DC Water Contract Compliance Officer Target Date: January 31, 2017





Business	Development Plan Internal Audit		
10.	Business Development Plan M/WBE Participation Updates	Recommendation	Management's Action Plan
	Observation Rating: Low		
	DC Water's Business Development Plan requires the Authority to submit quarterly M/WBE utilization reports to the EPA. However, these reports have not been formally submitted, as this is not required by the EPA. Additionally, MBE and WBE participation, based on award, must be reported annually on the EPA Form 5700-52A per EPA 33 CFR 40. DC Water has complied with this requirement, and also sends an explanation for failure to meet the Fair Share Objective at the close of any project for which M/WBE participation fell short (see observation 4). However, DC Water has not complied with the quarterly requirement in the Business Development Plan. Additionally, DC Water's Business Development Plan references EPA M/WBE outreach regulations found at 40 CFR Section 31. However, the EPA regulations regarding M/WBE utilization are actually found in 40 CFR Section 33.	DC Water should determine an appropriate frequency at which to report actual participation to the EPA based on regulations and revise the Business Development Plan, as applicable. This requirement should also be captured in the standard operating procedures that have been developed. The Business Development Plan and the SOP should capture any internal reporting requirements, both for participation by award and actual participation. Additionally, DC Water should update the EPA Section referenced in the Business Development Plan to reflect the relevant fair share objective and good faith effort requirements found in 40 CFR Section 33.	Response: DC Water plans on making recommendations concerning the Business Development Plan to the Board of Directors as part of the biannual reporting process. Among the recommendations to be made in the next report will be to align DC Water's reporting to the EPA from quarterly to the schedule indicated by the EPA. Responsible Party: Chief Procurement Officer Target Date: March 8, 2017





DETAILED OBSERVATIONS (CONTINUED)

Business Development Plan Internal Audit – Process Improvement Opportunity

Project Manager Training and Workload

As new procedures are implemented, DC Water should conduct compliance training for Project Managers. As Project Managers are responsible for reviewing and approving the pay applications, they will also be required to coordinate with the Grants Specialist and the Compliance Departments. We acknowledge that management has conducted several training as of the issuance of this report, and that the trainings will be extended to prime contractors and subcontractors as new contracts are procured.

Additionally, DC Water should conduct a workload management assessment to identify the quantity of contracts and level of effort of these contracts that are assigned to one Project Manager. If possible, this information should be benchmarked across industry standards.

DC Water is continually evaluating its processes, procedures, tools, and workloads of its project managers and will continue to make adjustments as needed.





APPENDIX A – RATING DEFINITIONS

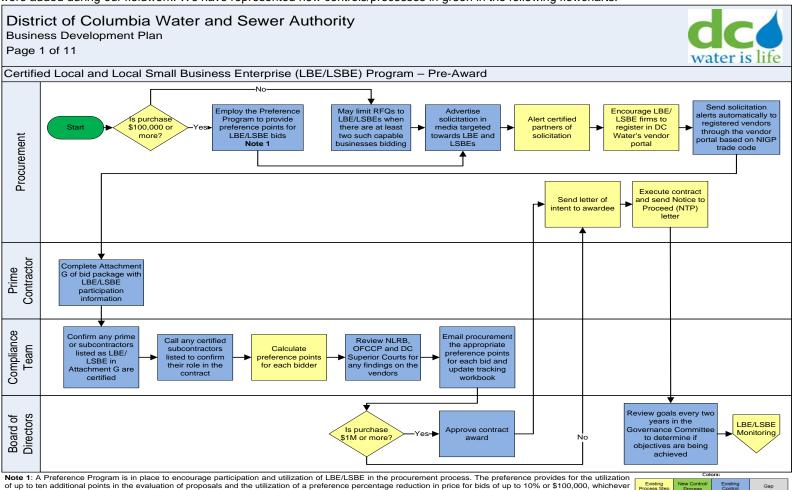
Observation Risk Rating Definitions		
Rating	Definition	
Low	Observation presents a low risk (i.e., impact on financial statements, internal control environment or business operations) to the organization for the topic reviewed and/or is of low importance to business success/achievement of goals. Action should be taken within 12 months (if related to external financial reporting, must mitigate financial risk within two months unless otherwise agreed upon).	
Moderate	Observation presents a moderate risk (i.e., impact on financial statements, internal control environment or business operations) to the organization for the topic reviewed and/or is of moderate importance to business success/achievement of goals. Action should be taken within nine months (if related to external financial reporting, must mitigate financial risk within two months).	
High	Observation presents a high risk (i.e., impact on financial statements, internal control environment or business operations) to the organization for the topic reviewed and/or is of high importance to business success/achievement of goals. Action should be taken immediately, but in no case should implementation exceed six months (if related to external financial reporting, must mitigate financial risk within two months).	





APPENDIX B - FLOWCHARTS

This internal audit was performed concurrently with management's initiative to update the Authority's Compliance process. As a result, new controls and processes were added during our fieldwork. We have represented new controls/processes in green in the following flowcharts.



is less. Preference consideration will be given for LBE/LSBE participation proportionate to the percentage of the LBE/LSBE's proposed participation on the contract.





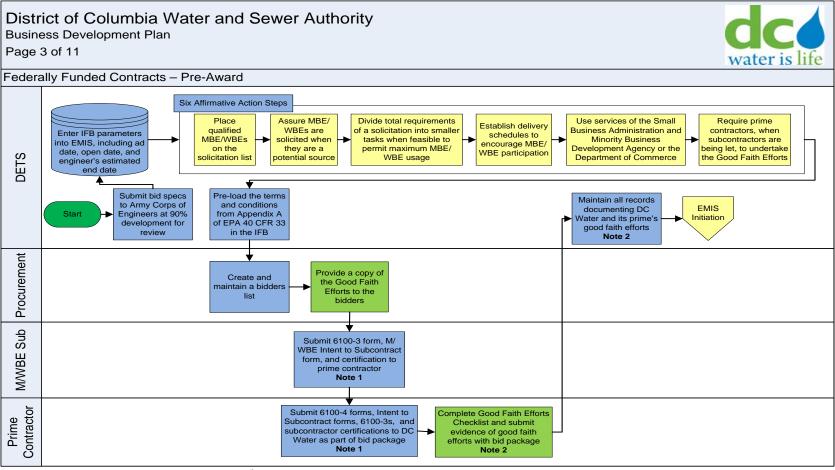
APPENDIX B – FLOWCHARTS (CONTINUED)

District of Columbia Water and Sewer Authority **Business Development Plan** Page 2 of 11 Certified Local and Local Small Business Enterprise (LBE/LSBE) Program - Monitoring Perform a review of Validate fields of the Verify prime all new procurement Manually load contractor tracking workbook as Is a certified LBE/LSBE s the prime actions for the fiscal tracking workbook participation applicable based on Pre-award subcontractor contractor year to determine with contract information from through being utilized? certified? LBE/LSBE information appropriate Procurement, prime, participation based certifying authority and subcontractors on award annually Compliance Verify actual Verify actual Confirm subcontractor Present observations participation with participation as participation with any and recommendations certified reported by prime for LBE/LSBE program prime contractors and subcontractors subcontractors utilizing certified to Authority executives annually agree subcontractors annually in January Present LBE/LSBE program report to the End Governance Committee in March Procurement Provide PO report for the fiscal year to the Compliance Colors:





APPENDIX B - FLOWCHARTS (CONTINUED)



Note 1: Intent to Subcontract forms were implemented March 8th, 2012. Contracts awarded before this date will not have this documentation.

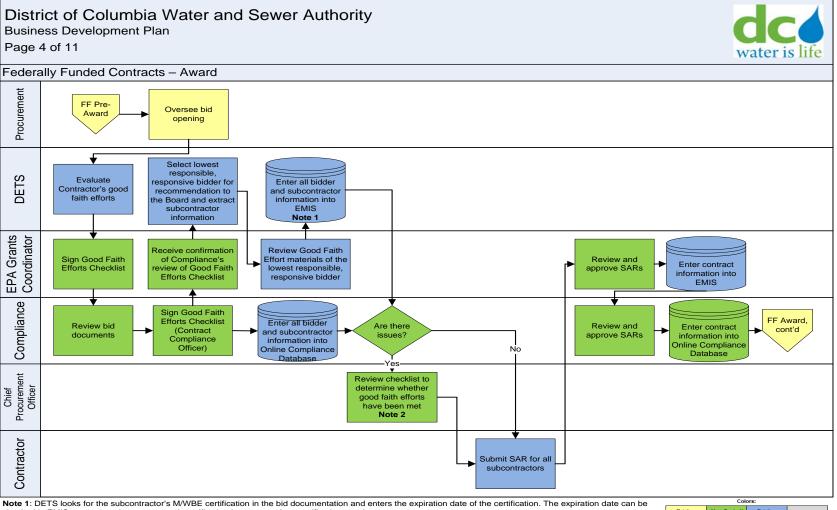
Note 2: What constitutes evidence of good faith outreach was not specified in EPA regulations. It is anticipated that new requirements will state that good faith effort documentation should include, but is not limited to, email logs, phone logs, electronic searches and communication, handouts, flyers or similar records.







APPENDIX B – FLOWCHARTS (CONTINUED)



Note 1: DETS looks for the subcontractor's M/WBE certification in the bid documentation and enters the expiration date of the certification. The expiration date can be checked in EMIS at any time, but no automatic notification is sent out when certifications expire.

Note 2: If the good faith efforts have not been met, the same review process will be performed for the next lowest bidder

Colors:

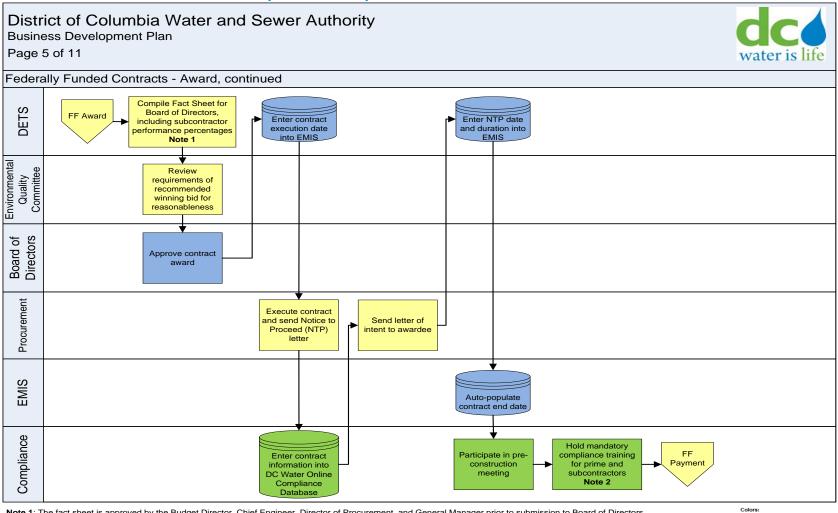
Existing Process Step Process Control Gap

Control Gap

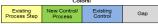




APPENDIX B - FLOWCHARTS (CONTINUED)



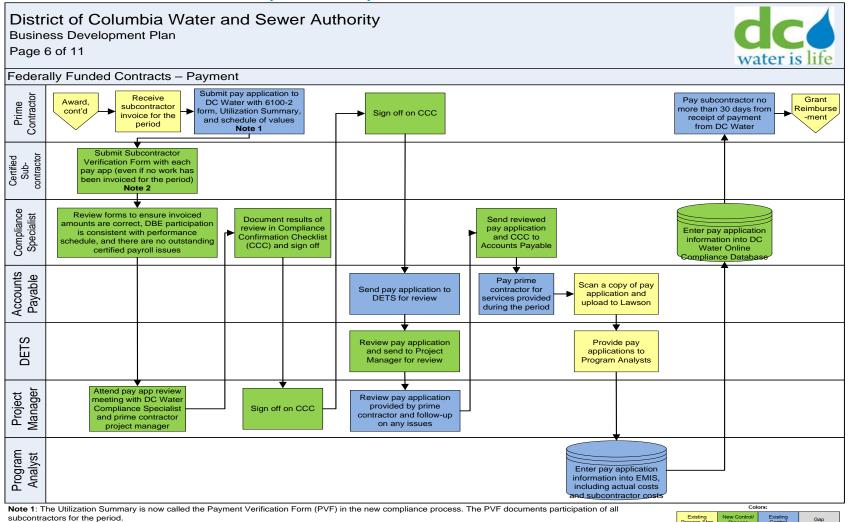
Note 1: The fact sheet is approved by the Budget Director, Chief Engineer, Director of Procurement, and General Manager prior to submission to Board of Directors. Note 2: The mandatory compliance training for prime and subcontractors is to take place within 30 days of NTP. Training includes Davis Bacon compliance, DBE subcontractor verification form and payment verification form usage, DC Water Works, and reporting through DC Water Online Compliance Database.







APPENDIX B – FLOWCHARTS (CONTINUED)



41

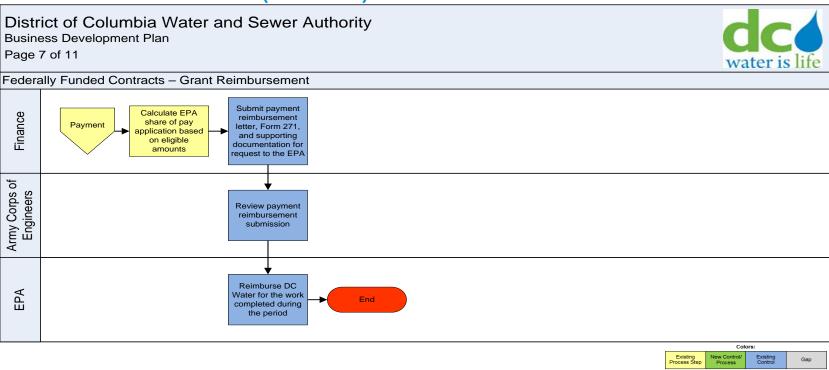
Note 2: 6100-2 Forms have been replaced by Subcontractor Verification Forms (SVFs) in the new compliance process. SVFs are submitted directly by subcontractor to

DC Water, instead of through the prime contractor. This allows for any issues reported by the subcontractor to remain confidential.





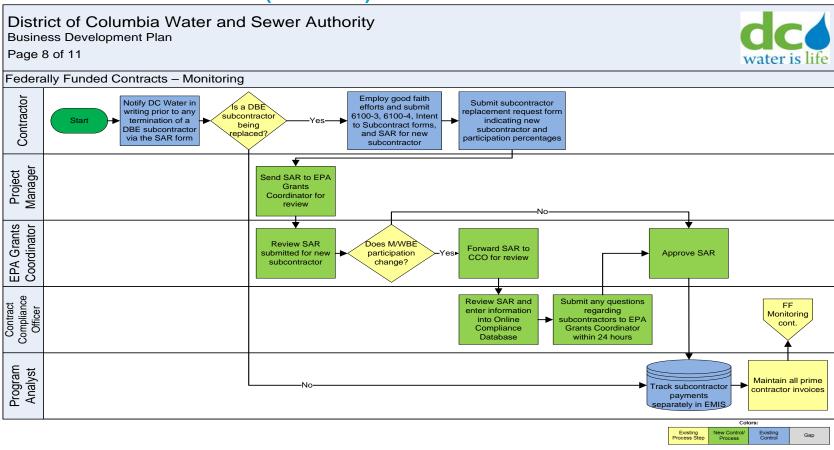
APPENDIX B – FLOWCHARTS (CONTINUED)







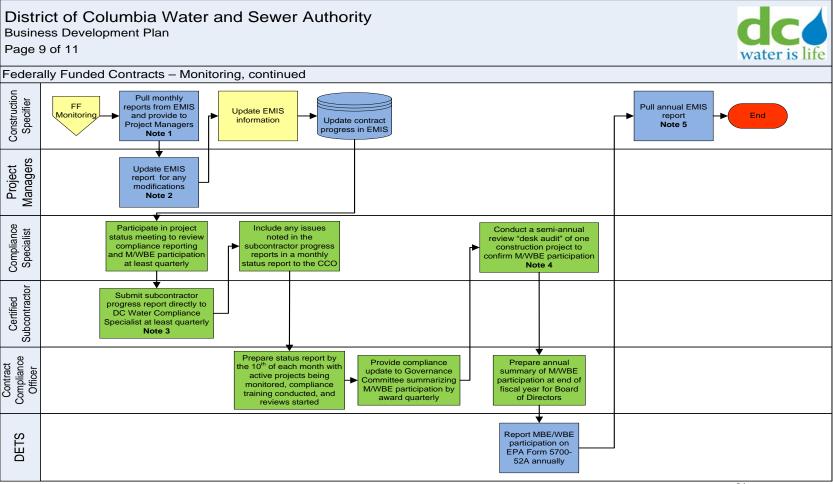
APPENDIX B - FLOWCHARTS (CONTINUED)







APPENDIX B - FLOWCHARTS (CONTINUED)



Note 1: Construction Specifier pulls a report of "Active" and "Working" contracts from EMIS as of month end to send to all Project Managers working with the contracts.

Note 2: Project Managers update the percent complete for each contract at this time.

Note 3: The subcontractor progress report is a confidential form that may be submitted by a certified subcontractor at any time.

Note 4: Findings are submitted to the Contract Compliance Officer, DC Water Project Manager, and the prime contractor for resolution if needed.

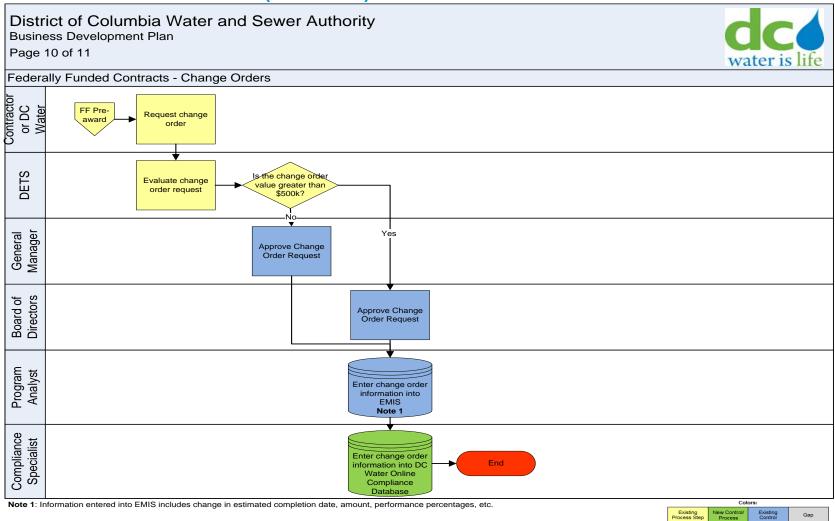
Note 5: A participation report is pulled from EMIS of all contracts that were worked on during the fiscal year. This shows the M/WBE participation percentages for each contract. These reports can also be pulled on an as-needed basis.







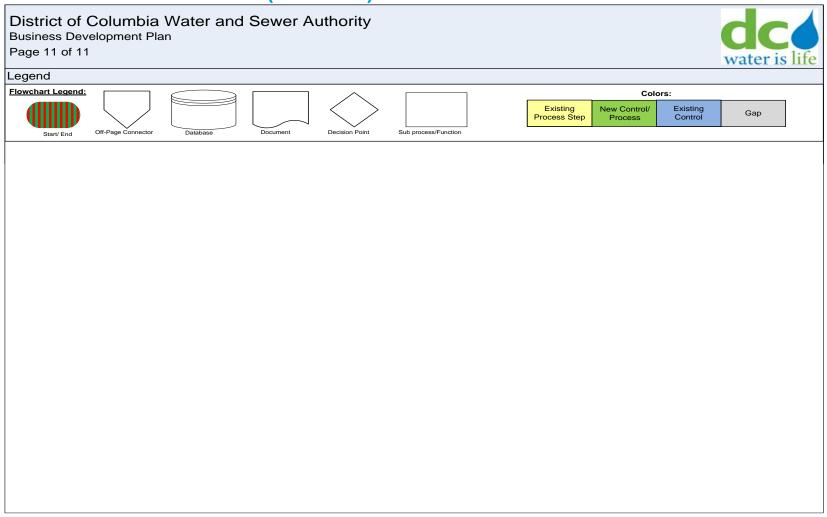
APPENDIX B - FLOWCHARTS (CONTINUED)



RSM



APPENDIX B – FLOWCHARTS (CONTINUED)





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Internal Audit Report Engineering – Contractor Management Phase 2

July 2016



Engineering – Contractor Management Phase 2 Internal Audit Report Issued: July 2016



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Engineering – Contractor Management Phase 2

Internal Audit Report Issued: July 2016



TRANSMITTAL LETTER

July 2016

The Audit Committee of DC Water 5000 Overlook Avenue, SW Washington, DC 20032

Pursuant to the approved 2016 internal audit plan for the District of Columbia Water and Sewer Authority ("DC Water" or the "Authority"), we hereby present the results of our Engineering – Contractor Management (Phase 2) Internal Audit. We will be presenting this report to the Audit Committee of DC Water at the next scheduled meeting on July 28th, 2016. Our report is organized in the following sections:

Executive Summary	This provides a summary of the observations identified during our internal audit of the Engineering – Contractor Management process.
Background	This provides an overview of the Contractor Management process.
Objectives and Approach	The internal audit objectives and focus are expanded upon in this section, as well as a review of the various phases of our approach.
Detailed Observations	This section provides a description of the observations noted during our work and recommended actions as well as management's response, responsible party, and estimated completion date.

We would like to thank the staff and all those involved in assisting the Internal Auditors in connection with this review.

Respectfully Submitted,

Internal Auditors



Internal Audit Report Issued: July 2016



EXECUTIVE SUMMARY

Background

Department of Engineering and Technical Services (DETS) and the DC Clean Rivers Project (DCCR) both utilize a team of external consultants and contractors to assist with the delivery of the Authority's ten-year \$3.8 billion Capital Improvement Plan. These third party agreements include specialties in the following major areas:

- Program Management
- Tunnel and Geotechnical Consultation
- · Design, Architecture, and Engineering
- Construction Management Consulting
- Design Builders
- Construction Contractors

Monitoring efforts consist of ensuring general compliance with each agreement, including but not limited to; change management, invoicing / payment protocols, insurance requirements, and periodic, regular project status and progress reporting.

To monitor compliance with these requirements the Authority utilizes their Program Management and Consultant Construction Management agreements noted above to execute a robust monitoring program, with ongoing reporting to key members of the Authority's management team. These monitoring efforts include random inspections, review of source documents (payroll records, etc.), and the review regular compliance reporting from contractors and subcontractors.

Overall Summary / Highlights

The observations identified during our assessment are summarized on the next few pages. We have assigned relative risk or value factors to each observation. Risk ratings are the evaluation of the severity of the concern and the potential impact on the operations of each item. Observations will require management action plans with estimated completion dates that will be included in the routine follow up of internal audit observations.

Objective and Scope

Our procedures were performed in accordance with the internal audit scope and approach set forth in our audit notification letter, dated March 9, 2016, and were limited to the procedures described therein.

Phase 1 of our work, performed during the prior fiscal year, consisted of the identification and design assessment of key controls as they relate to the Authority's Contractor Management processes. The primary objectives of our Phase 2 procedures, which were executed during the March 2016 to June 2016 timeframe, included the following:

- To update our understanding of the key monitoring controls in-place over high-risk outsourced program management, design or construction management functions
- To assess the operating effectiveness of key controls identified, through detailed testing of documentation within the following areas:
 - Weekly / monthly / quarterly / annual status reporting
 - Minority and Women owned Business Enterprise ("M/WBE") reporting and monitoring
 - o Regulatory compliance (Davis Bacon, Living Wage, etc.)
 - o Invoice and change order review and approval

The scope of this Contractor Management internal audit included the review of active vendor / contractor agreements being administered under the supervision of DETS and / or DCCR, as well as sample basis testing of the operating effectiveness of key monitoring controls in-place for ensuring contractual compliance with high risk processes governed by these outsourced agreements.

Summary of Observation Ratings (See Appendix A for definitions)

	Number of Observations by Risk Rating		
	High	Moderate	Low
Engineering – Contractor Management Phase 2	3	1	0

We would like to thank all DC Water team members who assisted us throughout this review.



Issued: July 2016



EXECUTIVE SUMMARY (CONTINUED)

Ratings and Conclusions

Following is a summary of all observations noted in the areas reviewed (see "Detailed Observations" section for additional information). Definitions of the rating scales are included in the Appendices.

	Summary of Observations	
Observations		Rating
1. INCONSISTENT N	ONITORING OF MINORITY AND WOMEN BUSINESS ENTERPRISE REQUIREMENTS	High
Through our detailed to (M/WBE) requirements	esting of invoice requests, we noted inconsistencies in the monitoring of Minority and Women Business Enterprise for individual projects:	
 13 of 21 invoice 	es reviewed with M/WBE requirements contained a Utilization Summary es reviewed with M/WBE requirements contained a Contractor's certification that payments were made reviewed with M/WBE requirements contained Subcontractor certifications that payments were received	
2. INCONSISTENT I	OCCUMENTATION OF INVOICE REVIEW BY PROJECT MANAGERS	High
6 of 23 invoices5 of 23 invoices	sting of invoice requests, we noted inconsistencies in the documentation of related Project Manager review: reviewed contained a fully completed checklist indicating the Project Manager's review of the invoice reviewed contained a partially completed checklist indicating the Project Manager's review of the invoice serviewed contained no checklist indicating the Project Manager's review of the invoice	
3. INCONSISTENT D	OCUMENTATION OF DAVIS BACON MONITORING	High
•	sting we noted inconsistencies in the level of documentation maintained to support Davis Bacon monitoring for 1 of 12 Davis Bacon wage requirements.	
4. INCONSISTENT U	SE OF PROJECT QUALITY PLANS	Moderate
Through our detailed te	sting we noted that Project Quality Plans (PQP) were not developed/obtained for 3 of 23 contracts reviewed.	

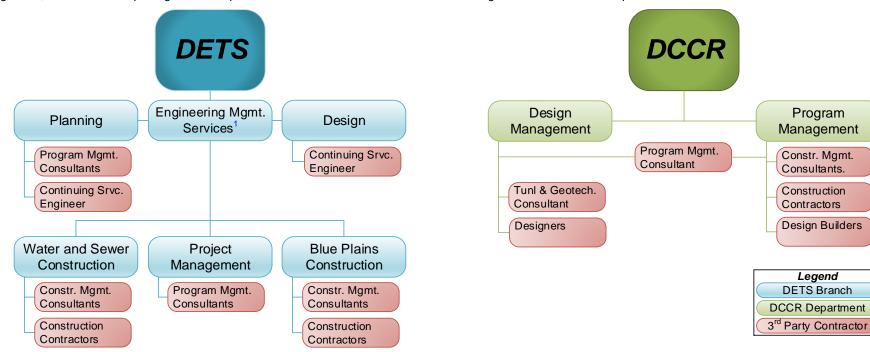


Internal Audit Report Issued: July 2016



BACKGROUND, OBJECTIVES AND APPROACH

To help effectively deliver its vision to *Provide world-class water and wastewater services as a leading steward of the environment*, The DC Water and Sewer Authority ("DC Water" or "The Authority") actively utilizes a multitude of external consultants and contractors to assist with executing a number of ongoing construction and renovation projects. These entities are an integral part in delivering the Authority's ten-year \$3.8 billion Capital Improvement Plan. The following depicts in general, the functional reporting relationships between these contractors and various management branches and departments within the DETS and DCCR.



¹The Engineering Management Services Branch assists with the review of contractor invoices and change orders, administers the Capital Improvement Plan, applicable project budgets, specifications, and is heavily involved in the procurement of Construction contracts and AE Agreements, including MBE/WBE participation.

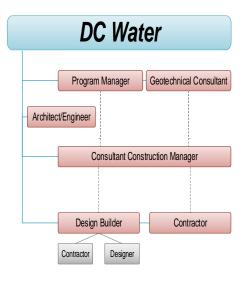


Internal Audit Report Issued: July 2016



BACKGROUND, OBJECTIVES AND APPROACH (CONTINUED)

Background (continued)



Program Managers

Program Management Consultants assist the Authority in the planning, procurement, management and administration of individual design, construction management and construction contracts that the Authority has executed with other parties. This may include preparation of unified and coordinated designs, criteria, guidance and instructions as well as together with technical and quality review of the work provided by other parties. Program Managers are also responsible for performing needs and risk assessments, ongoing monitoring, and reporting to the Authority. Their responsibilities also include the collection of data and the related monitoring and reporting of contractors' compliance with the Authority's workforce related goals described below.

Tunnel and Geotechnical Consultant

Much like a Program Manager, DCCR's Tunnel and Geotechnical Consultant is responsible for assisting the Authority in the planning, procurement, management and administration of individual design, construction management and construction contracts that the Authority has executed with other parties. This consultant is also responsible for coordinating with the DCCR Program Manager to form the Program Consultants Organization to assist with the management and execution of the Authority's Long Term Control Plan.

Designers, Architects, and Engineers

Designers, Architects and Engineers provide services for the preparation of contract documents to be used for bidding and procurement of construction contracts. They may also be responsible for preparing construction cost estimates and schedules. During the bidding process, these consultants may assist with responses to inquiries, conducting the pre-bid conference, and reviewing bids to provide the Authority with recommendations regarding the responsiveness and responsibility of bidders. During construction, these consultants are responsible for

responding to requests for information, preparing contract change requests, and advising the Authority on discovered ambiguities, omissions, or inconsistencies in the contract documents.

Consultant Construction Managers

Consultant Construction Managers are responsible for general construction management, review of shop drawings and other contractor submittals, preparation and negotiation of Change Orders, resident engineering and inspection services, quality assurance, coordination of materials testing, claims avoidance, and claims analysis and management throughout the construction project. Their responsibilities also include assisting the Program Manager with the collection of data and related monitoring and reporting of contractors' compliance with the Authority's workforce related goals described below.

Design Builders

Design Builders are responsible for the design and execution of work as outlined in their contract documents. This may include engineering, construction, testing, training, placement, and startup of items specified within the contract documents.

Construction Contractors

Construction contractors are responsible for completing all work as specified or indicated in the contract documents prepared by Designers, Architects, and/or Engineers. This may include construction, testing, training, placement, and startup of items specified within the contract documents.



Internal Audit Report Issued: July 2016



BACKGROUND, OBJECTIVES AND APPROACH (CONTINUED)

Background (continued)

In addition to, or in concert with the specific technical requirements enumerated within their agreements, all contracted parties are also responsible for adhering to and reporting on the status of the contractor's compliance with the Authority's workforce related goals, including but not limited to the Davis Bacon Act, Minority and Women Owned Business Enterprise participation, DC Resident Hiring Goals, and the DC Living Wage Act. To monitor compliance with these requirements the Authority utilizes their Program Management and Consultant Construction Management agreements noted above to execute a robust monitoring program, with ongoing reporting to key members of the Authority's management team. These monitoring efforts include random inspections, review of source documents (payroll records, etc.), and the review regular compliance reporting from contractors and subcontractors. Examples of certain requirements subject to the Authority's monitoring program are included below:



The Davis Bacon Act establishes minimum wage rates and fringe benefits based on geographical location for mechanics and laborers utilized under federally funded or assisted contractor and subcontractor agreements in excess of \$2,000. Contractors not in compliance with the payment requirements are subject to penalties, restitution to underpaid employees, and additional future monitoring.

For projects funded in part by the EPA, the Authority has established its Fair Share Objective for Minority and Women Business Enterprises (M/WBE), and requires all contractors under such projects to also comply with the agreed-upon objectives. These include 28% participation of Minority Business Enterprises and 4% participation of Women Business Enterprises for professional services agreements, and 32% and 6%, respectively for construction services agreements.





The DC Living Wage Act also establishes an overall minimum wage for DC Government contractors and recipients of government assistance of greater than \$100,000. Although currently independent of the District Government, the Authority has adopted this act and applied to many of its contracts.

The DC Mayor's Order 93-138 establishes minimum resident hiring requirements for new hires and apprenticeships. Although currently independent of the District Government, the Authority has adopted this act and applied to many of its contracts. For future contracts, the Agency is also in the process of developing a more comprehensive goal that will also include areas serviced outside the geographical limits of the District.



Internal Audit Report Issued: July 2016



BACKGROUND, OBJECTIVES AND APPROACH (CONTINUED)

Objectives and Approach

This internal audit of the Authority's vendor / contractor management function is the second phase of a three phased audit plan encompassing the Authority's engineering and construction function. The purpose of the first phase of our procedures was to obtain an understanding of existing policies and procedures, key controls in place, and to assess the design effectiveness of those controls identified. Our report related thereto was presented to the Audit Committee on 07/23/2015.

Objectives

The primary objectives of our Phase 2 procedures included the following:

- To update our understanding of the key monitoring controls in-place over high-risk outsourced program management, design or construction management functions
- To assess the operating effectiveness of key controls identified, through detailed testing of documentation within the following areas:
 - Weekly / monthly / quarterly / annual status reporting
 - o Minority and Women owned Business Enterprise ("M/WBE") reporting and monitoring
 - o Regulatory compliance (Davis Bacon, Living Wage, etc.)
 - Invoice and change order review and approval

Approach

Our audit approach consisted of the following phases:

Updating our Understanding of the Key Controls Identified

The purpose of this phase was to update our understanding of monitoring controls in-place over high-risk outsourced program management, design or construction management functions. This phase included interviews with management and project managers as applicable.

(Approach section continued on the following page)



Internal Audit Report Issued: July 2016



BACKGROUND, OBJECTIVES AND APPROACH (CONTINUED)

Objectives and Approach (continued)

Detailed Testing

The purpose of this phase of our work was to test the operating effectiveness of key controls through the following procedures:

- Selected a diverse sample of the Authority's managed contracts under Water & Sewer, Blue Plains and Clean Rivers, which included the following services:
 - o Program Management
 - Project / Construction Management
 - Architect / Engineering Services
 - o Construction Services
 - o Other vendors as applicable

The following is a listing of contracts sampled and subject to the testing procedures outlined herein.

Contract # / EPA Grant #	Title	Contractor	Contract Type	Division
120170 / C110027-50	Filtrate Treatment Facility	PC Construction Company	Construction	DETS
120080	Small Diameter Water Main Replacement 8	Capitol Paving of DC, Inc.	Construction	DETS
130050 / FS9938-1412	Small Diameter Water Main Replacement 9a	Judlau Contracting, Inc.	Construction	DETS
140010 / Eligible	Small Diameter Water Main Replacement 10b	Capitol Paving of D.C., Inc.	Construction	DETS
140040	Small Local Sewer Rehabilitation 4 (GA01/IF01)	Insituform Technologies, LLC	Construction	DETS
100110	Potomac Interceptor Long Tern Odor Control Abatement-Virginia	Ulliman Schutte Construction , LLC	Construction	DETS
140070 / 993812-11	Large Valve Replacement Contract 11R	Flippo Construction Co., Inc.	Construction	DETS
130240	Emergency Sanitary Sewer Combined & Stormwater Rehab	Anchor Construction Corporation	Construction	Sewer Services
150010	Sanitary Sewer Lateral Replacement FY15-FY18	Anchor Construction Corporation	Construction	Sewer Services
130090	Division Z - Poplar Point Pumping Station	E.E. Cruz & Company, Inc.	Construction	DCCR
100120	Biosolids Management Programs, Main Process Train	Pizzagalli / CDM JV	Design-Build	DETS
120020	Division B - Tingey Street Diversion Sewer	Forest City	Design-Build	DCCR
DCFA-472-WSA	Consulant Services	David McLaughlin	Management Consulting	DETS
DCFA-456-WSA	Asset Management Program	CH2M Hill	Design / Engineering	DETS
DCFA-412-WSA	Enhanced Nitrogen Removal Facilities	CH2M Hill	Design / Engineering	DETS
DCFA-437-WSA	Basic Ordering Agreement - X	Hazen and Sawyer, P.C.	Design / Engineering	DETS
DCFA-470-WSA	BOA XVI Infrastructure and Facilities	O Brien & Gere Engineers	Design / Engineering	DETS
DCFA-445-WSA	Division Z - Poplar Point Pumping Station	O Brien & Gere Engineers	Design / Engineering	DCCR
DCFA-449-WSA	Wastewater Treatment Program	AECOM Services of DC	Program Management	DETS
DCFA-439-WSA	Engineering Program Management Consultants 3C	Malcolm Pirnie	Program Management	DETS
DCFA-468-WSA	Sewer Program Management Consultant	Arcadis District of Columbia, PC	Program Management	DETS
DCFA-420-WSA	Program Managemet	Greeley&Hansen	Program Management	DCCR
DCFA-464-WSA	Construction Management 4F	URS corporation	Construction Management	DETS
DCFA-457-WSA	Division I - Main Pumping Station	Belstar, Inc.	Construction Management	DCCR

(Approach section continued on the following page)



Internal Audit Report Issued: July 2016



BACKGROUND, OBJECTIVES AND APPROACH (CONTINUED)

Objectives and Approach (continued)

- For the contracts selected, we developed a detailed script designed to test key controls currently used by management to facilitate the Authority's oversight and monitoring of outsourced construction management functions. The areas subjected to our test procedures included:
 - Weekly / monthly / quarterly / annual status reporting
 - For the contracts selected, we validated that progress meetings to discuss current project status and current issues/resolutions were held between key project team members for a sample of months. We also validated that Project Risk Management programs were developed for Program Management contracts, and Project Quality Plans were developed for all contracts as applicable.
 - o Minority and Women owned Business Enterprise ("M/WBE") reporting and monitoring
 - For the contracts selected, we verified that a sample of invoices/pay applications contained appropriate documentation to support the ongoing tracking of M/WBE utilization. Appropriate supporting documentation was determined to include a utilization summary, a contractor's certification that payment had been made to subcontractors, and subcontractor certifications that payment had been received.
 - o Regulatory compliance (Davis Bacon, Living Wage, etc.)
 - For the contracts selected, we verified that a sample of months contained appropriate documentation to support the ongoing monitoring of Davis Bacon Act living wage determinations. We reviewed tracking methodologies utilized by both the Authority and third parties engaged to monitor living wage requirements in order to verify that a sample of certified payroll records were obtained and compared to individual contract wage determinations. In addition, we verified that the sampled payroll items were in compliance with DC Living Wage Act.
 - Invoice and change order review and approval
 - For the contracts selected, we verified that appropriate documentation was provided to support costs presented for a sample of invoices/pay applications and change orders. We also verified that evidence was maintained to support Project Manager review for specific invoice requirements, and various levels of management approval for both invoices and change orders.
- For each contract / sampling item selected, we requested and inspected source documentation in date range from August 2015 to May 2016 in an effort to determine the current operating effectiveness of controls, utilizing the test scripts developed as a part of the previous step.

<u>Reporting</u>

At the conclusion of this internal audit, we summarized our observations related engineering vendor / contractor management at DC Water and reviewed the results of our testing with management.





DETAILED OBSERVATIONS

Engineeri	ng – Contractor Management Phase 2 Internal Audit		
1.	Inconsistent Monitoring of Minority and Women Business Enterprise Requirements	Recommendation	Management's Action Plan
	Observation Rating: High		
	Through our detailed testing of invoices, we noted inconsistencies in the level of documentation required to support monitoring of Minority and Women Business Enterprise (M/WBE) requirements for individual projects. In an effort to support the Authority's dedication to promoting the use of M/WBE and its commitment to the EPA for federally assisted projects, many RFQ, RFP, and IFB solicitations include a minimum goal for M/WBE subcontractor utilization percentage, or scoring preference for respondents that commit to subcontracting with M/WBE partners. In order to deliver on these commitments, it is critical that DC Water establish monitoring controls to ensure that contractors are on track to meet M/WBE utilization requirements. During Phase 1 of this assessment, we noted that DC Water's strongest established practice for M/WBE utilization monitoring included collection of the following items from contractors with each invoice request: • M/WBE Utilization Summary, detailing all MBE and WBE subcontract amounts, amounts paid to date, and overall utilization percentage compared to contract requirements • Signed certification from the Contractor that all M/WBE amounts reported are correct, and that timely payments have been provided to all subcontractors • Signed forms from Subcontractors, certifying that payment has been received (continued)	We noted that management is currently in the process of developing a comprehensive Standard Operating Procedure (SOP) related to the assignment of M/WBE monitoring responsibilities. In conjunction with the development of this SOP, we recommend management establish a consistent requirement for monitoring M/WBE utilization. This SOP should establish minimum documentation requirements for all contracts with M/WBE participation. By requiring all contractors to provide the level of detail to comply with the most stringent requirements, the Authority will help ensure that all reporting requirements are achieved. In addition, this will help provide management with greater assurance of accurate reporting and greater visibility into overall M/WBE utilization, regardless of contract type.	Response: Of the 21 contracts with MBE/WBE goals reviewed by Internal Audit, 20 were monitored by Department of Engineering and Technical Services (DETS), and 1 is monitored by Department of Water Services (DWS). • As corrective action for remedy of the noted findings, the following steps must be taken: Implement standard procedures for the establishment of a standard invoice format for both construction contracts and A&E agreements. • Provide training to internal and external staff (PM's, CM's, DETS and DWS Management), and contractors to ensure proper documentation of payments by contractors to subcontractors for accuracy and completeness. (continued)



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DETAILED OBSERVATIONS (CONTINUED)

Engineering – Contractor Management Phase 2 Internal Audit

1. <u>Inconsistent Monitoring of Minority and Women Business</u> Enterprise Requirements - continued

Individual contracts and/or EPA requirements dictate the information that is required for M/WBE reporting and monitoring purposes, and not all three tiers of the supporting documentation noted above may be required in all cases; however, an inconsistent approach to M/WBE monitoring may expose the Authority to the risk of noncompliance with utilization goals, which could result in delay or denial of EPA funding for applicable projects.

The table below summarizes the level of documentation received for the 21 sample invoices we reviewed with contractual M/WBE requirements:

Documentation	Received	Not Received
Utilization Summary	19	2
Contractor Certification	13	8
Subcontractor Certifications	1	20*

*6 of these 20 invoices reviewed contained a subcontractor certification of amount invoiced to date; however, the certification did not include amount *received* to date. As a subcontractor may not have received payment for work invoiced we noted an exception.

Management's Action Plan - continued

 Detailed document reviews at each level (PM, Supervisor, Manager, Compliance) to eliminate the risk of noncompliance with MBE/WBE utilization requirements.

As such, DETS has developed a draft comprehensive MBE/WBE Compliance Monitoring Standard Operating Procedures (SOP) for all contracts with MBE/WBE Requirements. In partnership with DETS, DWS will also adopt this, or a similar SOP. Although the draft SOP is currently pending formal completion and acceptance, the SOP has been informally implemented as of June 1, 2016. The SOP includes collection of the following documents:

- Standardized, single page utilization form, which includes current subcontractor utilization totals and corresponding Contractor certification, which shall be collected with all construction invoices
- Standardized, Subcontractor Verification Form, signed by the subcontractor which includes subcontractor invoice amount (job to date and current) and payments received (job to date and current), which shall be collected with all construction invoices

DETS Responsible Party: Engineering Management Services Branch, Rhonda Green, Grants Manager, MBE/WBE

DETS Completion Date: All DETS users received formal training as of December 5, 2016

DWS Responsible Party: Construction Contract Management Branch

Wali Haider, Construction Project Manager

DWS Completion Date: All DWS users received formal training as of December 15, 2016





Engineering	- Contractor Management Phase 2 Internal Audit		
	consistent Documentation of Invoice Review by Project lanagers	Recommendation	Management's Action Plan
Ol	bservation Rating: High		
in Pr by co In lin un co mo uti rev en pa	hrough our detailed testing of invoices, we noted inconsistencies the level of supporting documentation obtained to facilitate roject Manager (PM) review. Further, we noted checklists used by PMs to document their invoice review procedures varied in complexity, and were not completed in a consistent manner. In a multi-tiered invoice review process, PMs serve as the primary the of defense in the identification of inaccurate data, increasonable charges, or billings that do not reflect actual onsite conditions. PMs interact daily with contractors and are often the input informed with regards to the status of project activities, tilization of subcontractors, project changes, etc. As such, their eview, supported by sufficient source documentation, is critical to insure that all requirements have been met prior to release of anyment. In ack of a consistent mechanism (i.e. checklist) to document rocedures and results of Project Manager level invoice review can lead to instances of insufficient supporting documentation and anyment for inaccurate or unreasonable charges. (continued)	We recommend that Project Mangers utilize standard checklist(s) in their review of invoice requests. In addition, we recommend the Authority review existing checklists to determine the appropriateness and completeness of the items within those checklists. Further, we recommend PMs formally document the results of their review procedures via signature / initial next to each checklist step. Should a step not be applicable, written acknowledgement by the PM on the face of the checklist should be formally documented. This will help ensure that all aspects of an invoice have been reviewed, and required supporting documents have been obtained.	Response: We agree with the observation and recognize the need for a replicable process for Project Manager invoice review. We concur with Internal Audit's recommendation that the Authority require all PM/Construction Managers (CM) to utilize standard checklist(s) in the review of consultant and construction contractor invoices. As a result of the audit observation, DETS has created two invoice review checklists incorporating the recommendation of the audit: (continued)



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DETAILED OBSERVATIONS (CONTINUED)

Engineering – Contractor Management Phase 2 Internal Audit

2. <u>Inconsistent Documentation of Invoice Review by Project</u> Managers - continued

The table below summarizes Project Manager checklist utilization as observed through our review of 23 invoice tested:

Documentation	Received
Fully Completed Checklist	6
Partially Completed Checklist	5
No Checklist	12
Of Total	23

In further support of the need for consistent and complete invoice review procedures, our testing revealed that 2 of 23 invoices contained Subconsultant indirect labor rates that were not in compliance with executed contract documents.

Management's Action Plan - continued

- 1. The existing PM checklist to be used for review of A/E agreement invoices has been revised to more accurately reflect data reviewed, improve quality control, sustain accountability, and reduce or eliminate errors
- A proposed CM checklist to be used for review of construction contract invoices has been created to establish consistency and accountability by the CM

DETS and DWS have uniformly instituted the use of the PM and CM checklist as of August 8, 2016. Training of PM/CM's was conducted by November 30, 2016 allowing for PM/CM feedback and subsequent finalization of the checklists.

DETS Program Analysts / DWS Contract Management will verify that all invoices are reviewed by the PM or CM using the checklists and insure the checklists are fully completed following PM/CM review. The Program Analysts will ensure deficiencies found in the review of the completed checklists are brought to the attention of the PM or CM for correction immediately.

The PM/CM checklists will be reviewed quarterly and revised as contract conditions, policies and procedures change.

DETS Responsible Party: Engineering Management Services Branch, Paul Guttridge, Supervisor Project Control

DETS Completion Date: All DETS users received formal training as of October 31, 2016

DWS Responsible Party: Construction Contract Management Branch

Wali Haider, Construction Project Manager

DWS Completion Date: All DWS users received formal training as of November

14, 2016



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Engineer	ing – Contractor Management Phase 2 Internal Aud	dit	
3.	Inconsistent Documentation of Davis Bacon Monitoring	Recommendation	Management's Action Plan
	Observation Rating: High		
	Through our detailed testing we noted inconsistencies in the level of documentation maintained in support of ongoing monitoring for Davis Bacon wage compliance. As noted in the background section of this report, the Davis Bacon Act (DBA) establishes minimum wage rates and fringe benefits based on geographical location for mechanics and laborers utilized under federally funded or assisted contractor and subcontractor agreements in excess of \$2,000. As the contract owner, DC Water is responsible for monitoring contractor compliance with Davis Bacon wages. This monitoring is performed either by employees of the Authority, or by contracted third parties (for projects deemed "significant"). 12 of the contracts selected for testing were subject to Davis Bacon wage requirements. Of the 12 contracts, 8 were monitored internally by employees of the Authority, and 4 were monitored by a third party. For 1 of the 4 contracts monitored by a third party, sufficient documentation was not provided to the Authority to support that ongoing monitoring activities were performed by the third party. (continued)	When third parties are used for Davis Bacon monitoring, we recommend the Authority require the third parties to maintain documentation of all wage reviews performed. This effort could be facilitated through the dissemination of a Memorandum of Understanding detailing the level of documentation the third party is expected maintain. This will allow the Authority to more easily verify that ongoing monitoring is performed throughout the life of the project, and will allow the Authority with historical records should the need arise to assess past contractor and subcontractor compliance.	Response: DC Water agrees with the need for third parties responsible for monitoring contracts for Davis Bacon compliance to maintain necessary records and documentation of its prevailing wage monitoring efforts. This includes retaining copies of all payroll reports collected, conducting company site visits and presentation of findings as a result of all site visits conducted. In the short term, DC Water will disseminate a copy of its internal monitoring procedures with the applicable third parties and request that they adopt a similar process, prior to the start of their assigned task. We agree with the recommendation to disseminate a Memorandum of Understanding between DC Water and the appropriate third parties, when the use of them is deemed necessary for long term objectives. This will clearly convey performance expectations to third parties and insure contract compliance documentation is accurate for current and archivedl contracts. Moreover, third parties will be asked to submit monthly summary reports to DC Water concerning their monitoring activities and promptly share any findings of non-compliance with the appropriate DC Water Project Manager and the DC Water Contract Compliance Officer.



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Engin	Engineering – Contractor Management Phase 2 Internal Audit		
3.	Inconsistent Documentation of Davis Bacon Monitoring	Recommendation	Management's Action Plan
	The monitor for the Biosolids Management, Main Process Train (Contract #100120) project provided RSM with a DBA review procedures memorandum as well as examples of prior period certified payroll records, but no documentation was provided to us or the Authority evidencing the third party monitor actually performed a regular review of certified payroll records to the applicable DBA rates.		Responsible Party: Department of Procurement, Korey Gray, DC Water Contract Compliance Officer Completion Date: November 15, 2016
	Consistently documenting the results of third party DBA compliance reviews will allow the Authority to verify that third parties are performing monitoring activities in accordance with the Authority's expectations. Maintaining this documentation will also allow both third parties and the Authority to maintain historical records of past contractor and subcontractor compliance.		





Engineer	ing – Contractor Management Phase 2 Internal Au	dit	
4.	Inconsistent Use of Project Quality Plans	Recommendation	Management's Action Plan
	Observation Rating: Moderate		
	Through our detailed testing we noted that Project Quality Plans (PQP) were not developed/obtained for 2 of 23 contracts reviewed. Both contracts noted are managed/monitored by the Department of Water Services (DWS). Project Quality Plans are developed by Program and Construction Managers, as well as Construction Contractors in an effort to document the procedures by which the contractor will consistently deliver quality submittals and work in accordance with contract documents and DC Water expectations. PQPs typically include the following: Organizational Chart of Contractor Roles and Responsibilities related to quality management, assigned to specific Contractor staff Contractor's internal submittal review process Procedures for internal inspection / audit of quality Inspection / audit templates and checklists QA/QC reporting By not consistently requiring vendors to complete formal Project Quality Plans, the Authority increases its risk of receiving submittals and work that are not in accordance with contract documents and/or the Authority's quality expectations.	We recommend the Authority require all vendors/contractors for design, construction, and program/construction management services prepare formal Project Quality Plans which at a minimum, detail the vendor's planned procedures for internal quality management and reporting. In addition, and in conjunction with Observation #2, we recommend the Authority require all vendors/contractors to provide regular reporting of quality monitoring and results with each application for payment.	Response: We concur with the Internal Audit recommendation to require that contractors submit a formal Project Quality Plan and provide regular reporting of quality monitoring and test results with each pay application. In accordance with the auditor's recommendation, DWS will: • Develop a checklist to document jobsite material and test requirements per contract specifications for use by DWS field representatives monitoring emergency projects • Require contractors to submit initial Project Quality Plans customized to accommodate the various demands of emergency projects • Require contractors, to provide regular reporting of quality monitoring and test results to accommodate emergency projects DWS Responsible Party: Construction Contract Management Branch, Wali Haider, Construction Project Manager Completion Date: September 27, 2016





APPENDIX A – RATING DEFINITIONS

	Observation Risk Rating Definitions		
Rating	Definition		
Low	Observation presents a low risk (i.e., impact on financial statements, internal control environment or business operations) to the organization for the topic reviewed and/or is of low importance to business success/achievement of goals. Action should be taken within 12 months (if related to external financial reporting, must mitigate financial risk within two months unless otherwise agreed upon).		
Moderate	Observation presents a moderate risk (i.e., impact on financial statements, internal control environment or business operations) to the organization for the topic reviewed and/or is of moderate importance to business success/achievement of goals. Action should be taken within nine months (if related to external financial reporting, must mitigate financial risk within two months).		
High	Observation presents a high risk (i.e., impact on financial statements, internal control environment or business operations) to the organization for the topic reviewed and/or is of high importance to business success/achievement of goals. Action should be taken immediately, but in no case should implementation exceed six months (if related to external financial reporting, must mitigate financial risk within two months).		



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