

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Board of Directors

DC Retail Water and Sewer Rates Committee

Tuesday, September 26, 2017

9:30am

- FOLLOW-UP-ITEMS DC Retail Water and Sewer Rates Committee Meeting (July 25, 2017)
 - 1.) Review of unmetered fire service lines and their financial impact **Status**: (November 2017).
 - 2.) Review of combined domestic and fire service lines and their financial impact **Status**: (November 2017).
 - 3.) Present a copy of the customer bill to the Committee before the new VertexOne Customer Billing System go-live date (**Chairperson**). **Status**: (November 2017).
 - 4.) Brief the Committee on the Clean Rivers IAC lawsuit (Chairperson) Status: (September 2017).

^{*} 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)(1); legal, confidential or privileged matters under D.C. Official Code § 2-575(b)(8); 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.



Waste Hauler and Industrial High Strength Waste Fees

Presented to:

DC Retail Water and Sewer Rates Committee September 26, 2017



- DC Water charges:
 - Waste Hauler Fees allow for unlimited disposal of waste sources within the Blue Plains service area at the Blue Plains Septage Receiving Facility
 - Fees have not been adjusted since 2012 and are not keeping up with costs
 - Industrial High Strength Fees are proposed for Industrial Users discharging high strength waste
 - Fees are authorized, but have never been charged
- In June 2017, DC Water hired Raftelis Financial Consultants, Inc.
 (RFC) to evaluate these fees, and to make recommendations



Waste Hauler Fees



Background

Waste Hauler Fees

- Currently allows unlimited disposal of waste sources within the Blue Plains service area at the Blue Plains Septage Receiving Facility
- In 2016, waste categories included grease trap waste (10.6 million gallons), septage/portable toilet waste (3.3 million gallons), and groundwater/surface runoff (5.6 million gallons)
- In 2016, DC Water received approximately 20 million gallons of hauled waste from 33 permitted waste haulers
 - DC Water estimated 2016 projected revenue of \$993,000 (based on RFC 2017 Waste Hauler Fee Study) and recovered about \$473,000
- DC Water currently charges an annual permit fee per vehicle based on truck capacity (\$160-\$14,640)
 - This was last updated in 2012 and matched WSSC rates
 - Now our rates are about 40% lower than current WSSC rates



water is life Hauled Waste Characterization

Below are general waste categories accepted by DC Water (results in mg/liter) as compared with plant influent

Waste Type	# Samples	Chemical Oxygen Demand (COD)	Total Phosphoru s (TP)	Total Kjeldahl Nitrogen (TN)	Total Suspended Solids (TSS)	Volatile Suspended Solids (VSS)
Grease	21	30,700	59	560	21,600	16,000
Toilets	8	13,500	258	3,340	8,460	5,270
Septage	4	3,830	43	80	1,220	1,030
GW/SW*	1	58	<1	1.3	81	27
Comparison with most typical influent sample result:						
Influent	1	474	4.6	44.6	288	262

^{*}GW/SW – Ground Water/Storm Water



Why Restructure Waste Hauler Fees

- High Strength: Loads of pollutants received are very high compared to regular strength influent
- High Treatment Cost: Cost is not fully recovered
- High Cost Differential: Haulers with fewer loads paying a higher cost for service than haulers with many loads (in some cases may be paying more than actual cost)
- A revised structure based on volume would allow DC Water to fully recover cost of service without overcharging haulers with fewer loads



Proposed Waste Hauler Fee Structure

- FY 2016 selected as the test year which represents the most recent audited financial reporting
- RFC's 2017 Waste Hauler Fee Study consistent with industry standards and practices based on allocation of operating costs (with overhead) and capital costs
- Unit costs derived to determine cost associated with treating a pound of pollutant in wastewater were derived by dividing the annual allocated costs by the annual loadings for each pollutant

Units of Service	Flow	cBOD	TN	TP	Solids
Annual Loading	102,930,000	156,346,239	34,064,344 lbs/yr	3,469,537	234,330,000
Totals	kgals/yr	lbs/yr		lbs/yr	lbs/yr
Annual Total Costs (w OH)	\$168,267,672	\$21,029,567	\$50,097,071	\$15,694,900	\$61,675,410
Unit Cost	\$1.635	\$0.135	\$1.471	\$4.524	\$0.263
(w OH)	Per kgal	Per lb	Per lb	Per lb	Per lb

- Waste Hauler fee includes:
 - Base cost component cost of treating normal strength waste
 - High strength component derived from unit costs using DC Water (grease trap) and EPA characterization data (septage)



Proposed Waste Hauler Fees

- High Strength Waste \$69.71/kgal (per thousand gallons) round to \$70/kgal or \$0.07/gallon
 - High strength waste to include grease traps and interceptors, septic tank, sewage ejectors, portable toilets, and other concentrated wastes
- Normal/Low Strength Waste base fee rate of \$3.08/kgal (per thousand gallons) – round to \$3/kgal or \$0.003/gallon
 - Normal/low strength waste to include unconcentrated domestic, groundwater, and surface runoff

Custom Fees

- May be used for commercial/industrial sources and other special waste hauler categories (e.g., landfill leachate, food waste, etc.)
- Calculated based on actual loadings using unit costs added to the base fee



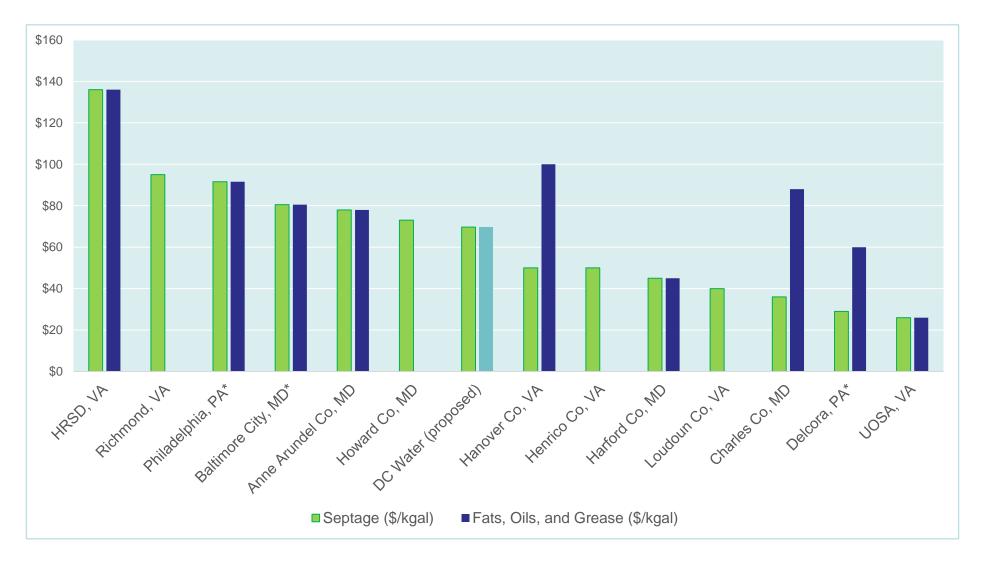
Comparison of Hauler Fees

- Currently DC Water charges an annual permit fee per vehicle based on truck capacity (\$160-\$14,640)
- Under the proposal, fees would be charged based on strength and volume
- Below are comparisons for three vendors based on the current and proposed fees

Waste Hauler	2016 Volume Disposed	Current Fee	Proposed Fee
Customer 1	49 gallons domestic/low strength	\$160	\$30.15
Customer 2	172,400 gallons high strength and 5,000 gallons low strength	\$14,600	\$12,113
Customer 3	3,189,434 gallons high strength and 72,600 gallons low strength	\$65,355	\$223,687



Waste Hauler Fee Utilities Comparison



^{*} applies utility unit costs to DC Water strength assumptions



Impact on DC Water

New Revenue

 Revenue would be \$993,000 based on 2016 volumes, an increase of about \$500,000

Operational Considerations

- Impact on current operations is minimal
- Sources and volumes are currently tracked manually by entering volumes and waste types from the manifest on a spreadsheet
 - There will be no change to the current process
- Pretreatment staff will determine monthly charges for each customer and provide a list to Customer Service/Permit Operations for billing



Industrial User (IU) High Strength Waste Fees



IU High Strength Waste Fee

- Industries discharging high strength waste to the collection system are paying the same base rate as industries with domestic strength waste
- Existing regulations established in 2012 for a high strength waste fee for permitted industrial users, but unit costs were never developed
- Unit costs developed for Waste Hauler fees could be used to charge industries with high strength waste

Units of Service	Flow	cBOD	TN	TP	Solids
Annual Loading	102,930,000	156,346,239	34,064,344 lbs/yr	3,469,537	234,330,000
Totals	kgals/yr	lbs/yr		lbs/yr	lbs/yr
Annual Total Costs (w OH)	\$168,267,672	\$21,029,567	\$50,097,071	\$15,694,900	\$61,675,410
Unit Cost	\$1.635	\$0.135	\$1.471	\$4.524	\$0.263
(w OH)	Per kgal	Per lb	Per lb	Per lb	Per lb

 Fee proposed for Significant Industrial Users only to capture high volume dischargers



Impact on DC Water

Revenue

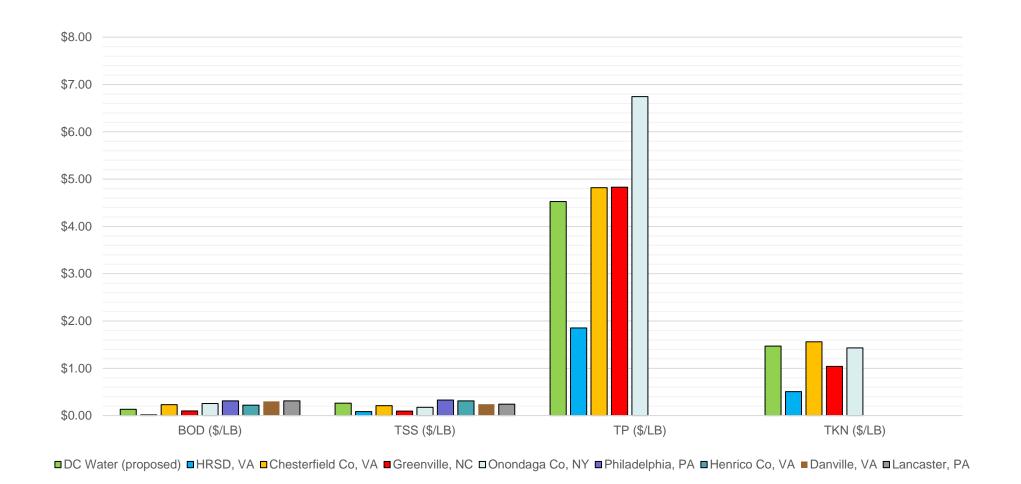
- Industrial High Strength Waste Fee annual projected revenue \$145,000 to \$205,000
- Three affected customers:
 - Bureau of Engraving and Printing \$40,000 to \$100,000, though currently installing a new recovery and treatment system
 - Dulles airport \$100,000
 - Amtrak \$5,000
 - No other major high strength waste streams identified

Operational Considerations

- Permittees with high strength waste will be required to self-monitor for high strength waste parameters monthly or as the permit requires. Flow data will also be required
- DC Water already monitors at least once a year to ensure data aligns with industry sampling
- Billing will be manually calculated by Pretreatment staff quarterly, or other frequency established by DC Water, using permittee and DC Water data



High Strength Waste Fee Utilities Comparison





Proposed Action



Proposed Regulations

- Regulatory updates to 21 DCMR Water and Sanitation
 - §112.6 Waste Hauling Annual Fee per Vehicle
 - replace tiered cost based on vehicle capacity to a single fee
 - \$30/vehicle proposed based on comparison with region, cost covered in general operating budget
 - §112.6 include volume-based fees for haulers and unit costs for industrial high strength waste fee
 - §1510 significant updates to Hauled Wastewater Section
 - §1510.12(b) clarify that non-domestic loads must comply with discharge standards in 1501, unless exempted (i.e., an alternate limit is authorized)
 - §1510.12(d) DC Water may require a waste analysis of any load prior to discharge
 - §1510.14 additional conditions that could result in suspension or termination of a permit



Proposed Regulations

- Regulatory updates to 21 DCMR Water and Sanitation
 - §1510 significant updates to Hauled Wastewater Section
 - §1510.16 authority to charge custom fees for waste generated outside
 Blue Plains service area and commercial/industrial hauled waste
 - §1510.17 authority to revise custom fees at any time
 - §1511 updates to High-Strength Waste Fee Section
 - §1511 Revise to apply section to Significant Industrial User's only
 - §1511.2(a) Revise Chemical Oxygen Demand (COD) domestic concentration to 600 mg/L, consistent with assumption in the 2017 Waste Hauler Fee Study that Biochemical Oxygen Demand (BOD) is half the COD (BOD domestic concentration is 300 mg/L)
 - §1511.11 to §1511.12 clarify procedure for determination of the average daily concentration (revised existing sections §1511.11 to §1511.14



Schedule for Implementation

Hauled Waste Fee Restructure	Industrial High Strength Waste Fee
September 21, 2017 – present Proposed Rulemaking to EQ&OPS Committee	September 21, 2017 – present Proposed Rulemaking to EQ&OPS Committee
September 26, 2017 – present Proposed Rulemaking to Retail Water and Sewer Rates Committee	September 26, 2017 – present Proposed Rulemaking to Retail Water and Sewer Rates Committee
October 5, 2017 – present Proposed Rulemaking to Board	October 5, 2017 – present Proposed Rulemaking to Board
October 20, 2017 – publish Proposed Rulemaking in DC Register	October 20, 2017 – publish Proposed Rulemaking in DC Register
November 20, 2017 – address public comments	November 20, 2017 – address public comments
December 19, 2017 – present Final Rulemaking to Retail Water and Sewer Rates committee	December 19, 2017 – present Final Rulemaking to Retail Water and Sewer Rates committee
December 21, 2017 – present Final Rulemaking to EQ&OPS Committee	December 21, 2017 – present Final Rulemaking to EQ&OPS Committee
January 4, 2018 – present Final Rulemaking to Board	January 4, 2018 – present Final Rulemaking to Board
January 19, 2018 – publish Final Rulemaking in DC Register	January 19, 2018 – publish Final Rulemaking in DC Register
February 1, 2018, phase in new hauled waste fee structure over 12 months as hauler permits are renewed	February – March 2018 –revise affected Significant Industrial User wastewater discharge permits to require payment for high strength waste discharges
February 2019 – new hauled waste fee structure completely phased in	April 1, 2018 – implement high strength waste fees



Action Items

- Management Recommendation to Amend the Waste Hauling Permit Fee (Annual Fee per Vehicle) and Adopt the Waste Hauling Disposal Fee for High Strength (grease trap and septage), Domestic strength, and Low Strength Volume Based Fees and Proposed Regulations
- Management Recommendation to Adopt the High Strength Waste Fee (Unit Costs) and Proposed Regulations

Attachment B

DC Retail Water and Sewer Rates Committee Action Item

 Management Recommendation to Amend the Waste Hauler and High Strength Waste Fee Regulations

ACTION ITEM 1

Action Item

 Recommendation to Amend the Waste Hauler and High Strength Waste Fee Regulations

Management Recommendation:

A. Amend Waste Hauler and High Strength Waste Fee Regulations

	Current Fees	Proposed Fees
Waste Hauling – Annual Fee per Vehicle		\$30.00
Waste Hauling Disposal Fee		
Vehicles 0-49 gals	\$160.00	
Vehicles 50-799 gals	\$2,265.00	
Vehicles 800-1,499 gals	\$6,170.00	
Vehicles >1,500 gals	\$14,640.00	
High Strength Grease Trap Waste		\$0.07 per gallon
High Strength Septage Waste		\$0.07 per gallon
Domestic Strength Waste		\$0.003 per gallon
Low Strength Waste		\$0.003 per gallon
High Strength Waste Fee (Effective April 1, 2018)		
Biochemical Oxygen Demand (BOD)		\$0.135 per pound
Total Suspended Solids (TSS)		\$0.263 per pound
Total Kjeldahl Nitrogen (TKN)		\$1.471 per pound
or Total Nitrogen (TN)		
Total Phosphorus (TP)		\$4.524 per pound

Attachment C

FY 2017 Completed Committee Workplan					
Objective/ <i>Activities</i> /Task	Date of Activity	Completed	Responsible Department		

	ates & Revenue
	ates & Revenue
include CDIAC credit	
	udget & Finance
i. Presentation to Joint F&B and September 27, 2016 √	
RRC Committees	
ii. Presentation to Joint F&B and November 15, 2016 $\sqrt{}$	
RRC Committees	
iii. Joint F&B and RRC November 15, 2016 √	
Committees recommended	
proposed CAP credit for	
CRIAC to eligible customers	
iv. Board approved to expand December 1, 2016	
CAP credit for CRIAC	
v. Published NOPK to expand December 16, 2016 Ge	eneral Counsel
CAP credit in DC Register	
	xternal Affairs
vii. RRC final recommendation on February 21, 2017 √	
50% CRIAC credit to CAP	
customers	
viii. 1 &B linal recommendation on 1 ebidary 23, 2017	
50% CRIAC credit to CAP	
customers	
ix. Board approval of CRIAC March 2, 2017 √	
credit for CAP customers	l O l
, , , , , , , , , , , , , , , , , , ,	eneral Counsel
expand CAP credit for CRIAC	
in DC Register	
xi. Go-Live May 1, 2017	

Conduct a Review of the Impact of the CRIAC on Various Customer Segments Conduct a review of the impact of			Rates and Revenue
the CRIAC on various customer segments including low-income customers who do not qualify for CAP, non-profit organizations and small businesses owners i. CRIAC overview to RRC ii. Discuss the CRIAC restructuring of various segments including low-income customers who do not qualify for CAP, non-profit, charitable and religious organizations and small businesses.	November 15, 2016 February 21, 2017	√ √	Rates and Revenue

FY 2017 C	ompleted Committee	Workplan	
Objective/ <i>Activities/</i> Task	Date of Activity	Completed	Responsible Department
3. Water System Replacement Fee			
RRC recommended proposal to amend customer classifications and WSRF regulations	May 25, 2017	V	Rates & Revenue
b. Board approved proposal to amend customer classifications and WSRF regulations	June 1, 2017	V	
c. Published NOPR to amend customer classifications and WSRF regulations in DCMR	June 16, 2017	√	General Counsel
d. Public Comment and Outreach e. RRC final recommendation to amend customer classifications and WSRF regulations	June 16 – July 17, 2017 July 25, 2017	√ √	External Affairs
f. Board final approval to amend customer classifications and WSRF regulations	September 7, 2017	V	
g. Publish final NOFR to amend customer classifications and WSRF regulations in DCMR	September 29, 2017	V	General Counsel
h. WSRF amendment goes into effect	October 1, 2017		
4. Water System Replacement Fee a. Review of unmetered fire service lines and their financial impact.	November 14, 2017		Rates & Revenue General Manager
 Review of combined domestic and fire service lines and their financial impact. 	November 14, 2017		
5. Delinquent Accounts			
a. Soldiers Home Negotiations	Monthly, as needed		General Counsel
6. Alternative Charges	T		
a. System Availability Fee (SAF) Go-live	January 1, 2018		Permits
7. DCGIS FY 2014 Flyover			
a. Updated Committee on FY 2014 Flyover	November 15, 2016	√ 	Customer Service
b. Review of FY 2014 Flyover	July 25, 2017	V	
New VertexOne ECIS Billing System			
a. Overview of the new VertexOne ECIS Billing System	July 25, 2017	V	Customer Service

Attachment C

FY 2017 Completed Committee Workplan					
Waste Hauler and High Strength Waste Fee Regulations					
a. RRC recommend proposal for Waste Hauler and High Strength Waste Fees	September 26, 2017	V	Rates & Revenue Wastewater Treatment		
b. Board approval on proposal for Waste Hauler and High Strength Waste Fees	October 5, 2017				
c. Publish NOPR for Waste Hauler and High Strength Waste Fees in DC Register	October 20, 2017		General Counsel		
d. Public Comment and Outreach	October 20 – November 20, 2017		External Affairs		
e. RRC final recommendation for Waste Hauler and High Strength Waste Fees	December 19, 2017				
f. Board approval for Waste Hauler and High Strength Waste Fees	January 4, 2018				
g. Publish final NOFR for Waste Hauler and High Strength Waste Fees in DC Register	January 19, 2018		General Counsel		
h. Waste Hauler Fees go into effect i. High Strength Waste Fees go into effect	February 1, 2018 April 1, 2018				

10. Rate Setting Policy		
a. Review of Rate Setting Policies	November 14, 2017	Rates & Revenue

Attachment D

FY 2018 Proposed Committee Workplan					
	Objective/ <i>Activities</i> /Task	Date of Activity	Completed	Responsible Department	
	ropose and Establish Retail Rates or FY 2019 & FY 2020				
a.	FY 2019 & FY 2020 Budget	November 2, 2017			
b.	presentation to Board RRC recommendation on proposed FY 2019 & FY 2020 rates	November 14, 2017			
C.	Board approval on proposed FY 2019 & FY 2020 rates	December 7, 2017			
d.	Publish Proposed Rates and Fees in DC Register	December 22, 2017		General Counsel	
e.	Public Comment and Outreach	December 22- May 16, 2018		External Affairs	
f.	Public Hearing	May 16, 2018		Board Secretary	
g. h.	Public Hearing Record Closes RRC final recommendation to approve FY 2019 & FY 2020 rates	June 11, 2018 June 26, 2018			
i.	Board Approval on FY 2019 & FY 2020 rates	July 5, 2018			
j.	Publish Final Rates and Fees in DC Register	July 20, 2018		General Counsel	
k.	Rates go into effect	October 1, 2018 (FY 2019)			
		<u> </u>			
2. Con	nduct a Review of the Impact of the				
	CRIAC on Various Customer Segments				
— ,—	going)			Data and Dames	
a.	Conduct a review of the impact of the CRIAC on various customer segments including low-income customers who do not qualify for CAP, non-profit organizations and			Rates and Revenue	
	small businesses owners				

November 15, 2016

February 21, 2017

i. CRIAC overview to RRC

businesses.

ii. Discuss the CRIAC restructuring

of various segments including low-income customers who do not qualify for CAP, non-profit, charitable and religious organizations and small

FY 2018 Proposed Committee Workplan				
Objective/Activities/Task	Date of Activity	Completed	Responsible Department	

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	Waste Hauler and High Strength					
V	Waste Fee Regulations					
a.	RRC recommend proposal for Waste Hauler and High Strength Waste Fees	September 26, 2017	V	Rates & Revenue Wastewater Treatment		
b.	Board approval on proposal for Waste Hauler and High Strength Waste Fees	October 5, 2017				
C.	Publish NOPR for Waste Hauler and High Strength Waste Fees in DC Register	October 20, 2017		General Counsel		
d.	Public Comment and Outreach	October 20 – November 20, 2017		External Affairs		
e.	RRC final recommendation for Waste Hauler and High Strength Waste Fees	December 19, 2017				
f.	Board approval for Waste Hauler and High Strength Waste Fees	January 4, 2018				
g.	Publish final NOFR for Waste Hauler and High Strength Waste Fees in DC Register	January 19, 2018		General Counsel		
h. i.	Waste Hauler Fees go into effect High Strength Waste Fees go into effect	February 1, 2018 April 1, 2018				

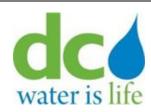
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4. Fire Protection Service Fee for FY '18,		
'19, '20, and '21		
a. Fire Protection Service Fee		Rates and Revenue
 RRC recommend proposal for 	February 20, 2018	
Fire Protection Service Fee		
ii. BOD approval of Notice of	March 1, 2018	
Proposed Rulemaking (NOPR)	·	
iii. Publish NOPR in DC Register	March 16, 2018	General Counsel
iv. Public Comment and Outreach	March 16 - April 16, 2018	External Affairs
v. RRC approval of proposed Fire	May 22, 2018	External / mane
Protection Fee		
vi. BOD approval of Notice of Final	June 7, 2018	
Rulemaking (NOFR)		
vii. Publish NOFR in DC Register	June 22, 2018	General Counsel
viii. Fire Protection Service Fee goes	June 22, 2018	Ochciai Oddiisci
in effect	Julie 22, 2010	
iii ellect		

Attachment D

FY 2018 Proposed Committee Workplan					
Objective/ <i>Activities</i> /Task	Date of Activity	Completed	Responsible Department		
5. 2018 Cost of Service Study and Amendments for Miscellaneous Fees & Charges					
a. 2018 Cost of Service Study and Amendments for Miscellaneous			Rates & Revenue		
Fees & Charges i. RRC recommend COS and proposed amendments for	February 20, 2018				
Miscellaneous Fees & Charges ii. Board approval of Notice of Proposed Rulemaking (NOPR)	March 1, 2018				
iii. Publish NOPR in DC Register iv. Public Comment and Outreach v. RRC approval of proposed miscellaneous charges	March 16, 2018 March 16 - April 16, 2018 May 22, 2018		General Counsel External Affairs		
vi. BOD approval of Notice of Final Rulemaking (NOFR)	June 7, 2018		0		
vii. Publish NOFR in DC Register viii. Miscellaneous Fees & Charges go in effect	June 22, 2018 October 1, 2018 (FY 2019)		General Counsel		
<u> </u>					
6. New VertexOne ECIS Billing System (on-going)					
a. VertexOne customer bill presentment	November 14, 2017		Customer Service		
7. Rate Setting Policy					
a. Review of Rate Setting Policies	November 14, 2017		Rates & Revenue		
		1			
8. Water System Replacement Fee					
a. Review of unmetered fire service lines and their financial impact.	November 14, 2017		Rates & Revenue General Manager		
b. Review of combined domestic and fire service lines and their financial impact.	November 14, 2017				
9. Delinquent Accounts					
a. Soldiers Home Negotiations	Monthly, as needed		General Counsel		
10. Alternative Charges					
a. System Availability Fee (SAF) Go-live * Dates subject to change	January 1, 2018		Permits		

^{*} Dates subject to change

DC Retail Water and Sewer	Rates Committee - 4.	DC Retail Water	and Sewer Rates	Committee Workpl	an -Matthew Brown



Attachment E

D.C. WATER AND SEWER AUTHORITY BOARD OF DIRECTORS RETAIL WATER & SEWER RATES COMMITTEE MEETING

TUESDAY, October 24, 2017; 9:30 a.m. AGENDA

Call to Order Committee Chairman

Monthly Updates Chief Financial Officer

Committee Workplan Chief Financial Officer

Agenda for November 14, 2017 Committee Meeting Committee Chairman

Other Business Chief Financial Officer

Adjournment

^{*}Detailed agenda can be found on DC Water's website at www.dcwater.com/about/board_agendas.cfm