



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Board of Directors

*Meeting of the
Environmental Quality and Operations Committee*

*5000 Overlook Avenue, SW, Room 407
Thursday, July 20, 2017
9:30 a.m.*

- | | | | |
|-------------------|-------------|--|-------------------------------|
| | I. | Call to Order | James Patteson
Chairperson |
| 9:30 a.m. | II. | AWTP Status Updates | Aklile Tesfaye |
| | | 1. BPAWTP Performance | |
| 9:45 a.m. | III. | Procurement Policy - DC Water Business Development Plan | John Bosley |
| 10:05 a.m. | IV. | Action Items | John Bosley/Len Benson |
| | | <i>Joint Use</i> | |
| | | 1. WAS-12-066-AA-RE - Supply and Delivery of Polymer, Polydyne, Inc | |
| | | 2. 14-PR-DFS-08 - Janitorial Services, M&N Contractors | |
| | | 3. Contract No. 100150 - Biosolids Management Program - Combined Heat and Power Project, Pepco Energy Services, Inc. | |
| 10:25 a.m. | V. | Other Business/Emerging Issues | |
| | | 1. Successful Completion of Repairs to NE Boundary Sewer at 8 th & V Street | Craig Fricke |
| 10:35 a.m. | VI. | Executive Session* | |
| 10:40 a.m. | VII. | Adjournment | James Patteson
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)(1); legal, confidential or privileged matters 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.

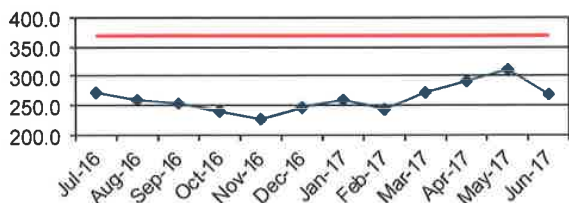
Follow-up Items from Prior Meetings:

1. Assistant General Manager for Wastewater Treatment: Prepare a presentation to discuss the power generating performance and cost agreements in place with DC Water and PES. **[Scheduled for Sept EQ&OPs Mtg]**
2. General Manager, DC Water: Provide a briefing on the readiness level of DC Water in regards to projected staffing needs (i.e., Operators, Controllers, Technician, etc.) when the Northeast Boundary Tunnel is commissioned. **[TBD]**
3. Director, Clean Rivers Project: Prepare a presentation specifically on planned public outreach, community engagement and neighborhood impact mitigation in relation to the Northeast Boundary Tunnel project; including DC Water's safety records on previous DCCR tunneling projects. **[Addressed at July 6th BOD Mtg]**
4. Chief Engineer, DC Water: Provide a detailed explanation for the M/WBE participation on the construction portion of the Northeast Boundary Tunnel project contract as an attachment to the fact sheet. **[Addressed at July 6th BOD Mtg]**
5. Chief Procurement Officer, DC Water: Provide a response to the Committee regarding whether WSSC and Fairfax County would be able to use the rates provided in the Emergency Sewer Main Infrastructure Repair & Replacement contract to procure similar services with the Contractor for their own needs. **[Response sent via email to EQ&OPs Committee on July 10th]**
6. Chief Engineer, DC Water: DC Water to inform homeowners affected by the PRV project, in sufficient detail, about what the installation of the PRV entails and what other construction other than that specified in the plumbing contract the homeowners will be responsible for. To this end, the Committee suggested including information about "associated ancillary costs" that the homeowner may expect to be responsible for in DC Water's communication and outreach efforts. **[Ongoing]**

BLUE PLAINS ADVANCED WASTEWATER TREATMENT PLANT PERFORMANCE REPORT – JUNE 2017

Average plant performance for the month was excellent with all effluent parameters well below the seven-day and monthly NPDES permit requirements. The monthly average influent flow was 268 MGD. There was no Excess Flow during this reporting period. The following Figures compare the plant performance with the corresponding NPDES permit limits.

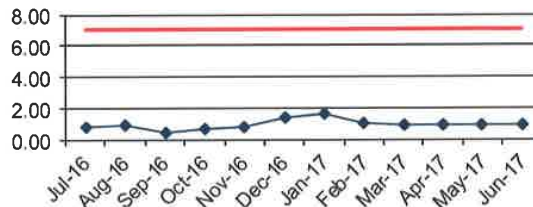
Plant Influent Flow (mgd)



■ Influent Flow — Average Design Capacity

This graph illustrates the monthly average influent flow to the plant. The design average flow is 370 MGD. Blue Plains has a revised 4-hour peak flow capacity of 511 MGD through complete treatment. Flows up to 336 MGD in excess of the 511 MGD peak capacity receive primary treatment, disinfection and dechlorination.

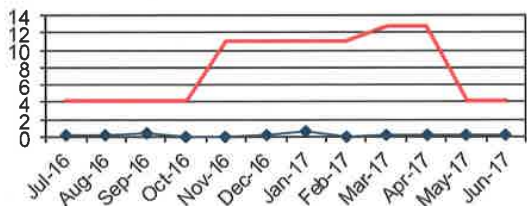
TSS (mg/l)



■ Effluent TSS — Permit Limit

Effluent Total Suspended Solids (TSS) is a measure of the amount of solid material that remains suspended after treatment. The effluent TSS concentration for the month averaged 0.86 mg/L, which is below the 7.0 mg/L permit limit.

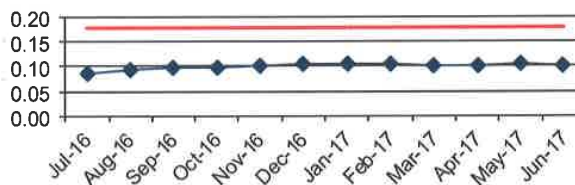
Ammonia (mg/l)



■ Effluent NH3 — Permit Limit

The Ammonia Nitrogen (NH₃-N) is a measure of the nitrogen found in ammonia. For the month, effluent NH₃-N concentration averaged 0.09 mg/L and is below the average 4.2 mg/L limit.

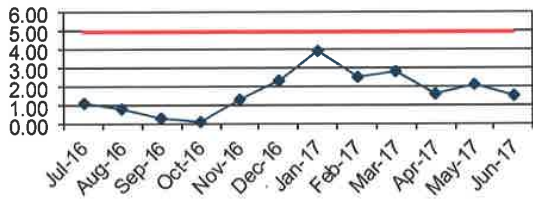
Total Phosphorus Annual Average (mg/l)



■ Effluent TP — Permit Limit

The Total Phosphorus (TP) is a measure of the particulate and dissolved phosphorus in the effluent. The annual average effluent TP concentration is 0.10 mg/L, which is below the 0.18 mg/L annual average limit.

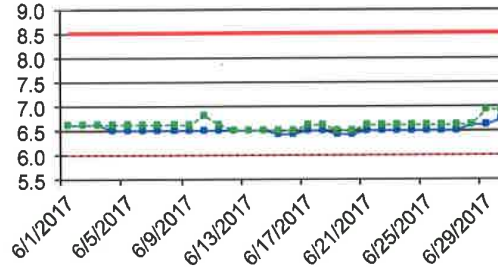
CBOD (mg/l)



■ Effluent CBOD — Permit Limit

Carbonaceous Biochemical Oxygen Demand (CBOD) is a measure of the amount of dissolved oxygen required for the decomposition of organic materials. The effluent CBOD concentration averaged 1.55 mg/L (partial month), which is below the 5.0 mg/L limit.

Min and Max Instantaneous pH

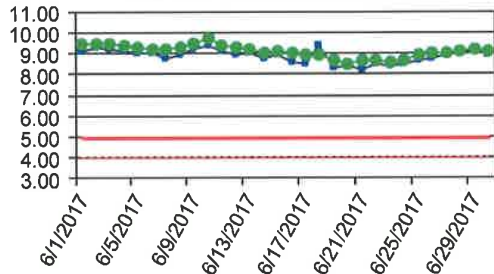


● MAX pH ■ MIN pH — Upper Limit - - Lower Limit

pH is a measure of the intensity of the alkalinity or acidity of the effluent. The minimum and maximum pH observed were 6.4 and 6.9 standard units, respectively. The pH was within the permit limits of 6.0 and 8.5 for minimum and maximum respectively.

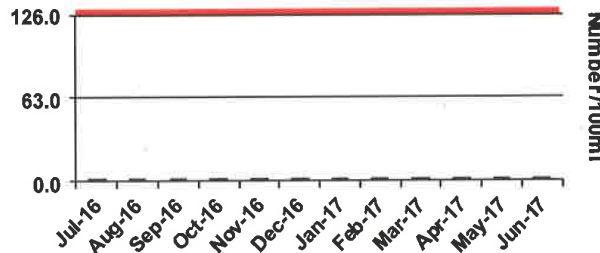
E. coli

Daily and Instantaneous Min DO



● MIN Daily Average ■ Instant MIN DO
 — MIN Daily Average Limit - - Instant MIN Limit

Dissolved Oxygen (DO) is a measure of the atmospheric oxygen dissolved in wastewater. The DO readings for the month are within the permit limits. The minimum daily average is 8.5 mg/L. The minimum instantaneous DO reading is 8.2 mg/L. The minimum permit limits are 5.0 mg/L and 4.0 mg/L respectively.

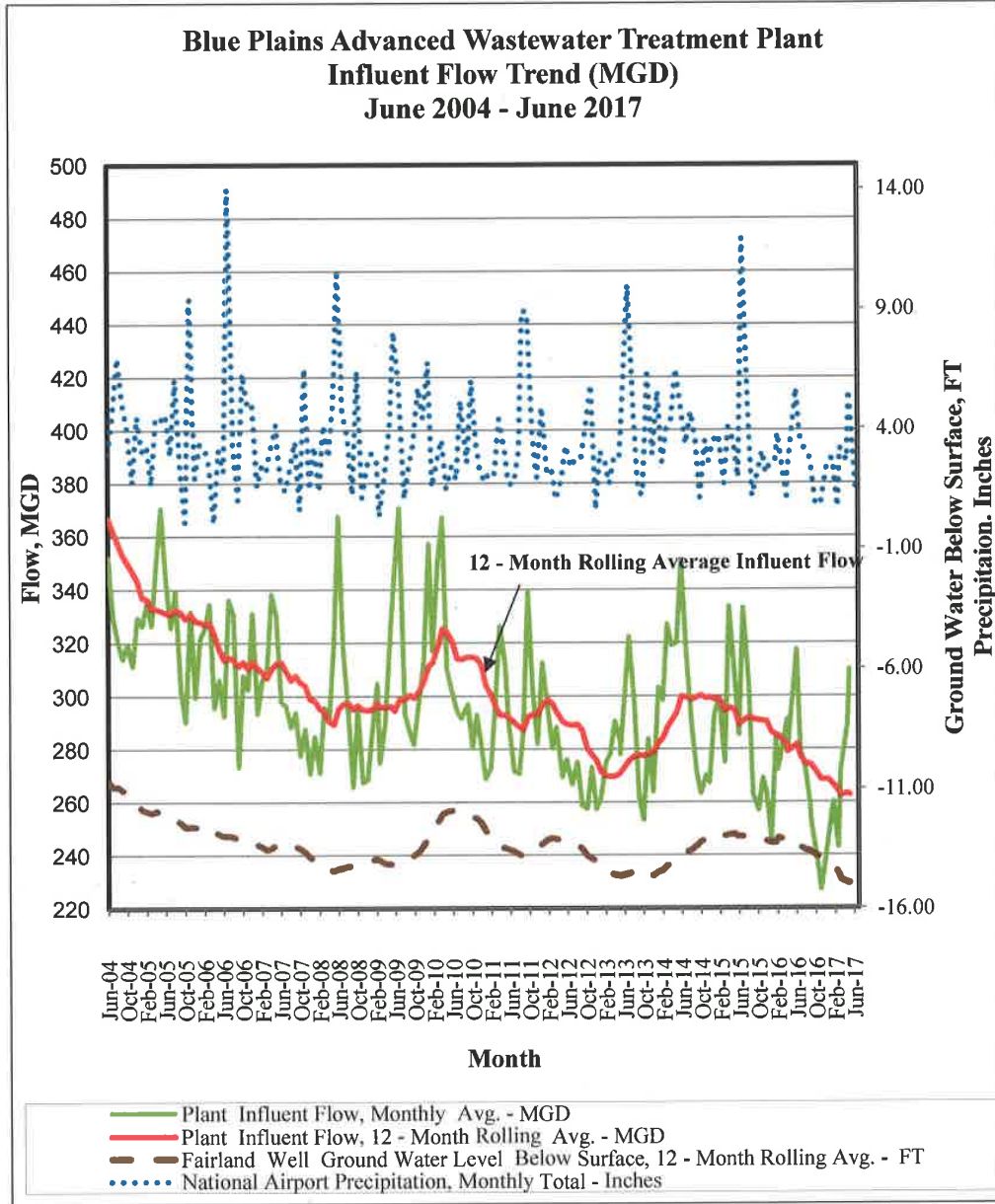


■ E. Coli Geomean — Permit Limit

E.coli is an indicator of disease causing organisms (pathogens). The E.coli permit limit is 126/100mL. The E coli geometric mean is 1.1 /100mL, and well below the permit limit.

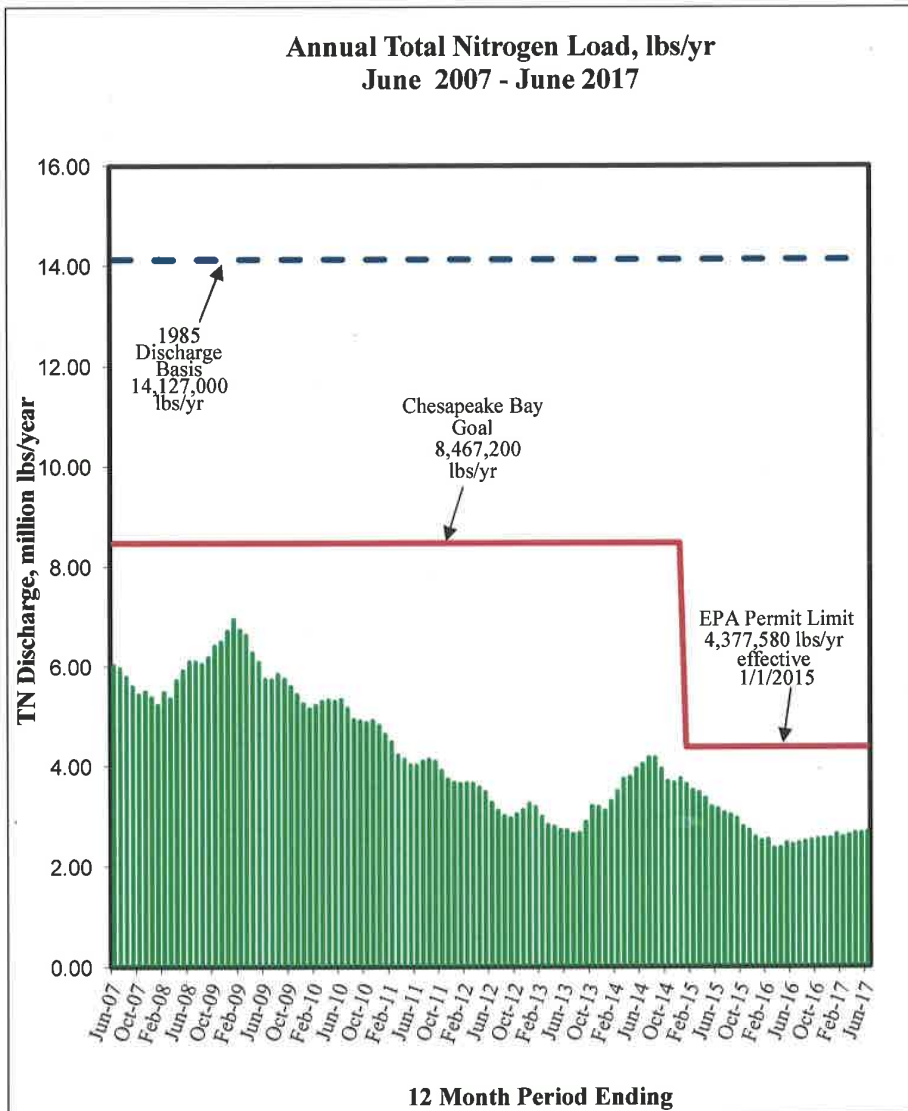
Plant Influent Flow Trend

The graph below shows influent flow trend to the plant over a 10-year period ending June 2017. While for any given month the flow is weather dependent, the 12-month rolling average influent flow has remained at or below 300 MGD since February 2011.



Blue Plains Total Nitrogen (TN) Removal - Performance

The graph below shows the rolling 12-month total effluent TN discharge, in pounds per year, over a 10-year period ending June 2017. During the month, the TN average concentration and total load in the effluent were 2.95 mg/L and 224,000 lbs respectively. The effluent quality is on track to remain below the NPDES permit annual load limit of 4,377,580 lbs/year.



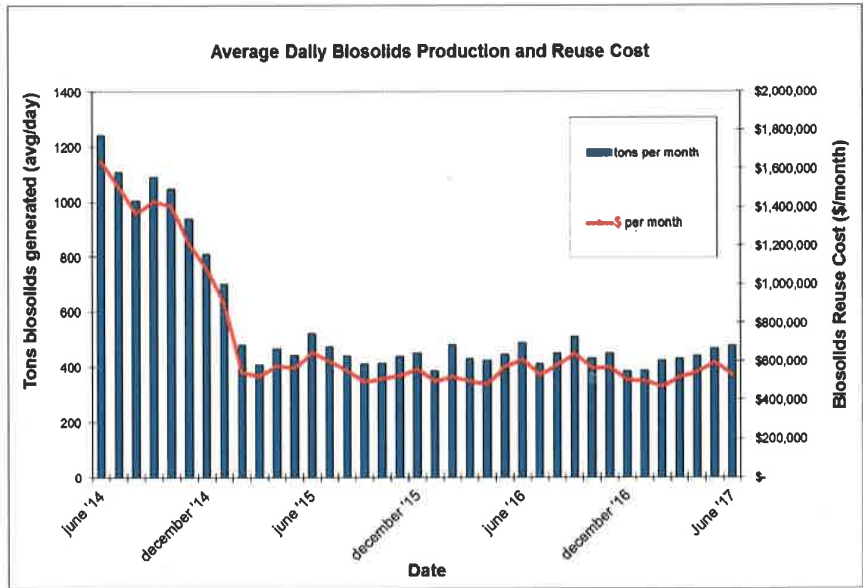
Blue Plains Electricity Generation and Usage

In June 2017, the average energy consumed at Blue Plains was 642 megawatt hours per day (MWH/day) or 2.40 MWH of electricity per million gallon of wastewater processed through complete treatment. The Combined Heat and Power (CHP) facility generated an average of 87 MWH/day, making up for 14% of total energy consumed at Blue Plains. The remaining 555 MWH/day was purchased from PEPCO.

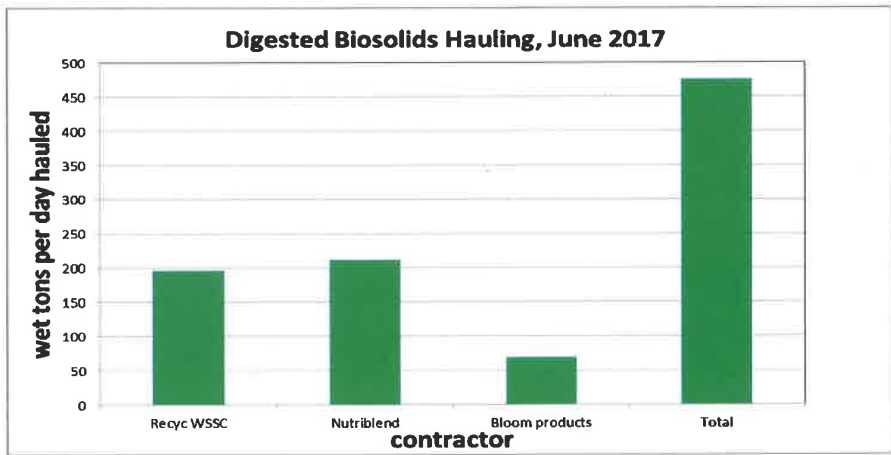
Refer to attached Briefing Note on CHP status and performance

RESOURCE RECOVERY

In June, biosolids hauling averaged 475 wet tons per day (wtpd). The average percent solids for the Class A material was 30.2%. The graph below shows average daily biosolids produced and the associated monthly cost for reuse (transportation and application cost) for a three-year period ending June 2017. In June, diesel prices averaged \$2.70/gallon, and with the contractual fuel surcharge, the weighted average biosolids reuse cost (taking into account the marketed material) was \$37.36 per wet ton.



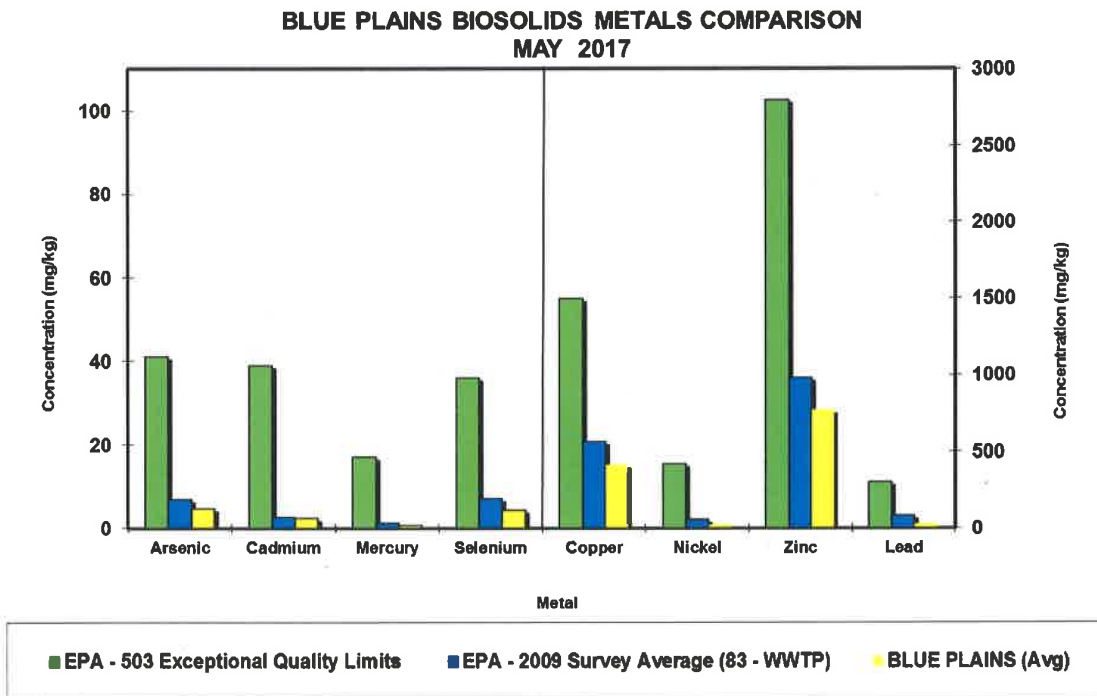
The average quantities of Class A biosolids transported and applied on farms by the two major contracts (WSSC's Recyc and DC Water's Nutriblend) and the quantities marketed as Bloom are shown on the graph below. In June, 2,051 wet tons of Bloom were distributed to 10 different customers.



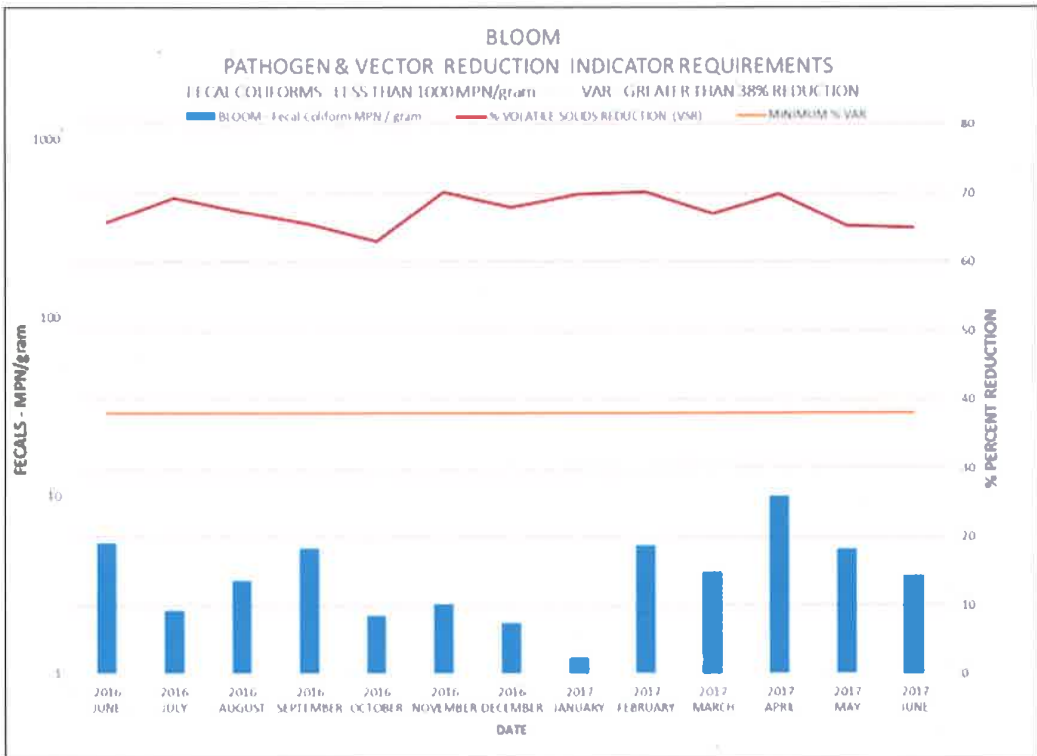
Product Quality

All biosolids produced during the month of May met Class A Exceptional Quality (EQ) requirements required by EPA.

The graph below shows the EPA regulated heavy metals average concentrations in the Class A biosolids. The concentrations are considerably below the regulated exceptional quality limits (EPA-503 Exceptional Quality Limits) and the national average (EPA-2009 Survey Average).

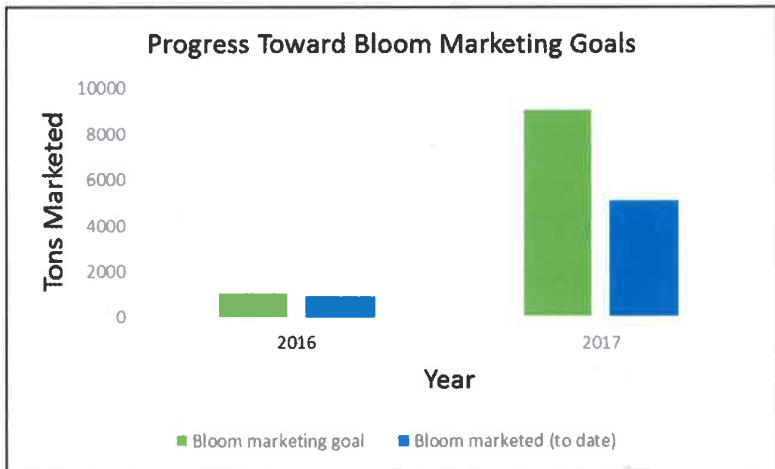


The graph below shows both Vector Attraction Reduction (VAR) and Fecal Coliform (FC) results in the Class A product, both of which are required to maintain the Class A Exceptional Quality (EQ) status. Vector Attraction Reduction is measured by the reduction in Volatile Solids (VS) or organic compounds that may be odorous and attract nuisance vectors such as flies and rodent. DC Water anaerobic digesters reduced VS by over 65 percent, well above the required 38 percent minimum. In addition, the graph shows fecal coliforms levels in the Class A product. Fecal coliforms are indicators of disease causing organism (pathogens), and must be below 1,000 MPN/g to meet Class A standards. The FC levels in the Class A product are two orders of magnitude less than the maximum allowable level.



Bloom Marketing

Bloom sales as of July 1st total 5,025 tons for the calendar year. This represents 56% of the goal, half way through the year.



CLEAN WATER QUALITY AND TECHNOLOGY

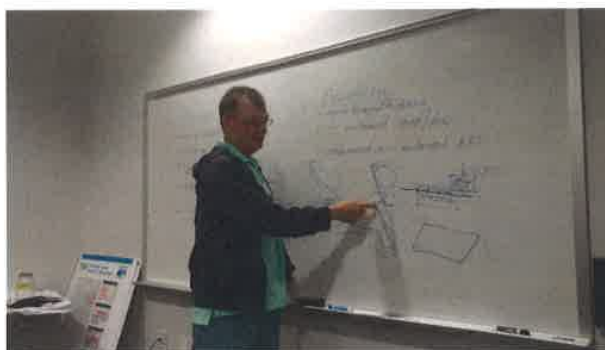
The Department of Clean Water Quality and Technology includes the research and development, pretreatment and laboratory programs. A summary of activities for each group is provided below.

Research and Development

The research and development team focuses on research topics associated with the planning and operation of Blue Plains. The current focus of research is to optimize treatment process capacity and to work toward achieving energy neutral operations.

Biosolids research planning meeting – May, 5th, 2017

The research and development team organized a meeting with Dr. Matthew Higgins from Bucknell University, PA to discuss future research topics associated with digestion and dewatering improvements at Blue Plains AWTP. The team produced a list of topics of interests, which are listed below. The topics will be reviewed and discussed within DWT and other departments for prioritization and planning.



Dr. Matthew Higgins explains a concept during biosolids research planning meeting

- Assess impact of different time and temperature conditions on the thermal hydrolysis process to develop a strategy that mitigates formation of inhibitory organics while maintaining current sludge rheology and dewatering characteristics.
- Determine the minimum solids retention time for stable digester operation following thermal hydrolysis process as a possible strategy for enhancing digester capacity.
- Evaluate impacts of feeding un-cooled thermally hydrolyzed solids as a strategy for enhancing digester performance (gas production and degradation of organic material).
- Investigate dewatering enhancements that would further increase organics removal from the digested solids
- Investigate air injection dewatering as a strategy for increasing the cakes solids.
- Evaluate BFP fabric enhancements as a strategy for increasing cake solids content.

- Evaluate addition of carbon dioxide (CO₂) for enhanced solids hydrolysis.
- Consider CO₂ addition for enhanced dewatering.
- Evaluate potential for phosphorus recovery using magnetic iron.
- Evaluate benefits of dewatering immediately after THP followed by dry digestion.

Aeration Pilot – Evaluate Diffuser Fouling and Strategies for Fouling Mitigation in the Nitrification Process

The first phase of aeration pilot testing was completed in 2015. During this work, fouling mitigation strategies for membrane diffusers used in the secondary process were evaluated using a reverse flexing technique. A summary of that work was reported in previous GM reports. In a second phase of testing, the pilot will be used to evaluate fouling mitigation methods such as acid cleaning on different fine-pore diffusers in the nitrification process.

The aeration pilot was reconfigured to allow the installation of diffusers in a full floor coverage layout and to increase from 15 ft side water depth (approximate depth of secondary treatment process) to 22 ft (depth in the pilot was increased to the extent possible because of the increased depth of the diffusers in the full scale nitrification system). The pilot tank can receive nitrification sludge from the waste line coming back to secondary reactor No. 1 on the west side, and secondary effluent from the west clarifier effluent channel near the pilot tank.

Diffuser grid installation and pilot startup preparations – May, 1st – May, 3rd & May, 15th – May, 18th.

In May, Dr. Diego Rosso from University of California, Irvine (UCI), CA made two trips to Blue Plains in May to help our research team install the diffusers grid and prepare the pilot for the new testing phase. The pilot was planned to start up in June with its new configuration.



Reconfigured Aeration Pilot Diffusers for Fouling Mitigation Studies

Blue Plains Main Laboratory

The Main Laboratory staff conducts analyses on Blue Plains AWTP effluent for NPDES Permit requirements, as well as on biosolids, pretreatment samples, storm water runoff, and process samples, on a daily basis, 365 days a year. The laboratory currently analyzes approximately 2,800 samples each month and conducts approximately 8,000 analyses, including Total Suspended Solids; Volatile Suspended Solids; Total and Volatile Solids; Ammonia Nitrogen; Nitrite and Nitrate Nitrogen; Total, Soluble, and Ortho Phosphorus; Total and Soluble Kjeldahl Nitrogen; Carbonaceous Biochemical Oxygen Demand; Chemical Oxygen Demand; Total Alkalinity and Hardness; and Fecal Coliform and E. Coli microbiological testing.

In addition to comprehensive testing to support operation of liquid stream processes, the laboratory analyzes Belt Filter Press cake samples for fecal coliform bacteria for DC Water's Class A Biosolids reporting, as well as digester samples from the new Cambi Thermal Hydrolysis and Anaerobic Digestion facility, including Total and Volatile Solids, Total and Volatile Suspended Solids, Ammonia Nitrogen, alkalinity and pH. Fecal coliforms in the BFP dewatered cake and TS and VS upstream and downstream of the digestion process are monitored to show compliance with 40 CFR 503 Pathogen and Vector Attraction Reduction requirements.

The laboratory also assisted the Department of Sewer Services conducting microbiological analysis of water samples for E. Coli bacteria, as well as monitoring the Northeast Boundary Swirl Facility Effluent for NPDES compliance. Laboratory staff also participated in the WWOA Executive Board.

This month the Main Laboratory completed analysis of the USEPA's Discharge Monitoring Report – Quality Assurance (DMR-QA) Study 37, which commenced on March 24, 2017 and concludes on July 7, 2017.

Blue Plains Pretreatment Program

The Blue Plains Pretreatment Program manages the Industrial Pretreatment Program, including temporary dewatering dischargers from construction and other activities, as well as the Hauled Waste Program. Additional responsibilities include providing specialized sampling and program management support for the Blue Plains NPDES permit and facilitating the quarterly Blue Plains Storm Water Committee meetings and other SWPPP compliance activities. Staff is also currently working on development of a new hauled waste fee structure.

Industrial Pretreatment Program

DC Water currently manages thirteen (13) Significant Industrial User (SIU) permits and seventeen (17) Non-Significant Industrial User (NSIU) wastewater discharge permits. One SIU permit for WMATA Western Bus Division, was transferred to a NSIU permit in March 2017. Inspections and sampling were conducted at three SIUs this month: Amtrak; Capitol Power Plant; and GSA Central Heating and Refrigeration Plant. Sampling was also conducted at a fourth SIU: WMATA Brentwood Rail Yard. DC Water

received monthly self-compliance monitoring reports for six (6) SIUs and one NSIU. All SIUs and NSIUs are in compliance with discharge standards for the current month.

DC Water currently manages 90 Temporary Discharge Authorization (TDA) permits, primarily for construction site discharges of groundwater and/or surface runoff in the combined sewer area. Three new TDA permits were issued this month. All TDA discharges are currently in compliance with pretreatment standards.

Hauled Waste Program

As of the end of the current month, the hauled waste program had 32 permitted haulers authorized to discharge domestic septage, portable toilet waste, grease trap waste, groundwater or surface runoff, and other types of waste, if approved in advance and have been characterized and meet pretreatment standards. Staff renewed two hauled waste permits this month. DC Water collected fees from 11 waste haulers this month, including those on a monthly payment plan option.

DC Water received 896 hauled waste loads (2,433,662 gallons) from permitted haulers this month. Manifest forms from each truck entering the plant are collected by the security guards and picked up daily by Pretreatment staff. Data is entered into an Excel spreadsheet to track the volume and type of loads being discharged daily and the results of sampling. Two hauled waste samples were collected this month.

NPDES Permit Sampling

Pretreatment staff collected two wet weather 24-hour composite samples at outfall 002 and two wet weather grab samples at outfall 001 for low level PCB analysis. Staff also collected a grab sample at outfall 001 for toxicity testing, in accordance with annual testing requirements under the current permit. Quarterly influent, effluent, and biosolids samples were collected for local limits analysis, including low level influent mercury. Bimonthly metals samples at outfall 002 were also collected by pretreatment staff for low level mercury and dissolved metals.

Briefing Note for the Environmental Quality and Operations Committee

Combined Heat and Power (CHP) – Status

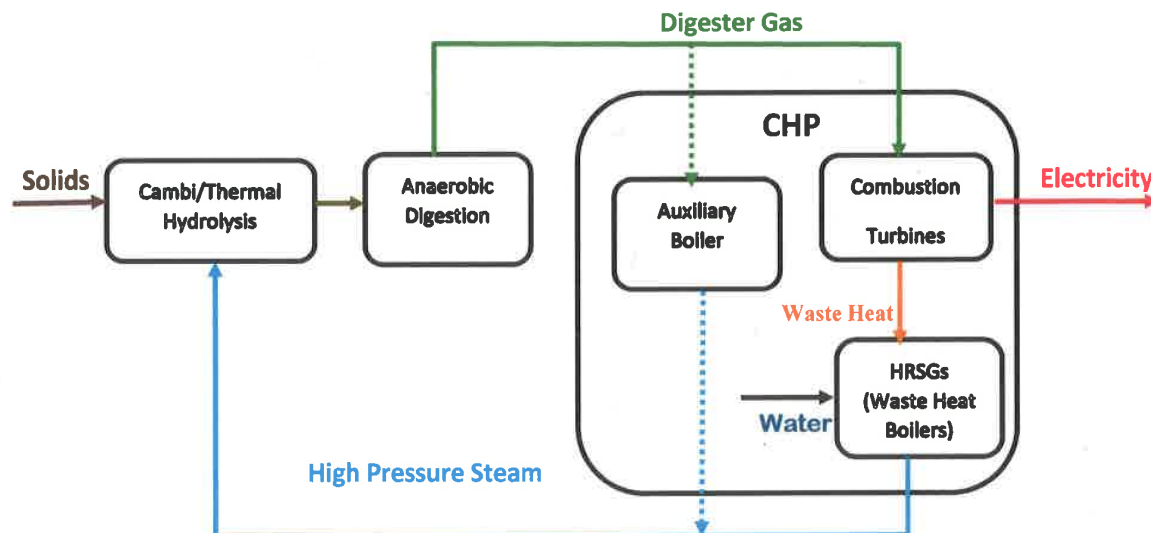
PURPOSE

During the June 15, 2017, Environmental Quality and Operation Committee monthly meeting, committee members requested the Authority to prepare a presentation on the Combined Heat and Power (CHP) Facility operation and maintenance, with focus on recent decline in performance in terms of energy generation. This briefing was prepared to provide an update on efforts underway to correct deficiencies and restore energy generation capacity to desired levels. The Authority intends to make the requested presentation as soon as the corrective actions are fully implemented.

BACKGROUND

The objective of the CHP facility is to utilize digester gas produced by anaerobic digestion and generate electricity and high pressure steam to sustain the Cambi/Thermal Hydrolysis Process (THP). Under normal operating scenarios, digester gas is routed and combusted inside three gas turbine units to generate electricity. The exhaust air, or waste heat from the combustion turbines, contains a considerable amount of thermal energy and is used to operate Heat Recovery Steam Generators (HRSG). The HRSGs, also referred as waste heat boilers, produce high pressure steam required to hydrolyze solids in the Cambi/Thermal Hydrolysis (THP) process. **The continuous supply of high pressure steam is critical to sustain production of Class A biosolids, and therefore takes precedence in the operation of the CHP facility.** In case the HRSGs cannot produce the required quantity of steam solely from heat emanating from combustion turbine exhaust, each HRSG is equipped with a duct burner to increase steam output through combustion of additional digester gas. During periods when the combustion turbines and the associated HRSGs are not in service or cannot meet peak steam demands, an auxiliary boiler system, installed in the facility, is used to generate high pressure steam and meet demands to sustain continuous operation of Cambi/Thermal Hydrolysis (Figure 1)

Figure 1. Digester Gas to Electricity and High Pressure Steam

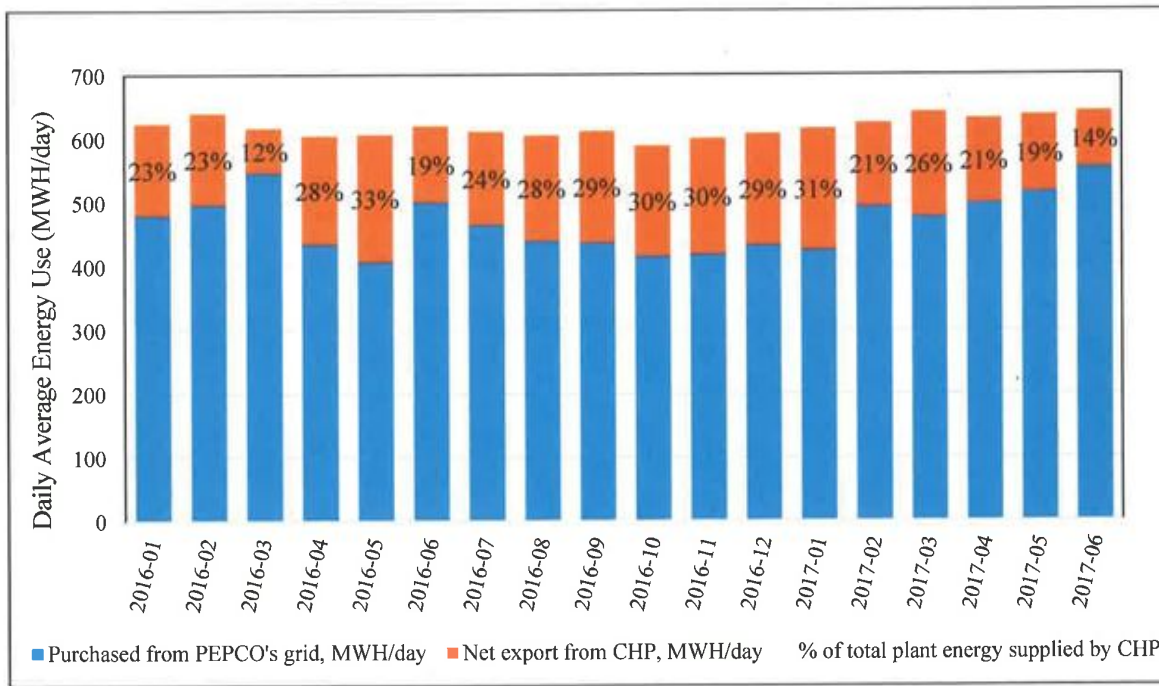


CURRENT STATUS AND PERFORMANCE

Annual inspection on all three HRSGs, completed in March 2017, revealed damage on refractory material; a heat resistant material that protects the interior of the HRSGs from thermal stress. The damage is present inside a section of each HRSG where a duct burner is located. As discussed, the duct burners allow supplemental firing when additional heat energy is required to increase output of high pressure steam. To prevent further damage and catastrophic failure of the HRSGs, the duct burners were removed from service. This limited the capacity of the HRSGs to supply adequate high pressure steam during periods of peak steam demand for Cambi/Thermal hydrolysis process. It was therefore necessary to operate the auxiliary boiler frequently - to meet steam demand and maintain the Class A anaerobic Digestion process - until repairs to restore reliability of the HRSGs are complete. In June, performance was further impacted by scale buildup inside the auxiliary boiler. In order to clean up the scale and ensure long-term reliability of the auxiliary boiler, extensive chemical cleaning was required. This chemical cleaning can only be done when the auxiliary boiler is in continuous operation.

As a result, significant amounts of digester gas, typically used to operate the combustion turbines, was diverted to the auxiliary boiler. In addition, the air permit stipulates that only one combustion turbine/HRSG train can remain in operation when the auxiliary boiler is in use. These conditions limited the number of combustion turbines that could be operated, and consequently reduced the amount of energy generated for use at Blue Plains during the months of April through June (Figure 2).

Figure 2. Blue Plains Monthly Average Energy Consumption and Sources



CORRECTIVE ACTIONS AND SCHEDULE

Immediately following discovery of the damages in the HRSGs, Pepco Energy Services (PES), the contract operator of the CHP facility, contacted the equipment manufacturers of the units to complete an in-depth inspection and root cause analysis, and set up a contract to implement necessary corrective maintenance. The root cause analysis considered several failure modes, but both PES and the equipment manufactures were not certain of the cause/s. The equipment manufacturers' recommendation was to repair one of the duct burner units to the original factory condition and install view ports to allow close monitoring and testing of the unit to confirm that the repair works prior to effecting the same repair on the other two HRSGs.

Repair of the first duct burner unit to factory condition will be completed following receipt of original equipment manufacturer (OEM) parts at the end of July. The schedule for completing the planned monitoring, testing and implementation of any changes to this unit, and the complete repair of the remaining two units will be determined based on discoveries during the monitoring/testing period. However, based on discussion with PES, DC Water anticipates the following schedule:

- Complete repair of the first duct burner unit: August 15, 2017
- Monitor and test the effectiveness of repair on the first duct burner unit: August 15 - November 15, 2017
- Complete repair on the remaining two duct burner units: November 30, 2017

SHORTTERM OPERATING STRATEGY AND ANTICIPATED PERFORMANCE

PES's short term strategy includes operations of all three combustion turbines/HRSG trains, without the use of duct burners, to provide supplemental heat. However, during periods when peak steam demand cannot be satisfied or when each combustion turbine/HRSG train is removed from service to complete planned repairs, PES will revert to operating the auxiliary boiler. During such operating scenarios, only one combustion turbine/HRSG train can be operated and therefore, generation of electricity will be reduced. This strategy will remain in effect until all three duct burners are repaired and reliability of the HRSGS is fully restored.

PES is implementing a HRSG cleaning program in an effort to maximize steam output from HRSG operation - without use of the duct burners - thereby minimizing the risk of steam production shortfalls that would in-turn require use of the auxiliary boiler. This program has shown positive results and increased steam output on one HRSG by nearly 20% and similar results are expected for the two remaining units. Cleaning efforts on all three HRSGs is scheduled for completion by end of August.

The Authority will provided routine updates on progress and schedule required to complete all corrective actions.



District of Columbia Water and Sewer Authority
George S. Hawkins, CEO and General Manager

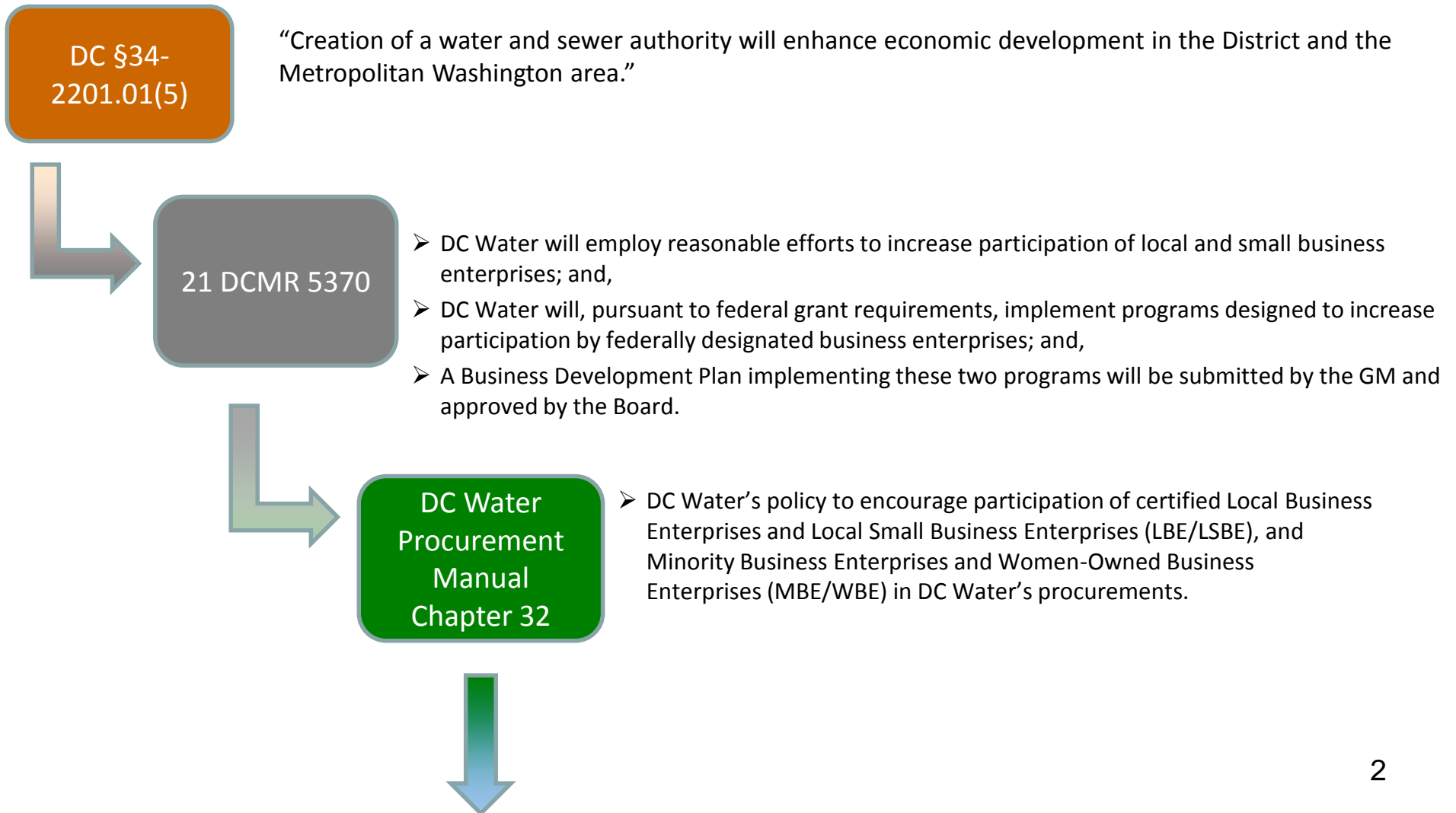
DC WATER
BUSINESS DEVELOPMENT PLAN
Policies and Regulations

Presented to the
EQ and Ops Committee
James Patteson, Chairperson

Thursday, July 20, 2017



Local/Local Small Business Enterprise Preference Program





District of Columbia Water and Sewer Authority
George S. Hawkins, CEO and General Manager



As a supplement to the references in the Procurement Manual, DC Water developed a more detailed Business Development Plan with the same operational guidelines:

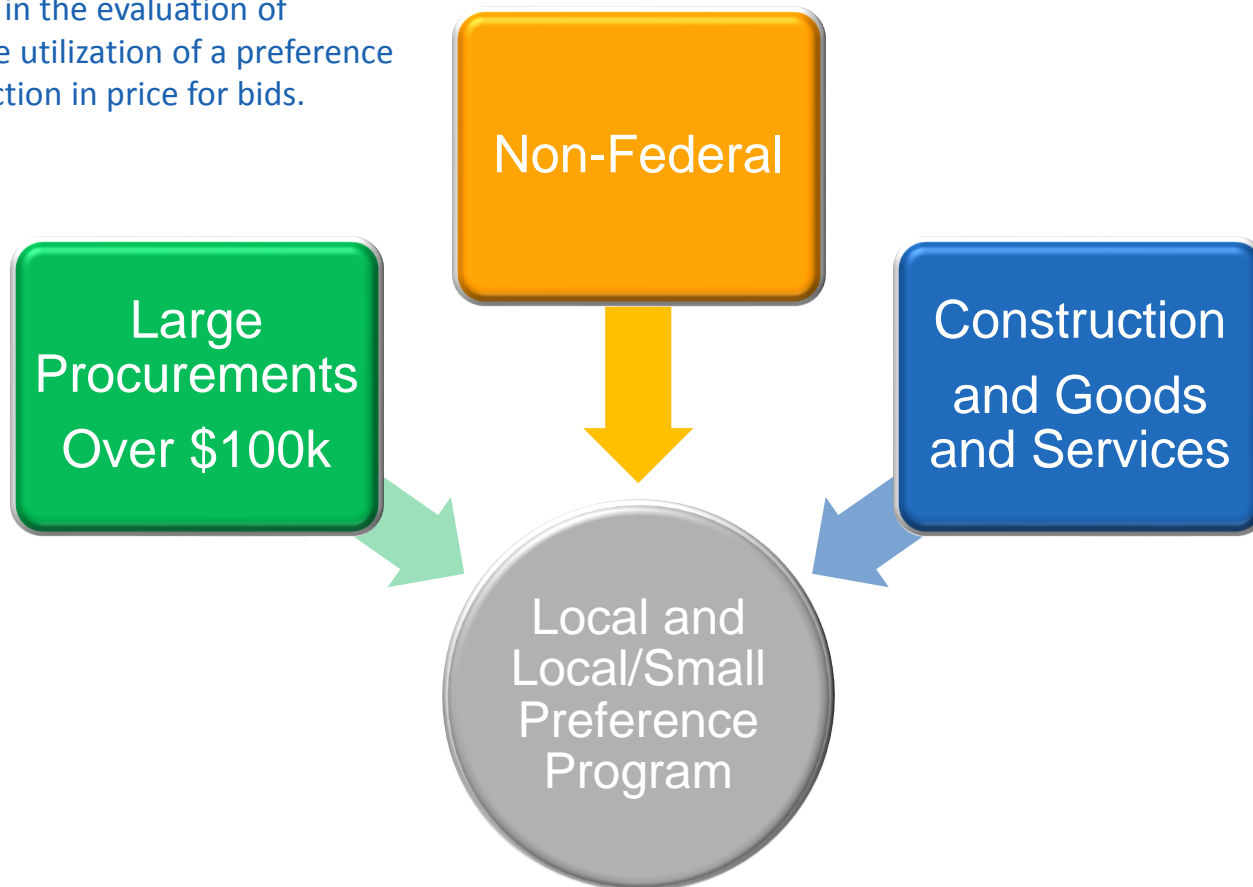
- To implement and enhance LBE/LSBE participation in Large Purchase Procurements, and,
- To implement an outreach, education and a Fair Share Objectives program designed to encourage participation of MBEs and WBEs in procurements eligible to receive federal assistance pursuant to EPA regulations.



District of Columbia Water and Sewer Authority
George S. Hawkins, CEO and General Manager

Local/Local Small Business Enterprise Preference Program

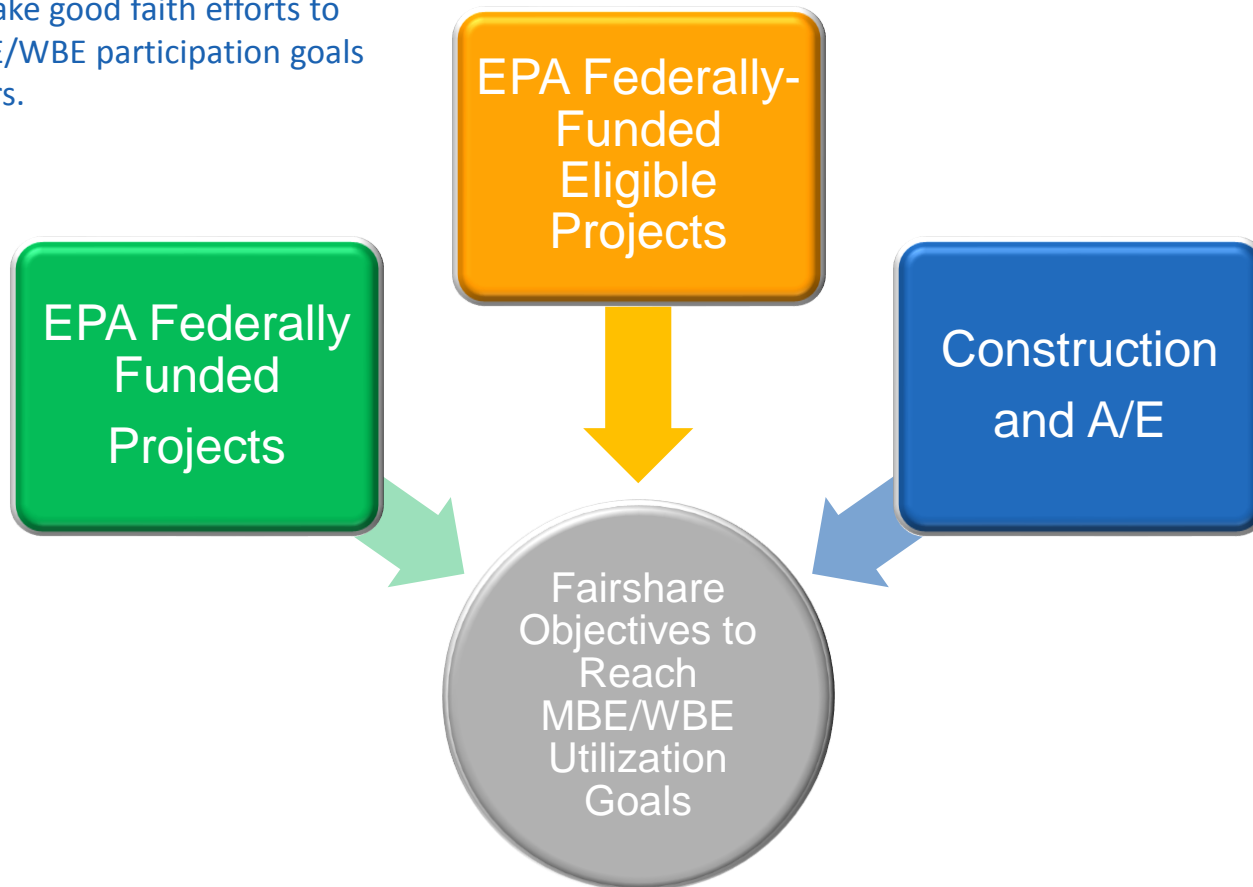
The preference provides for the utilization of additional points in the evaluation of proposals and the utilization of a preference percentage reduction in price for bids.





EPA Fair Share Objective for Minority/Women Small Business Enterprises

The Fair Share Objectives require bidding contractors to make good faith efforts to comply with MBE/WBE participation goals for subcontractors.





District of Columbia Water and Sewer Authority
George S. Hawkins, CEO and General Manager

»QUESTIONS?

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

ACTION REQUESTED

GOODS AND SERVICES CONTRACT MODIFICATION

Supply and Delivery of Pre-Dewatering Polymer

(Joint Use)

Approval to extend option year two (2) of the contract and add funding in the amount of \$1,700,000.00.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME: Polydyne, Inc. One Chemical Plant Road Riceboro, GA 31323	SUBS: N/A	PARTICIPATION: N/A
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DESCRIPTION AND PURPOSE

Original Contract Value:	\$1,803,739.00
Original Contract Dates:	01-01-2013 – 12-31-2013
No. of Option Years in Contract:	2
Option Year 1 Value:	\$1,420,000.00
Option Year 1 Dates:	01-01-2014 – 12-31-2014
Option Year 2 Value:	\$1,420,000.00
Option Year 2 Dates:	03-02-2015 – 03-01-2016
Prior Modifications Value:	\$2,582,255.00
Prior Modifications Dates:	01-01-2015 – 09-30-2017
Requested Modification Value:	\$1,700,000.00
Requested Modification Dates:	10-01-2017 – 09-30-2018

Purpose of the Contract:

The purpose of this contract is to deliver dry polymer to the District of Columbia Water and Sewer Authority. This product, Polydyne's polymer MA-039, is used to condition biosolids in the pre-dewatering step.

Reason For Change:

DC Water periodically re-evaluates its polymers to ensure we continue to use the best products and at the correct dosing rates. For this pre-dewatering polymer, product and supplier selection begins with laboratory testing. Successful products are then tested at full scale. Lastly, an RFP is issued to suppliers whose products perform well at full scale in the plant. Full scale testing, originally scheduled for April, 2017, was postponed until spring, 2018 because the current polymer performs very well, lab results did not indicate any alternatives would be an improvement, and reduced pricing for the current polymer was negotiated. Therefore, this funding request is to cover requirements for this polymer until a new contract can be awarded. The requested amount is estimated by using the forecast spending of \$1.5M plus a \$200K contingency in case usage requirements are higher than expected. Procurement previously negotiated a 5% price reduction in 2016 and the additional aforementioned 5.2% price reduction in May, 2017.

Spending Previous Year:

Cumulative Contract Value:	01-01-2013 – 09-30-2017: \$7,225,994.00
Cumulative Contract Spending:	01-01-2013 – 05-31-2017: \$6,603,228.70

Contractor's Past Performance:

According to the COTR, Polydyne has performed acceptably with regard to product quality, timeliness of deliveries, conformance to site safety and operating procedures; submitting reports, and ease of doing business.

No LBE/LSBE participation.

PROCUREMENT INFORMATION

Contract Type:	Fixed Price Requirements Contract	Award Based On:	Lowest Responsive and Responsible Bidder
Commodity:	Goods and Services	Contract Number:	WAS-12-066-AA-RE
Contractor Market:	Open Market with Preference Points for LSBE and LBE Participation		

BUDGET INFORMATION

Funding:	Operating	Department:	Wastewater Treatment
Service Area:	Blue Plains	Department Head:	Salil Kharkar

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	41.92%	\$712,640.00
Washington Suburban Sanitary Commission	43.33%	\$736,610.00
Fairfax County	9.81%	\$166,770.00
Loudoun County	4.29%	\$72,930.00
Other (PI)	0.65%	\$11,050.00
TOTAL ESTIMATED AMOUNT	100.00%	\$1,700,000.00


 _____ / 7/12/17
 Aklile Tesfaye Date
 Assistant General Manager
 Blue Plains


 _____ / 7/12/17
 Dan Bae Date
 Director of Procurement


 _____ / 7/12/17
 Robert Hunt Date
 Acting Chief Financial Officer

 George S. Hawkins Date
 General Manager

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

ACTION REQUESTED

GOODS AND SERVICES CONTRACT OPTION YEAR

**Janitorial Services
(Joint Use)**

Approval to exercise option year three (3) for the Janitorial Services contract in the amount of \$765,000.00.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME: M & N Contractors, LLC 77 Randolph Road Silver Spring, MD 20904 LSBE	SUBS: N/A	PARTICIPATION: N/A
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DESCRIPTION AND PURPOSE

Original Contract Value:	\$673,640.52
Original Contract Dates:	10-21-2014—10-20-2015
No. of Option Years in Contract:	4
Option Year 1 Value:	\$714,445.56
Option Year 1 Dates:	10-21-2015—10-20-2016
Option Year 2 Value:	\$737,000.00
Option Year 2 Dates:	10-21-2016 10-20-2017
Modification Value:	\$31,842.78
Modification Dates:	01-15-2015—10-20-2016
Option Year 3 Value:	\$765,000.00
Option Year 3 Dates:	10-21-2017—10-20-2018

Purpose of the Contract:

To provide the District of Columbia Water and Sewer Authority (DC Water) with janitorial services at DC Water office space and facilities.

Contract Scope:

The contract provides for full and complete janitorial services to include labor, equipment, consumables and supervision for Blue Plains, Bryant Street, Fort Reno and 125 "O" Street.

Spending Previous Year:

Cumulative Contract Value:	10-21-2014 to 10-20-2017	\$2,141,206.06
Cumulative Contract Spending:	10-21-2014 to 06-30-2017	\$1,870,225.76

Contractor's Past Performance:

According to the COTR, the Contractor's quality of workmanship; services rendered; conformance to DC Water's policies, procedures and contract terms; and invoicing all meet expectations.

PROCUREMENT INFORMATION

Contract Type:	Fixed Price	Award Based On:	Highest Rated Offeror
Commodity:	Services	Contract Number:	14-PR-DFS-08
Contractor Market:	Open Market with Preference Points for LBE and LSBE Participation		

BUDGET INFORMATION

Funding:	Operating	Department:	Facilities
Project Area:	DC Water Wide	Department Head:	Johnnie Walker

ESTIMATED USER SHARE INFORMATION

User - Operating	Share %	Dollar Amount
District of Columbia	83.65%	\$639,922.50
Washington Suburban Sanitary Commission	12.07%	\$92,335.50
Fairfax County	2.84%	\$21,726.00
Loudoun Water	1.25%	\$9,562.50
Other (PI)	0.19%	\$1,453.50
TOTAL ESTIMATED DOLLAR AMOUNT	100.00%	\$765,000.00


 Rosalind R. Inge Date 7/11/17
 Assistant General Manager,
 Support Services


 Dan Bae Date 7/12/17
 Director of Procurement


 Robert Hunt Date 7/12/17
 Acting Chief Financial Officer

 George S. Hawkins Date
 CEO/General Manager

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

ACTION REQUESTED

DESIGN-BUILD-OPERATE CONTRACT CHANGE ORDER:

**Biosolids Management Program - Combined Heat and Power Project
(Joint Use)**

Approval to execute Change Order No. 13 in an amount of \$1,050,000. The modification exceeds the General Manager's approval authority.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:	PARTICIPATION:
Pepco Energy Services, Inc. 1300 N. 17 th Street Suite 1600 Arlington, VA 22209	Noyes Air Conditioning Gaithersburg, MD	81.4%
	Power Mechanical Virginia Beach, VA	11.5%
	JPG Plumbing Services Jessup, MD	2.0%
	Corrosion Testing Laboratories Newark, DE	0.8%
	Fisher Testing Owings, MD	0.4%

DESCRIPTION AND PURPOSE

Original Contract Value:	\$83,015,875.00
Value of this Change Order:	\$ 1,050,000.00
Cumulative CO Value, including this CO:	\$ (956,103.36)
Current Contract Value, including this CO:	\$82,059,771.64
Original Contract Time:	1190 Days
Time extension, this CO:	0 Days
Total CO contract time extension:	760 Days
Contract Start Date (NTP):	02-28-2012
Anticipated Design-Build Completion Date:	06-30-2017
Cumulative CO % of Original Contract:	- 1.15%
Contract completion %:	99.58%

Purpose of the Contract:

Provide the final design, construction and operation of Biosolids Management Program – Combined Heat and Power (CHP) Project

Original Contract Scope:

Design and construct a building to house combustion gas turbines, heat recovery steam generators, a steam boiler and support systems including electrical power supply, controls, and interface with Blue Plains' existing Process Control System. Install and operate three combustion turbines, three heat recovery steam generators, a steam boiler, and support systems. Operate the combined heat and power facility to produce steam for the Cambi system and generate electricity for a 15 year term with an option for another 5 years.

Previous Change Order Scope:

To formally change the black start testing completion date to June 30, 2017 (previously extended to December 31, 2016 as part of Change Order 11), and time limit requirements of Acceptance Test 13 (Appendix 7, 7.6.13) which states: "...the Acceptance Test shall be repeated with the permanent generator to demonstrate the ability to bring the CHP facility back on line within the required 30 minutes,

subject to the terms and conditions of subsection 6.3(E) of the Service Contract". The change is to allow additional time to run required safety checks and gas purges.

Change Order Scope:

On June 2, 2017, a settlement was reached between PES and DC Water for the disputed issue related to the presence of microbial induced corrosion (MIC) within the process service water (PSW) which created pitting in the digester gas cooling heat exchangers in the CHP system PES to provide emergency temporary heat exchange systems as needed to support CHP system operation and to replace 18 heat exchangers made of 316L stainless steel with 18 heat exchangers made of materials with MIC resistant properties.

PROCUREMENT INFORMATION

Contract Type:	Fixed Price	Award Based On:	Best value
Commodity:	Design, Construction, & Operation	Contract Number:	100150
Contractor Market:	Open Market		

BUDGET INFORMATION

Funding:	Capital	Department:	Wastewater Engineering
Service Area:	Wastewater Treatment	Department Head:	Diala Dandach
Project:	XA		

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	41.22%	\$ 432,810.00
Federal Funds	0.00%	\$ 0.00
Washington Suburban Sanitary Commission	45.84%	\$ 481,320.00
Fairfax County	8.38%	\$ 87,990.00
Loudoun County & Potomac Interceptor	4.56%	\$ 47,880.00
Total Estimated Dollar Amount	100.00%	\$1,050,000.00


 _____ 7/11/17
 Robert Hunt Date
 Acting Chief Financial Officer


 _____ 7/14/17
 Dan Bae Date
 Director of Procurement


 _____ 7-10-17
 Leonard R. Benson Date
 Chief Engineer

 George S. Hawkins Date
 General Manager