



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Board of Directors

*Meeting of the
Environmental Quality and Sewerage Services
Committee
5000 Overlook Avenue, SW, Room 407*

*Thursday, July 16, 2015
9:30 a.m.*

I. Call to Order

Bo Menkiti
Acting Chairperson

9:30 a.m. II. AWTP Status Updates

Walt Bailey

1. [BPAWTP Performance](#)

9:45 a.m. III. Status Updates: Potomac Interceptor Sewer

Liliana Maldonado

1. [Odor Abatement Project](#)

10:00 a.m. IV. Action Items – Joint Use

Len Benson

1. None

Non-Joint Use

1. [Contract No.140050 – SAK Construction, LLC](#)

10:15 a.m. VII. Other Business/Emerging Issues

10:30 a.m. VIII. Adjournment

Bo Menkiti
Acting Chairperson

Follow-up Items from Prior Meetings:

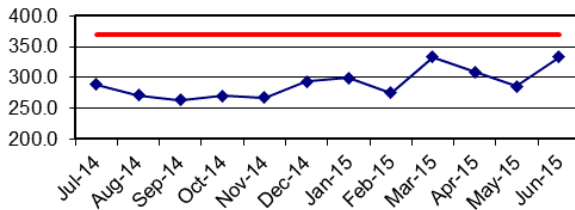
1. None

* 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.

DEPARTMENT OF WASTEWATER TREATMENT June 2015

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 333 MGD. There was 200 MG of Excess Flow during this reporting period. The following Figures compare the plant performance with the corresponding NPDES permit

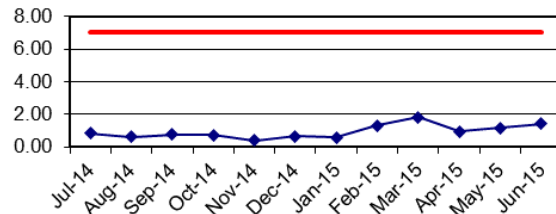
Plant Influent Flow (mgd)



■ 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.

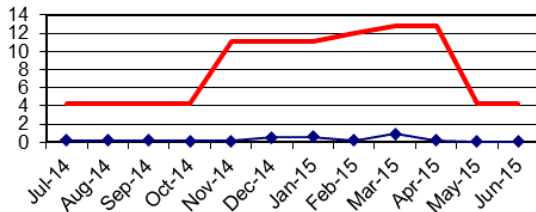
TSS (mg/l)



■ 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 1.42 mg/L, which is below the 7.0 mg/L permit limit.

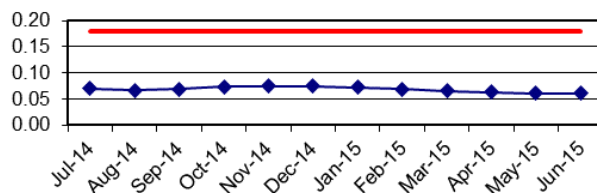
Ammonia (mg/l)



■ Effluent NH3 — Permit Limit

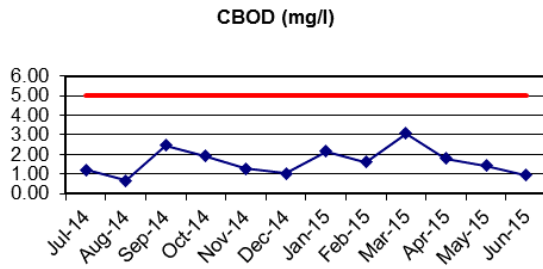
The Ammonia Nitrogen (NH₃-N) is a measure of the nitrogen found in ammonia. For the month, effluent NH₃-N concentration averaged 0.06 mg/L and is below the average 4.2 mg/L limit.

Total Phosphorus Annual Average (mg/l)



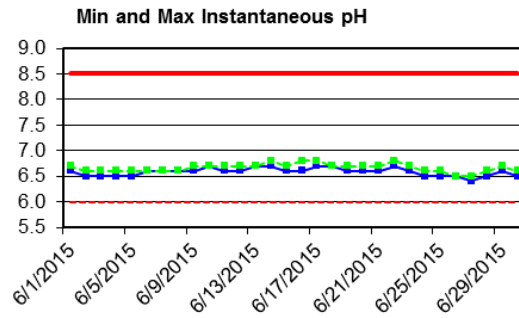
■ Effluent TP — Permit Limit

The Total Phosphorus (TP) is a measure of the particulate and dissolved phosphorus in the effluent. The annual average effluent TP concentration is 0.06 mg/L, which is below the 0.18 mg/L annual average limit.



■ Effluent CBOD — Permit Limit

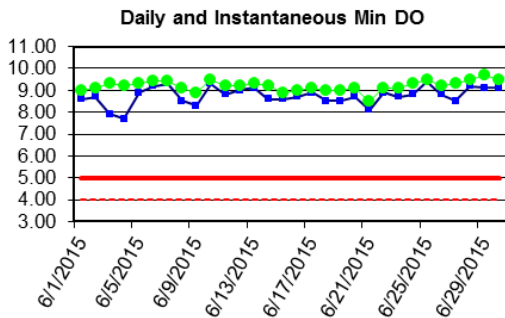
Carbonaceous Biochemical Oxygen Demand (CBOD) is a measure of the amount of dissolved oxygen required for the decomposition of organic materials. The effluent CBOD concentration averaged 0.95 mg/L (partial month) which is below the 5.0 mg/L limit.



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

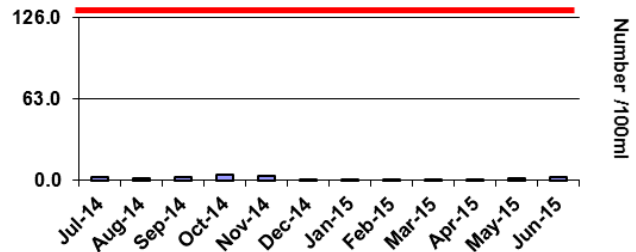
pH is a measure of the intensity of the alkalinity or acidity of the effluent. The minimum and maximum pH observed were 6.4 and 6.8 standard units respectively. The pH was within the permit limits of 6.0 and 8.5 for minimum and maximum respectively.

E. coli



● 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 7.7 mg/L. The minimum permit limits are 5.0 mg/L and 4.0 mg/L respectively. The low instantaneous reading on March 9 was due to a planned full air outage for construction. This was completed without permit impact.



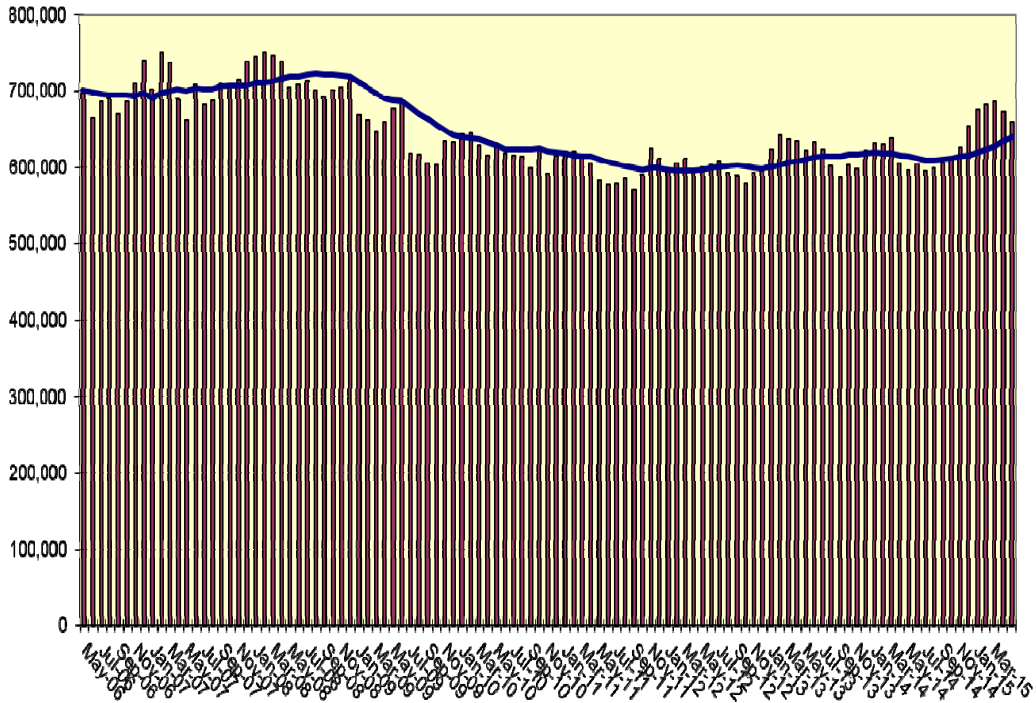
■ E. Coli Geomean — Permit Limit

E.coli is an indicator of disease causing organisms (pathogens). The E.coli permit limit is 126/100mL. The E coli geometric mean is 3.0/100mL, and well below the permit limit.

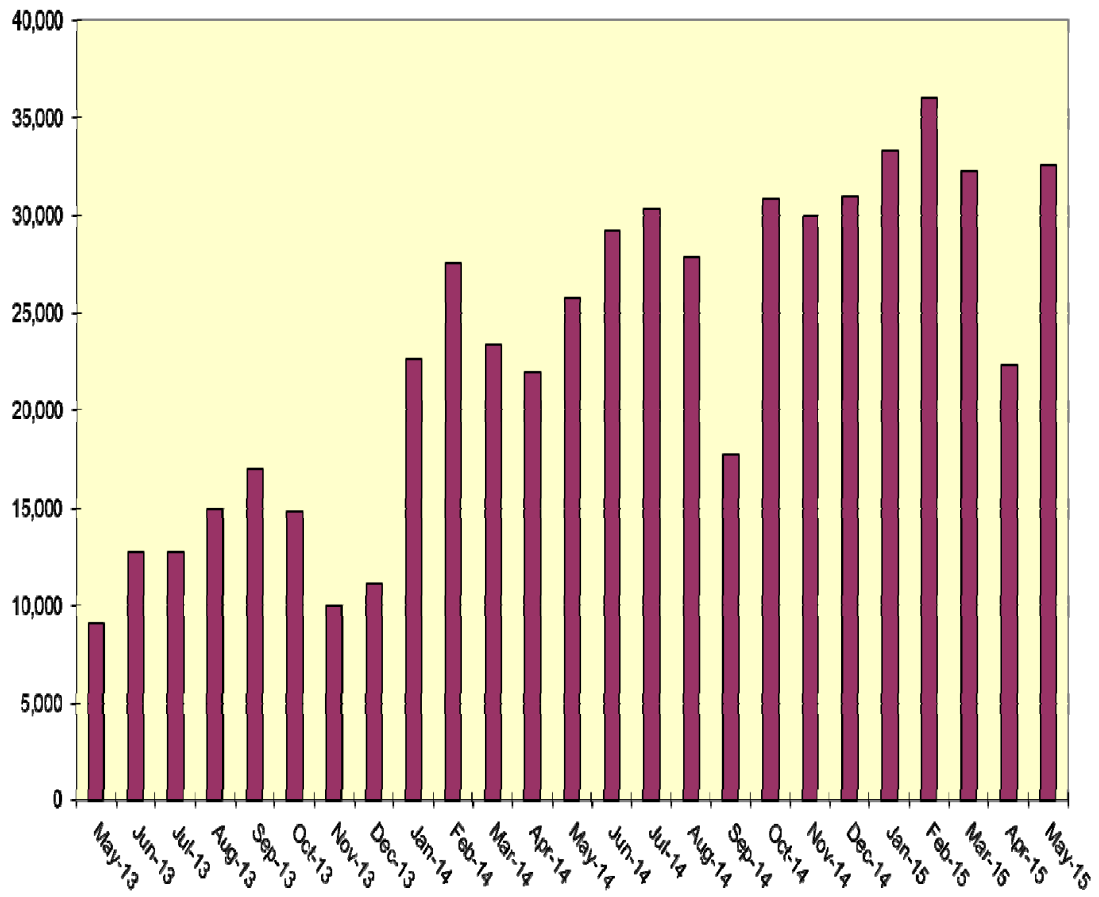
BLUE PLAINS ELECTRICITY USAGE

Blue Plains AWWTP has installed Power Monitors at critical points within the power distribution system to monitor power usage. The graph below is based on the installed power monitors and reflects usage at Blue Plains. As new processes are brought on line, the total plant power consumption has increased. This will start decreasing once CHP power is fed into the system.

**Blue Plains
Electricity Used, kwh/day
Excludes TBM Power Usage**



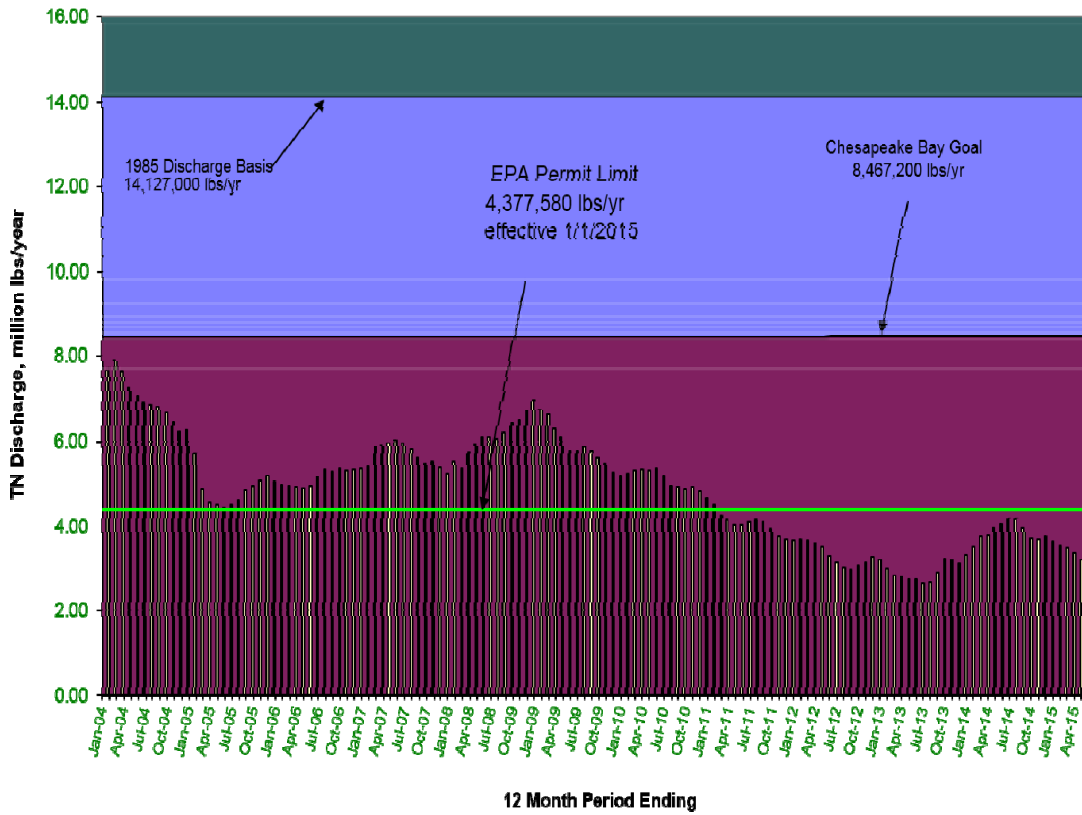
TBM Electricity Used, kwh/day



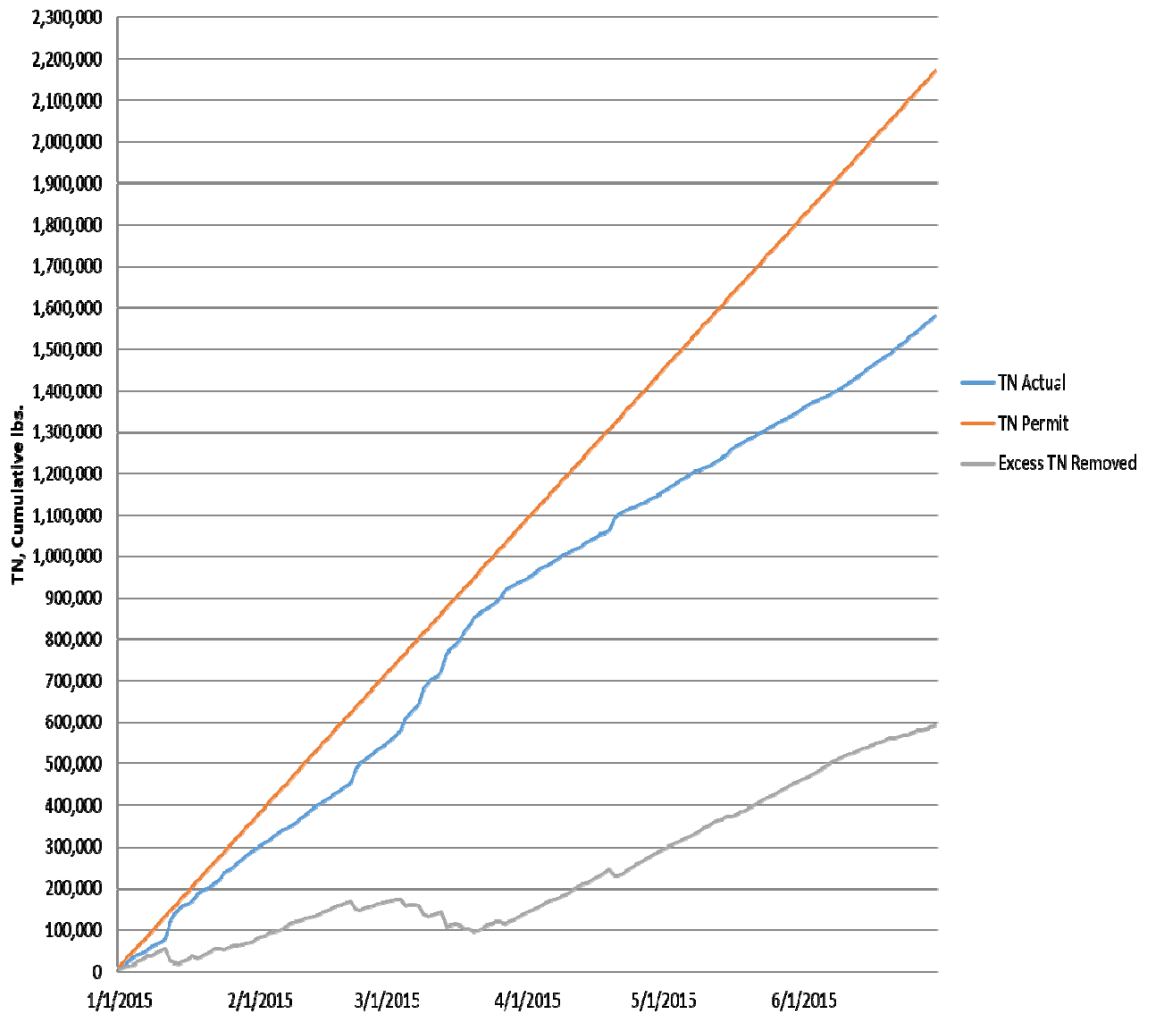
BIOLOGICAL NUTRIENT REMOVAL PERFORMANCE

During the month the full-scale BNR process produced an effluent with average total nitrogen concentration of 2.79 mg/l. The figure below shows Blue Plains effluent total nitrogen (TN) since the implementation of full scale BNR. The Figure shows Blue Plains meeting the Chesapeake Bay Goal of discharging less than 8,467,200 lbs/yr of TN.

Annual Total Nitrogen Load, lbs/yr



2015 Cumulative Nitrogen



START-UP AND COMMISSIONING UPDATE

As some parts of the nearly \$1 billion in construction activities at Blue Plains are winding down, the start-up and commissioning process is moving ahead. This process involves testing the newly built facilities to ensure:

1. the facilities perform as designed,
2. they are completed in accordance with an integrated schedule,
3. interfaces with Blue Plains have been made,
4. capture all new assets,
5. identify and order critical spare parts,
6. develop standard operating procedures, and
7. train personnel to take over the new facilities.

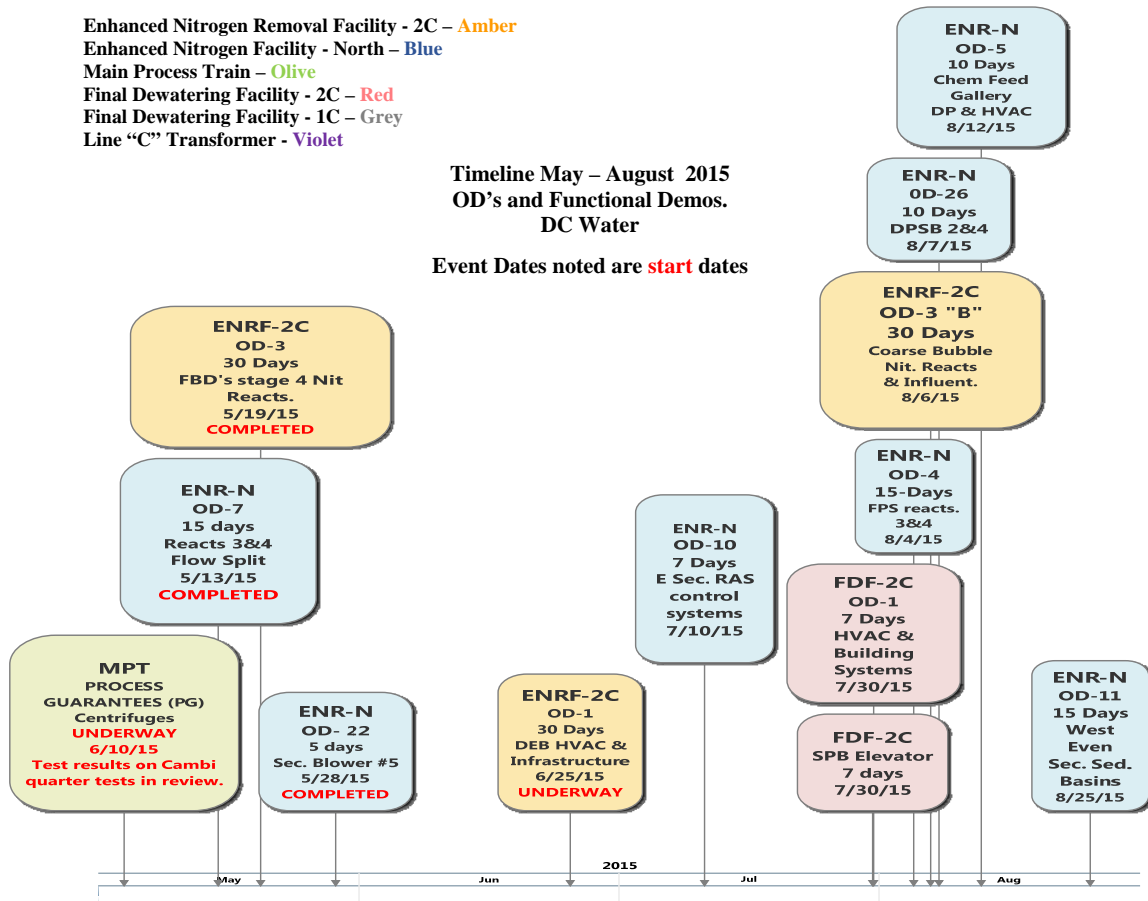
Operational Demonstrations:

One part of the construction checkout process is called the Operational Demonstration (OD). The OD process provides a platform for the contractor and DC Water to prove out the newly constructed process under the various design conditions which can last from 5 days to 1 year. Following is the three month OD look-ahead for 2015.

Enhanced Nitrogen Removal Facility - 2C – Amber
 Enhanced Nitrogen Facility - North – Blue
 Main Process Train – Olive
 Final Dewatering Facility - 2C – Red
 Final Dewatering Facility - 1C – Grey
 Line “C” Transformer - Violet

Timeline May – August 2015
 OD’s and Functional Demos.
 DC Water

Event Dates noted are **start** dates



Preparation for the Operational Demonstration for the HVAC and Building Systems for the Final Dewatering Facility Second Contract is underway. Additionally, the Operational Demonstration for Denitrification Electrical Building HVAC and Infrastructure for the Enhanced Nitrogen Removal Facility – Second Contract started this month. The Performance Guarantee test results for the CAMBI Quarter Test in the Main Process Train Contract is being reviewed and the Performance Guarantee for the Main Process Train Pre-Dewatering Centrifuges is underway.

PREFORMANCE GUARANTEE (PG): CENTRIFUGES

**Preparation for OPERATIONAL DEMONSTRATION:
HVAC and Building Systems FDF-2C (OD 1)**



- All of the infrastructure for the new final dewatering facility will undergo an operational demonstration. This demonstration will ensure the proper operations of the buildings: HVAC, fire systems (alarms, sprinklers, etc), lighting, electrical outlets and plumbing (potable water, process service water, and sumps).
- A 7 day, 24 hour/day Operational Demonstration shall begin in the end of July
- Testing will include verifying proper operations of the HVAC, fire systems, lighting, electrical outlets and all plumbing including sump.

**OPERATIONAL DEMONSTRATION: DEB HVAC &
Infrastructure ENRF-2C (OD 1)**



- The HVAC and Infrastructure including fire alarm systems, lighting, electrical outlets and plumbing is undergoing an operational demonstration
- A 30 day, 24/hour/day Operational Demonstration started June 25th.
- Tests will verify proper operations of the HVAC, fire systems, lighting, electrical and all plumbing including sumps. Of particular interest is insuring that the AC systems adequately maintains proper temperatures to avoid electrical failure during the warmer months.



The pre-dewatering centrifuges further thicken the blended primary/secondary/nitrogen waste sludges prior the CAMBI/Digestion process. 4 performance guarantees running continuously for 3 days for each centrifuge are being conducted to ensure proper centrifuge performance. PG-7 requires each centrifuge process at least 70 dry tons of solids/day; PG-8 requires each centrifuge maintain 15-18% solids (average 16.5%); PG-9 requires each centrifuge capture 90% of the solids; and PG-10 requires polymer dosages not to exceed 10 lbs/dry ton and match that of the existing centrifuges.

Training:

Successful operation of the new facilities will require significant training of operations and maintenance employees on new processes, procedures and equipment. We are also continuously working with Human Capital Management with the Cornerstone Training program to schedule and track employee training.

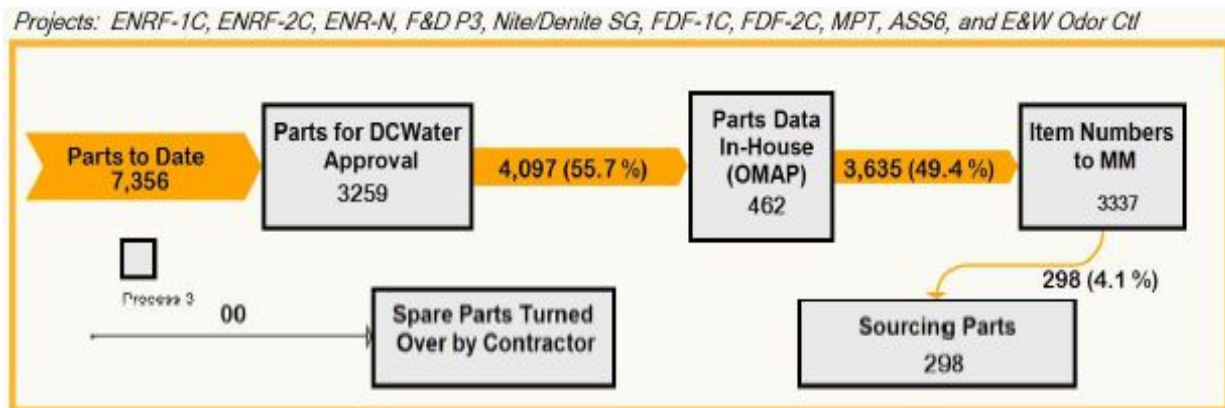
Training completed from May 27, 2015 – June 22, 2015:

- 1524 hours of vendor training were completed by DC Water personnel.
- 0 hours of other required training were completed by DC Water personnel.

Asset Integration:

The process of asset integration involves capturing and identifying over 15,000 unique assets associated with the new projects coming on-line. This is done to facilitate ordering of critical spare parts through Maximo, identify qualified vendors, and to develop standard operating procedures. Efforts up through the month of June 2015 include: management

- Asset attributes based on approved service manuals continue to be logged into the Maximo maintenance program,
- Working with Materials Management (MM) to identify vendors for critical spare parts.
- Parts work flow is as follows:

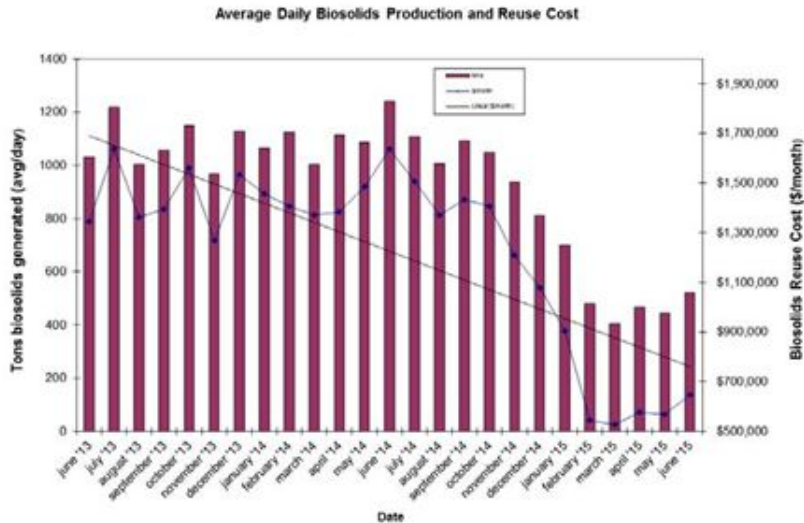
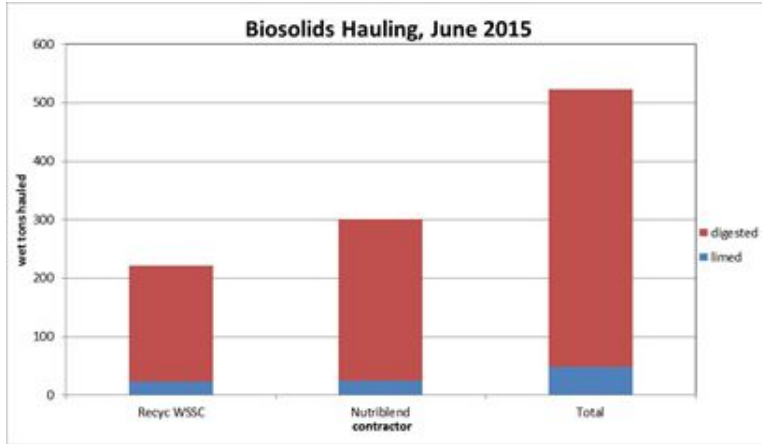


Project Acronym Key:

- ENRF-1C: Enhanced Nitrogen Removal Facility 1st Contract
- ENRF-2C: Enhanced Nitrogen Removal Facility 2nd Contract
- ENR-N: Enhanced Nitrogen Removal – North
- F&D P3: Filtration and Disinfection Electrical Upgrades Phase 3
- Nite/Denite SG: Nitrification/Denitrification Electrical Upgrades
- FDF-1C: Final Dewatering Facility 1st Contract
- FDF-2C: Final Dewatering Facility 2nd Contract
- MPT: Main Process Train
- ASS6: Area Substation #6
- E&W Odor Ctl: East and West Odor Control

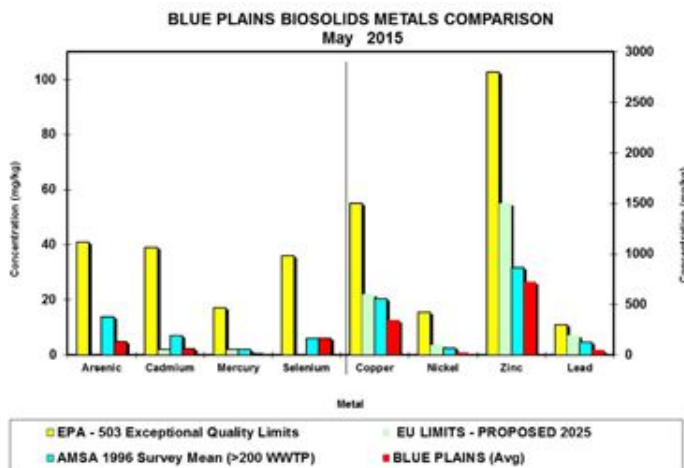
BLUE PLAINS RESOURCE RECOVERY REPORT

In June, biosolids hauling averaged 523 wet tons per day (wtpd). Of this total, 48 wtpd were lime stabilized Class B, and 474 wtpd were digested. The graph below shows the total hauling by contractor for the month of June. The average percent solids for the digested material was 32.1%. At the end of June the Cumberland County storage pad had approximately 210 tons (~25,000 tons capacity), Cedarville lagoon had approximately 0 tons of Blue Plains biosolids (~30,000 tons capacity), Goochland pad had 1400 tons, and Fauquier lagoon had 3107 tons (~15,000 tons capacity).



Please note the drop in biosolids management costs (second graph below, right vertical axis) due to the reduction in solids production since digesters came on line, and also due to the drop in fuel costs. In June, diesel prices averaged \$3.12/gallon and with the contractual fuel surcharge the weighted average biosolids reuse cost in June for the two contracts (DC Water and WSSC) was \$41.25/wet ton. For comparison, in June 2014 the average diesel price was \$4.08/gal and the average contract cost was \$43.87/wet ton.

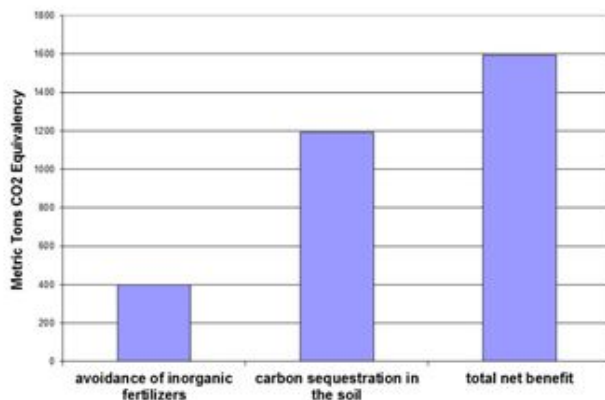
The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of May 2015. As can be seen in the graphs, the Blue Plains levels are considerably below the regulated exceptional quality limits, the national average levels surveyed in 1996, and the European Union (EU) limits. The EU limits are more conservative than the USEPA limits, and Blue Plains biosolids metals content is lower than the EU standards as well.



Environmental Benefits

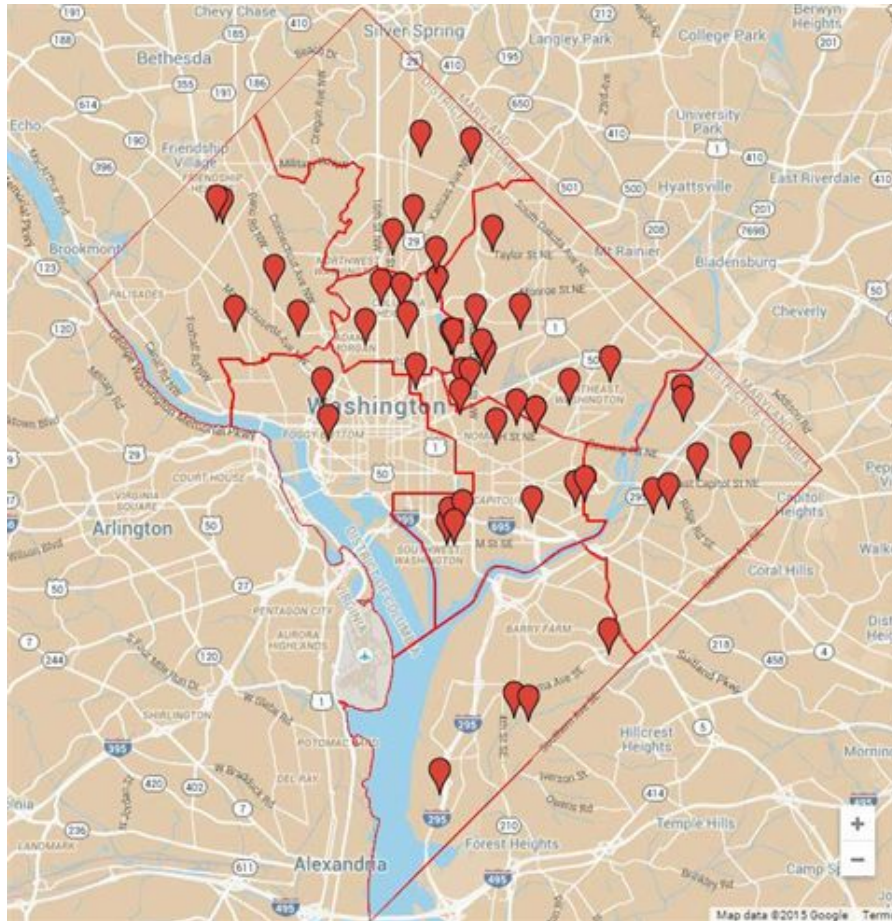
The quantity land applied in May coming directly from the plant and from storage facilities equaled 22,917 tons. Taking into account the fuel required to transport biosolids to the field, the net benefit of the land applied material is 1594 metric tons CO₂ equivalent avoided emissions. This is equivalent to taking 3,246,782 car miles off the road in the month of May (assumes 20 mpg, 19.4 lb CO₂ equivalent emissions/gallon gas – EPA estimate). The cumulative total avoided carbon emission since December, 2006 is 142,330 metric tons CO₂ equivalent.

**DCWater Biosolids Recycling Program
Greenhouse Gas Balance Benefits
May 2015 Totals**

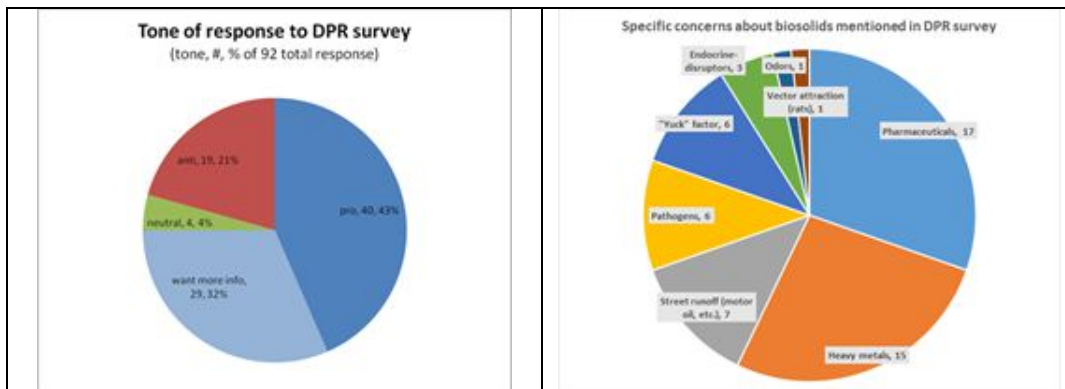


Highlights

Staff has been donating compost to sister agencies, non-profits, and community gardens for the past two years, and has established urban reuse in DC in all 8 wards of the city. Please see the map below showing approximate locations of all sites using DC Water Class A compost. Staff initiated these donations and relationships in order to introduce, through the use of our Class A compost, the idea of using biosolids in an urban setting. In the past two years, staff used DC Water compost for tree planting, community gardens, and urban restoration sites. Reactions of those using the product has been enthusiastic and supportive, and the resulting sites have benefited from the use of our compost.



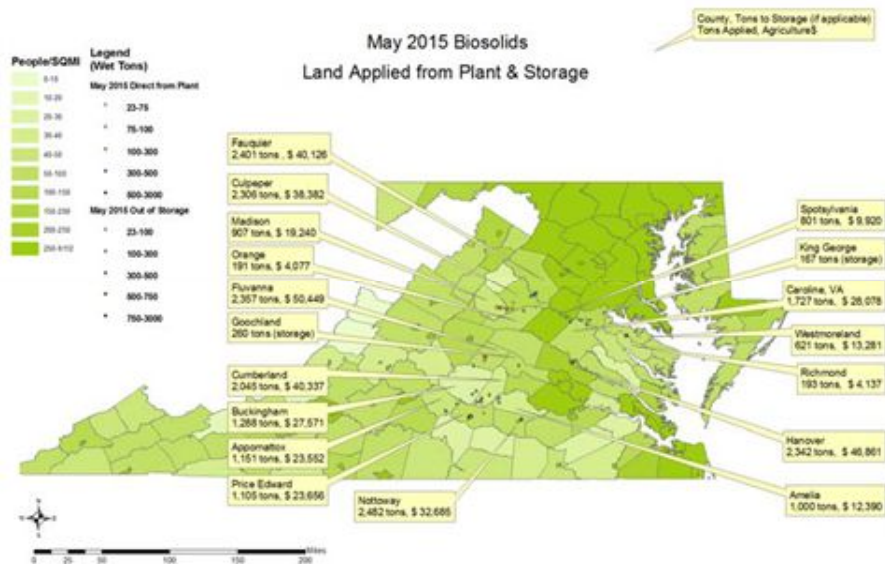
One such recipient of the product is DC Department of Parks and Recreation, for use on their community garden sites. The DPR coordinator has been supportive of the use of this asset in the service area, and has facilitated conversations and ultimately the use of the product on these garden spots. He recently sent out a survey to the gardening community, asking some questions about how they felt using a biosolids product. The results showed a mix of responses, including a majority in the middle that did not feel strongly either way. As expected, there were some who were concerned with the practice and had specific questions they would like answered. As a result, staff worked with the office of External Affairs to complete a “biosolids fact sheet” answering questions about benefits and risks. Please see the results of the survey below, including a breakdown of the concerns.



As a result of the survey, one gardener vocalized concerns about the use of “toxic waste” in the gardens, and thought DC Water was using the community gardens as a “waste disposal method”. He brought his concerns to the DC City Council, and ultimately the local NPR station, WAMU, came to do a piece on the issue for a local show, Metro Connection. The story was balanced and took both perspectives seriously. Please click on the link below if you would like to hear the story.

http://wamu.org/programs/metro_connection/15/06/19/how_dc_water_is_trying_to_turn_sewage_into_fertilizer_for_your_food#.VYrEtdIB9g.mailto

Biosolids Reuse Map for May of 2015



Clean Water Quality and Technology

The Clean Water Quality and Technology department includes the research and development, pretreatment and laboratory programs.

Research and Development Program

The research and development team continues to work on research topics associated with the planning and operation of Blue Plains. The current focus of research is to optimize plant processes' capacities and to pave the road for achieving energy neutral operations at Blue Plains advanced wastewater treatment plant (Blue Plains AWTP).

Research highlights for this month:

FOG as a co-substrate to improve digestion gas production

The new anaerobic digestion process at Blue Plains AWTP is currently processing approximately 300-350 dry tons/day of combined thickened primary sludge and biological sludge (from secondary and tertiary biological treatment). Prior to digestion, the combined thickened sludge is thermally hydrolyzed where particulate matter is solubilized and pathogens are stabilized. The thermal hydrolysis step improves the volumetric gas production yield from approximately 0.8 m³gas/m³.d to 1.8-2 m³gas/m³.d. The increase in gas yield comes from the fact that the digesters can be loaded with higher solids concentrations due to improved viscosity. Conventional anaerobic digester is typically loaded at solids concentration around 5% (or 50,000 mg/L) while the process at Blue Plains AWTP is loaded at 10.5% (or 105,000 mg/L). This high concentrated feed results in higher concentrations of ammonia, which leads to higher alkalinity and pH in the digester. Depending on the digester's pH, produced ammonia can be inhibitory to the microorganisms that are responsible for converting organic matter into biogas.

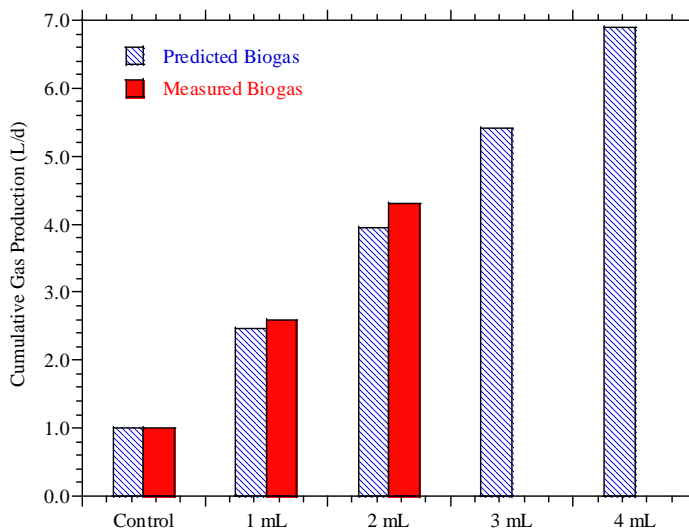


Exhibit A. Vegetable Oil digestion runs showing measured and predicted biogas production rates at various doses of oil.

The form of inhibitory ammonia is created at higher pH levels and thus lowering the pH may improve digester performance. The ammonia source comes from the breakdown of organic nitrogen present in proteins in the digester feed. The unique environment of the Blue Plains AWTP digesters allows them to accept substrates at rates beyond what a conventional process would accept without failing. A good substrate candidate must have high carbon to nitrogen ratio to avoid further

ammonia inhibition and to avoid increasing ammonia recycled back to the liquid treatment. FOG (Fat Oil and Grease) fits these requirements well.

DC Water conducted bench-scale experiments where a digester was fed various doses of vegetable oil [Exhibit A]. The results were very promising and improvement in digester performance was achieved. As expected, pH and inhibitory ammonia levels were lower. Exhibit B shows the methane production yields (m^3 methane gas per m^3 digester volume per day) for digesters with various feeds and with and without thermal hydrolysis. The chart shows the significant improvement in gas production yield with vegetable oil addition where the digesters were able to handle loads far beyond these recommended by literature. This is due to the unique characteristics of the Blue Plains AWTP digesters namely the high buffering capacity due to high alkalinity.

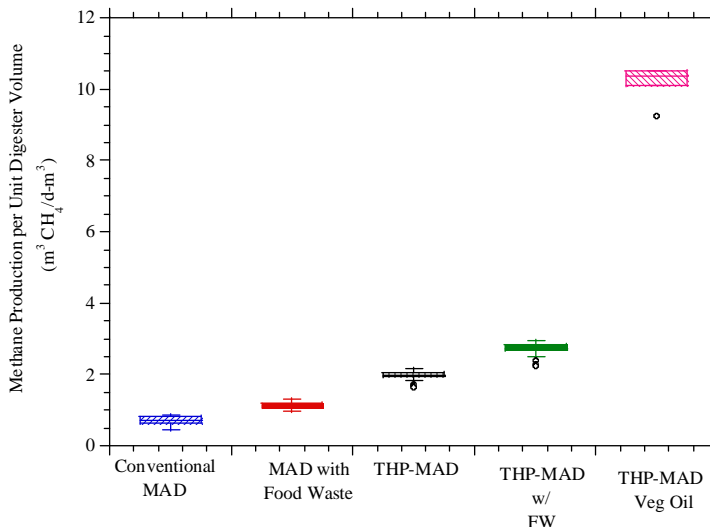


Exhibit B. Methane volumetric yield for digesters with various feeds showing the significant improvement due to vegetable oil addition at $10 m^3/m^3.d$, which represents adding FOG to thermally hydrolyzed sludge feeding anaerobic digesters.

Events in May:

- May 13th – Dr. Mari Winkler Visit (Washington State University)** – Dr. Mari Winkler came to visit the research and development team and met with Mr. Walter Bailey (Assistant GM), Mr. Salil Kharkar (Director of Process Engineering), Mr. Aklile Tesfaye (Director of Operations), and Dr. Sudhir Murthy (Innovation Chief). She delivered a presentation on her work on aerobic granulation process and its development. The process provides benefits from intensification standpoint where higher rates per unit volume are achieved compared to conventional suspended growth systems. DC Water research and development is working on a collaboration effort with Washington University to explore cultivating aerobic granular sludge in regular activated sludge reactors.
- May 18th – May 20th IWA/WEF Nutrient Removal and Recovery Specialist Conference, Gdansk.** The conference theme focused on moving innovations into practice in the area of nutrient removal and recovery from wastewater with emphasis on mainstream deammonification. DC Water had a strong presence at the conference with 4 featured papers on the areas of mainstream deammonification, sidestream deammonification, and process intensification. The conference gathered elite scientists

and engineers working on nutrient removal and recovery. It was a good opportunity to see the progress made with mainstream deammonification since last conference in 2013. Groups from North America, Europe and Asia are leading the way. Many concepts were further developed using various process configurations including suspended, attached growth and hybrid systems. The following is a list of the papers presented by DC Water representatives from the research and development team:

1. Evaluating The Impact Of Multiple Substrate Limitations For Optimizing Control Strategies (Stewart et al.)
 2. Robustness evaluation for NOB out-selection in mainstream deammonification (Han et al.)
 3. Sidestream Deammonification on Thermal Hydrolysis Process Digestate: Strategies to Overcome Nitritation Inhibition (Zhang et al.)
 4. Safety Factor Strategies For Aggressive SRT Operation In Suspended Growth Shortcut Nitrogen Removal (Al-Omari et al.)
- **May 21st – Co-digestion Task Force Meeting** – During this regular planning meeting to incorporate co-digestion into Blue Plains AWTP solids treatment to improve biogas production and generate revenue, Mr. Ahmed Al-Omari (R&D Manager) provided an update on the co-digestion research including impact on dewaterability and filtrate quality.

Blue Plains Pretreatment Program

The Blue Plains Pretreatment Program staff of two manages the Industrial Pretreatment Program, including temporary dischargers from construction 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. This month, DC Water staff attended the NACWA/EPA Pretreatment Annual Conference in Greenville, SC.

Industrial Pretreatment Program

DC Water currently manages sixteen (16) Significant Industrial User (SIU) permits and fifteen (15) Non-Significant Industrial User (NSIU) wastewater discharge permits. Inspections and compliance monitoring were conducted at two SIUs this month: the Greenpenz/Watergate groundwater treatment system and the District Apartments Realty Holding Company groundwater treatment system. One Notice of Violation (NOV) was issued this month to a SIU, the National Railroad Passenger Corporation (Amtrak), who received a Notice of Violation (NOV) on May 8, 2015, for failure to sample for pH at the train wash the week of April 22, 2015. All SIUs and permitted NSIUs are currently in compliance with discharge standards.

A follow-up letter to the 2014 annual pretreatment program report was submitted to EPA Region III on May 12, 2015, providing WSSC's publication of SIUs in Significant Non-Compliance for 2014.

DC Water currently manages 76 Temporary Discharge Authorization (TDA) permits, primarily for construction site discharges of groundwater and/or surface runoff in the combined sewer area. One new TDA permit was issued this month. A Directive Letter

was issued to Skanska USA Building on May 26, 2015, eliminating the requirement for a well point sampling program due to continued compliance with the mercury limit at the American University East Campus construction site. However, weekly monitoring for mercury will continue and if future violations occur, Skanska must initiate pretreatment using a 10 micron bag filter. All TDA discharges are currently in compliance with pretreatment standards.

Hauled Waste Program

As of the end of the month, the hauled waste program had nineteen (19) 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. One new waste hauler was added this month. DC Water collected fees from nine waste haulers this month, including those on a monthly payment plan option.

DC Water received 371 hauled waste loads (952,680 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 random hauled waste samples were collected this month, including one grease trap load. A grease trap load was collected on May 6, 2015, from Tech 24, which exceeded discharge standards for pH and TPH. The pH was 4.4 (limit is 5.0 to 10.0), and the TPH concentration was 104 mg/L (limit is 100 mg/L). A Notice of Violation was issued on May 19, 2015.

NPDES Permit Sampling

Pretreatment staff collected the bimonthly metals at outfall 002 this month, including sampling for low level mercury. Staff also collected one dry weather and one wet weather 24-hour composite sample at outfall 002 and a grab sample at outfall 001 for low level PCB analysis using EPA Method 1668 this month.

Department of Wastewater Treatment Main Laboratory

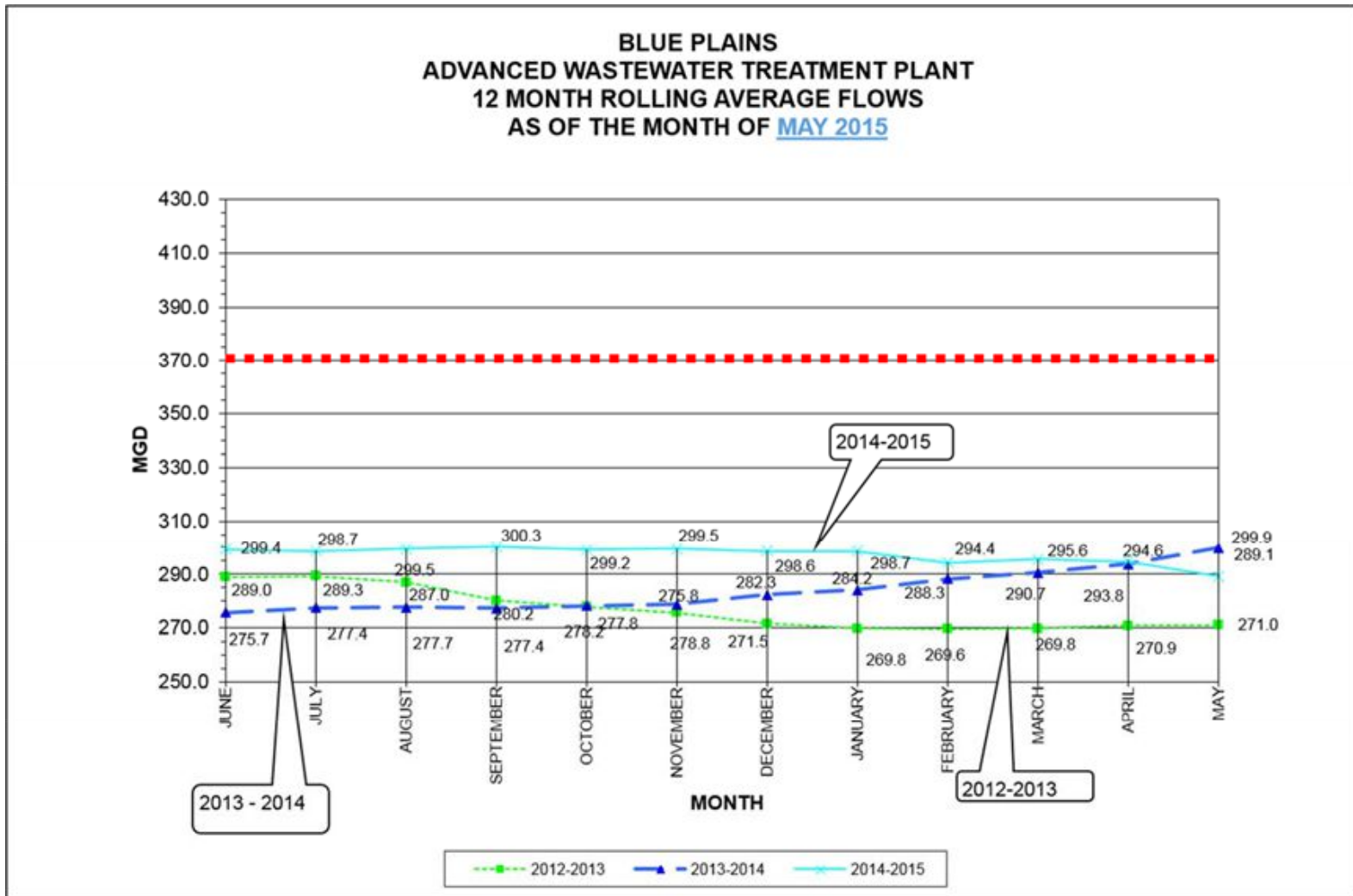
The **DWT Main Laboratory** conducts analyses on Blue Plains effluent for NPDES Permit requirements, as well as on biosolids, pretreatment samples, storm water runoff, and process samples, on a daily basis, 365 days a year. The laboratory currently analyzes approximately 2,800 samples a month and conducts 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.

The **DWT Laboratory** assists the **Department of Sewer Services** on a regular basis conducting microbiological analysis of water samples for E. Coli bacteria.

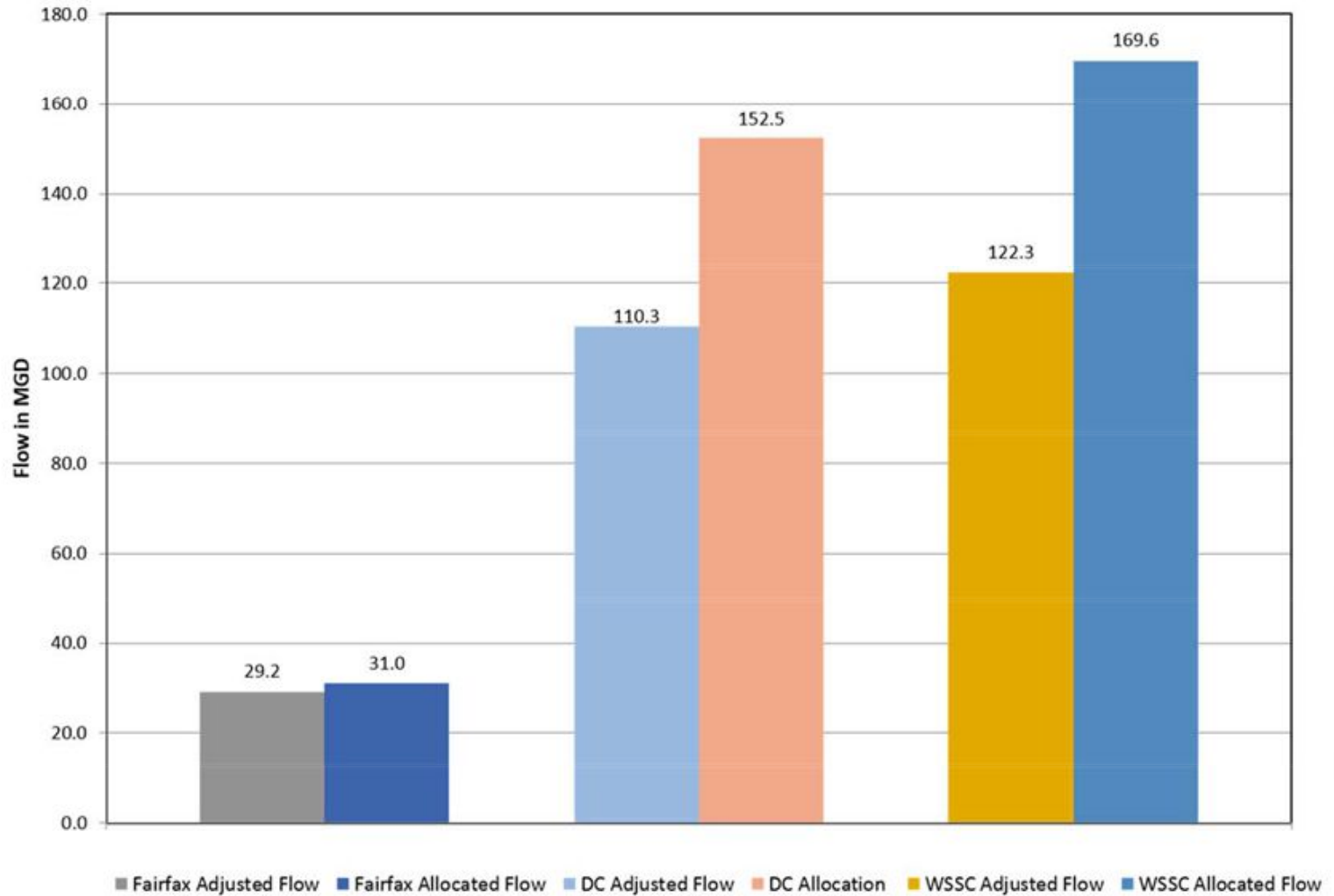
The **DWT Laboratory** also assists the **Biosolids Division** with ongoing Odor Control and Lime Stabilization studies, as well as continued pH monitoring of biosolids for 40 CFR 503 Pathogen and Vector Attraction Reduction requirements.

The **DWT Laboratory** also participates in the **WWOA Executive Board**.

This month, the **DWT Laboratory** took over the analysis of **Biosolids Division Belt Filter Press** samples for fecal coliform bacteria for DCWater's **Class A Biosolids Certification** project, and continued the analysis of digester samples from the new **Cambi Thermal Hydrolysis Digestion facility**, including Total and Volatile Solids, Total and Volatile Suspended Solids, Ammonia Nitrogen, and pH.



Adjusted Flows vs Allocated Flows - MAY 2015



**Potomac Interceptor Long-Term Odor Abatement
Status Report June 2015**

Project Description: This project provides for the long-term abatement of odors generated by the Potomac Interceptor by constructing six ventilation buildings along the main sections of the sewer. The six sites are located in the District of Columbia (Site 1995), Montgomery County, MD (Sites 4, 17 and 27), Fairfax County (Site 31) and Loudoun County (Site 46), VA. The constructed system draws gases from the sewer by vacuum, treats the gas stream with activated carbon and discharges the treated air to the atmosphere.

Summary Status:

General

Construction at the DC and three Maryland sites is substantially complete. Construction at the two Virginia sites is ongoing and nearing completion.

DC Site (Site 1995)

Facility is running.

Maryland Sites

Site 4 (Little Falls PS) – Facility is running.

Site 17 (Beltway) – Facility is operational but not running because the valve actuator needs to be replaced. The part is on order and will be replaced shortly.

Site 27 (Old Angler’s Inn) – Construction is substantially complete but the facility has not been operated since an odor complaint was received on 5/23/15. Facility has only been run intermittently (~1 hour per week) to collect humidity data. A carbon media blend that will address both H₂S and DMS is in the process of being placed in the existing vessel. Daily observations for odor continue to be conducted along the interceptor and noted on observation forms.

Virginia Sites

Site 31 (Fairfax) – Under Construction; progressed from 92% to 93% complete. The contractor is performing loop tests and start-up of equipment in preparation for the 15-day operational demonstration test. Exterior stone work is ongoing. Communications between the SCADA system and the facility have been established. Full auto-mode operational demonstration test start date is projected to occur in July based on Fire Marshall approval.

Site 46 (Loudoun) – Under Construction; 99% complete. The facility is running. However, interior building work is ongoing for punch list work items. The building will be delivered to DC Water upon training of operations personnel, production of O&M manuals and completion of work items. No odor complaints were received during this period.

Design & Construction Activities	Projected		Actual		Status
	Start	End	Start	End	
Place in operation, Site 31 (Fairfax)	7/31/15				Fire Marshall inspection pending.

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

ACTION REQUESTED

CONSTRUCTION CONTRACT:

**Sewers Under Buildings Phase 2
(Non-Joint Use)**

Approval to execute a construction contract for \$3,580,990.00

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:	PARTICIPATION:
SAK Construction, LLC 1405 Benson Ct. Suite C Arbutus, MD 21227	TFE Resources, Ltd Owings Mills, MD	WBE 4.06%
	Envirenew, Inc. Gaithersburg, MD	WBE 1.42%
	Bulldog Distribution, LLC Owings Mills, MD	MBE 4.20%
	Luther's Supply Company Shreve, MO	MBE 2.28%
	Daco Construction Corp. Hanover, MD	MBE 2.44%

DESCRIPTION AND PURPOSE

Contract Value, Not-To-Exceed:	\$3,580,990.00
Contract Time:	403 Days (1 Year, 1 Month)
Anticipated Contract Start Date (NTP):	09-18-2015
Anticipated Contract Completion Date:	10-25-2016
Bid Opening Date:	06-03-2015
Bids Received:	3
Other Bids Received	
Proshot Concrete, Inc.	\$ 4,964,988.00
Midwest Mole, Inc.	\$ 7,468,245.00

Purpose of the Contract:

To rehabilitate the identified sewers under building that will increase system efficiency and add at least 50-years asset life.

Contract Scope:

- Replacement and rehabilitation of 36 pipes at several locations using cured-in-place pipe lining, shotcrete lining, chemical grouting.
- Installation of one new manhole.

Federal Grant Status:

- Construction Contract is eligible for Federal grant funding assistance; inclusion in grant is pending availability of grant funds.

PROCUREMENT INFORMATION

Contract Type:	Fixed Price	Award Based On:	Lowest responsive, responsible bidder
Commodity:	Construction	Contract Number:	140050
Contractor Market:	Open Market		

BUDGET INFORMATION

Funding:	Capital	Department:	Engineering and Technical Services
Service Area:	Sanitary, Storm, Combined Sewer	Department Head:	Liliana Maldonado
Project:	G6, G7 & GY		

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	100.00%	\$ 3,580,990.00
Federal Funds	0.00%	\$ 0.00
Washington Suburban Sanitary Commission	0.00%	\$ 0.00
Fairfax County	0.00%	\$ 0.00
Loudoun County & Potomac Interceptor	0.00%	\$ 0.00
Total Estimated Dollar Amount	100.00%	\$ 3,580,990.00


 Gail Alexander-Reeves _____ Date
 Director of Budget

 Dan Bae _____ Date
 Director of Procurement


 Leonard R. Benson _____ Date
 Chief Engineer

 George S. Hawkins _____ Date
 General Manager