

**2012 IMA  
LIST OF DERIVATIVE AGREEMENTS**

<b>OPERATING AGREEMENTS</b>		
<b>NO.</b>	<b>TITLE</b>	<b>EFFECTIVE DATE</b>
1.	BLUE PLAINS FLOW CAPACITY, LOADS AND PEAK FLOWS - ALLOCATIONS AND LIMITATIONS	4/3/13
2.	FINANCIAL RESPONSIBILITIES OF PARTIES	4/3/13
3.	FLOW AND LOAD MEASUREMENT AND MANAGEMENT	4/3/13
4.	WASTEWATER PROJECTED FLOW CAPACITY NEEDS AND FUTURE OPTIONS	4/3/13
5.	PRETREATMENT AND OPERATIONAL REQUIREMENTS	4/3/13
6.	BIOSOLIDS MANAGEMENT COMMITMENTS	4/3/13

## **OPERATING AGREEMENT #1**

### **PARTIES' AGREEMENT REGARDING: BLUE PLAINS FLOW CAPACITY, LOADS, AND PEAK FLOWS - ALLOCATIONS AND LIMITATIONS**

**THIS OPERATING AGREEMENT** ("Agreement"), made among the **DISTRICT OF COLUMBIA** (the District), the **DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY** (DC Water), **FAIRFAX COUNTY, Virginia** (Fairfax), **MONTGOMERY COUNTY, Maryland** (Montgomery), **PRINCE GEORGE'S COUNTY, Maryland** (Prince George's), and the **WASHINGTON SUBURBAN SANITARY COMMISSION** (WSSC),

Witness:

**WHEREAS**, the Parties have entered into the Blue Plains Intermunicipal Agreement (2012 IMA); and

**WHEREAS**, the Parties have agreed to comply with the Allocated Flow Capacity values for the Blue Plains Wastewater Treatment Plant (Blue Plains), which apportion capacity among the District, Fairfax, WSSC and Non-Party Users, as set forth in the 2012 IMA, **Section 4**; and

**WHEREAS**, the Parties agree to comply with nutrient loads for Blue Plains effluent discharged through two Blue Plains effluent points, designated Outfall #001 and Outfall #002; and

**WHEREAS**, the Parties agree to routinely monitor their Actual Flows, Adjusted Flows and the associated nutrient loads to Blue Plains to ensure that all allocations and/or limitations for Blue Plains are not exceeded; and

**WHEREAS**, the Parties have agreed to regularly monitor all wastewater process, permit, regulatory and other developments that have the potential to impact either flow capacity, nutrient loads or other parameters that may affect Blue Plains and its ability to comply with its permit or process requirements as defined in **Section 6**; and

**WHEREAS**, the Parties recognize that the Blue Plains NPDES permit, applicable Total Maximum Daily Load (TMDLs) for the Potomac River Watershed, and associated state Watershed Implementation Plans (WIPs) must all be complied with, and that the load limits in Blue Plains' permit are applied to Outfall #001 and #002; and

**WHEREAS**, the Parties have agreed to regularly monitor their peak flows at the point of connection to the collection system owned by the District and operated by DC Water, and to comply with their Peak Flow Limitations, as set forth in the 2012 IMA, **Section 6**; and

**WHEREAS**, the Parties acknowledge their responsibility to ensure that the Non-Party Users and Indirect Users also comply with the terms of this Agreement as applicable;

and

**WHEREAS, Section 2** of the 2012 IMA authorizes the Leadership Committee to create, modify or terminate an Operating Agreement to implement the terms of the IMA consistent with **Section 11**.

**NOW, THEREFORE, the Parties agree as follows:**

**PURPOSE:** The purpose of this Agreement is to address matters relating to **Section 4** of the 2012 IMA

**A. BLUE PLAINS EFFLUENT LOADS AND ALLOCATIONS**

1. The Blue Plains Effluent Loads and Blue Plains Effluent Load Allocations (for Outfalls #001 and #002) are defined in **Table OA 1-A** below.
2. The Parties acknowledge that these Effluent Load Allocations are based on various state and District flow and concentration assumptions.

**Table OA 1-A**

<b>BLUE PLAINS EFFLUENT LOADS<sup>1, 2</sup></b>		
<b>ENTITIES WITH ALLOCATIONS</b>	<b>LOAD ALLOCATIONS (LBS/YR)</b>	
	<b>Total Nitrogen</b>	<b>Total Phosphorus</b>
<b>District of Columbia’s Blue Plains Load Allocation<sup>3</sup> - Total</b>	<b>2,114,542.00</b>	<b>87,993.54</b>
<i>WSSC</i>	<i>Not specified</i>	<i>Not specified</i>
<i>Naval Ship Research &amp; Development Center</i>	<i>Not specified</i>	<i>Not specified</i>
<i>National Park Service</i>	<i>Not specified</i>	<i>Not specified</i>
<b>Maryland’s Blue Plains Load Allocation-Total<sup>4</sup></b>	<b>1,993,000.00</b>	<b>89,694.91</b>
<i>Fairfax County</i>	<i>Not specified</i>	<i>Not specified</i>
<i>Loudoun County Sanitation Authority</i>	<i>Not specified</i>	<i>Not specified</i>
<i>Dulles Airport</i>	<i>Not specified</i>	<i>Not specified</i>
<i>Town of Vienna</i>	<i>Not specified</i>	<i>Not specified</i>
<b>Virginia’s Blue Plains Load Allocation-Total</b>	<b>581,458.00</b>	<b>26,166.00</b>
<b>Blue Plains Effluent Loads (Grand Total)<sup>1</sup></b>	<b>4,689,000.00</b>	<b>203,854.45</b>

<sup>1</sup> Loads for Blue Plains and sub-allocations are as documented in EPA’s Final TMDL (December 29, 2010), Section Q.

<sup>2</sup> Use of Allocated Flow Capacity is contingent on providing an allocation equivalent to at least 4.0 mg/L for TN and 0.18 mg/L for TP for Allocated Flow Capacity plus Captured Stormwater Flow, i.e. all flow out of Outfall 002. The District must also provide an allocation for flow discharged to Outfall 001.

<sup>3</sup> The load allocations shown for the District only address that portion associated with District flows to Blue Plains. Allocations for other Non-Party Users are reflected in the respective state allocations.

<sup>4</sup> WSSC use of allocated flow capacity is limited to 163.6 mgd due to diversion of nitrogen and phosphorus load allocations to the Seneca WWTP (i.e., loads associated with 6 mgd).

**B. BLUE PLAINS INFLUENT DESIGN LOAD CAPACITY**

1. Influent loads to Blue Plains must be limited so that the Blue Plains effluent loads meet permit requirements. The Parties agree that the Design Load Capacities are set forth in **Table OA 1-B**. If there are potential problems with meeting plant permits then the load capacities set forth in **Table OA 1-B** will apply.
2. The Design Load Capacity reflects Complete Treatment requirements for those flows that are discharged through Outfall #002, under Maximum Design Flow Capacity flows.

**Table OA 1-B**

<b>BLUE PLAINS DESIGN LOAD CAPACITY FOR INFLUENT FLOWS<sup>1</sup></b>		
<b>Parameters</b>	<b>Loads (lb/day)</b>	
	<b>Annual Average</b>	<b>Maximum 30-Day Rolling Average</b>
<b>BOD</b>	525,977	694,290
<b>TSS</b>	562,282	747,836
<b>TKN</b>	104,940	137,471
<b>NH<sub>3</sub></b>	55,390	64,252
<b>TP</b>	14,108	18,340
<b>Associated Maximum Design Flow Capacity – Basis (mgd)</b>		
<b>Flow, Average Year</b>	<b>384</b>	<b>485</b>
<b>Flow, Maximum Year</b>	<b>431</b>	<b>485</b>

**GLOSSARY TERMS FOR OPERATING AGREEMENT #1**

This Glossary identifies terms that have a specific and defined meaning for purposes of interpreting this Operating Agreement. Additional terms that are also used in the 2012 IMA Core Agreement are defined in the Glossary included in the IMA.

**Complete Treatment** – Flow that is discharged out of Outfall #002 and receives the following treatment: screening, grit removal, primary treatment, secondary treatment, nutrient reduction, disinfection, and de-chlorination.


**Maximum Design Flow Capacity** – Design flow capacity figures, used to develop design loads for complete treatment out of Outfall #002, that reflects flow assumptions during specific wet weather conditions (i.e., 60 inch Rain Year and after full implementation of the CSO LTCP and the Total Nitrogen and Wet Weather Plan).

<sup>1</sup> \*Source: “Design - Level Plant Influent Flows and Loads Technical Memorandum”, AECOM May 2009 and “Projected Flows and Sources – NT/Wet Weather Plan”, Greeley and Hansen, July 2010.

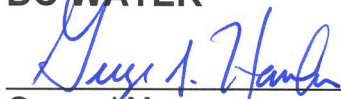
**EXECUTION**

This Agreement is executed on behalf of the Parties by the Members of the IMA Leadership Committee who, by affixing their signatures, confirm the authorization of their respective Party to be bound thereby. It shall be effective on the date indicated by the Chair below.


**DISTRICT OF COLUMBIA**

  
City Administrator 04/02/13  
Date

**DC WATER**

  
General Manager 3/21/13  
Date

**FAIRFAX COUNTY, VIRGINIA**

  
County Executive 3/25/13  
Date


**MONTGOMERY COUNTY, MARYLAND**

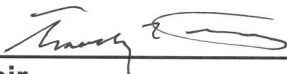
  
Chief Administrative Officer 4/3/2013  
Date

**PRINCE GEORGE'S COUNTY, MARYLAND**

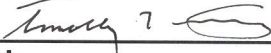
  
Chief Administrative Officer 4/2/13  
Date

**WASHINGTON SUBURBAN SANITARY COMMISSION, MARYLAND**

  
General Manager 3/24/13  
Date

Approved by Leadership Committee:   
Chair 4/3/13  
Date

All Parties have been notified, 60 days have passed from notification, no objection has been made by any Party, this Agreement is, therefore,

EFFECTIVE:   
Chair 4/3/13  
Date

## **OPERATING AGREEMENT #2**

### **PARTIES' AGREEMENT REGARDING: FINANCIAL RESPONSIBILITIES OF PARTIES**

**THIS OPERATING AGREEMENT** (Agreement), made among the **DISTRICT OF COLUMBIA** (the District), the **DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY** (DC Water), **FAIRFAX COUNTY, Virginia** (Fairfax), **MONTGOMERY COUNTY, Maryland** (Montgomery), **PRINCE GEORGE'S COUNTY, Maryland** (Prince George's), and the **WASHINGTON SUBURBAN SANITARY COMMISSION** (WSSC),

Witness:

**WHEREAS**, the Parties have entered into the Blue Plains Intermunicipal Agreement (2012 IMA); and

**WHEREAS**, the Parties recognize their collective and mutual interests under the 2012 IMA include the authorization, review, or approval of actions that have a potential fiscal impact on the Parties, including, but not limited to billing, auditing and fiscal management; and

**WHEREAS**, the Parties agree to their collective and individual responsibility for complying with the fiscal allocations for Capital Costs, Operating and Maintenance (O&M) Costs, billing and payment procedures, User Fees, as well as fines, penalties and claims; and

**WHEREAS**, the Parties agree that their financial responsibilities and payment obligations for Capital Costs and O&M Costs of facilities include those implemented by DC Water and by Fairfax or WSSC, to the extent that those facilities are deemed to be Multi-Jurisdiction Use Facilities (MJUFs); and

**WHEREAS**, the Parties agree to work with DC Water and, as applicable, Fairfax and WSSC, to ensure that MJUF determinations and associated cost allocations are consistent with the 2012 IMA; and

**WHEREAS**, the Parties recognize that any significant changes in the wastewater flows, peak flows, and/or loads could require modification to the terms of the 2012 IMA, **Section 5**, and this Operating Agreement; and

**WHEREAS**, **Section 2** of the 2012 IMA authorizes the Leadership Committee to create, modify or terminate an Operating Agreement to implement the terms of the IMA consistent with **Section 11**.

**NOW, THEREFORE, the Parties agree as follows:**

**PURPOSE:** This Operating Agreement shall set forth additional matters implementing **Section 5** of the 2012 IMA:

- A. General Cost Responsibilities;
- B. Capital Cost Responsibilities;
- C. Operation and Maintenance Costs Responsibilities;
- D. User Fees Responsibilities;
- E. Fines, Penalties and Claims Responsibilities; and
- F. Billing and Payment Procedures.

**A. GENERAL COST RESPONSIBILITIES**

1. **Timing** - Following agreement of the directly involved Operating Agency Representatives regarding the needs, location, size, allocation of capacity, and allocation of cost for new or expanded collection facilities, such facilities shall be constructed as promptly as needs require.
2. **Contingent Obligations**
  - a. Construction of new or improved MJUFs shall be contingent on funding; however, failure to fund will result in a loss of allocation to the non-paying Party.
  - b. No Operating Agency shall be obligated to commence construction or installation of any additional pipelines and appurtenances until:
    - 1) DC Water, Fairfax and WSSC have made their share of the cost available to the constructing Operating Agency or have otherwise satisfied the constructing Operating Agency that funds will be available as expended; and
    - 2) The constructing Operating Agency has available sufficient funds, including funds which the other Operating Agencies have made available or will make available as expended, to pay for all estimated costs of such facility.
3. **Cost Basis** – The cost basis for Capital Costs shall be actual incurred Capital Costs associated with the MJUFs. The cost basis for O&M costs shall be actual incurred O&M costs associated with the MJUFs.
4. **Billing Disputes** – If disputes regarding billings cannot be resolved through routine procedures, the affected Operating Agency Representatives shall endeavor to reach a consensus with DC Water and/or others involved. If a consensus cannot be reached, the dispute resolution process outlined in **Section 10** of the 2012 IMA will be used.

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**B. CAPITAL COST RESPONSIBILITIES**

1. **Blue Plains Capital Cost Allocations** - Capital Costs for Blue Plains and Other Associated Facilities shall be allocated proportionate to the District, Fairfax, WSSC, and Non-Party Users' Allocated Flow Capacity or other Usage Allocations as defined in the 2012 IMA **Section 5**. Cost allocations for all Blue Plains wastewater treatment and biosolids management are as set forth in **Table OA 2-A** below.

**TABLE OA 2-A**

<b>BLUE PLAINS ALLOCATED FLOW CAPACITY AND RESULTING COST ALLOCATIONS</b>		
<b>ENTITIES</b>	<b>CAPACITY ALLOCATIONS (MGD)</b>	<b>COST ALLOCATIONS (Percent)</b>
District of Columbia	152.50	<b>41.216</b>
Non-Party Users:		
LCSA, Virginia	13.80	<b>3.730</b>
Dulles Airport, Virginia	1.50	<b>0.405</b>
Town of Vienna, Virginia	1.50	<b>0.405</b>
Naval Ship Research & Development Center, Maryland	0.07	<b>0.019</b>
National Park Service, Maryland	<u>0.03</u>	<u><b>0.008</b></u>
Sub-total	16.9	N/A
<b>District of Columbia - Total<sup>1</sup></b>	<b>169.40</b>	45.783
<b>WSSC<sup>2</sup> (for Prince George's County &amp; Montgomery County), Maryland – Total</b>	<b>169.60</b>	<b>45.838</b>
<b>Fairfax County, Virginia<sup>3</sup> - Total</b>	<b>31.00</b>	<b>8.378</b>
<b>Grand Total</b>	<b>370.00</b>	<b>100.000</b>

<sup>1</sup> Pursuant to the 2012 IMA, the District is responsible for costs on behalf of the Non-Party Users, which it then recovers through separate agreements with those entities.

<sup>2</sup> The Allocated Flow Capacity for WSSC is on behalf of Prince George's and Montgomery; with any sub-allocations determined by separate agreements between those entities. The WSSC allocation also includes wastewater from other political jurisdictions, including some within those Counties with which WSSC has separate agreements.

<sup>3</sup> The Allocated Flow Capacity for Fairfax also includes wastewater from other political jurisdictions with which Fairfax has separate agreements.



2. **Pipelines and Appurtenances Capital Cost Allocations Methodology for Determining MJUF Portions of Pipelines & Appurtenances** - Capital Costs associated with constructing, replacing, or rehabilitating the wastewater collection systems and facilities shall be allocated utilizing the MJUF capital cost allocation methodology. This methodology uses a computer model to calculate a percentage of use by each entity for each project, and for each portion of the facility being evaluated (i.e., node-to-node). This assessment determines the MJUF portion for every project and its components.
3. **CSO Long-term Control Plan (LTCP) Capital Cost Allocations**
- a. **Parties Agree to Pay MJUF Portion** - The Parties agree to pay proportionate shares of the Capital Costs of that portion of the CSO LTCP that has been determined to be a MJUF, as defined in **Table OA 2-B**.
  - b. **Basis for Determining MJUF Portion of CSO LTCP Cost Allocations** - The MJUF portion of the approved CSO LTCP and resulting Capital Cost allocations are based on the modeling used in the development and assessment of the CSO LTCP. These Capital Cost allocations shall apply to the District, Fairfax, WSSC and Non-Party Users. Sub-allocations of those Capital Cost allocations for Fairfax, WSSC and the Non-Party Users shall be in proportion to their Allocated Flow Capacity.
  - c. **Modification of the CSO LTCP** - DC Water shall evaluate performance assumptions associated with any modifications to the CSO LTCP to determine if the Capital Cost allocations should be modified; and present the findings to the Regional Committee.
  - d. **Leadership Committee to Approve Modifications** - The Leadership Committee, after reviewing recommendations from the Regional Committee and determining that such modifications are desirable or required, shall approve and adopt revisions. The revisions may supplant the established Capital Cost allocations.

**TABLE OA 2-B**

<b>COMBINED SEWER OVERFLOW LONG-TERM CONTROL PLAN CAPITAL COST ALLOCATIONS FOR MJUF DESIGNATED PORTIONS ONLY</b>	
<b>USER</b>	<b>PERCENT</b>
<b>District of Columbia</b>	<b>92.90</b>
<b>Fairfax County</b>	<b>1.01</b>
<b>WSSC</b>	<b>5.54</b>
<b>Non-Party Users</b>	<b>0.55</b>
<b>Sub-Total: Fairfax, WSSC &amp; Non-Party Users</b>	<b>7.10</b>
<b>TOTAL</b>	<b>100.00</b>

4. **Capital Equipment Capital Cost Allocations**

- a. Cost allocations for all capital equipment are set forth in **Table OA 2-C**.
- b. Those capital equipment assets which reflect capital that has a shorter life span (such as information technology equipment and fleet, etc.), will be allocated using capacity or flow rates. See **Table OA 2-C** for a list of items included in capital equipment costs and designation as to the cost allocation basis.
- c. Funding of the MJUF portion of capital equipment is derived by first allocating each pool of capital equipment costs to one or more agreed upon cost drivers. (These cost drivers include the number of full time employees, departmental budgets, etc.)
- d. Changes to these cost drivers can be proposed by DC Water, Fairfax or WSSC and are subject to future evaluation by the Regional Committee.

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**TABLE OA 2-C**

<b>CAPITAL EQUIPMENT COST ALLOCATION METHODOLOGY</b>		
<b>SERVICE AREA</b>	<b>PROJECT</b>	<b>ALLOCATION METHODOLOGY</b>
<b>Wastewater Treatment</b>	Plant Model	Allocated Capacity
	Laboratory Equipment	Allocated Capacity
<b>Maintenance Services</b>	Maintenance	Allocated Capacity
	Pump Repairs/Replacement	Allocated Capacity
	Turbine, Aerator & Methanol	Allocated Capacity
	Maintenance Management System	Actual Flows
	Large Electric Motors	Allocated Capacity
	Potomac Sewage Pumping Station	Allocated Capacity
	High Priority Rehabilitation Program	Allocated Capacity
	Large Meter Testing	Allocated Capacity
	Centrifuge Repair/Replace	Allocated Capacity
	<b>Fleet</b>	Vehicles
Indirect Fleet Allocation		Actual Flows
<b>Information Technology</b>	Financial Management	Actual Flows
	Radio Equipment	Actual Flows
	General IT Infrastructure	Actual Flows
	Payroll/HR System	Actual Flows
<b>Facilities &amp; Security</b>	HVAC at Various Locations	Actual Flows
	Doors, Signage, Fencing, etc.	Actual Flows

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5. **Other Capital Cost Allocation Calculations - Indirect Labor Cost Pools** – DC Water will segregate its Blue Plains indirect labor cost pool from its non-Blue Plains indirect labor cost pool. The Blue Plains indirect labor cost pool's allocation base will be the total costs of Blue Plains project/activities managed by DC Water's Engineering Department or its successor. The non-Blue Plains indirect labor cost pool's allocation base will be the total cost of all non-Blue Plains projects/activities managed by DC Water's Engineering Department or its successor.

## **C. OPERATION AND MAINTENANCE (O&M) COST RESPONSIBILITIES**

### **1. Determination of Billing Flow**

- a. Each of the District, Fairfax and WSSC's proportion of the annual MJUF O&M Costs shall be its Billing Flow divided by the Total Billing Flow. The Billing Flow will be the Actual Flow for each entity; except that the District Actual Flow is adjusted to account for any differential treatment cost impacts to calculate the District Billing Flow. The procedures for calculating these Billing Flows are set forth below in **Table OA 2-D**. For purposes of this calculation, all Actual Flows reflect Allocated Flow Capacities, and the Captured Stormwater Flow represents total estimated flows once the CSO LTCP is fully implemented.
- b. **Differential Treatment Cost Impacts** - Consistent with 2012 IMA **Section 5**, the calculation of Billing Flow from Actual Flow shall take into account any differential treatment cost impacts that have been determined based on a Jointly Managed Study.
- c. **District Billing Flows** - As of the date of this Agreement, the only agreed upon differential treatment cost applies to the District's CSF. The cost of treating CSF has been determined to be 49.28% of the cost of treating average strength wastewater (consistent with a technical review of DC Water analysis, 3/22/10). This percentage will be reviewed and updated periodically for changed conditions.
- d. **Annual Adjustment of Billing Flow** - The Billing Flow for any year will, therefore, be adjusted as follows:
  - 1) DC Water will calculate the CSF treated at Blue Plains using the measured rainfall and the CSO LTCP model. The CSO LTCP model, this calculation, and the nomograph in the **Appendix of OA #3** will be reviewed periodically by the Regional Committee.
  - 2) The calculated CSF will be subtracted from the Actual Flow.
  - 3) The CSF will be multiplied by the CSF cost ratio (i.e. the cost per gallon of treating CSF divided by the cost per gallon of treating average strength wastewater). This is the Adjusted CSF.
  - 4) The Billing Flow is calculated by adding the Adjusted CSF to the Actual Flow less the CSF.

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**NOTE:** For purposes of this calculation, all Actual Flows reflect Allocated Flow Capacities, and the Captured Stormwater Flow represents total estimated flows once the CSO LTCP is fully implemented. Numbers are rounded for purposes of the example.

**TABLE OA 2-D**

<b>Actual Flow</b>			
<b>Flow Sources</b>	<b>Flows (MGD)</b>	<b>Outfalls</b>	
		<b>#001</b>	<b>#002</b>
<b><u>MD</u></b>			
WSSC	169.60		
Navy	0.07		
NPS	0.03		
<b>Sub-Total MD</b>	<b>169.70</b>		
<b><u>VA</u></b>			
Fairfax	31.00		
Loudoun	13.80		
Dulles	1.50		
Vienna	1.50		
<b>Sub-Total VA</b>	<b>47.80</b>		
<b>Suburb Total</b>	<b>217.50</b>		
<b><u>DC</u></b>			
DC	152.5		
CSF	21		
Total DC	173.5		
<b>Grand Total</b>	<b>391.00</b>	<b>7.30</b>	<b>383.70</b>

## 2. Blue Plains & Associated Facility O&M Cost Allocations

- a. The District, Fairfax and WSSC and Non-Party Users shall be assessed by DC Water for their proportionate share of the cost of operating and maintaining Blue Plains.
- b. The DC Water Central Operations Facility (COF) building O&M Costs allocated to wastewater services shall be 54%. However, all Parties have the right to request a detailed analysis of this agreed allocation percentage if a circumstance occurs that materially changes the assumptions used in developing this ratio. Where practicable, DC Water will continue to segregate COF related costs from other cost pools in the Facilities Department or its successor.

## 3. Pipelines and Appurtenances O&M Cost Allocations

- a. The District, Fairfax and WSSC and Non-Party Users shall be assessed by DC Water for their proportionate share of the cost of operating and maintaining the interceptors (including the Potomac Interceptor) and appurtenances, and including wastewater pumping stations at locations other than Blue Plains which are determined to be MJUFs.
- b. WSSC shall assess DC Water, as appropriate, for its proportionate share of the cost of O&M of the interceptors, wastewater pumping stations, screen chambers and wastewater Flow meters that are operated and maintained by WSSC or any of the other parties to handle BPSA flows that are directed to Blue Plains.
- c. The District, Fairfax and WSSC's share of these O&M Costs shall be based on a node-to-node assessment methodology.

4. CSO LTCP O&M Cost Allocations – The District, Fairfax, WSSC and Non-Party Users shall be assessed by DC Water for their proportionate share of the cost of operating and maintaining that portion of the CSO LTCP that has been determined to be a MJUF by the Regional Committee based on the proportion of their Actual Flow versus Total Flow through the facility or based on other Usage determinations. Any methodology used shall be approved by the Regional Committee.

<b>Billing Flow – Example Calculation</b>		
1	Metered Plant Flow (Actual Flow), MGD	391
2	Metered <b>WSSC</b> (Actual Flow = Billing Flow), MGD	169.6
3	Metered <b>Fairfax</b> (Actual Flow = Billing Flow) MGD	31
4	Metered <b>Loudoun</b> (Actual Flow = Billing Flow)MGD	13.8
5	<b>Other PI Users</b> (Actual Flow = Billing Flow), MGD	3.1
6	Total Suburban (Actual Flow = Billing Flow), MGD	217.5
7	<b>District</b> (Actual Flow), MGD	$391 - 217.5 = 173.5$
8	Captured Stormwater Flow (CSF) (from LTCP model), MGD	21
9	CSF Cost Ratio (from AECOM cost study)	49% <sup>1</sup>
10	Adjusted CSF Flow, MGD	$(21)(.49) = 10.3$
11	District Billing Flow, MGD	$173.5 - 21 + 10.3 = 162.8$
12	Total Billing Flow, MGD	$217.5 + 162.8 = 380.3$

<sup>1</sup> Cost ratio applied to Captured Stormwater Flow is based on determination cited in **Subsection C.1.c.**

**D. USER FEE RESPONSIBILITIES**

1. **Payment** - The WSSC and Fairfax shall pay to the District an annual User Fee in accordance with **Section F.2.** of this Agreement. This fee shall be proportionately adjusted if the Allocated Flow Capacities defined in **Section 4** of the 2012 IMA are reduced.
2. **Annual Estimate** - In accordance with **Section 5** of the 2012 IMA, DC Water shall prepare an estimate of the User Fee prior to the beginning of each DC Water fiscal year and include it in the next billings rendered to Fairfax, Loudoun County Sanitation Authority (LCSA or Loudoun Water) and WSSC.

**E. FINES, PENALTIES AND CLAIMS RESPONSIBILITIES**

1. **Proportionate Allocation for Capital Projects** - Except as otherwise provided in the 2012 IMA, all fines, penalties and claims relating to Capital Projects will be allocated proportionately to the District, Fairfax and WSSC, and Non-Party Users based on Allocated Flow Capacity.
2. **Proportionate Allocation for O&M Activities** - Except as otherwise provided in the 2012 IMA, all fines, penalties and claims relating to O&M Activities will be allocated based on the Actual Flows of District, Fairfax, WSSC and Non-Party Users.

**F. BILLING AND PAYMENT PROCEDURES**

1. **DC Water to Annually Estimate Costs** - Before October 1 of each year, DC Water shall prepare an annual estimate of the Capital Costs and O&M Costs expected to be incurred during the following year and the estimated share of these costs for the District, Fairfax and WSSC. These estimates will be allocated in accordance with **Section 5.C. and 5.D.** As appropriate, the estimated share of the annual costs for each of these Parties shall be offset by each Party's estimate of the costs that it will incur in operating and maintaining its share of MJUFs for managing BPSA flows, or its share of managing Blue Plains biosolids or other residuals.
2. **Billing and Payment** - DC Water shall bill Fairfax and WSSC quarterly for Capital Costs and O&M Costs. Fairfax and WSSC shall remit quarterly payments to DC Water to cover 25% of their share of estimated annual Blue Plains O&M Costs and User Fees. Payments shall be made within 30 days of receipt of the invoices. If quarterly payments are not made on time, interest shall be charged at the Federal Reserve Bank's Discount Rate in effect on the due date of the bill. The Federal Reserve Bank Discount Rate will be determined quarterly at the end of each quarter.
3. **Reconciliation of Annual Bills**
  - a. **Capital Costs** – DC Water shall submit a reconciled quarterly invoice, including the estimate for the following quarter.

- b. **O&M Costs** - No later than 90 days after the completion of the annual independent audit or March 31st, DC Water shall prepare an annual bill for the purpose of reconciling payments made during the year by Fairfax and WSSC. This bill shall be based upon the actual costs incurred by each Party; such information to be provided to DC Water by Fairfax and WSSC within 30 days after the close of each DC Water fiscal year.
- c. **Capital Costs and O&M Costs** - Any overpayments or underpayments shall be equally prorated to each quarterly payment date and simple interest calculated from the date the quarterly payment was paid until the overpayment is refunded or the underpayment is paid. See **Table OA 2-E** for an example of the computation of the interest discussed in this sub-section

**TABLE OA 2-E**

<b>FEDERAL RESERVE DISCOUNT RATE INTEREST CALCULATION EXAMPLE (For illustrative purposes only)</b>					
<b>Quarter</b>	<b>Interest Rate<sup>1</sup></b>	<b>In Thousand Dollars</b>			<b>Period Outstanding<sup>2</sup> (Months)</b>
		<b>Payment<sup>3</sup></b>	<b>Over/ &lt;Under&gt;<sup>4</sup></b>	<b>Interest Owed<sup>5</sup></b>	
1	2.00%	7,500.00	625.00	14.06	13.5
2	2.00%	7,500.00	625.00	10.94	10.5
3	2.50%	7,500.00	625.00	9.77	7.5
4	3.00%	7,500.00	625.00	7.03	4.5
Total Annual Payment		30,000.00	2,500.00	41.8	
Total Annual Actual		(27,500.00)			
Over/<Under> <sup>4</sup>		2,500.00			

\* \*\* Assumes refund/payment received end of subsequent year Quarter 1.

4. **Maintenance and Review of Records** - DC Water, Fairfax and WSSC shall maintain books, accounts, records, documents and other evidence, employing generally accepted accounting principles and practices sufficient to show properly

<sup>1</sup> Federal Reserve Discount Rate in effect at end of each Quarter.

<sup>2</sup> Number of months between making payment and time of refund/payment (true up). Assumes quarterly payment made in mid-quarter. Assumes true up received end of subsequent year Quarter 1. This would be 13.5 months for Quarter 1, 10.5 months for Quarter 2, etc.

<sup>3</sup> Quarterly payments based upon annual budget.

<sup>4</sup> Over or Underpayment equally prorated over each quarter. Annual difference is divided evenly between the quarters.

<sup>5</sup> Example interest calculation for the first quarter:  $(625) \times (0.02) \times (13.5/12) = 14.06$



all direct and indirect costs of whatever nature they claim to have incurred or anticipate incurring. The foregoing records shall be subject at reasonable times to audit, examination, inspection or reproduction by DC Water, Fairfax or WSSC or a duly authorized representative of these Parties. Upon request, the Party shall provide a mutually acceptable electronic data processing medium containing all available computerized cost data to support the billing. Records shall be preserved for a period of at least three (3) years from the end of the fiscal year in which payment was made.


5. **Right to Audit** - All cost elements charged to DC Water, Fairfax, WSSC, or any Non-Party User may be audited by any Party. These cost elements include, but are not limited to: Capital Costs, O&M Costs, direct costs, indirect costs and flow data. Any adjustments made to DC Water, Fairfax or WSSC's bill as the result of an audit shall also automatically be made, as applicable, to other entities.
6. The right of any Party to any sum due pursuant to this Agreement shall not be barred by any statute of limitations.
7. **Biosolids Management Cost Procedures** - WSSC will incur Blue Plains biosolids management costs in accordance with **Operating Agreement #6, Biosolids Management Commitments**. The payment procedures for these costs shall be as follows:
  - a. DC Water shall credit WSSC for all Blue Plains related biosolids costs incurred by WSSC less the share allocated to WSSC.
  - b. DC Water shall then collect the share of these costs allocated to Fairfax by adding these costs to the regular payments due from Fairfax.
  - c. DC Water shall also recover the costs paid on behalf of the Non-Party Users.

**-END OF PAGE-**

**EXECUTION**

This Agreement is executed on behalf of the Parties by the Members of the IMA Leadership Committee who, by affixing their signatures, confirm the authorization of their respective Party to be bound thereby. It shall be effective on the date indicated by the Chair below.

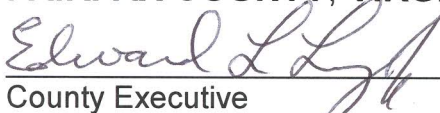
**DISTRICT OF COLUMBIA**

 040213  
City Administrator Date

**DC WATER**

 3/21/13  
General Manager Date

**FAIRFAX COUNTY, VIRGINIA**

 3/25/13  
County Executive Date

**MONTGOMERY COUNTY, MARYLAND**

 4/3/13  
Chief Administrative Officer Date

**PRINCE GEORGE'S COUNTY, MARYLAND**

 4/2/13  
Chief Administrative Officer Date

**WASHINGTON SUBURBAN SANITARY COMMISSION, MARYLAND**

 3/20/13  
General Manager Date

Approved by Leadership Committee:  4/3/13  
Chair Date

All Parties have been notified, 60 days have passed from notification, no objection has been made by any Party, this Agreement is, therefore,

EFFECTIVE:  4/3/13  
Chair Date

## OPERATING AGREEMENT #3

### PARTIES' AGREEMENT REGARDING: FLOW AND LOAD MEASUREMENT AND MANAGEMENT

**THIS OPERATING AGREEMENT** (Agreement), among the **DISTRICT OF COLUMBIA** (the District), the **DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY** (DC Water), **FAIRFAX COUNTY, Virginia** (Fairfax), **MONTGOMERY COUNTY, Maryland** (Montgomery), **PRINCE GEORGE'S COUNTY, Maryland** (Prince George's), and the **WASHINGTON SUBURBAN SANITARY COMMISSION** (WSSC),

Witness:

**WHEREAS**, the Parties have entered into the Blue Plains Intermunicipal Agreement (2012 IMA); and

**WHEREAS**, the Parties agree to routinely monitor and assess their Actual Flows, Adjusted Flows, and the associated Pollutant/Nutrient Loads to Blue Plains to ensure that all allocations and/or limitations for Blue Plains are not exceeded, as set forth in **Section 4** of the 2012 IMA; and

**WHEREAS**, the Parties agree to regularly monitor and assess their Peak Flows at the point of connection to the BPSA's collection system; and comply with Peak Flow Limitations, as set forth in **Section 4** of the 2012 IMA and **Operating Agreement #1**; and

**WHEREAS**, the Parties acknowledge their responsibility to ensure that the Non-Party Users and Indirect Users also comply with the terms of this Operating Agreement; and

**WHEREAS**, **Section 2** of the 2012 IMA authorizes the Leadership Committee to create, modify or terminate an Operating Agreement to implement the terms of the 2012 IMA consistent with **Section 11**.

**NOW THEREFORE, the Parties agree as follows:**

**PURPOSE:** The purpose of this Agreement is to address matters related to **Section 6** of the 2012 IMA, including:

- A. Flow Measurement, Reporting and Assessment;
- B. Load Measurement, Reporting and Assessment; and
- C. Load Management.

## **A. FLOW MEASUREMENT, REPORTING AND ASSESSMENT**

### **1. Flow Measurement**

- a. For each sewer of a Party that has, or is expected to have, a discharge of 60,000 GPD or greater which discharges from a sewer of the District, Fairfax or WSSC into a sewer owned or operated by the District, DC Water, Fairfax or WSSC; the owner/manager of such discharging sewer(s) shall provide and install wastewater flow meters of the maximum practicable accuracy, at its own expense. The receiving Party directly involved shall mutually approve all such meter installations, shall designate who shall read, test, operate and maintain all such meters, and shall determine the methods and procedures to be followed. DC Water, Fairfax and WSSC may jointly read, test and inspect such meters at reasonable times at the request of any Party.
- b. DC Water shall provide, operate and maintain metering of the total Blue Plains wastewater Flow, as well as Intra-plant Flows<sup>1</sup>, in order to implement this agreement. DC Water, Fairfax and WSSC may jointly read, test and inspect such meters at reasonable times at the request of any Party.
- c. In case a wastewater flow meter fails to function for any reason, the meter shall be repaired as expeditiously as possible. Wastewater flow for the period of such failure shall be deemed to be equal to the flow during the most recent equivalent period that the meter was in satisfactory operation. If there is no such corresponding period, the flow shall be determined or estimated in such a manner as shall be agreed upon by the Parties involved.
- d. **Wastewater Units** - For each sewer that has, or is expected to have, a discharge of less than 60,000 GPD which discharges from a sewer of the District, Fairfax or WSSC into a sewer of another entity, the total annual estimated wastewater flow shall be calculated based upon the number of wastewater units connected to or discharging into such sewer. A wastewater unit shall equate to an annual discharge of 125,000 gallons. Each service connection shall be counted as one or more wastewater units depending upon the use of the premises served through such connections as follows:
  - 1) Each single family dwelling unit, whether detached or attached, shall constitute one (1) wastewater unit;
  - 2) Each apartment unit shall constitute one-half (0.5) of a wastewater unit;
  - 3) Wastewater units for premises used for other than residential purposes shall be determined by multiplying the annual water consumption by one and one-half (1.5)<sup>2</sup> and dividing by 125,000 gallons<sup>3</sup>.

---

<sup>1</sup> Wastewater flow meters that are located within the Blue Plains WWTP that are used to help calculate District Flows.

<sup>2</sup> Ratio of 1.5 accounts for contributions from I/I sources to the estimated flows.

<sup>3</sup> 125,000 gallon figure reflects conversion of flows (water consumption and I/I) to estimated wastewater units.

- e. The monthly computation of the District, Fairfax, WSSC, and Non-Party User's Actual Flow shall include both its metered and unmetered flow entering the District's sewer system.
- f. The District's Actual Flow shall be calculated by subtracting the sum of Fairfax, WSSC and Non-Party Users' Actual Flows from the total plant Actual Flow.
- g. Additional long-term flow meters to monitor flows to the Potomac Interceptor are critical to ensuring that there is adequate and detailed flow data to evaluate how well the PI system is functioning under various flow conditions; and to ensure that individually and collectively that the flows into and through the PI are consistent with those values set forth in **Section 4** of the IMA.
- h. In order to address flow limitations necessary to ensure the proper performance of the Potomac Interceptor, the Regional Committee shall evaluate the need for developing a long-term rain gauge network, adding meters near Manholes #7 or #18 (i.e., section of PI where surcharging occurs), and addressing any other technical issues that would aid in this effort. The Regional Committee shall develop a plan to identify, fund, and implement this evaluation; which shall include defining specific tasks, roles and responsibilities, and a schedule for accomplishing this work.

## 2. **Flow Reporting**

- a. No later than 15 days after the end of each month, Fairfax, WSSC and each Non-Party User shall prepare and send to DC Water a report on the status of its Actual Wastewater Flows and commitments. DC Water shall compile these reports into a single report and distribute this report to the Parties no later than 30 days after the end of the month. DC Water shall also prepare an annual summary report for each calendar year and distribute this report to the Parties no later than February 15th of the following year.
- b. Fairfax, WSSC and Non-Party Users' report shall include at least the following information:
  - 1) The measured average flow and Peak Flow rate and duration during the month of the report for each metered point of connection between two (2) entities in the wastewater collection systems;
  - 2) The measured Actual Flow and the Peak Flow rate and duration for each metered point of connection between two (2) entities' wastewater collection systems for the 12 month period ending with the month for which the report is prepared;
  - 3) The estimated Actual Flow for the unmetered points of connection between the two (2) entities' wastewater collection systems, and the method used to estimate the annual average;
  - 4) The User's total daily average of all Actual Flows (i.e. the sum of all metered and unmetered flows) during the month for which the report is prepared;
  - 5) The total rainfall, as measured at Washington National Airport, during the 12 months ending with the month for which the report is prepared;
  - 6) The Highest Rolling Annual Average for its Actual Flow during the 12 months ending with the month for which the report is prepared;

- 7) Such other related information/data as may be deemed necessary to implement the 2012 IMA.
  - c. DC Water shall be responsible for ensuring that the Non-Party Users comply with these reporting requirements.
  - d. DC Water's monthly and annual summary reports shall include Actual Flow data at Blue Plains, including total flow through the plant, and the distribution of the flow to Outfall #001 and Outfall #002; and such other related information/data as may be deemed necessary to implement the 2012 IMA.
  - e. The District's Actual Flow for the purposes of flow management within the context of this Agreement shall be the total flow to Blue Plains less flows reported by Fairfax and WSSC and the Non-Party Users. The Parties recognize that a portion of the District's Actual Flow to Blue Plains is stormwater flow from its Combined Sewer area.
3. **Flow Assessment**
- a. DC Water shall monitor reported flows and calculate Adjusted Flows from Actual Flows provided by Fairfax, WSSC and Non-Party Users (i.e., to present normalized flows that reflect average hydrologic conditions). **Table OA 3-A** shows Adjusted Flow –Calculation Example.
  - b. DC Water shall monitor the flow trends and any potential allocation or limit exceedances and alert the Parties each month if any reported flows or peak flow values indicate problems.
  - c. DC Water shall prepare an annual BPSA flow report for the Regional Committee that assesses flow trends, as well as noting any instances where Adjusted Flows and/or Peak Flow values indicate that flows are or have the potential to exceed Allocated Flow Capacity and/or Peak Flow Limitations, as defined in **Section 4** of the 2012 IMA.
  - d. DC Water shall also be responsible for assessing all flows, analyzing data and modeling flows as needed to make recommendations what and where peak flow reductions are required in the system and for potential modifications to the Peak Flows in the Potomac Interceptor defined in the **Section 4** of the 2012 IMA.
  - e. The Regional Committee is responsible for reviewing the BPSA flow report and assessing what actions, if any, are required. These actions may include, but are not limited to, determining if additional flow management or documentation of flow management efforts are required from the District, Fairfax, WSSC and/or the Non-Party Users; and determining whether a comprehensive BPSA Long-term Planning Study and updated BPSA Flow Projections are needed in advance of their regularly scheduled 5-year update. These efforts will be used to formally assess Adjusted Flow and Peak Flow trends against Allocated Flow Capacity and Peak Flow Limitations, as well as flow management actions. The procedures for conducting this BPSA work are outlined in **Operating Agreement #4**.
  - f. The Regional Committee shall report to and make recommendations to the Leadership Committee based on the results of the BPSA Long-term Planning Study.

4. **Flow Management**

- a. The District's, Fairfax's, WSSC's and Non-Party Users' Adjusted Flow shall at no time exceed its Allocated Flow Capacity as defined in **Section 4** of the 2012 IMA.
- b. If the Adjusted Flow of the District, Fairfax or WSSC exceeds the Allocated Flow Capacity for any reason, the District, Fairfax or WSSC shall immediately stop making any further commitments for hookups, connections and extensions to its sewage system tributary to Blue Plains until three (3) consecutive months have passed during which the sum of the entity's Adjusted Flow shall not have exceeded its Allocated Flow Capacity. The sole exceptions to this prohibition shall be:
  - 1) To eliminate an alternative method of wastewater disposal that has been certified by a duly constituted health officer in the District, Fairfax or WSSC's BPSA, or his designated local representative, to constitute a public health hazard. This certification shall be on a parcel by parcel basis;
  - 2) For public service buildings, which include schools, hospitals, nursing homes, medical and dental clinics, and other structures used by public agencies in providing essential services for public health and welfare;
  - 3) If the User has a plan approved by the Regional Committee to bring its Adjusted Flow within its Allocated Flow Capacity.

**B. LOAD MEASUREMENT, REPORTING AND ASSESSMENT**

1. DC Water shall be responsible for sampling, monitoring and assessing the influent flows to Blue Plains. If there are exceedances that create problems with the Blue Plains permit or other issues, then the Load Capacities set forth in **Table OA 1-B** of **Operating Agreement #1** will apply.
2. DC Water shall be responsible for providing annual reports to the Regional Committee regarding the results of these assessments and recommending any potential actions, including conducting detailed strength of influent wastewater studies.
3. The Regional Committee shall participate in DC Water-required Jointly Managed Studies to assess the strength of influent wastewater and to determine what changes, if any are required to Allocated Flow Capacity, Peak Flow Limitations or any Load Limitations in order to ensure that Blue Plains continues to have the ability to comply with all of its process and permit requirements.
4. Based on the results of such studies, the Regional Committee shall make recommendations to the Leadership Committee regarding changes that may be required to the flow, load and/or financial obligations of the Parties.

**A. LOAD MANAGEMENT**

1. The Regional Committee shall review options for managing loads in influent wastewater flows, including but not limited to, assessing the increase in loadings that

result from extensive Inflow/Infiltration reductions in sewer collection system, use of garbage disposals, and potential Pretreatment requirements for commercial, household or other activities.

2. Based on the results of such studies, the Regional Committee may make recommendations to the Leadership Committee regarding any potential changes to the Flow Management responsibilities, Pretreatment obligations, and any other obligations of the Parties.



## APPENDIX

### Table OA 3-A

#### Adjusted Flow - Calculation Example (for comparing to Allocated Flow Capacity)

1) **Actual Flows, Rainfall and Well Depths**

a) Assume it was a wet year and annual averages of Actual Flows were measured as follows:

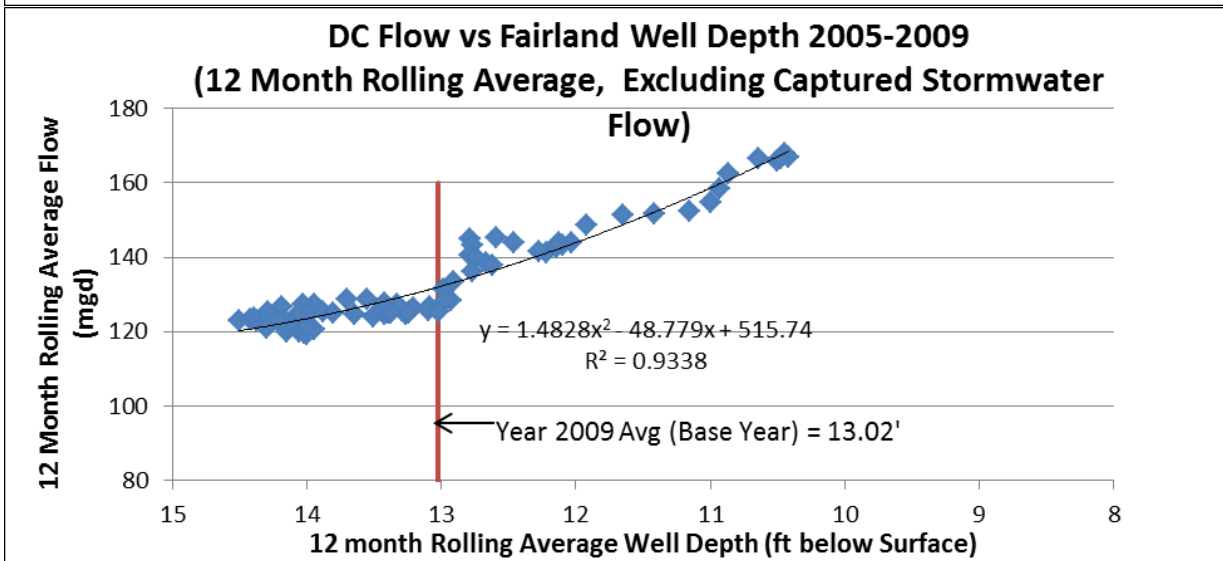
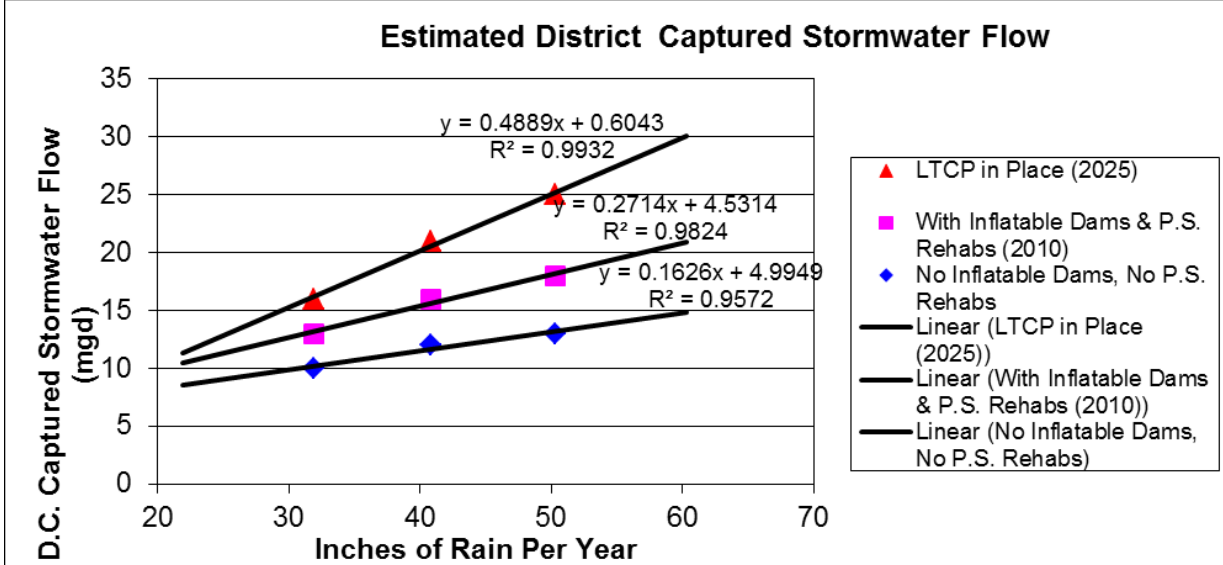
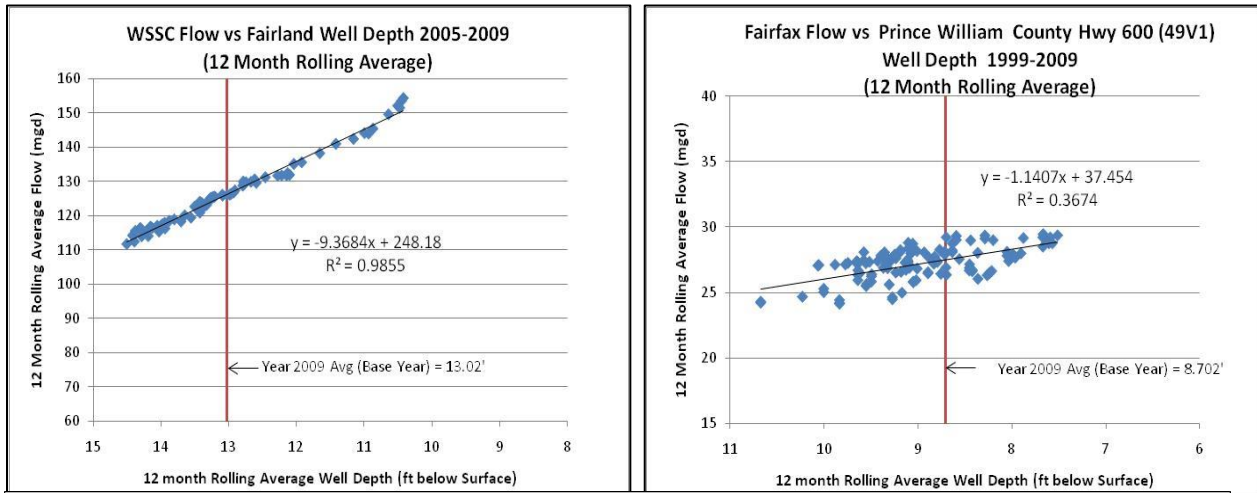
Line	Item	Value (MGD)	Calculation
1	Blue Plains Outfall #002	400.00	
2	Blue Plains Outfall # 001	8.00	
3	Total Blue Plains	408.00	Lines 1 + Line 2
4			
5	Maryland		
6	WSSC	175.00	
7	Navy	0.07	
8	NPS	0.03	
9	<b>Sub-Total Maryland</b>	175.10	Sum of Lines 6,7,9
10			
11	Virginia		
12	Fairfax	30.00	
13	Loudoun	13.80	
14	Dulles	1.50	
15	Vienna	1.50	
16	<b>Sub-Total Virginia</b>	46.80	Sum of Lines 12 to 15
17			
18	<b>Total Suburban Flow</b>	221.9	Line 9 + Line 16
19			
20	<b>Total District Flow</b>	186.10	Line 3 minus Line 18

b) **Rainfall and Well Depths**

Assume 12 month rolling average rainfall and well depths were as follows:

Item	Value	Notes
Rainfall at National Airport	48 in.	12 month rolling average
Fairland Well Depth	11.5 ft	12 month rolling average
Prince William County Highway 600 Well Depth	7.50 ft	12 month rolling average

## Nomographs Used to Calculate Flow Adjustments<sup>1</sup>



<sup>1</sup> These nomographs shall be reviewed periodically by the Regional Committee for accuracy and adjusted accordingly.

## SAMPLE CALCULATIONS

### 2) WSSC Flow Calculation

- a) Assume Actual Flow = 175.00 MGD (metered)
  
- b) Make adjustment to average hydrologic conditions using Fairland Well depth
  - i) Assume actual 12 month rolling average Fairland well depth = 11.50 ft
  - ii) Nomograph flow:  $y = -9.3684 * (11.50) + 248.18 = 140.4$  MGD
  - iii) Base year (2009) 12 month rolling average Fairland well depth = 13.02 ft
  - iv) Nomograph flow:  $y = -9.3684 * (13.02) + 248.18 = 126.2$  MGD
  - v) Adjustment =  $126.2 - 140.4 = -14.2$  MGD
  
- c) WSSC Adjusted Flow =  $175.00 - 14.2 = 160.8$  MGD

### 3) Fairfax Flow Calculation

- a) Assume Actual Flow = 30 MGD (metered)
  
- b) Make adjustment to average hydrologic conditions using Prince William County Highway 600 Well depth
  - i) Assume actual 12 month rolling average Prince William County well depth = 7.50 ft
  - ii) Nomograph flow:  $y = -1.1407 * (7.5) + 37.454 = 28.9$  MGD
  - iii) Base year (2009) 12 month rolling average Prince William County well depth = 8.702 ft
  - iv) Nomograph flow:  $y = -1.1407 * (8.702) + 37.454 = 27.5$  MGD
  - v) Adjustment =  $27.5 - 28.9 = -1.4$  MGD
  
- c) Fairfax Adjusted Flow =  $30 - 1.4 = 28.6$  MGD

### 4) District Flow Calculation

- a) Assume Actual Flow = 186.1 MGD
  
- b) Make adjustment to average hydrologic conditions using Fairland Well depth
  - i) Assume actual 12 month rolling average Fairland well depth = 11.50 ft
  - ii) Nomograph flow:  $y = 1.4828 * (11.50^2) - 48.779 * (11.50) + 515.74 = 150.9$  MGD
  - iii) Base year (2009) 12 month rolling average Fairland well depth = 13.02 ft
  - iv) Nomograph flow:  $y = 1.4828 * (13.02^2) - 48.779 * (13.02) + 515.74 = 132.0$  MGD
  - v) Adjustment =  $132.0 - 150.9 = -18.9$  MGD
  
- c) Make adjustment for Captured Stormwater Flow (CSF)
  - i) Assume LTCP is in place and 48" rainfall
  - ii)  $CSF = 0.4889 * (48) + 0.6043 = 24.1$
  
- d) District Adjusted Flow =  $186.1 - 18.9 - 24.1 = 143.1$

5) Comparison of Actual Flow and Adjusted Flow

Line	Item	Actual Flow (MGD)	Adjusted Flow (MGD)
1	Blue Plains Outfall #002	400.00	
2	Blue Plains Outfall #001	8.00	
3	<b>Total Blue Plains</b>	408.00	349.40
4			
5	Maryland		
6	WSSC	175.00	160.80
7	Navy	0.07	0.07
8	NPS	0.03	0.03
9	<b>Sub-Total Maryland</b>	175.10	160.90
10			
11	Virginia		
12	Fairfax	30.00	28.60
13	Loudoun	13.80	13.80
14	Dulles	1.50	1.50
15	Vienna	1.50	1.50
16	<b>Sub-Total Virginia</b>	46.80	45.40
17			
18	<b>Total Suburban Flow</b>	221.9	206.30
19			
20	<b>Total District Flow</b>	186.10	143.10

-END OF PAGE-

**EXECUTION**

This Agreement is executed on behalf of the Parties by the Members of the IMA Leadership Committee who, by affixing their signatures, confirm the authorization of their respective Party to be bound thereby. It shall be effective on the date indicated by the Chair below.

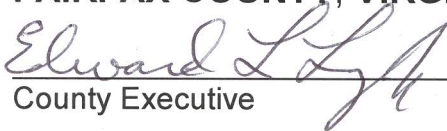
**DISTRICT OF COLUMBIA**

 04/02/13  
City Administrator Date

**DC WATER**

 3/21/13  
General Manager Date

**FAIRFAX COUNTY, VIRGINIA**

 3/25/13  
County Executive Date

**MONTGOMERY COUNTY, MARYLAND**

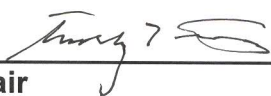
 4/3/13  
Chief Administrative Officer Date

**PRINCE GEORGE'S COUNTY, MARYLAND**

 4/2/13  
Chief Administrative Officer Date

**WASHINGTON SUBURBAN SANITARY COMMISSION, MARYLAND**

 3/20/13  
General Manager Date

Approved by Leadership Committee:  4/3/13  
Chair Date

All Parties have been notified, 60 days have passed from notification, no objection has been made by any Party, this Agreement is, therefore,

EFFECTIVE:  4/3/13  
Chair Date

## **OPERATING AGREEMENT #4**

### **PARTIES' AGREEMENT REGARDING: WASTEWATER PROJECTED FLOW CAPACITY NEEDS AND FUTURE OPTIONS**

**THIS OPERATING AGREEMENT** (Agreement), among the **DISTRICT OF COLUMBIA** (the District), the **DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY** (DC Water), **FAIRFAX COUNTY, Virginia** (Fairfax), **MONTGOMERY COUNTY, Maryland** (Montgomery County), **PRINCE GEORGE'S COUNTY, Maryland** (Prince George's), and the **WASHINGTON SUBURBAN SANITARY COMMISSION** (WSSC),

Witness:

**WHEREAS**, the Parties have entered into the Blue Plains Intermunicipal Agreement (2012 IMA); and

**WHEREAS**, the Parties recognize their collective and mutual interests under the 2012 IMA, which includes the management of Wastewater flows generated in the Blue Plains Service Area (BPSA) and sent to the Blue Plains Wastewater Treatment Plant (Blue Plains); and

**WHEREAS**, the Parties recognize that the District has limited options available to it to address its own Projected Flow Capacity Needs; and

**WHEREAS**, the Parties agree to work together to address their individual and collective Projected Flow Capacity Needs for flows generated within the BPSA, including development of Jointly Managed Studies to determine these Projected Flow Capacity Needs and to develop alternatives for addressing these Projected Flow Capacity Needs as defined in **Section 7**; and

**WHEREAS**, **Section 2** of the 2012 IMA authorizes the Leadership Committee to create, modify or terminate an Operating Agreement to implement the terms of the IMA consistent with **Section 11**.

**NOW, THEREFORE, the Parties agree as follows:**

**PURPOSE:** The purpose of this Agreement is to address matters relating to **Section 7** of the 2012 IMA, including:

- A. Long-term Planning for BPSA;
- B. Development of Options and Proposed Actions; and
- C. Assessment and Notification Requirements.

#### **A. LONG-TERM PLANNING FOR BPSA**

1. **Jointly Managed Study** - The Regional Committee shall be responsible for conducting a Jointly Managed Study to produce a BPSA Long-term Planning Study at least every five (5) years, unless flow or load or other issues require this

assessment to be done sooner. It is anticipated that 5-year updates for an approximately 30-year planning horizon are adequate to assess and take necessary actions to protect the Parties' rights under this Agreement. As flows to the Blue Plains approach its Design Flow Capacity, the frequency of conducting such assessments may be increased.

**2. Flow Projection Methodology**

- a. The BPSA Long-term Planning Study shall address at a minimum:
  - 1) Updated flow projections for the District, Fairfax and WSSC, as well as for Non-Party Users and Indirect Users as well as for the overall BPSA, including:
    - a) Incorporation of MWCOG's most recently adopted Cooperative Forecast, which includes regionally developed demographic data, or other mutually agreed forecast;
    - b) Updates to all Parties' wastewater flow management actions and plans;
    - c) Confirmed or updated wastewater flow factors;
    - d) Confirmed or updated Inflow and Infiltration assumptions; and
    - e) Updated base year flow figures (i.e. flow defined or calculated that best reflects annual average flows under average hydrologic conditions), that are used to develop Projected Flow Capacity Needs of the BPSA for each jurisdiction/entity that contributes flow to Blue Plains;
  - 2) Updated information regarding water quality issues, loading limits, state or federal regulations, and any other activities or initiatives that will or have the potential to impact the Blue Plains' permit and/or treatment process requirements;
  - 3) Updated information and assessments about peak flows generated in the BPSA; and
  - 4) Trend data and analysis as needed to assess the potential impacts all of these factors will or could have on the Allocated Flow Capacity, Peak Flow Limitations and/or load assumptions for the BPSA.
- b. As a result of this periodic assessment, the Parties agree to reconcile any differences between the total and individual projected Annual Average Design Capacity requirements and with each of the Parties' and Non-Party User's Allocated Flow Capacity. This reconciliation may include, but is not limited to, the application of the following:
  - 1) Flow management projects/programs that reduce and/or increase flows;
  - 2) Load management programs that reduce or increase loads; and
  - 3) Reallocation (via sale or rental) of Allocated Flow Capacity.
- c. Evaluation of projected Annual Average Design Flow Capacity requirements will address the associated flow allocations, limitations, definitions, and assumptions set forth in the Derivative Agreement(s), to determine if any flow parameters, allocations, and/or limitations require modification to reflect the new projections.

## **B. DEVELOPMENT OF OPTIONS AND PROPOSED ACTION**

1. Based on the results of any Jointly Managed Study, as defined in **Section 7** of the 2012 IMA, the Regional Committee shall develop options (for the Parties and Non-Party Users, as appropriate) that address at a minimum the following elements and criteria:
  - a. Provide wastewater capacity at Blue Plains to meet the District's Projected Flow Capacity Needs unless other options better meet the District's Projected Flow Capacity Needs;
  - b. Give priority to the reallocation of annual average wastewater flow capacity that is not expected to be needed for more than 15 to 20 years;
  - c. Use the following hierarchy for considering the location of any proposed new or expanded treatment options: at Blue Plains, at WSSC's facilities, or at Fairfax's facilities, all of which shall be deemed to be Multi-Jurisdiction Use Facilities (MJUF) as defined in **Section 5** of the 2012 IMA, unless the Regional Committee agrees to alternative site considerations;
  - d. Evaluate storage options to identify any potential impacts on the peak flows and Allocated Flow Capacity defined in **Section 4** of the 2012 IMA;
  - e. Evaluate the rental or sale of capacity to ensure it would be consistent with the terms and assumptions in **Sections 4** and **6** of the 2012 IMA, and the associated Derivative Agreement(s), considering that the rental or sale of capacity shall be at the discretion of the Party allocated the capacity.
  - f. Consider that rental of capacity shall be viewed as a short-term solution and must be reassessed at least every five (5) years;
  - g. Consider that the Non-Party Users' Projected Flow Capacity Needs may have unique contractual agreements and there may be limited options available for them to address their capacity requirements outside of Blue Plains;
2. The options developed during a Jointly Managed Study shall address the following elements for each Party and Non-Party User, as appropriate:
  - a. The resulting Allocated Flow Capacities;
  - b. The resulting Peak Flow Limitations; and
  - c. The impact on Design Flow Capacities and Design Load Capacities.
3. The Regional Committee shall recommend to the Leadership Committee technical and/or programmatic options that address the individual and collective Projected Flow Capacity Needs of the Parties under **Section 7** of the 2012 IMA. These recommendations shall include, but not be limited to, addressing:
  - a. The proposed time frame for taking specific actions (whether operational or construction);
  - b. The estimated cost of these actions; and



- c. The proposed flow, load, and cost allocations and implications for each Party (and Non-Party User) associated with any options.
4. If suburban flows are diverted, nutrient loads associated with the diverted flows go with those flows and the District is responsible for finding nutrient offsets.
5. Any jurisdiction that requires additional flow capacity shall be responsible for finding nutrient offsets for that flow.

### **C. ASSESSMENT AND NOTIFICATION REQUIREMENTS**

1. The Regional Committee shall periodically assess the Adjusted Flows set forth in **Section 6** and the flow projections set forth in **Section 7** of the 2012 IMA, and as set forth in this Agreement, to determine if the timing or the scope of the agreed upon actions are being implemented in a manner that protects the interests of all the Parties.
2. The Regional Committee shall develop an implementation plan that outlines the proposed actions to be taken and associated schedule and defines the Parties' responsibilities. For those options which require that additional flow or load capacity be provided at Blue Plains or at other sites, this implementation plan shall include, but not be limited to:
  - a. A timeline with periodic milestones (generally every 5 to 10 years) that ensures that the necessary flow and/or load capacity is available when the Projected Flow Capacity Need is required;
  - b. A reassessment of Projected Flow Capacity Needs versus agreed upon actions, whether addressed via flow management, rental/sale of capacity, or construction projects;
  - c. A minimum 15-year advance notification period for any proposed action that requires capital funding.
3. Any Party that requires additional capacity in the BPSA in order to meet its Projected Flow Capacity Needs, which it cannot meet through its own flow management actions or are not being addressed through a Jointly Managed Study, shall provide 15-year advance notification to the Regional Committee that it requires such capacity, define those actions it must undertake to manage its future flows, and outline a schedule for those actions.
4. Unless otherwise agreed to by the Regional Committee, any diversions or reallocation of flow capacity by Fairfax or WSSC greater than five (5) MGD to meet District Projected Flow Capacity Needs shall occur at least one (1) year before the projected requirement for those flows.

**EXECUTION**

This Agreement is executed on behalf of the Parties by the Members of the IMA Leadership Committee who, by affixing their signatures, confirm their authorization of their respective Party to be bound thereby. It shall be effective on the date indicated by the Chair below.

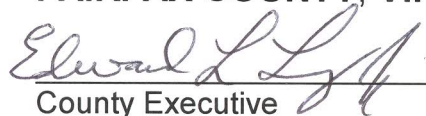
**DISTRICT OF COLUMBIA**

  
City Administrator \_\_\_\_\_ Date 040219

**DC WATER**

  
General Manager \_\_\_\_\_ Date 3/21/13

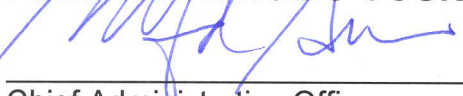
**FAIRFAX COUNTY, VIRGINIA**

  
County Executive \_\_\_\_\_ Date 3/25/13

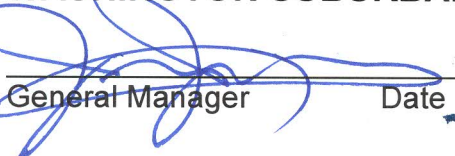
**MONTGOMERY COUNTY, MARYLAND**

  
Chief Administrative Officer \_\_\_\_\_ Date 4/3/13

**PRINCE GEORGE'S COUNTY, MARYLAND**

  
Chief Administrative Officer \_\_\_\_\_ Date 4/2/13

**WASHINGTON SUBURBAN SANITARY COMMISSION, MARYLAND**

  
General Manager \_\_\_\_\_ Date 3/20/13

Approved by Leadership Committee:  \_\_\_\_\_ Date 4/3/13  
Chair

All Parties have been notified, 60 days have passed from notification, no objection has been made by any Party, this Agreement is, therefore,

EFFECTIVE:  \_\_\_\_\_ Date 4/6/13  
Chair

## OPERATING AGREEMENT #5

### PARTIES' AGREEMENT REGARDING: PRETREATMENT & OPERATIONAL REQUIREMENTS

**THIS OPERATING AGREEMENT** (Agreement), among the **DISTRICT OF COLUMBIA** (the District), the **DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY** (DC Water), **FAIRFAX COUNTY, Virginia** (Fairfax), **MONTGOMERY COUNTY, Maryland** (Montgomery), **PRINCE GEORGE'S COUNTY, Maryland** (Prince George's), and the **WASHINGTON SUBURBAN SANITARY COMMISSION** (WSSC),

Witness:

**WHEREAS**, the Parties have entered into the Blue Plains Intermunicipal Agreement (2012 IMA); and

**WHEREAS**, the 2012 IMA authorizes and requires the IMA Leadership Committee (the Leadership Committee), to set forth specific pretreatment and operational requirements, as well as monitoring and reporting processes, that they determine are appropriate to implement the provisions of **Section 8**;

**WHEREAS**, the Parties recognize their legal obligations to comply with all state, federal and local pretreatment requirements applicable to the Blue Plains Wastewater Treatment plant (Blue Plains) and its collection systems and their need to establish operational requirements for wastewater coming into Blue Plains as necessary to preclude damage to Blue Plains' wastewater and biosolids processes and equipment, to meet permit requirements, to avoid contributing any pollutants which cause or have the ability to cause wastewater, air, and/or biosolids permit exceedances, or that have any negative impacts at the plant;

**WHEREAS**, the Leadership Committee hereby agrees on behalf of the Parties to set forth specific requirements and monitoring and reporting processes necessary to protect the wastewater collection lines within the Blue Plains Service Area (BPSA), as well as the wastewater treatment processes and biosolids management programs at Blue Plains; and

**WHEREAS**, **Section 2** of the 2012 IMA authorizes the Leadership Committee to create, modify or terminate an Operating Agreement to implement the terms of the IMA consistent with **Section 11**.

**NOW, THEREFORE, the Parties agree as follows:**

#### **A. SCOPE**

The requirements of this Agreement are intended to apply to only those regulations, requirements, and discharges in the BPSA and/or to the Blue Plains WWTP.

## **B. REGULATORY AUTHORITY**

The Parties recognize their legal obligations to comply with all state, federal and local pretreatment requirements applicable to Blue Plains and its collection systems.

## **C. EXISTING AGREEMENTS**

In addition to the 2012 IMA, the following agreements are applicable to this Agreement

### **1. Agreements among Parties**

- a. **District & Fairfax**, *Wastewater Pretreatment Agreement* (June 27, 1986)
- b. **District & WSSC**, *Wastewater Pretreatment Agreement* (June 30, 1986)

### **2. Agreements among Parties and Non-Party Users, and Parties and Indirect Users**

#### **Indirect User Agreements**

- a. **Fairfax Co. & Herndon**, *Interjurisdictional Wastewater Pretreatment Agreement* (October 10, 1995)
- b. **Fairfax Co. & Arlington Co.**, *Sewage Conveyance, Treatment and Disposal* (October 03, 1994)
- c. **Fairfax Co. & Arlington Co.**, *Interjurisdictional Pretreatment Agreement* (June 17, 1994)

#### **Non-Party User Agreements**

- a. **District & LCSA**, *Wastewater Pretreatment Agreement* (September 12, 1989)
- b. **District & LCSA**, *Amendment to the Agreement* (November, 11, 1998)
- c. **District & Vienna**, *Wastewater Pretreatment Agreement* (April 20, 1986)
- d. **District & US FAA**, *General Agreement* (January 1966)
- e. **District & the Navy**, *General Agreement* (April 27, 1965)
- f. **District & Fairfax County Park Authority**, *General Agreement* (January 23, 1964)
- g. **District & National Park Services**, *General Agreement* (August 18, 1964)

Copies of these agreements and all future agreements relating to Pretreatment and operational requirements between and among the Parties and Non-Party Users shall be maintained at the offices of DC Water and the IMA Secretariat. As these agreements are replaced or amended, their successor agreements will be appended to and incorporated by reference into this Derivative Agreement.

## **D. PRELIMINARY TREATMENT AND OPERATING REQUIREMENTS**

1. Coarse screening shall be provided at any pumping station pumping more than an average of 2.5 mgd of flow, unless coarse screening is provided at a downstream facility. Screenings shall not be ground and returned to the wastewater flow under normal operations.
2. If necessary to bypass screens for more than four (4) hours, DC Water shall be notified within 24 hours.

3. If conditions arise requiring screening to be ground and returned to the wastewater flow, DC Water shall be notified within 24 hours.
4. Fairfax and WSSC shall generate a screenings report semi-annually which documents the location and total tonnage of screenings removed during each month within the six (6)-month period (January to June and July to December). The reports shall be due by the 30<sup>th</sup> of the month following the end of the reporting period (i.e., by July 30 and January 30) and shall be submitted to the DC Water Wastewater Treatment Manager:

DC Water Wastewater Treatment Manager  
5000 Overlook Ave., SW, Washington, DC 20032  
202-787- 4008

#### **E. TRUCKED WASTE MONITORING REQUIREMENTS**

1. Trucked waste shall only be discharged at monitored location(s). Access control or surveillance cameras shall be required for unmanned stations.
2. Within 12 months of the 2012 IMA Agreement, all septage receiving stations that send waste to the BPSA shall have access control or surveillance cameras in operation, except when units are out of service for routine maintenance – a time period not to exceed one (1) week.
3. Surveillance camera records or gate records shall be reviewed as necessary to verify discharge activity. Camera records shall be maintained for 72 hours.
4. After proper notification and review, DC Water reserves the right to prohibit any wastes that are deemed to cause, or have the potential to cause, operational or system problems, and/or which cause or have the ability to cause wastewater, air, and/or biosolids permit exceedances.
5. DC Water shall be notified prior to the establishment of any new septage receiving sites in the BPSA.
6. Periodic self-monitoring data shall be required for existing discharges of non-domestic trucked waste, landfill leachate, or trucked waste containing sludge or other residuals. The Party shall determine the list of requested parameters and frequency of self-monitoring. Data shall be submitted to DC Water in the quarterly pretreatment program reports.
7. Each Party shall conduct random sampling of the trucked wastes at least semi-annually for all parameters. Data shall be submitted to DC Water in the quarterly pretreatment program reports.

#### **F. PROHIBITED TRUCKED WASTES**

Prohibited wastes shall not be discharged to the BPSA unless conditionally authorized under the terms outlined in Subsection G of this Agreement. Prohibited wastes include:

1. Trucked wastes that are generated outside of the counties included in the BPSA (i.e., out-of-state and out-of-county wastes), unless the out-of-state and/or out-of-county waste is incidental to other waste collected from within the counties included in the BPSA;
2. Hazardous waste, as defined by EPA in 40 CFR 261 and/or in District of Columbia Code § 8-1302(2);
3. Wastes that are specifically prohibited by DC Water's prohibited discharge standards;
4. Wastes that exceed DC Water's local discharge standards or EPA's gas/vapor toxicity screening levels (EPA 812-B92-001), if measured in mg/L; or wastes that exceed EPA's Part 503 biosolids quality standards or applicable State biosolids standards, if measured in mg/kg; and
5. Portable toilet waste, where formaldehyde and 1,4-dichlorobenzene are used in deodorizer/sanitizer products. The prohibition of these products shall be implemented within 90 calendar days from the effective date of this Agreement.

**G. CONDITIONALLY AUTHORIZED TRUCKED WASTES**

DC Water may conditionally accept the following trucked wastes:

1. Grease trap waste – if no blockages or significant grease accumulation in the collection system or other issues arise;
2. Car wash waste – if no blockages or significant solids accumulation in the collection system or other issues arise;
3. Non-hazardous non-domestic waste - if characterized and approved by DC Water in advance;
4. Leachate from domestic landfills – if characterized and approved by DC Water in advance; and
5. Sludge or other residuals - if characterized and approved by DC Water in advance, and no blockages or significant solids accumulation in the collection system or other issues arise.

**H. AUTHORIZED TRUCKED WASTES**

DC Water will accept the following trucked wastes:

1. Portable toilet waste, where formaldehyde and 1,4-dichlorobenzene are not used in deodorizer/sanitizer products; and
2. Domestic septage.

## **I. CHARACTERIZATION AND MONITORING OF NEW TRUCKED WASTES**

Any Party proposing to accept hauled waster from a new non-domestic source (i.e., those that have not already been approved by DC Water) shall submit a request for approval to DC Water for new discharges of non-domestic trucked waste, landfill leachate, or trucked waste containing sludge or other residuals. DC Water shall respond with a determination on such a request within 30 calendar days. DC Water shall hold Non-Party Users to these same conditions for requesting new discharges of non-domestic trucked waste, landfill leachate, or trucked waste containing sludge or other residuals. The request may include:

1. Analytical data representative of the discharge, including, but not limited to:
  - a. pH,
  - b. Total Solids,
  - c. Total Suspended Solids,
  - d. Volatile Suspended Solids,
  - e. Biochemical Oxygen Demand,
  - f. Total Phosphorus,
  - g. Total Kjeldahl Nitrogen,
  - h. Total Metals (i.e., arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, silver, and zinc),
  - i. Total Petroleum Hydrocarbon/Oil and Grease, and
  - j. Polychlorinated Biphenyls (PCBs).
2. Estimates of volume and frequency of discharge that DC Water will use to evaluate the effect of the loading on the wastewater and sludge treatment plant processes.
  - a. If the sewage strength and/or load impacts warrant consideration of differential treatment cost, this will be negotiated among the Parties.
  - b. If the discharge is accepted, periodic monitoring may be required, with frequency and parameters to be agreed upon by the affected Party and DC Water.
  - c. If the discharge is prohibited, the limitations of **Subsection F** apply.

## **J. TREATMENT PLANT RESIDUALS**

Other Wastewater Treatment Plants or Water Treatment Plants within the BPSA shall not directly discharge sludge or other residuals into the Blue Plains sewage system, unless characterized and approved by DC Water in advance.

## **K. PRETREATMENT PERMITS**

1. Significant Industrial Users (SIU) in the BPSA must obtain a pretreatment permit from DC Water, Fairfax, or WSSC, unless the SIUs are regulated through Limited Party Agreements with Non-Party Users or Indirect Users.
2. Permits must contain, at a minimum, effluent limitations that match or exceed DC Water's discharge standards, monitoring and reporting requirements, a statement of duration, a statement of non-transferability, a statement of applicable civil and criminal penalties, and any other conditions requested to be included in the permit by DC Water.

3. Permits shall require immediate notification to DC Water of a spill, slug, or other unplanned emergency discharge (such as decontamination Wastewater) to the sewer at 202-612-3400 (24 hours per day, 7 days a week), and written notification to the DC Water Pretreatment Supervisor within five (5) days following the event, to the:  
DC Water Pretreatment Supervisor  
5000 Overlook Ave., SW, Washington, DC 20032  
202-787- 4177
4. Such notification shall include:
  - a. Name and address of the premises where the discharge occurred or is occurring;
  - b. The precise location of the discharge at the premises;
  - c. Type of waste discharged or being discharged;
  - d. Volume and concentration of Wastewater discharged;
  - e. Corrective actions conducted or planned to mitigate the incident and prevent reoccurrence; and
  - f. Contact name and phone number.
5. Permits shall require immediate notification to DC Water of any changes at its facility affecting the potential for a slug discharge.
6. Permits shall indicate that DC Water has right of entry and inspection of pretreatment and sewer facilities, observation, measurement, sampling, testing, and access to (with the right to copy) all pertinent compliance records located on the premises of the SIU. Whenever DC Water exercises this right, advance reasonable notice shall be given to the Operating Agencies. The Operating Agencies shall make all necessary legal and administrative arrangements for these inspections.

## **L. REPORTING**

1. **Quarterly Pretreatment Program Reports**
  - a. Reports shall be due to DC Water 45 days following the last day of the quarter for the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> quarters. However, the 4<sup>th</sup> quarter report due date may be extended an additional 30 days (if necessary, to allow additional time for completing the annual report).
  - b. Reports shall be prepared in accordance with a format to be developed by DC Water. For example, report all violations during the quarter, compliance status of each SIU, the date enforcement action is taken or is anticipated to be taken, identify any SIUs with a substantial change in volume or character of pollutants, etc.
  - c. Each Operating Agency/Jurisdiction shall submit all requested hauled waste documentation to DC Water in the quarterly report. Documentation shall include, but not be limited to:
    - 1) A current list of haulers (or changes to the list from the previous report), including approved sources (types) of waste, permitted vehicle information, and truck volume for each hauler;



- 2) Results of all analytical monitoring done on the hauled waste during that quarter (either by the Operating Agency/Jurisdiction or the waste hauler);
- 3) Where possible, flow estimates or number of loads of each waste type received during the quarter; and
- 4) If requested, gate records or security camera records, for verification of discharge activity.

**2. Annual Pretreatment Program Reports**

- a. In addition to the quarterly reports, an annual report shall be prepared. However, if the fourth quarter report is expanded to incorporate all the requirements of the annual report noted below, that report will suffice to meet both reporting obligations
  - b. Reports shall be prepared in accordance with instructions from EPA Region III. If a Party does not receive 'new or updated' guidance from DC Water by January 5, the same report format/procedures used the previous year shall apply.
  - c. The annual report shall include a master list of permitted waste haulers. At a minimum, the list shall include hauler name, contact information, list of vehicles, permitted truck capacities, and permitted waste type. The master list can reference the list provided in the fourth quarter report, as long as it notes any subsequent changes.
  - d. Reports shall be due to DC Water 45 days following the last day of the year (i.e., by February 15th), unless an alternate date is established in writing by DC Water.
  - e. Reports shall be accurate and complete upon submittal. Allowable exceptions to this include the following:
    - 1) Significant Non-Compliance (SNC) for the July to December period shall be submitted no later than March 15).
    - 2) The publication of the SNC violators shall occur no later than June 30, when required, and proof of publication shall be submitted to DC Water immediately following publication.
3. Follow-up comments from DC Water and/or EPA Region III shall be addressed as soon as practicable or as required by a comment letter.

**M. ENFORCEMENT**

1. The Parties shall, in accordance with their approved Enforcement Response Plans, take escalating enforcement action against any industrial user or waste hauler in the BPSA that violates any provision of the approved DC Water or Parties' pretreatment program. If EPA Region III, or the delegated state agency for the Parties, reviews the enforcement action taken by the Party and requests further action, the Party shall comply with the request or show just cause why such action is not warranted.
2. If DC Water does not agree with a decision made by a Party regarding specific enforcement action against a SIU or waste hauler, the issue shall be raised to the Regional Committee for dispute resolution pursuant to the 2012 IMA.

#### **N. REVISIONS TO LEGAL AUTHORITY**

1. DC Water shall forward a copy of proposed revisions to its legal authority (DC Code § 8-105) and/or implementation regulations (21 DCMR Chapter 15), to the Parties prior to or at the time of submittal to EPA Region III. Similarly, whenever the Parties revise their legal authority and/or implementation regulations, they shall forward a copy of the proposed revisions to DC Water prior to or at the time of submittal to their state approval authority. If there are significant changes to the regulations, EPA Region III review and approval may also be required.
2. Adopted Final Rulemaking or regulations shall be submitted to the Parties (or to DC Water, if the Parties adopted new regulations) within 30 days of the adoption date.
3. As necessary, the Parties shall adopt revisions (either directly or by reference) to their Sewer Use Ordinances (SUOs) pertaining to industrial waste pretreatment that are at least as stringent as those adopted by DC Water pertaining to industrial waste pretreatment. Proposed SUO revisions will be forwarded to DC Water within 180 days of receipt of DC Water's Final Rulemaking. If this schedule cannot be met, the Party shall notify DC Water in writing, and provide an alternate due date and reason why the schedule cannot be met. The Party shall then proceed to adopt the final regulations.
4. DC Water shall provide the Parties an opportunity to provide comments prior to making any revisions or additions to its Local Limits. Once DC Water makes any revisions or additions to its Local Limits, the Parties shall adopt any such revisions or additions and incorporate the new limits into all applicable SIU permits as soon as practical following receipt of the Final Rulemaking.

#### **O. COMPLIANCE BY NON-PARTY USERS**

DC Water shall require and enforce the same compliance by Non-Party Users, as applicable, with the substantive provisions of Subsections C through M, above, as is required of the Parties.


#### **P. PERIODIC REVIEW OF PRETREATMENT AND OPERATIONAL REQUIREMENTS**

1. The Regional Committee, as part of the review for its Annual Report, shall consider the efficiency and effectiveness of the practices and procedures of this Agreement. This review will include technical input from any appropriate Regional Committee work group(s). The Regional Committee will also consider, in a timely manner, any concerns that are raised by DC Water or any other Party over these practices and procedures or proposed modifications required by EPA or any state agency.
2. If the Regional Committee determines these requirements, practices or procedures should be modified, the Regional Committee shall recommend to the Leadership Committee any revisions that may be required to this Operating Agreement, the 2012 IMA or any associated Derivative Agreements.


**EXECUTION**

This Agreement is executed on behalf of the Parties by the Members of the IMA Leadership Committee who, by affixing their signatures, confirm the authorization of their respective Party to be bound thereby. It shall be effective on the date indicated by the Chair below.

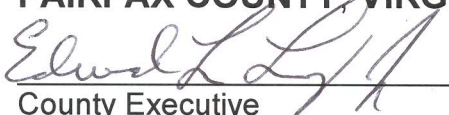
**DISTRICT OF COLUMBIA**

  
City Administrator \_\_\_\_\_ Date 0402 13

**DC WATER**

  
General Manager \_\_\_\_\_ Date 3/21/13

**FAIRFAX COUNTY, VIRGINIA**

  
County Executive \_\_\_\_\_ Date 3/25/13


**MONTGOMERY COUNTY, MARYLAND**


  
Chief Administrative Officer \_\_\_\_\_ Date 4/3/13

**PRINCE GEORGE'S COUNTY, MARYLAND**


  
Chief Administrative Officer \_\_\_\_\_ Date 4/2/13

**WASHINGTON SUBURBAN SANITARY COMMISSION, MARYLAND**

  
General Manager \_\_\_\_\_ Date 3/20/13

Approved by Leadership Committee:  \_\_\_\_\_ 4/3/13  
Chair Date

All Parties have been notified, 60 days have passed from notification, no objection has been made by any Party, this Agreement is, therefore,

EFFECTIVE:  \_\_\_\_\_ 4/3/13  
Chair Date

## **OPERATING AGREEMENT #6**

### **PARTIES' AGREEMENT REGARDING: BIOSOLIDS MANAGEMENT COMMITMENTS**

**THIS OPERATING AGREEMENT** (Agreement), among the **DISTRICT OF COLUMBIA** (the District), the **DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY** (DC Water), **FAIRFAX COUNTY, Virginia** (Fairfax), **MONTGOMERY COUNTY, Maryland** (Montgomery), **PRINCE GEORGE'S COUNTY, Maryland** (Prince George's), and the **WASHINGTON SUBURBAN SANITARY COMMISSION** (WSSC),

Witness:

**WHEREAS**, the Parties have entered into the Blue Plains Intermunicipal Agreement (2012 IMA); and

**WHEREAS**, DC Water, Fairfax and WSSC recognize their obligations to comply with all state, federal and local biosolids preparation and land application regulations applicable to the Blue Plains Wastewater Treatment plant (Blue Plains); and the need to remove biosolids from the sewage generated within the Blue Plains Service Area (BPSA); and

**WHEREAS**, DC Water, Fairfax and WSSC recognize the need to establish operational requirements for the manufacturing of biosolids products at Blue Plains or offsite; and

**WHEREAS**, the Parties desire to manage the biosolids resource by the most practical, sustainable, environmentally sound, and economically beneficial means;

**WHEREAS**, the 2012 IMA authorizes and requires the Leadership Committee to set forth specific operational processes and contractual support for biosolids management that they determine are appropriate to implement the provisions of **Section 9** of the 2012 IMA;

**WHEREAS**, **Section 2** of the 2012 IMA authorizes the Leadership Committee to create, modify or terminate an Operating Agreement to implement the terms of the IMA consistent with **Section 11**.

**NOW, THEREFORE, the Parties agree as follows:**

**PURPOSE:** The purpose of this Agreement is to address matters relating to **Section 9** of the 2012 IMA. This Agreement confers no rights upon any person other than the Parties to this Agreement.

#### **A. REGULATORY AUTHORITY**

The Parties recognize their legal obligations to comply with all state, federal and local biosolids preparation and land application regulations applicable to Blue Plains.

**B. REGIONAL COMMITTEE ASSIGNMENT AND REPORTING RESPONSIBILITIES**

The Regional Committee shall periodically review and analyze the biosolids management activities of the Parties. The Regional Committee may request the assistance of Party experts and biosolids contractors in performing these analyses. The Regional Committee shall make recommendations to the Leadership Committee to maintain or improve the management of biosolids, including:

1. Utilizing contract mechanisms to handle management of all or portions of the biosolids;
2. Identification of additional land application or other management sites;
3. Working with local and state officials to obtain land application or other management permits;
4. Working with local and state officials to change regulations, legislation, or legal actions that are deemed harmful to the effective and environmentally sound management of biosolids;
5. Requesting support of the Leadership Committee and elected officials as necessary to support these efforts; and
6. Contracting for research that supports the biosolids management activities of the Parties.

**C. BIOSOLIDS REUSE AND DISPOSAL OPTIONS – ALLOCATION, MATERIAL RESPONSIBILITY AND CONTRACTS**

1. DC Water and WSSC shall independently contract for services related to reuse or disposal (if necessary) of biosolids produced at Blue Plains. The percentage of biosolids reuse and disposal managed by DC Water shall be no less than 50% and no greater than 70%. WSSC will manage the remainder. The percentages within these limits are to be based on a balance between financial and contractual security, and on programmatic needs as determined by the Regional Committee.
2. DC Water and WSSC may also, with concurrence of the Regional Committee, allocate tonnage to a user or a regional entity that has the opportunity to contract for sustainable reuse of biosolids. DC Water and WSSC shall separately issue one or more contracts for the sustainable reuse of biosolids resources for use in agriculture, mine reclamation, silviculture, composting, soil blending, energy production, or any other sustainable and economically feasible technology.
3. Other options, such as landfilling, may also be included in contracts by DC Water and WSSC for backup and emergency purposes or as recommended by the Regional Committee. In all scenarios, the Parties shall meet the biosolids management commitments set forth in the 2012 IMA. The Parties may consider regional contractual coordination, if another entity outside of DC Water is willing and interested in such collaboration. A recommendation in this direction would allow for

diversification of reuse options and geography, but should only be done if it furthers the biosolids commitments in the 2012 IMA.

**D. PREPARATION OF CONTRACT SOLICITATIONS**

1. DC Water and WSSC shall be responsible for the issuance and administration of their contract solicitations for the reuse of biosolids generated at Blue Plains.
2. The specifications, terms, conditions, and evaluating criteria for any biosolids reuse contract solicitations shall be developed by DC Water and WSSC with input from the Regional Committee.
3. The Regional Committee, either directly or through technical staff, may participate in the review of technical proposals or other contract documents for the hauling and reuse of biosolids received, pursuant to contract solicitations issued by DC Water and WSSC, and make recommendations for award to the respective contracting officers.

**E. CONTRACT REVIEW**

1. DC Water and WSSC shall each execute contracts awarded pursuant to the contract solicitations. They shall appoint contracting officers for such contracts and, in consultation with the other participating parties, administer all aspects of contract performance in accordance with their respective procurement laws and regulations.
2. With respect to DC Water and WSSC's contracts, the Regional Committee's functions and responsibilities shall include the following:
  - a. Provide information, recommendations and requests to the contracting officer to remedy or avoid existing or potential problems caused by any contractors or subcontractors operating within any of the Parties' jurisdictions or caused by their operation in other areas that are or will adversely impact a Party; and
  - b. Monitor the performance and administration of all contracts awarded and provide the contracting officer with the recommendations of the other participating jurisdictions on administrative actions that should be taken to protect the interests of such other parties in all such biosolids contracts; and
  - c. Receive and assess progress and other relevant reports relating to the performance and administration of all biosolids contracts and reports on proposed actions contemplated by the contracting officers in the administration of such contracts; and
  - d. Review research findings funded through the Regional Committee.

## **F. COST AND PAYMENT**

All costs, including administrative costs, of managing the biosolids program will be borne by the Parties and shared based upon the methods and procedures described in **Section 5** of the 2012 IMA. The Parties will receive monthly reports of tonnage allocations to each contract and a final cost accounting at the end of the DC Water fiscal year.

## **G. EMERGENCY PROVISIONS**

1. If any contractors for Blue Plains biosolids reuse and/or disposal service unexpectedly cease operations for any reason, all Parties shall cooperate in order to continue transportation and management of the quantities of Blue Plains biosolids defined in the 2012 IMA and this Agreement.
2. All Parties shall assist in making available, to the extent possible, disposal and reuse options in the region (landfills, incinerators, etc.). If necessary, all Parties shall commit to investigating regional cooperation on biosolids reuse with other parties. This investigation shall include, but not be limited to, other land application programs, composting, incineration, soil blending, etc., and emergency plans shall consider all these options.
3. Separately, or as part of the BPSA Emergency Operating Plan, the Parties shall include emergency back-up contingency plans for removal and transport of biosolids generated at Blue Plains.

## **H. PRODUCT MARKETING AND REVENUE**

1. DC Water will produce into the foreseeable future a Class B stabilized biosolids cake products, as well as a Class A biosolids cake suitable (with further conditioning or mixing) for marketing. DC Water and WSSC shall market and reuse this material for all of the Parties in a manner advantageous to DC Water, Fairfax and WSSC. This marketing will promote the product's use and, if successful, will generate revenue. Potential products from the Blue Plains biosolids program include compost, blended soil, dried product, green energy/carbon credits, and electrical power. DC Water and WSSC will use all revenue to first offset biosolids program and, then, Blue Plains' operating costs thereby reducing costs for all Parties.
2. Each Party shall provide data monthly regarding the revenue or credits generated by DC Water and WSSC. At the end of each fiscal year, DC Water and WSSC shall calculate annual totals for each product, and calculate the percentage of each product for which each Party may take credit. These credits are not for monetary purposes (as the revenue will be used to offset biosolids program costs) but for the purposes of informing rate payers and regulators of efforts to produce valuable products, clean energy, and carbon credits.

3. DC Water and WSSC shall separately be responsible for preparing, negotiating and managing all contracts and agreements related to the sale or use biosolids products. Other products such as steam, electricity, and/or carbon/renewable energy credits produced at Blue Plains shall be managed by DC Water.
4. The Regional Committee shall cooperate in these distribution and marketing efforts with the DC Water biosolids manager to determine if there are markets and/or distribution points in their respective jurisdiction. The region has many potential uses for a Class A biosolids product, and the Parties shall work to maximize reuse within the BPSA. All users will work to inform end-users of the benefits and limited risks of using these products.
5. DC Water shall develop an agency-wide carbon footprint model and establish a baseline for registration with a certified entity. This model will be updated and audited, as necessary, to maintain certification. As improvements occur at Blue Plains (digesters, fine bubble diffusers, energy efficiency projects, etc.) the DC Water carbon footprint will shrink, possibly making carbon credits available for sale or trade. The production of energy from a renewable source (biosolids) may also make available Renewable Energy Credits (REC's) for sale or trade.


**-END OF PAGE-**



**EXECUTION**

This Agreement is executed on behalf of the Parties by the Members of the IMA Leadership Committee who, by affixing their signatures, confirm the authorization of their respective Party to be bound thereby. It shall be effective on the date indicated by the Chair below.


**DISTRICT OF COLUMBIA**

 040213  
City Administrator Date

**DC WATER**

 3/21/13  
General Manager Date

**FAIRFAX COUNTY, VIRGINIA**

 3/25/13  
County Executive Date

**MONTGOMERY COUNTY, MARYLAND**


 4/3/13  
Chief Administrative Officer Date

**PRINCE GEORGE'S COUNTY, MARYLAND**

 4/2/13  
Chief Administrative Officer Date

**WASHINGTON SUBURBAN SANITARY COMMISSION, MARYLAND**

 3/20/13  
General Manager Date

Approved by Leadership Committee:  4/3/13  
Chair Date

All Parties have been notified, 60 days have passed from notification, no objection has been made by any Party, this Agreement is, therefore,

EFFECTIVE:  4/3/13  
Chair Date