

Pepco Holdings
701 Ninth Street NW
Washington DC 20068-0001
202 872 2000

pepcoholdings.com

October 31, 2019

Ms. Ingrid Hopkins
Water Protection Division
(3WP42) USEPA Region III
1650 Arch Street
Philadelphia, PA 19103-3029

Re: Benning Facility Consent Decree (Civil Action No. 1:15-cv-018450) - Quarterly Status Reports for July - September 2019

Dear Ms. Hopkins,

In accordance with Paragraph 68 of the Benning Facility Consent Decree, please find attached the following reports for the period of July – September 2019:

1. Copies of monthly and quarterly discharge monitoring reports
2. Status of annual inspection of the drainage system
3. Storm drain inlets inspection logs
4. Monthly site-wide inspection summary and logs
5. Status of Stormwater Treatment System
6. Stormwater management training
7. Stormwater pollution prevention plan updates
8. Change in management responsibilities
9. Status of completion of transformer storage shed
10. Status of Stormwater Retention Project
11. Description of non-compliance with effluent limits

The certification statement signed by the Vice President of Support Services is also attached. Please contact me at 412-400-7216 or tammy.sanford@exeloncorp.com, if you have any questions or need additional information.

Sincerely,



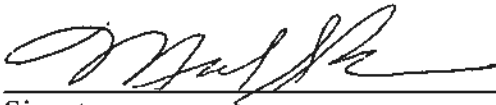
Tammy Sanford
Manager, Environmental Management

Attachments

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Michael S. Poncia,
Vice President, Support Services



Signature

Date

10/30/19

Paragraph 68.a.(1) of the Consent Decree

Discharge Monitoring Reports

Copies of DMRs for July - September 2019 are attached.

Permit

Permit ID:	DC0000094	Major:	✓
Permittee:	PEPCO Environment Management Services	Permittee Address:	701 Ninth Street, NW, Room 6219 WASHINGTON , DC20019
Facility:	PEPCD - BENNING	Facility Location:	3300 BENNING ROAD, N.E. WASHINGTON , DC20019
Permitted Feature:	003 - External Outfall	Discharge:	003-A - OIL/WATER SEPARATOR

Report Dates & Status

Monitoring Period:	From 07/01/19 to 07/31/19	DMR Due Date:	08/28/19
Status:	NetDMR Validated		

Considerations for Form Completion

PCBS WILL USE ANALY MET.608

Principal Executive Officer:

First Name:	William	Last Name:	Sullivan
Title:	VP, Operations	Telephone:	202-872-2942

No Data Indicator (NODI)

Form NODI: -

Parameter Code	Name	NODI	Quantity or Loading			Quality or Concentration			# of Ex.	Freq. of Analysis	Smpl. Type
			Value 1	Value 2	Units	Value 1	Value 2	Value 3			

Parameter Code	Name	NODI	Quantity or Loading			Quality or Concentration			Units	# of Ex.	Freq. of Analysis	Smpl. Type
			Value 1	Value 2	Units	Value 1	Value 2	Value 3				
00400	pH											
	1 - Effluent Gross	Smpl.										
Season: 0		Req.			>=6 MINIMUM		<=8.5 MAXIMUM	12 - SU		01/DS - Once Per Discharge	GR - GRAB	
NODI: -		NODI			C - No Discharge		C - No Discharge					
00530	Solids, total suspended											
	1 - Effluent Gross	Smpl.										
Season: 0		Req.				<=30 MO AVG	<=100 DAILY MX	19 - mg/L		01/DS - Once Per Discharge	GR - GRAB	
NODI: -		NODI				C - No Discharge	C - No Discharge					
00556	Oil & Grease											
	1 - Effluent Gross	Smpl.										
Season: 0		Req.				<=15 MO AVG	<=20 DAILY MX	19 - mg/L		01/DS - Once Per Discharge	GR - GRAB	
NODI: -		NODI				C - No Discharge	C - No Discharge					
39496	PCB-1242											
	1 - Effluent Gross	Smpl.										
Season: 0		Req.					<=1 DAILY MX	28 - ug/L		01/DS - Once Per Discharge	GR - GRAB	
NODI: -		NODI					C - No Discharge					
39504	PCB-1254											
	1 - Effluent Gross	Smpl.										
Season: 0		Req.					<=1 DAILY MX	28 - ug/L		01/DS - Once Per Discharge	GR - GRAB	
NODI: -		NODI					C - No Discharge					
39508	PCB-1260											
	1 - Effluent Gross	Smpl.										
Season: 0		Req.					<=1 DAILY MX	28 - ug/L		01/DS - Once Per Discharge	GR - GRAB	
NODI: -		NODI					C - No Discharge					
50050	Flow, in conduit or thru treatment plant											
	1 - Effluent Gross	Smpl.										
Season: 0		Req.	Req Mon MO AVG	Req Mon DAILY MX	03 - MGD		Req Mon MO AVG	Req Mon DAILY MX	03 - MGD	01/DS - Once Per Discharge	MS - MEASRD	
NODI: -		NODI	C - No Discharge	C - No Discharge			C - No Discharge	C - No Discharge				

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments**Attachments**

No attachments.

Report Last Saved By**PEPCO Environment Management Services**

User: FARIBA12
Name: Fariba Mahvi
E-Mail: fmahvi@pepco.com
Date/Time: 2019-08-26 12:44 (Time Zone:-04:00)

Report Last Signed By

User: FARIBA12
Name: Fariba Mahvi
E-Mail: fmahvi@pepco.com
Date/Time: 2019-08-26 12:45 (Time Zone:-04:00)

Permit

Permit ID: DC0000094
Permittee: PEPCO Environment Management Services
Facility: PEPCO - BENNING
Permitted Feature: 003 - External Outfall

Major:
Permittee Address: 701 Ninth Street, NW, Room 6219
 WASHINGTON , DC20019
Facility Location: 3300 BENNING ROAD, N.E.
 WASHINGTON , DC20019
Discharge: 003-A - OIL/WATER SEPARATOR

Report Dates & Status

Monitoring Period: From 08/01/19 to 08/31/19
Status: **NetDMR Validated**

DMR Due Date: 09/28/19

Considerations for Form Completion

PCBS WILL USE ANALY MET.608

Principal Executive Officer

First Name: William
Title: VP, Operations

Last Name: Sullivan
Telephone: 202-872-2942

No Data Indicator (NODI)

Form NODI: -

Parameter		NODI	Quantity or Loading			Quality or Concentration				# of Ex.	Freq. of Analysis	Smpl. Type
Code	Name		Value 1	Value 2	Units	Value 1	Value 2	Value 3	Units			

Parameter		NODI	Quantity or Loading			Quality or Concentration				# of Ex.	Freq. of Analysis	Smpl. Type
Code	Name		Value 1	Value 2	Units	Value 1	Value 2	Value 3	Units			
00400	pH	Smpl.										
1 - Effluent Gross												
Season: 0		Req.			>=6 MINIMUM		<=8.5 MAXIMUM	12 - SU		01/DS - Once Per Discharge	GR - GRAB	
NODI: -		NODI			C - No Discharge		C - No Discharge					
00530	Solids, total suspended	Smpl.										
1 - Effluent Gross												
Season: 0		Req.				<=30 MO AVG	<=100 DAILY MX	19 - mg/L		01/DS - Once Per Discharge	GR - GRAB	
NODI: -		NODI				C - No Discharge	C - No Discharge					
00556	Oil & Grease	Smpl.										
1 - Effluent Gross												
Season: 0		Req.				<=15 MO AVG	<=20 DAILY MX	19 - mg/L		01/DS - Once Per Discharge	GR - GRAB	
NODI: -		NODI				C - No Discharge	C - No Discharge					
39496	PCB-1242	Smpl.										
1 - Effluent Gross												
Season: 0		Req.					<=1 DAILY MX	28 - ug/L		01/DS - Once Per Discharge	GR - GRAB	
NODI: -		NODI					C - No Discharge					
39504	PCB-1254	Smpl.										
1 - Effluent Gross												
Season: 0		Req.					<=1 DAILY MX	28 - ug/L		01/DS - Once Per Discharge	GR - GRAB	

Parameter		NODI	Quantity or Loading			Quality or Concentration				# of Ex.	Freq. of Analysis	Smpl. Type
Code	Name		Value 1	Value 2	Units	Value 1	Value 2	Value 3	Units			
NODI: -		NODI						C - No Discharge				
39508	PCB-1260	Smpl.										
1 - Effluent Gross												
Season: 0		Req.						<=1 DAILY MX	28 - ug/L		01/DS - Once Per Discharge	GR - GRAB
NODI: -		NODI						C - No Discharge				
50050	Flow, in conduit or thru treatment plant	Smpl.										
1 - Effluent Gross												
Season: 0		Req.	Req Mon MO AVG	Req Mon DAILY MX	03 - MGD		Req Mon MO AVG	Req Mon DAILY MX	03 - MGD		01/DS - Once Per Discharge	MS - MEASRD
NODI: -		NODI	C - No Discharge	C - No Discharge			C - No Discharge	C - No Discharge				

Submission Note

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Edit Check Errors

No errors.

Comments**Attachments**

No attachments.

Report Last Saved By**PEPCO Environment Management Services**

User: HIEDISTURM
Name: Hiedi Sturm
E-Mail: hiedi.sturm@exeloncorp.com
Date/Time: 2019-09-25 09:03 (Time Zone:-04:00)

Report Last Signed By

User: HIEDISTURM
Name: Hiedi Sturm
E-Mail: hiedi.sturm@exeloncorp.com
Date/Time: 2019-09-26 20:52 (Time Zone:-04:00)

Permit

Permit ID:	DC0000094	Major:	<input checked="" type="checkbox"/>
Permittee:	PEPCO Environment Management Services	Permittee Address:	701 Ninth Street, NW, Room 6219 WASHINGTON , DC20019
Facility:	PEPCO - BENNING	Facility Location:	3300 BENNING ROAD, N.E. WASHINGTON , DC20019
Permitted Feature:	013 - External Outfall	Discharge:	013-A - BNON COOLING WATER BLOWDOWN

Report Dates & Status

Monitoring Period:	From 07/01/19 to 08/31/19	DMR Due Date:	09/28/19
Status:	NetDMR Validated		

Considerations for Form Completion

Principal Executive Officer

First Name:	William	Last Name:	Sullivan
Title:	VP, Operations	Telephone:	202-872-2942 

No Data Indicator (NODI)

Form NODI : -

Parameter		NODI	Quantity or Loading			Quality or Concentration				# of Ex.	Freq. of Analysis	Smpl. Type
Code	Name		Value 1	Value 2	Units	Value 1	Value 2	Value 3	Units			

Parameter		NODI	Quantity or Loading			Quality or Concentration				# of Ex.	Freq. of Analysis	Smpl. Type
Code	Name		Value 1	Value 2	Units	Value 1	Value 2	Value 3	Units			
50050	Flow, in conduit or thru treatment plant	Smpl.	0.000735	0.0129	03 - MGD							
1 - Effluent Gross												
Season: 0		Req.	Req Mon MO AVG	Req Mon DAILY MX	03 - MGD						01/60 - Once Every 2 Months	ES - ESTIMA
NODI: -		NODI										
TS000	Toxicity, Acute	Smpl.										
1 - Effluent Gross												
Season: 0		Req.				Opt Mon DAILY AV	Opt Mon DAILY MX	2F - tox acute			01/5Y - Once Every 5 Years	24 - COMP24
NODI: -		NODI				E - Analysis Not Conducted/No Sample	E - Analysis Not Conducted/No Sample					

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments**Attachments**

No attachments.

Report Last Saved By**PEPCO Environment Management Services**

User: HIEDISTURM
Name: Hiedi Sturm
E-Mail: hiedi.sturm@exeloncorp.com
Date/Time: 2019-09-25 19:02 (Time Zone: -04:00)

Report Last Signed By

User: HIEDISTURM
Name: Hiedi Sturm
E-Mail: hiedi.sturm@exeloncorp.com
Date/Time: 2019-09-26 20:48 (Time Zone: -04:00)

Attachment 1

NPDES Permit DC 0000094

Permit Condition Part II. A

For each measurement of sample taken pursuant to the storm event monitoring requirements of this permit, the permittee shall record and report with the Discharge Monitoring Report the following information:

Storm Event Monitoring Requirements				
Outfall Number	Sample Date	Duration of Storm Event (in hours)	Rainfall Measurement (in inches)	Duration Between Measurable Storm Events (hours)
101	9/30/2019	7.25	0.17	888
013	9/30/2019	7.25	0.17	888

Attachment 2

NPDES Permit DC 0000094

Permit Condition Part VII.E

Pollutant Load Percent Reduction Calculations for the September 30, 2019 sampling at Outfalls 101 and 013 (Manhole K).

**Benning Generating Station
Pollutant Load Percent Reduction
Washington, DC**

Outfall	Parameter	Sample Dates	Average Concentration (mg/L) (a)	Average Flow (cfs) ⁽²⁾	Load (mg/s)	Maximum Daily Limit (mg/L) (c)	Maximum Daily Stormwater Discharge Concentrations Goals for Metals (b)	Baseline Concentration (mg/L)	Source of Baseline Concentration ⁽¹⁰⁾	Average Baseline Flow (cfs)	Baseline Load (mg/s)	Pollutant Reduction Compared with Maximum Daily Discharge Concentration ⁽⁷⁾	Pollutant Concentration Reduction Compared with Baseline Concentration ⁽⁸⁾	Pollutant Load Compared with Baseline Load ⁽⁸⁾	
013Q	TSS	9/30/2019	10	0.58	164.24	100	100	42	(b) Highest TSS discharge concentration from DMR data. Quarterly stormwater DMR data for Apr-Jun 2005	Highest TSS discharge concentration from DMR data. Quarterly stormwater DMR data for Oct-Dec 2010. TSS was not reported on DMRs prior to Jul-Sep 2009. Flow was measured in October 2010.	4.82	5732	90%	76%	97%
013Q	Cadmium	9/30/2019	<0.000250	0.58	0.0 ⁽¹⁾	0.00495	0.0045	0.00075	(b) Reasonable potential analysis concentration for cadmium	Highest cadmium discharge concentration from DMR data for Outfall 013Q. Quarterly stormwater DMR data for Jan-Mar 2006.	7.48	0.16	100%	100%	100%
013Q	Copper	9/30/2019	0.0107	0.58	0.18	0.01344	0.0134	0.064	(b) Highest copper discharge concentration from DMR data for Outfall 013Q. Quarterly stormwater DMR data for Jul-Sep 2006	Highest copper discharge concentration from DMR data for Outfall 013Q. Quarterly stormwater DMR data for Jul-Sep 2006.	3.14	5.7	20%	83%	97%
013Q	Iron	9/30/2019	3.64	0.58	59.78	1.00	NA	5.80	(f) Highest iron discharge concentration from DRM data for Outfall 013Q. Quarterly Stormwater DMR Data for Jul-Sep 2007.	Highest iron discharge concentration from DMR data for Outfall 013Q. Quarterly Stormwater DMR Data for Jul-Sep 2007.	0.148	24	-264%	37%	-146%
013Q	Nickel	9/30/2019	0.0022	0.58	0.04	0.117 ⁽⁵⁾	0.117	0.056	(b) Reasonable potential analysis concentration for nickel	Highest nickel discharge concentration from DMR data for Outfall 013Q. Quarterly Stormwater DMR Data for Jul-Sep 2007.	0.148	0.23	98%	96%	85%
013Q	Lead	9/30/2019	0.003	0.58	0.05	0.06458	0.0645	0.023	(f) Highest lead discharge concentration from DMR data for Outfall 013Q. Quarterly stormwater DMR data for Jan-Mar 2006	Highest lead discharge concentration from DMR data for Outfall 013Q. Quarterly stormwater DMR data for Jan-Mar 2006.	7.48	4.9	95%	87%	99%
013Q	Zinc	9/30/2019	0.043	0.58	0.7	0.11718	0.117	0.9	(b) Highest zinc discharge concentration from DMR data. Quarterly stormwater DMR data for Apr-Jun 2005	Highest zinc discharge concentration from DMR data. Quarterly stormwater DMR data for Apr-Jun 2005.	5.15	131	63%	95%	99%
013Q	PCB-1242	9/30/2019	<0.000500	0.58	0.0 ⁽¹⁾	No Discharge	NA	0		Quarterly DMRs for Outfall 013Q. PCB Aroclors were not detect from 2005 to 2010.	NA ⁽⁹⁾	0 ⁽⁹⁾	0%	0% ⁽³⁾	0% ⁽³⁾
013Q	PCB-1254	9/30/2019	<0.000500	0.58	0.0 ⁽¹⁾	No Discharge	NA	0		Quarterly DMRs for Outfall 013Q. PCB Aroclors were not detect from 2005 to 2010.	NA ⁽⁹⁾	0 ⁽⁹⁾	0%	0% ⁽³⁾	0% ⁽³⁾
013Q	PCB-1260	9/30/2019	<0.000500	0.58	0.0 ⁽¹⁾	No Discharge	NA	0		Quarterly DMRs for Outfall 013Q. PCB Aroclors were not detect from 2005 to 2010.	NA ⁽⁹⁾	0 ⁽⁹⁾	0%	0% ⁽³⁾	0% ⁽³⁾
Manhole K	TSS	9/30/2019	16	0.09	41	Monitor Only	NA	41		Third Quarter 2011 DMR for Manhole K ⁽⁴⁾ . Flow was measured in September 2011.	0.223	259	NA	61%	84%
Manhole K	Cadmium	9/30/2019	0.000717	0.09	0	0.0045 ⁽⁶⁾	0.0075	0.0012		Third Quarter 2011 DMR for Manhole K ⁽⁴⁾ . Flow was measured in September 2011.	0.223	0.0076	84%	40%	76%
Manhole K	Copper	9/30/2019	0.107	0.09	0.273	0.0134 ⁽⁶⁾	0.0134	0.093		Third Quarter 2011 DMR for Manhole K ⁽⁴⁾ . Flow was measured in September 2011.	0.223	0.59	-699%	-15%	54%
Manhole K	Iron	9/30/2019	1.41	0.09	3.6	Monitor Only	NA	3.8		Third Quarter 2011 DMR for Manhole K ⁽⁴⁾ . Flow was measured in September 2011.	0.223	24	-228%	63%	85%
Manhole K	Nickel	9/30/2019	0.0237	0.09	0.060	0.117 ⁽⁶⁾	0.117	0.09		Third Quarter 2011 DMR for Manhole K ⁽⁴⁾ . Flow was measured in September 2011.	0.223	0.57	80%	74%	89%
Manhole K	Lead	9/30/2019	0.0309	0.09	0.079	0.0645 ⁽⁶⁾	0.0645	0.13		Third Quarter 2011 DMR for Manhole K ⁽⁴⁾ . Flow was measured in September 2011.	0.223	0.82	52%	76%	90%
Manhole K	Zinc	9/30/2019	0.174	0.09	0.44	0.117 ⁽⁶⁾	0.117	0.57		Third Quarter 2011 DMR for Manhole K ⁽⁴⁾ . Flow was measured in September 2011.	0.223	3.6	-49%	69%	88%
Manhole K	PCB-1242	9/30/2019	<0.000500	0.09	0.0 ⁽¹⁾	No Discharge	NA	0.0 ⁽¹⁾		Third Quarter 2011 DMR for Manhole K ⁽⁴⁾ . Flow was measured in September 2011.	0.223	0 ⁽⁹⁾	NA	0% ⁽³⁾	0% ⁽³⁾
Manhole K	PCB-1254	9/30/2019	<0.000500	0.09	0.0 ⁽¹⁾	No Discharge	NA	0.0 ⁽¹⁾		Third Quarter 2011 DMR for Manhole K ⁽⁴⁾ . Flow was measured in September 2011.	0.223	0 ⁽⁹⁾	NA	0% ⁽³⁾	0% ⁽³⁾
Manhole K	PCB-1260	9/30/2019	<0.000500	0.09	0.0 ⁽¹⁾	No Discharge	NA	0.0 ⁽¹⁾		Third Quarter 2011 DMR for Manhole K ⁽⁴⁾ . Flow was measured in September 2011.	0.223	0 ⁽⁹⁾	NA	0% ⁽³⁾	0% ⁽³⁾

Sources:

- (a) Microbac, 2019. Third Quarter Sample Analytical Results Microbac Laboratories, Inc.
(b) USEPA, 2009a. Authorization to Discharge Under the National Pollutant Discharge Elimination System Industrial Permit Number: DC0000094. United States Environmental Protection Agency. Effective July 19, 2009.
(c) Maximum Daily Limit listed in the 2009 NPDES Permit

Prepared by: EFT 10/24/2019

Notes:

- cfs - cubic feet per second mg/L - milligrams per liter mg/s - milligrams per second
NA - Not applicable NS - Not sampled

- ⁽¹⁾ Pollutant concentration was not detected. Concentration used in pollutant load calculation is set to zero.
⁽²⁾ Flow was calculated using using September 30, 2019 rainfall and site data.
⁽³⁾ Not required by 2009 NPDES Permit for Benning Generating Station.
⁽⁴⁾ Data from the September 5, 2011 sampling event for Manhole K was established as the baseline load because it was the first sample collected after Manhole K was retrofitted. The retrofit was performed so that a representative sample could be collected from Manhole K. Flow was estimated based on the storm intensity and catchment area.
⁽⁵⁾ No maximum daily limit is listed. Value is the Maximum Daily Stormwater Discharge Concentrations Goals for Metals listed in Section VIII.E of the 2009 NPDES Permit for Benning Generating Station.
⁽⁶⁾ Manhole K has no maximum daily limit for the constituent and is monitoring only. Value listed is the Maximum Daily Stormwater Discharge Concentrations Goals for Metals listed in Section VIII.E of the 2009 NPDES Permit for Benning Generating Station.
⁽⁷⁾ Positive values indicates that the June 2019 concentrations are lower than the maximum daily limit for the pollutants.
⁽⁸⁾ Positive values indicate that the June 2019 concentrations/loads are lower than the baseline concentrations/loads.
⁽⁹⁾ There were no detections of PCB Aroclors. Therefore, a baseline flow was not established. However, given that the concentration of PCB Aroclors is zero, the load is also zero regardless of flow.
⁽¹⁰⁾ Baseline concentrations are based on the highest concentration listed on DMRs for Outfall 013Q from 2005 to 2007. TSS was not reported on DMRs until 2009. Therefore, the baseline concentration for TSS is from the highest concentration listed on the Jul-Sep 2009 to 2010 DMRs for Outfall 013Q.

Permit

Permit ID: DC0000094
Permittee: PEPCO Environment Management Services
Facility: PEPCO - BENNING
Permitted Feature: 003 - External Outfall

Major: ✓
Permittee Address: 701 Ninth Street, NW, Room 6219
 WASHINGTON , DC20019
Facility Location: 3300 BENNING ROAD, N.E.
 WASHINGTON , DC20019
Discharge: 003-A - OIL/WATER SEPARATOR

Report Dates & Status

Monitoring Period: From 09/01/19 to 09/30/19
Status: NetDMR Validated

DMR Due Date: 10/28/19

Considerations for Form Completion

PCBS WILL USE ANALY MET.608

Principal Executive Officer

First Name: William
Title: VP, Operations

Last Name: Sullivan
Telephone: 202-872-2942

No Data Indicator (NODI)

Form NODI: -

Parameter Code	Name	NODI	Quantity or Loading			Quality or Concentration			Units	# of Ex.	Freq. of Analysis	Smpl. Type
			Value 1	Value 2	Units	Value 1	Value 2	Value 3				

Parameter Code	Name	NODI	Quantity or Loading			Quality or Concentration			# of Ex.	Freq. of Analysis	Smpl. Type
			Value 1	Value 2	Units	Value 1	Value 2	Value 3			
00400	pH										
1 - Effluent Gross		Smpl.				=7.73		=7.9	12 - SU	01/DS - Once Per Discharge	GR - GRAB
Season: 0		Req.				>=6 MINIMUM		<=8.5 MAXIMUM	12 - SU	01/DS - Once Per Discharge	GR - GRAB
NODI: -		NODI									
00530	Solids, total suspended										
1 - Effluent Gross		Smpl.				=4.3		=4.3	19 - mg/L	01/DS - Once Per Discharge	GR - GRAB
Season: 0		Req.				<=30 MO AVG		<=100 DAILY MX	19 - mg/L	01/DS - Once Per Discharge	GR - GRAB
NODI: -		NODI									
00556	Oil & Grease										
1 - Effluent Gross		Smpl.									
Season: 0		Req.				<=15 MO AVG		<=20 DAILY MX	19 - mg/L	01/DS - Once Per Discharge	GR - GRAB
NODI: -		NODI				B - Below Detection Limit/No Detection		B - Below Detection Limit/No Detection			
39496	PCB-1242										
1 - Effluent Gross		Smpl.						=0	28 - ug/L	01/DS - Once Per Discharge	GR - GRAB
Season: 0		Req.						<=1 DAILY MX	28 - ug/L	01/DS - Once Per Discharge	GR - GRAB
NODI: -		NODI									
39504	PCB-1254										
1 - Effluent Gross		Smpl.						=0	28 - ug/L	01/DS - Once Per Discharge	GR - GRAB
Season: 0		Req.						<=1 DAILY MX	28 - ug/L	01/DS - Once Per Discharge	GR - GRAB
NODI: -		NODI									
39508	PCB-1260										
1 - Effluent Gross		Smpl.						=0	28 - ug/L	01/DS - Once Per Discharge	GR - GRAB
Season: 0		Req.						<=1 DAILY MX	28 - ug/L	01/DS - Once Per Discharge	GR - GRAB
NODI: -		NODI									
50050	Flow, in conduit or thru treatment plant										
1 - Effluent Gross		Smpl.	=0.005	=0.005	03 - MGD	=0.005		=0.005	03 - MGD	01/DS - Once Per Discharge	MS - MEASRD
Season: 0		Req.	Req Mon MO AVG	Req Mon DAILY MX	03 - MGD	Req Mon MO AVG		Req Mon DAILY MX	03 - MGD	01/DS - Once Per Discharge	MS - MEASRD
NODI: -		NODI									

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments**Attachments**

No attachments.

Report Last Saved By**PEPCO Environment Management Services**

User: HIEDISTURM
Name: Hiedi Sturm
E-Mail: hiedi.sturm@exeloncorp.com
Date/Time: 2019-10-21 06:57 (Time Zone: -04:00)

Report Last Signed By

User: HIEDISTURM
Name: Hiedi Sturm
E-Mail: hiedi.sturm@exeloncorp.com
Date/Time: 2019-10-28 14:36 (Time Zone: -04:00)

Permit

Permit ID: DC0000094
Permittee: PEPCO Environment Management Services
Facility: PEPCO - BENNING
Permitted Feature: 013 - External Outfall

Major: ✓
Permittee Address: 701 Ninth Street, NW, Room 6219
 WASHINGTON , DC20019
Facility Location: 3300 BENNING ROAD, N.E.
 WASHINGTON , DC20019
Discharge: 013-Q - No Blowdown

Report Dates & Status

Monitoring Period: From 07/01/19 to 09/30/19
Status: **NetDMR Validated**

DMR Due Date: 10/28/19

Considerations for Form Completion

NO BLOWDOWN

Principal Executive Officer

First Name: William
Title: VP, Operations

Last Name: Sullivan
Telephone: 202-872-2942

No Data Indicator (NODI)

Form NODI: -

Parameter Code	Parameter Name	NODI	Quantity or Loading			Quality or Concentration			# of Ex.	Freq. of Analysis	Smpl. Type
			Value 1	Value 2	Units	Value 1	Value 2	Value 3			

Parameter Code	Name	NODI	Quantity or Loading			Quality or Concentration			# of Ex.	Freq. of Analysis	Smpl. Type
			Value 1	Value 2	Units	Value 1	Value 2	Value 3			
00400	pH										
1 - Effluent Gross		Smpl.				=7.51		=7.51	12 - SU	01/90 - Quarterly	GR - GRAB
Season: 0		Req.				>=6 MINIMUM		<=8.5 MAXIMUM	12 - SU	01/90 - Quarterly	GR - GRAB
NODI: -		NODI									
00530	Solids, total suspended										
1 - Effluent Gross		Smpl.				=10		=10	19 - mg/L	01/90 - Quarterly	GR - GRAB
Season: 0		Req.				<=30 MO AVG		<=100 DAILY MX	19 - mg/L	01/90 - Quarterly	GR - GRAB
NODI: -		NODI									
00556	Oil & Grease										
1 - Effluent Gross		Smpl.				<5.43		<5.43	19 - mg/L	01/90 - Quarterly	GR - GRAB
Season: 0		Req.				Req Mon MO AVG		Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	GR - GRAB
NODI: -		NODI									
01027	Cadmium, total [as Cd]										
1 - Effluent Gross		Smpl.				<0.25		<0.25	28 - ug/L	01/90 - Quarterly	GR - GRAB
Season: 0		Req.				<=2.08 MO AVG		<=4.95 DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB
NODI: -		NODI									
X 01042	Copper, total [as Cu]										
1 - Effluent Gross		Smpl.				=10.7		=10.7	28 - ug/L	01/90 - Quarterly	GR - GRAB
Season: 0		Req.				<=5.24 MO AVG		<=13.44 DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB
NODI: -		NODI									
X 01045	Iron, total [as Fe]										
1 - Effluent Gross		Smpl.				=3.64		=3.64	19 - mg/L	01/90 - Quarterly	GR - GRAB
Season: 0		Req.				<=.69 MO AVG		<=1 DAILY MX	19 - mg/L	01/90 - Quarterly	GR - GRAB
NODI: -		NODI									
01051	Lead, total [as Pb]										
1 - Effluent Gross		Smpl.				=3		=3	28 - ug/L	01/90 - Quarterly	GR - GRAB
Season: 0		Req.				<=56.6 MO AVG		<=64.58 DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB
NODI: -		NODI									
01092	Zinc, total [as Zn]										
1 - Effluent Gross		Smpl.				=43		=43	28 - ug/L	01/90 - Quarterly	GR - GRAB
Season: 0		Req.				<=73.11 MO AVG		<=117.18 DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB
NODI: -		NODI									
39496	PCB-1242										
1 - Effluent Gross		Smpl.						=0	28 - ug/L	01/90 - Quarterly	GR - GRAB
Season: 0		Req.						<=1 DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB
NODI: -		NODI									
39504	PCB-1254										
1 - Effluent Gross		Smpl.						=0	28 - ug/L	01/90 - Quarterly	GR - GRAB
Season: 0		Req.						<=1 DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB

Parameter Code	Name	NODI	Quantity or Loading			Quality or Concentration			# of Ex.	Freq. of Analysis	Smpl. Type
			Value 1	Value 2	Units	Value 1	Value 2	Value 3			
NODI: -		NODI									
39508	PCB-1260	Smpl.					=0	28 - ug/L	01/90 - Quarterly	GR - GRAB	
1 -	Effluent Gross										
Season: 0		Req.					<=1 DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB	
NODI: -		NODI									

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

Parameter Code	Name	Monitoring Location	Field	Type	Description	Acknowledge
01042	Copper, total [as Cu]	1 - Effluent Gross	Quality or Concentration Sample Value 2	Soft	The provided sample value is outside the permit limit. (Error Code: 1)	<input checked="" type="checkbox"/>
01045	Iron, total [as Fe]	1 - Effluent Gross	Quality or Concentration Sample Value 2	Soft	The provided sample value is outside the permit limit. (Error Code: 1)	<input checked="" type="checkbox"/>
01045	Iron, total [as Fe]	1 - Effluent Gross	Quality or Concentration Sample Value 3	Soft	The provided sample value is outside the permit limit. (Error Code: 1)	<input checked="" type="checkbox"/>

Comments

Attachments

Name	Type	Size
DMR_Attachments_1_and_2_Sept_2019.pdf	pdf	44449

Report Last Saved By

PEPCO Environment Management Services

User: HIEDISTURM
 Name: Hiedi Sturm
 E-Mail: hiedi.sturm@exeloncorp.com
 Date/Time: 2019-10-28 10:27 (Time Zone: -04:00)

Report Last Signed By

User: HIEDISTURM
 Name: Hiedi Sturm
 E-Mail: hiedi.sturm@exeloncorp.com
 Date/Time: 2019-10-28 14:36 (Time Zone: -04:00)

Permit

Permit ID: DC0000094
Permittee: PEPCO Environment Management Services
Facility: PEPCO - BENNING
Permitted Feature: 101 - External Outfall

Major: ✓
Permittee Address: 701 Ninth Street, NW, Room 6219
 WASHINGTON , DC20019
Facility Location: 3300 BENNING ROAD, N.E.
 WASHINGTON , DC20019
Discharge: 101-Q - (no description)

Report Dates & Status

Monitoring Period: From 07/01/19 to 09/30/19
Status: NetDMR Validated

DMR Due Date: 10/28/19

Considerations for Form Completion

These discharges shall be monitored at manhole K for outfall 101.

Principal Executive Officer

First Name: William
Title: VP, Operations

Last Name: Sullivan
Telephone: 202-872-2942

No Data Indicator (NODI)

Form NODI: -

Parameter Code	Name	NODI	Quantity or Loading			Quality or Concentration			Units	# of Ex.	Freq. of Analysis	Smpl. Type
			Value 1	Value 2	Units	Value 1	Value 2	Value 3				

Parameter Code	Name	NODI	Quantity or Loading			Quality or Concentration			# of Ex.	Freq. of Analysis	Smpl. Type
			Value 1	Value 2	Units	Value 1	Value 2	Value 3			
00400	pH										
1 - Effluent Gross		Smpl.				=7.02		=7.02	12 - SU	01/90 - Quarterly	GR - GRAB
Season: 0		Req.				>=6 MINIMUM		<=8.5 MAXIMUM	12 - SU	01/90 - Quarterly	GR - GRAB
NODI: -		NODI									
00530	Solids, total suspended										
1 - Effluent Gross		Smpl.				=16		=16	19 - mg/L	01/90 - Quarterly	GR - GRAB
Season: 0		Req.				Req Mon MO AVG		Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	GR - GRAB
NODI: -		NODI									
00556	Oil & Grease										
1 - Effluent Gross		Smpl.				<5.43		<5.43	19 - mg/L	01/90 - Quarterly	GR - GRAB
Season: 0		Req.				Req Mon MO AVG		Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	GR - GRAB
NODI: -		NODI									
00980	Iron, total recoverable										
1 - Effluent Gross		Smpl.				=1.41		=1.41	19 - mg/L	01/90 - Quarterly	GR - GRAB
Season: 0		Req.				Req Mon MO AVG		Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	GR - GRAB
NODI: -		NODI									
01027	Cadmium, total [as Cd]										
1 - Effluent Gross		Smpl.				=0.717		=0.717	28 - ug/L	01/90 - Quarterly	GR - GRAB
Season: 0		Req.				Req Mon MO AVG		Req Mon DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB
NODI: -		NODI									
01042	Copper, total [as Cu]										
1 - Effluent Gross		Smpl.				=107		=107	28 - ug/L	01/90 - Quarterly	GR - GRAB
Season: 0		Req.				Req Mon MO AVG		Req Mon DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB
NODI: -		NODI									
01051	Lead, total [as Pb]										
1 - Effluent Gross		Smpl.				=30.9		=30.9	28 - ug/L	01/90 - Quarterly	GR - GRAB
Season: 0		Req.				Req Mon MO AVG		Req Mon DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB
NODI: -		NODI									
01067	Nickel, total [as Ni]										
1 - Effluent Gross		Smpl.				=23.7		=23.7	28 - ug/L	01/90 - Quarterly	GR - GRAB
Season: 0		Req.				Req Mon MO AVG		Req Mon DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB
NODI: -		NODI									
01092	Zinc, total [as Zn]										
1 - Effluent Gross		Smpl.				=174		=174	28 - ug/L	01/90 - Quarterly	GR - GRAB
Season: 0		Req.				Req Mon MO AVG		Req Mon DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB
NODI: -		NODI									
39496	PCB-1242										
1 - Effluent Gross		Smpl.				=0		=0	28 - ug/L	01/90 - Quarterly	GR - GRAB
Season: 0		Req.									

Parameter Code	Name	NODI	Quantity or Loading			Quality or Concentration			# of Ex.	Freq. of Analysis	Smpl. Type
			Value 1	Value 2	Units	Value 1	Value 2	Value 3			
NODI: -		NODI									
39504	PCB-1254										
1 - Effluent Gross		Smpl.				=0	=0	28 - ug/L	01/90 - Quarterly	GR - GRAB	
Season: 0		Req.				Req Mon MO AVG	Req Mon DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB	
NODI: -		NODI									
39508	PCB-1260										
1 - Effluent Gross		Smpl.				=0	=0	28 - ug/L	01/90 - Quarterly	GR - GRAB	
Season: 0		Req.				Req Mon MO AVG	Req Mon DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB	
NODI: -		NODI									
50050	Flow, in conduit or thru treatment plant										
1 - Effluent Gross		Smpl.				=0.00535	=0.129	03 - MGD	01/90 - Quarterly	ES - ESTIMA	
Season: 0		Req.				Req Mon MO AVG	Req Mon DAILY MX	03 - MGD	01/90 - Quarterly	ES - ESTIMA	
NODI: -		NODI									
X	Toxicity, Acute										
TS000		Smpl.									
1 - Effluent Gross											
Season: 0		Req.				Req Mon MO AVG	Req Mon DAILY MX	2F - tox acute	01/5Y - Once Every 5 Years	24 - COMP24	
NODI: -		NODI									

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

Parameter Code	Name	Monitoring Location	Field	Type	Description	Acknowledge
TS000	Toxicity, Acute	1 - Effluent Gross	All	Soft	All permit limit values for the Parameter are missing sample values or NODI selection. (Error Code: -1)	<input checked="" type="checkbox"/>

Comments

Toxicity Acute sampling requirement was met in compliance with the permit condition. Therefore, no sampling was conducted.

Attachments

Name	Type	Size
DMR_Attachments_1_and_2_Sept_2019.pdf	pdf	44449

Report Last Saved By

PEPCO Environment Management Services

User: HIEDISTURM
 Name: Hiedi Sturm
 E-Mail: hiedi.sturm@exeloncorp.com
 Date/Time: 2019-10-28 10:29 (Time Zone:-04:00)

Report Last Signed By

User: HIEDISTURM
 Name: Hiedi Sturm
 E-Mail: hiedi.sturm@exeloncorp.com
 Date/Time: 2019-10-28 14:36 (Time Zone:-04:00)

Permit

Permit ID: DC0000094 **Major:** ✓
Permittee: PEPCO Environment Management Services **Permittee Address:** 701 Ninth Street, NW, Room 6219
 WASHINGTON , DC20019
Facility: PEPCO - BENNING **Facility Location:** 3300 BENNING ROAD, N.E.
 WASHINGTON , DC20019
Permitted Feature: 201 - External Outfall **Discharge:** 201-A - INTERNAL MONITORING PT. 201
Report Dates & Status
Monitoring Period: From 07/01/19 to 09/30/19 **DMR Due Date:** 10/31/19
Status: **NetDMR Validated**

Considerations for Form Completion

OIL/WATER SEPARATOR, DEMINERALIZERREGENERATION WASTEWATER,BOILER BLOWDOWN, SUMP FOR GROUNDWATER INFILTRATION, FIRESIDEWASHING

Principal Executive Officer

First Name: William **Last Name:** Sullivan
Title: VP, Operations **Telephone:** 202-872-2942

No Data Indicator (NODI)

Form NOOI: -

Parameter		NODI	Quantity or Loading			Quality or Concentration			# of Ex.	Freq. of Analysis	Smpl. Type
Code	Name		Value 1	Value 2	Units	Value 1	Value 2	Value 3			

Parameter Code	NODI Name	Quantity or Loading			Quality or Concentration			# of Ex.	Freq. of Analysis	Smpl. Type		
		Value 1	Value 2	Units	Value 1	Value 2	Value 3					
00400	pH											
1 - Effluent Gross	Smpl.				=7.93				=7.93	12 - SU	01/90 - Quarterly	GR - GRAB
Season: 0	Req.				>=6 MINIMUM				<=8.5 MAXIMUM	12 - SU	01/90 - Quarterly	GR - GRAB
NODI: -	NODI											
00530	Solids, total suspended											
1 - Effluent Gross	Smpl.					<1			<1	19 - mg/L	01/90 - Quarterly	GR - GRAB
Season: 0	Req.					<=30 MO AVG			<=100 DAILY MX	19 - mg/L	01/90 - Quarterly	GR - GRAB
NODI: -	NODI											
00556	Oil & Grease											
1 - Effluent Gross	Smpl.					<5.62			<5.62	19 - mg/L	01/90 - Quarterly	GR - GRAB
Season: 0	Req.					<=10 MO AVG			<=15 DAILY MX	19 - mg/L	01/90 - Quarterly	GR - GRAB
NODI: -	NODI											
39496	PCB-1242											
1 - Effluent Gross	Smpl.								=0	28 - ug/L	01/90 - Quarterly	GR - GRAB
Season: 0	Req.								<=1 DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB
NODI: -	NODI											
39504	PCB-1254											
1 - Effluent Gross	Smpl.								=0	28 - ug/L	01/90 - Quarterly	GR - GRAB
Season: 0	Req.								<=1 DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB
NODI: -	NODI											
39508	PCB-1260											
1 - Effluent Gross	Smpl.								=0	28 - ug/L	01/90 - Quarterly	GR - GRAB
Season: 0	Req.								<=1 DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB
NODI: -	NODI											
50050	Flow, in conduit or thru treatment plant											
1 - Effluent Gross	Smpl.	=0.00535	=0.129	03 - MGD		=0.00535			=0.0129	03 - MGD	01/90 - Quarterly	ES - ESTIMA
Season: 0	Req.	Req Mon MO AVG	Req Mon DAILY MX	03 - MGD		Req Mon MO AVG			Req Mon DAILY MX	03 - MGD	01/90 - Quarterly	ES - ESTIMA
NODI: -	NODI											

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments**Attachments**

No attachments.

Report Last Saved By**PEPCO Environment Management Services**

User: HIEDISTURM
Name: Hiedi Sturm
E-Mail: hiedi.sturm@exeloncorp.com
Date/Time: 2019-10-28 08:26 (Time Zone: -04:00)

Report Last Signed By

User: HIEDISTURM
Name: Hiedi Sturm
E-Mail: hiedi.sturm@exeloncorp.com
Date/Time: 2019-10-28 14:36 (Time Zone: -04:00)

©2008 NetDHR

Permit

Permit ID: DC0000094
Permittee: PEPCO Environment Management Services
Facility: PEPCO - BENNING
Permitted Feature: 201 - External Outfall

Major: ✓
Permittee Address: 701 Ninth Street, NW, Room 6219
 WASHINGTON , DC20019
Facility Location: 3300 BENNING ROAD, N.E.
 WASHINGTON , DC20019
Discharge: 201-B - HYDROSTATIC TESTING TANKS

Report Dates & Status

Monitoring Period: From 07/01/19 to 09/30/19
Status: **NetDMR Validated**

DMR Due Date: 10/31/19

Considerations for Form Completion

Principal Executive Officer

First Name: William
Title: VP, Operations

Last Name: Sullivan
Telephone: 202-872-2942

No Data Indicator (NODI)

Form NODI: -

Parameter Code	Name	NODI	Quantity or Loading			Quality or Concentration			Units	# of Ex.	Freq. of Analysis	Smpl. Type
			Value 1	Value 2	Units	Value 1	Value 2	Value 3				

Parameter Code	Name	NODI	Quantity or Loading			Quality or Concentration			# of Ex.	Freq. of Analysis	Smpl. Type
			Value 1	Value 2	Units	Value 1	Value 2	Value 3			
00310	BOD, 5-day, 20 deg. C	Smpl.									
1 - Effluent Gross											
Season: 0		Req.				<=30 MO AVG	<=60 DAILY MX	19 - mg/L		01/DS - Once Per Discharge	GR - GRAB
NODI: -		NODI				C - No Discharge	C - No Discharge				
00400	pH	Smpl.									
1 - Effluent Gross											
Season: 0		Req.			>=6 MINIMUM		<=8.5 MAXIMUM	12 - SU		01/DS - Once Per Discharge	GR - GRAB
NODI: -		NODI			C - No Discharge		C - No Discharge				
00530	Solids, total suspended	Smpl.									
1 - Effluent Gross											
Season: 0		Req.				<=30 MO AVG	<=60 DAILY MX	19 - mg/L		01/DS - Once Per Discharge	GR - GRAB
NODI: -		NODI				C - No Discharge	C - No Discharge				
00556	Oil & Grease	Smpl.									
1 - Effluent Gross											
Season: 0		Req.				<=15 MO AVG	<=20 DAILY MX	19 - mg/L		01/DS - Once Per Discharge	GR - GRAB
NODI: -		NODI				C - No Discharge	C - No Discharge				
34030	Benzene	Smpl.									
1 - Effluent Gross											
Season: 0		Req.			<=1 MO AVG			19 - mg/L		01/DS - Once Per Discharge	GR - GRAB
NODI: -		NODI			C - No Discharge						
50050	Flow, in conduit or thru treatment plant	Smpl.									
1 - Effluent Gross											
Season: 0		Req.					<=.5 DAILY MX	03 - MGD		99/99 - Continuous	MS - MEASRD
NODI: -		NODI					C - No Discharge				
50060	Chlorine, total residual	Smpl.									
1 - Effluent Gross											
Season: 0		Req.				<=.1 MO AVG		19 - mg/L		01/DS - Once Per Discharge	GR - GRAB
NODI: -		NODI				C - No Discharge					

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

PEPCO Environment Management Services

User: HIEDISTURM
Name: Hiedi Sturm
E-Mail: hiedi.sturm@exeloncorp.com
Date/Time: 2019-10-21 15:16 (Time Zone: -04:00)

Report Last Signed By

User: HIEDISTURM
Name: Hiedi Sturm
E-Mail: hiedi.sturm@exeloncorp.com
Date/Time: 2019-10-28 14:36 (Time Zone: -04:00)

Permit

Permit ID: DC0000094
Permittee: PEPCO Environment Management Services

Major: ✓

Permittee Address: 701 Ninth Street, NW, Room 6219
 WASHINGTON , DC20019

Facility: PEPCO - BENNING

Facility Location: 3300 BENNING ROAD, N.E.
 WASHINGTON , DC20019

Permitted Feature: 202 - External Outfall

Discharge: 202-A - COOLING TOWER BLOWDOWN

Report Dates & Status

Monitoring Period: From 07/01/19 to 09/30/19

DMR Due Date: 10/31/19

Status: **NetDMR Validated**

Considerations for Form Completion

Net Value of PCBs

Principal Executive Officer

First Name: William
Title: VP, Operations

Last Name: Sullivan
Telephone: 202-872-2942

No Data Indicator (NODI)

Form NODI: -

Parameter Code	Parameter Name	NODI	Quantity or Loading			Quality or Concentration			# of Ex.	Freq. of Analysis	Smpl. Type
			Value 1	Value 2	Units	Value 1	Value 2	Value 3			

Parameter Code	Name	NODI	Quantity or Loading			Quality or Concentration			# of Ex.	Freq. of Analysis	Smpl. Type
			Value 1	Value 2	Units	Value 1	Value 2	Value 3			
00010	Temperature, water deg. centigrade	Smpl.									
	1 - Effluent Gross										
Season: 0	Req.						<=2.6 DAILY MX	04 - deg C	01/90 - Quarterly	MS - MEASRD	
NODI: -	NODI						C - No Discharge				
00400	pH	Smpl.									
	1 - Effluent Gross										
Season: 0	Req.				>=6 MINIMUM		<=8.5 MAXIMUM	12 - SU	01/90 - Quarterly	GR - GRAB	
NODI: -	NODI				C - No Discharge		C - No Discharge				
01034	Chromium, total [as Cr]	Smpl.									
	2 - Effluent Net										
Season: 0	Req.						<= .2 MO AVG	<= .2 DAILY MX	19 - mg/L	01/90 - Quarterly	GR - GRAB
NODI: -	NODI						C - No Discharge	C - No Discharge			
01092	Zinc, total [as Zn]	Smpl.									
	2 - Effluent Net										
Season: 0	Req.						<=1 MO AVG	<=1 DAILY MX	19 - mg/L	01/90 - Quarterly	GR - GRAB
NODI: -	NODI						C - No Discharge	C - No Discharge			
39496	PCB-1242	Smpl.									
	1 - Effluent Gross										
Season: 0	Req.						Req Mon DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB	
NODI: -	NODI						C - No Discharge				
39504	PCB-1254	Smpl.									
	1 - Effluent Gross										
Season: 0	Req.						Req Mon DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB	
NODI: -	NODI						C - No Discharge				
39508	PCB-1260	Smpl.									
	1 - Effluent Gross										
Season: 0	Req.						Req Mon DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB	
NODI: -	NODI						C - No Discharge				
50050	Flow, in conduit or thru treatment plant	Smpl.									
	1 - Effluent Gross										
Season: 0	Req.		Req Mon MO AVG	Req Mon DAILY MX	03 - MGD					MEASD - Measured	CN - CONTIN
NODI: -	NODI		C - No Discharge	C - No Discharge							
50064	Chlorine, free available	Smpl.									
	1 - Effluent Gross										
Season: 0	Req.						<= .2 MO AVG	<= .5 DAILY MX	19 - mg/L	01/90 - Quarterly	GR - GRAB
NODI: -	NODI						C - No Discharge	C - No Discharge			
71871		Smpl.									

Parameter Code	Name	NODI	Quantity or Loading			Quality or Concentration			# of Ex.	Freq. of Analysis	Smpl. Type
			Value 1	Value 2	Units	Value 1	Value 2	Value 3			
1 - Effluent Gross	Bromine, reported as the element										
Season: 0		Reg.				Req Mon MO AVG	Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	GR - GRAB	
NODI: -		NODI				C - No Discharge	C - No Discharge				

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

PEPCO Environment Management Services

User: HIEDISTURM
 Name: Hiedi Sturm
 E-Mail: hiedi.sturm@exeloncorp.com
 Date/Time: 2019-10-21 15:19 (Time Zone:-04:00)

Report Last Signed By

User: HIEDISTURM
 Name: Hiedi Sturm
 E-Mail: hiedi.sturm@exeloncorp.com
 Date/Time: 2019-10-28 14:36 (Time Zone:-04:00)

Permit

Permit ID: DC0000094 **Major:** ✓
Permittee: PEPCO Environment Management Services **Permittee Address:** 701 Ninth Street, NW, Room 6219 WASHINGTON, DC20019
Facility: PEPCO - BENNING **Facility Location:** 3300 BENNING ROAD, N.E. WASHINGTON, DC20019
Permitted Feature: 202 - External Outfall **Discharge:** 202-B - COOLING TOWER BASIN WASH WATER

Report Dates & Status

Monitoring Period: From 07/01/19 to 09/30/19 **DMR Due Date:** 10/31/19
Status: NetDMR Validated

Considerations for Form Completion

COOLING TOWER UNITS 15 & 16

Principal Executive Officer

First Name: William **Last Name:** Sullivan
Title: VP, Operations **Telephone:** 202-872-2942

No Data Indicator (NODI)

Form NODI: -

Parameter Code	Name	NODI	Quantity or Loading			Quality or Concentration			# of Ex.	Freq. of Analysis	Smpl. Type
			Value 1	Value 2	Units	Value 1	Value 2	Value 3			
00400	pH										
	1 - Effluent Gross	Smpl.									
Season: 0		Req.				>=6 MINIMUM	<=8.5 MAXIMUM	12 - SU	01/90 - Quarterly	GR - GRAB	
NODI: -		NODI				C - No Discharge	C - No Discharge				
00530	Solids, total suspended										
	1 - Effluent Gross	Smpl.									
Season: 0		Req.				<=30 MO AVG	<=100 DAILY MX	19 - mg/L	01/90 - Quarterly	GR - GRAB	
NODI: -		NODI				C - No Discharge	C - No Discharge				
39496	PCB-1242										
	1 - Effluent Gross	Smpl.									
Season: 0		Req.					<=1 DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB	
NODI: -		NODI					C - No Discharge				
39504	PCB-1254										
	1 - Effluent Gross	Smpl.									
Season: 0		Req.					<=1 DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB	
NODI: -		NODI					C - No Discharge				
39508	PCB-1260										
	1 - Effluent Gross	Smpl.									
Season: 0		Req.					<=1 DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB	
NODI: -		NODI					C - No Discharge				
50050	Flow, in conduit or thru treatment plant										
	1 - Effluent Gross	Smpl.									
Season: 0		Req.	Req Mon MO AVG	Req Mon DAILY MX	03 - MGD				01/90 - Quarterly	ES - ESTIMA	
NODI: -		NODI	C - No Discharge	C - No Discharge							

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments**Attachments**

No attachments.

Report Last Saved By**PEPCO Environment Management Services**

User: HIEDISTURM
Name: Hiedi Sturm
E-Mail: hiedi.sturm@exeloncorp.com
Date/Time: 2019-10-21 15:18 (Time Zone:-04:00)

Report Last Signed By

User: HIEDISTURM
Name: Hiedi Sturm
E-Mail: hiedi.sturm@exeloncorp.com
Date/Time: 2019-10-28 14:36 (Time Zone:-04:00)

©2008 NetDMR

Permit

Permit ID: DC0000094
Permittee: PEPCO Environment Management Services
Facility: PEPCO - BENNING
Permitted Feature: 203 - External Outfall

Major: ✓
Permittee Address: 701 Ninth Street, NW, Room 6219
 WASHINGTON , DC20019
Facility Location: 3300 BENNING ROAD, N.E.
 WASHINGTON , DC20019
Discharge: 203-A - COOLING TOWER BLOW DOWN

Report Dates & Status

Monitoring Period: From 07/01/19 to 09/30/19
Status: NetDMR Validated

DMR Due Date: 10/31/19

Considerations for Form Completion

Net Value of PCBs

Principal Executive Officer

First Name: William
Title: VP, Operations

Last Name: Sullivan
Telephone: 202-872-2942

No Data Indicator (NODI)

Form NODI: -

Code	Parameter Name	NODI	Quantity or Loading			Quality or Concentration			Units	# of Ex.	Freq. of Analysis	Smpl. Type
			Value 1	Value 2	Units	Value 1	Value 2	Value 3				

Parameter Code	Name	NODI	Quantity or Loading			Quality or Concentration			# of Ex.	Freq. of Analysis	Smpl. Type
			Value 1	Value 2	Units	Value 1	Value 2	Value 3			
00010	Temperature, water deg. centigrade	Smpl.									
	1 - Effluent Gross										
Season: 0	Req.						<=2.8 DAILY MX	04 - deg C	01/90 - Quarterly	MS - MEASRD	
NODI: -	NODI						C - No Discharge				
00400	pH	Smpl.									
	1 - Effluent Gross										
Season: 0	Req.			>=6 MINIMUM			<=8.5 MAXIMUM	12 - SU	01/90 - Quarterly	GR - GRAB	
NODI: -	NODI			C - No Discharge			C - No Discharge				
01034	Chromium, total [as Cr]	Smpl.									
	2 - Effluent Net										
Season: 0	Req.						<=.2 MO AVG	<=.2 DAILY MX	19 - mg/L	01/90 - Quarterly	GR - GRAB
NODI: -	NODI						C - No Discharge	C - No Discharge			
01092	Zinc, total [as Zn]	Smpl.									
	2 - Effluent Net										
Season: 0	Req.						<=1 MO AVG	<=1 DAILY MX	19 - mg/L	01/90 - Quarterly	GR - GRAB
NODI: -	NODI						C - No Discharge	C - No Discharge			
39496	PCB-1242	Smpl.									
	1 - Effluent Gross										
Season: 0	Req.						Req Mon DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB	
NODI: -	NODI						C - No Discharge				
39504	PCB-1254	Smpl.									
	1 - Effluent Gross										
Season: 0	Req.						Req Mon DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB	
NODI: -	NODI						C - No Discharge				
39508	PCB-1260	Smpl.									
	1 - Effluent Gross										
Season: 0	Req.						Req Mon DAILY MX	28 - ug/L	01/90 - Quarterly	GR - GRAB	
NODI: -	NODI						C - No Discharge				
50050	Flow, in conduit or thru treatment plant	Smpl.									
	1 - Effluent Gross										
Season: 0	Req.		Req Mon MO AVG	Req Mon DAILY MX	03 - MGD					MEASD - Measured	CN - CONTIN
NODI: -	NODI		C - No Discharge	C - No Discharge							
50064	Chlorine, free available	Smpl.									
	1 - Effluent Gross										
Season: 0	Req.						<=.2 MO AVG	<=.5 DAILY MX	19 - mg/L	01/90 - Quarterly	GR - GRAB
NODI: -	NODI						C - No Discharge	C - No Discharge			
71671		Smpl.									

Parameter Code	Name	NODI	Quantity or Loading			Quality or Concentration			# of Ex.	Freq. of Analysis	Smpl. Type
			Value 1	Value 2	Units	Value 1	Value 2	Value 3			
1 - Effluent Gross	Bromine, reported as the element										
Season: 0		Req-				Req Mon MO AVG	Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	GR - GRAB	
NODI: -		NODI				C - No Discharge	C - No Discharge				

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments**Attachments**

No attachments.

Report Last Saved By**PEPCO Environment Management Services**

User: HIEDISTURM
 Name: Hiedi Sturm
 E-Mail: hiedi.sturm@exeloncorp.com
 Date/Time: 2019-10-21 15:21 (Time Zone:-04:00)

Report Last Signed By

User: HIEDISTURM
 Name: Hiedi Sturm
 E-Mail: hiedi.sturm@exeloncorp.com
 Date/Time: 2019-10-28 14:36 (Time Zone:-04:00)

Permit

Permit ID: DC0000094 **Major:** ✓
Permittee: PEPCO Environment Management Services **Permittee Address:** 701 Ninth Street, NW, Room 6219
 WASHINGTON, DC20019
Facility: PEPCO - BENNING **Facility Location:** 3300 BENNING ROAD, N.E.
 WASHINGTON, DC20019
Permitted Feature: 203 - External Outfall **Discharge:** 203-B - COOLING TOWER BASIN WASH WATER
Report Dates & Status
Monitoring Period: From 07/01/19 to 09/30/19 **DMR Due Date:** 10/31/19
Status: NetDMR Validated

Considerations for Form Completion

Principal Executive Officer

First Name: Willam **Last Name:** Sullivan
Title: VP, Operations **Telephone:** 202-872-2942

No Data Indicator (NODI)

Form NODI: -

Parameter Code	Name	NODI	Quantity or Loading			Quality or Concentration			# of Ex.	Freq. of Analysis	Smpl. Type
			Value 1	Value 2	Units	Value 1	Value 2	Value 3			
00400	pH										
	1 - Effluent Gross	Smpl.									
	Season: 0	Req.			>=6 MINIMUM		<=8.5 MAXIMUM	12 - SU		01/90 - Quarterly	GR - GRAB
	NODI: -	NODI			C - No Discharge		C - No Discharge				
00530	Solids, total suspended										
	1 - Effluent Gross	Smpl.									
	Season: 0	Req.				<=30 MO AVG	<=100 DAILY MX	19 - mg/L		01/90 - Quarterly	GR - GRAB
	NODI: -	NODI				C - No Discharge	C - No Discharge				
39496	PCB-1242										
	1 - Effluent Gross	Smpl.									
	Season: 0	Req.					<=1 DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
	NODI: -	NODI					C - No Discharge				
39504	PCB-1254										
	1 - Effluent Gross	Smpl.									
	Season: 0	Req.					<=1 DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
	NODI: -	NODI					C - No Discharge				
39508	PCB-1260										
	1 - Effluent Gross	Smpl.									
	Season: 0	Req.					<=1 DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
	NODI: -	NODI					C - No Discharge				
50050	Flow, in conduit or thru treatment plant										
	1 - Effluent Gross	Smpl.									
	Season: 0	Req.	Req Mon MO AVG	Req Mon DAILY MX	03 - MGD					01/90 - Quarterly	ES - ESTIMA
	NODI: -	NODI	C - No Discharge	C - No Discharge							

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments**Attachments**

No attachments.

Report Last Saved By**PEPCO Environment Management Services**

User: HIEDISTURM
Name: Hiedi Sturm
E-Mail: hiedi.sturm@exeloncorp.com
Date/Time: 2019-10-21 15:20 (Time Zone: 04:00)

Report Last Signed By

User: HIEDISTURM
Name: Hiedi Sturm
E-Mail: hiedi.sturm@exeloncorp.com
Date/Time: 2019-10-28 14:36 (Time Zone: -04:00)

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Paragraph 68.a.(2) of the Consent Decree

Annual Inspection of the Drainage System in 2019

As described in the prior quarterly report, an internal inspection of the facility's drainage system, using closed circuit television (CCTV), was conducted between April 22 and May 21, 2019 by Insight, LLC.

Insight's evaluation of the CCTV inspection data indicated that most of the storm drain lines that discharge to Outfall 013 are in good condition, but the inspection identified evidence of structural defects (cracks and visible reinforcement) with deposits and debris in various locations within the drainage system. Insight recommended the following corrective actions to address the conditions of the storm drain laterals in three areas identified below:

MH 69A to Inlet (I)69 - realign/replace the pipe to correct the joint offset.

MH 51 D to the downstream T connection - replace

MH 56 to 157 - replace the broken pipe segment.

PEPCO is currently working with a contractor to perform the work in the 4th quarter, 2019. A status update will be provided in the 4th quarter status report.

Insight also attempted to perform a CCTV inspection of the storm drain laterals and inlets located in the area of the former power plant that discharge to Outfall 101. As experienced in prior attempts to conduct camera surveys of the underground drain pipes in this area, camera access was significantly constrained by segments of collapsed pipe, the small diameter of certain of the lateral lines, and the presence of debris and standing water.

In order to address the issues experienced in the Insight CCTV inspection, PEPCO has retained the services of Princeton Hydro, LLC to investigate the Outfall 101 drainage to conclusively determine the connectivity of all the surface inlets currently assumed to drain to Outfall 101. Princeton Hydro will manage this effort, including bringing in specialized firms that will be able to use other techniques beyond CCTV to trace the existing piping and provided a revised area drainage map. The field work for this effort is expected to begin in the fourth quarter, 2019 and a progress update will be provided in the 4th quarter, 2019 report.

Site Drainage Map

An update of the existing drainage area map has been deferred until after the Outfall 101 investigation by Princeton Hydro, LLC scheduled to be completed in the 4th quarter, 2019. A revised drainage area map and/or an update on the status of this effort will be provided in the 4th quarter, 2019 report.

Paragraph 68.a.(3) of the Consent Decree

Storm Drain Inlets Inspection Logs

The inspection logs for July - September 2019 are attached.

Sue Kiefer

PEPCO STORM DRAIN SHEET FOR TUESDAY

DATE 7/2/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
22		No Longer Exists						
23		No Longer Exists						
24	✓						<i>cleaned</i>	
25	✓							
26		No Longer Exists						
27	✓							
28	✓						<i>cleaned</i>	
29	✓						<i>cleaned</i>	
30	✓							
31		No Longer Exists						
32		No Longer Exists						
33	✓							
34		No Longer Exists						
35		No Longer Exists						
36		No Longer Exists						
37	✓						<i>cleaned</i>	
38	✓							
39	✓							
40	✓						<i>cleaned</i>	
41		This Drain Is Covered						
42	✓							

Sven Kirtz

PEPCO STORM DRAIN SHEET FOR WEDNESDAY

DATE 7/3/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
43	✓						cleaned cleaned / new filter	
44	✓							
45	✓						cleaned cleaned	
46	✓							
47	✓							
48	✓						cleaned cleaned	
49	✓						cleaned cleaned / need to replace boom	
50		Drain System Not Attach To The Drain System In The Yard						
51	✓							
52	✓							
53	✓						cleaned	
54	✓							
55		No Filter Required, Solid Metal Plate						
56	✓							
57	✓						cleaned / more cleaned out filter	
58	✓							
59		No Filter Required, Solid Metal Plate						
60	✓							
61	✓						cleaned	
62	✓						cleaned	

Sven Kier		PEPCO STORM DRAIN SHEET FOR FRIDAY					DATE	COMMENTS
Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS		
85	✓						cleaned	
86	✓							
87	✓							
88	✓						cleaned	
89	✓							
90	✓							
91	✓							
92		No Filter Required, Drains On Grass Towards The Corner						
93		No Filter Required, Drains On Grass Towards The Corner						
94		No Filter Required, Drains On Grass Towards The Corner						
95		No Filter Required, Drains On Grass Towards The Corner						
96		No Filter Required, Drains On Grass Towards The Corner						
97	✓						cleaned	
98	✓						cleaned	
99	✓							
100	✓							
101	✓							
102	✓						cleaned	
103	✓							
104	✓							
105	✓							
106	✓						cleaned	
107	✓							
108	✓							
109	✓							
110	✓						cleaned	

DATE 7/5/19

* Mended weather
 flood warning til 10:30 am
 Rain 9/11 day

PEPCO STORM DRAIN SHEET FOR MONDAY							DATE	COMMENTS
Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS		
1	✓							
2	✓						cleaned	
3	✓							
4	✓						cleaned	
5	✓							
6	✓						cleaned/swapped boom	
7	✓							
8	✓							
9	✓							
10	✓							
11	✓							
12	✓							
13	✓						cleaned	
14	✓							
15	✓							
16	No Longer Exists							
17	✓							
18	✓						cleaned	
19	✓							
20	✓						cleaned/cleaned out 5/1/08	
21	✓							
22	✓							
23	✓							
24	✓							

Steve [Signature]

7/8/19

Sven Kintz

PEPCO STORM DRAIN SHEET FOR TUESDAY

DATE

7/9/18

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
22		No Longer Exists						
23		No Longer Exists						
24	✓						cleaned	
25	✓							
26		No Longer Exists						
27	✓							
28	✓						cleaned	
29	✓						cleaned	
30	✓							
31		No Longer Exists						
32		No Longer Exists						
33	✓							
34		No Longer Exists						
35		No Longer Exists						
36		No Longer Exists						
37	✓						cleaned	
38	✓							
39	✓						cleaned	
40	✓							
41		This Drain Is Covered						
42	✓							

Sven K RFF		PEPCO STORM DRAIN SHEET FOR THURSDAY							DATE	9/10/19
Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS			
63	✓						cleaned			
64	✓									
65	✓									
66	✓						cleaned			
67	✓									
68	✓									
69	✓						cleaned			
70	✓									
71	✓						cleaned			
72	✓									
73	✓									
74	✓						cleaned			
75	✓									
76	✓						cleaned			
77	✓									
78	✓									
79	✓						cleaned			
80	✓									
81	✓									
82	✓									
83	✓									
84		No Filter Required, Outside Of Pepco Yard								

Sven Klotz

PEPCO STORM DRAIN SHEET FOR FRIDAY

DATE

7/12/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS
85	✓						cleaned
86	✓						
87	✓						
88	✓						cleaned
89	✓						
90	✓						
91	✓						cleaned
92							No Filter Required, Drains On Grass Towards The Corner
93							No Filter Required, Drains On Grass Towards The Corner
94							No Filter Required, Drains On Grass Towards The Corner
95							No Filter Required, Drains On Grass Towards The Corner
96							No Filter Required, Drains On Grass Towards The Corner
97	✓						
98	✓						cleaned
99	✓						
100	✓						
101	✓						
102	✓						cleaned
103	✓						
104	✓						
105	✓						cleaned
106	✓						cleaned
107	✓						
108	✓						
109	✓						
110	✓						cleaned

Sven Kirtz DATE 7/15/19

PEPCO STORM DRAIN SHEET FOR MONDAY

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR ROOM	NEEDS GUARD PLUS	COMMENTS	
1	✓						cleaned	
2	✓						cleaned	
3	✓						cleaned	
4	✓							
5	✓							
6	✓						cleaned	
7	✓							
8	✓							
9	✓							
10	✓						cleaned	
11	✓							
12	✓							
13	✓						cleaned	
14	✓							
15	✓							
16		No Longer Exists						
17	✓						cleaned	
18	✓							
19	✓							
20	✓							
21	✓						cleaned	
22	✓							
23	✓							
24	✓							

Sven Katz PEPCO STORM DRAIN SHEET FOR TUESDAY DATE 7/19/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
22		No Longer Exists						
23		No Longer Exists						
24	✓						Cleaned	
25	✓							
26		No Longer Exists						
27	✓						Cleaned	
28	✓							
29	✓						Cleaned	
30	✓							
31		No Longer Exists						
32		No Longer Exists						
33	✓						Cleaned	
34		No Longer Exists						
35		No Longer Exists						
36		No Longer Exists						
37	✓							
38	✓						Cleaned	
39	✓							
40	✓							
41		This Drain Is Covered						
42	✓						Cleaned	

Sven Kiefer **PEPCO STORM DRAIN SHEET FOR WEDNESDAY** **DATE** *7/17/19*

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS
43	<input checked="" type="checkbox"/>						<i>cleaned</i>
44	<input checked="" type="checkbox"/>						
45	<input checked="" type="checkbox"/>						
46	<input checked="" type="checkbox"/>						<i>cleaned</i>
47	<input checked="" type="checkbox"/>						
48	<input checked="" type="checkbox"/>						
49	<input checked="" type="checkbox"/>						<i>cleaned</i>
50	Drain System Not Attach To The Drain System In The Yard						
51	<input checked="" type="checkbox"/>						
52	<input checked="" type="checkbox"/>						
53	<input checked="" type="checkbox"/>						<i>cleaned</i>
54	<input checked="" type="checkbox"/>						
55	No Filter Required, Solid Metal Plate						
56	<input checked="" type="checkbox"/>						
57	<input checked="" type="checkbox"/>						<i>cleaned</i>
58	<input checked="" type="checkbox"/>						
59	No Filter Required, Solid Metal Plate						
60	<input checked="" type="checkbox"/>						
61	<input checked="" type="checkbox"/>						<i>cleaned</i>
62	<input checked="" type="checkbox"/>						

Sven Krick 7/18/19

PEPCO STORM DRAIN SHEET FOR THURSDAY DATE

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
63	✓						cleaned	
64	✓							
65	✓							
66	✓						cleaned	
67	✓							
68	✓							
69	✓						cleaned	
70	✓							
71	✓							
72	✓						cleaned	
73	✓							
74	✓							
75	✓						cleaned	
76	✓							
77	✓							
78	✓						cleaned	
79	✓							
80	✓							
81	✓							
82	✓							
83	✓							
84	No Filter Required, Outside Of Pepco Yard							

Sven Kietz PEPCO STORM DRAIN SHEET FOR FRIDAY DATE 7/19/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
85	✓						cleaned	
86	✓							
87	✓							
88	✓						cleaned	
89	✓							
90	✓						cleaned	
91	✓							
92		No Filter Required, Drains On Grass Towards The Corner						
93		No Filter Required, Drains On Grass Towards The Corner						
94		No Filter Required, Drains On Grass Towards The Corner						
95		No Filter Required, Drains On Grass Towards The Corner						
96		No Filter Required, Drains On Grass Towards The Corner						
97	✓							
98	✓						cleaned	
99	✓							
100	✓							
101	✓						cleaned	
102	✓							
103	✓							
104	✓						cleaned	
105	✓						cleaned	
106	✓							
107	✓							
108	✓						cleaned	
109	✓							
110	✓							

Sven Kier 7/22/19

PEPCO STORM DRAIN SHEET FOR MONDAY DATE

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN ROOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
1	✓						completed	
2	✓							
3	✓							
4	✓						completed	
5	✓							
6	✓							
7	✓						completed	
8	✓							
9	✓							
10	✓							
11	✓						completed	
12	✓							
13	✓							
14	✓						completed	
15	✓							
16	No Longer Exists							
17	✓							
18	✓						completed	
19	✓							
20	✓							
21	✓						completed	
22	✓							
23	✓							
24	✓						completed	

SOP KIRK DATE 7/23/19

PEPCO STORM DRAIN SHEET FOR TUESDAY

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
22		No Longer Exists						
23		No Longer Exists						
24	✓						Cleaned	
25	✓							
26		No Longer Exists						
27	✓							
28	✓						Cleaned	
29	✓							
30	✓						new filters/witch hat	
31		No Longer Exists						
32		No Longer Exists						
33	✓							
34		No Longer Exists						
35		No Longer Exists						
36		No Longer Exists						
37	✓						Cleaned	
38	✓							
39	✓							
40	✓						Cleaned	
41		This Drain Is Covered						
42	✓							

Sven Kurf **PEPCO STORM DRAIN SHEET FOR WEDNESDAY** DATE 7/24/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
43	✓						Cleaned	
44	✓							
45	✓						cleaned / cleaned skuff out of 6. Her	
46	✓							
47	✓							
48	✓						cleaned / new boom	
49	✓							
50		Drain System Not Attach To The Drain System In The Yard						
51	✓						cleaned	
52	✓						cleaned	
53	✓							
54	✓							
55		No Filter Required, Solid Metal Plate						
56	✓						cleaned	
57	✓						cleaned	
58	✓						cleaned	
59		No Filter Required, Solid Metal Plate						
60	✓						cleaned	
61	✓						cleaned	
62	✓						cleaned	

Sven Knick		PEPCO STORM DRAIN SHEET FOR THURSDAY					DATE	7/25/19
Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
63	✓						cleaned	
64	✓							
65	✓							
66	✓						cleaned / cleaned back of grate	
67	✓						cleaned / worked the grate	
68	✓							
69	✓							
70	✓						cleaned	
71	✓							
72	✓							
73	✓							
74	✓						cleaned / SLAP AT P. filter	
75	✓							
76	✓						cleaned	
77	✓							
78	✓							
79	✓						cleaned	
80	✓						cleaned	
81	✓							
82	✓							
83	✓						cleaned / new boom	
84		No Filter Required, Outside Of Pepco Yard						

NEED FILTERS ORDERED 37" X 42" AND THE BIG FILTER FOR DRAIN 25 AND THE BIG ONE BY THE PARKING LOT (ROAD TO SLUDGE PIT)

Sven Kirtz PEPCO STORM DRAIN SHEET FOR FRIDAY DATE 7/26/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
85	✓						Cleaned	
86	✓							
87	✓						Cleaned	
88	✓							
89	✓							
90	✓						Cleaned	
91	✓							
92		No Filter Required, Drains On Grass Towards The Corner						
93		No Filter Required, Drains On Grass Towards The Corner						
94		No Filter Required, Drains On Grass Towards The Corner						
95		No Filter Required, Drains On Grass Towards The Corner						
96		No Filter Required, Drains On Grass Towards The Corner						
97	✓						Cleaned	
98	✓						Cleaned	
99	✓						Cleaned	
100	✓							
101	✓							
102	✓							
103	✓						Cleaned	
104	✓							
105	✓						Cleaned	
106	✓							
107	✓							
108	✓						Cleaned	
109	✓							
110	✓							

Sen Krutz **PEPCO STORM DRAIN SHEET FOR MONDAY** **DATE 7/29/19**

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
1	✓						cleaned	
2	✓							
3	✓						cleaned / replaces boom	
4	✓							
5	✓							
6	✓							
7	✓						cleaned / removed Rocks from f./tr	
8	✓							
9	✓							
10	✓						cleaned	
11	✓							
12	✓							
13	✓							
14	✓							
15	✓						cleaned	
16		No Longer Exists						
17	✓							
18	✓							
19	✓						cleaned	
20	✓						cleaned	
21	✓							
22	✓							
23	✓							
24	✓						cleaned / new f./tr	

Sven Krietz

PEPCO STORM DRAIN SHEET FOR TUESDAY

DATE 7/30/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
22		No Longer Exists						
23		No Longer Exists						
24	✓						cleaned / cleaned out filter	
25	✓							
26		No Longer Exists						
27	✓							
28	✓						cleaned	
29	✓							
30	✓						cleaned	
31		No Longer Exists						
32		No Longer Exists						
33	✓							
34		No Longer Exists						
35		No Longer Exists						
36		No Longer Exists						
37	✓						cleaned / cleaned boom muddy	
38	✓							
39	✓							
40	✓						cleaned	
41		This Drain Is Covered						
42	✓							

Sven K. H. P. PEPCO STORM DRAIN SHEET FOR WEDNESDAY DATE 7/31/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS
43	✓						cleaned / new filter.
44	✓						
45	✓						
46	✓						cleaned
47	✓						cleaned
48	✓						cleaned
49	✓						cleaned
50		Drain System Not Attach To The Drain System In The Yard					
51	✓						cleaned
52	✓						cleaned / cleaned filter
53	✓						
54	✓						
55		No Filter Required, Solid Metal Plate					
56	✓						
57	✓						
58	✓						cleaned
59		No Filter Required, Solid Metal Plate					
60	✓						
61	✓						cleaned
62	✓						

Sven Krietz

PEPCO STORM DRAIN SHEET FOR THURSDAY

DATE 8/1/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
63	✓						cleaned / have to replace boom	
64	✓							
65	✓						cleaned	
66	✓							
67	✓							
68	✓						cleaned	
69	✓						cleaned / filter needs replaced have to wait on CEDOR	
70	✓							
71	✓							
72	✓							
73	✓						cleaned	
74	✓						cleaned	
75	✓							
76	✓							
77	✓						cleaned	
78	✓							
79	✓							
80	✓							
81	✓							
82	✓						cleaned / replaced filter	
83	✓							
84		No Filter Required, Outside Of Pepco Yard						

Sven Knitz

PEPCO STORM DRAIN SHEET FOR FRIDAY

DATE 8/2/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS
85	<input checked="" type="checkbox"/>						cleaned
86	<input checked="" type="checkbox"/>						cleaned
87	<input checked="" type="checkbox"/>						cleaned
88	<input checked="" type="checkbox"/>						cleaned
89	<input checked="" type="checkbox"/>						cleaned
90	<input checked="" type="checkbox"/>						cleaned
91	<input checked="" type="checkbox"/>						cleaned
92							No Filter Required, Drains On Grass Towards The Corner
93							No Filter Required, Drains On Grass Towards The Corner
94							No Filter Required, Drains On Grass Towards The Corner
95							No Filter Required, Drains On Grass Towards The Corner
96							No Filter Required, Drains On Grass Towards The Corner
97	<input checked="" type="checkbox"/>						cleaned
98	<input checked="" type="checkbox"/>						cleaned
99	<input checked="" type="checkbox"/>						cleaned
100	<input checked="" type="checkbox"/>						cleaned
101	<input checked="" type="checkbox"/>						cleaned
102	<input checked="" type="checkbox"/>						
103	<input checked="" type="checkbox"/>						
104	<input checked="" type="checkbox"/>						
105	<input checked="" type="checkbox"/>						cleaned
106	<input checked="" type="checkbox"/>						cleaned
107	<input checked="" type="checkbox"/>						cleaned
108	<input checked="" type="checkbox"/>						cleaned
109	<input checked="" type="checkbox"/>						cleaned
110	<input checked="" type="checkbox"/>						cleaned

Sren K1272

PEPCO STORM DRAIN SHEET FOR MONDAY

DATE 8/5/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
1	✓						cleaned	
2	✓							
3	✓						cleaned	
4	✓						cleaned	
5	✓							
6	✓							
7	✓						cleaned	
8	✓							
9	✓						cleaned	
10	✓							
11	✓							
12	✓							
13	✓						cleaned	
14	✓						cleaned	
15	✓							
16		No Longer Exists						
17	✓							
18	✓							
19	✓						cleaned	
20	✓							
21	✓						cleaned	
22	✓							
23	✓							
24	✓						cleaned	

8/6/19

PEPCO STORM DRAIN SHEET FOR TUESDAY

Gren Kirtz

DATE

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS
22				No Longer Exists			X X
23				No Longer Exists			
24	✓						cleaned
25	✓						cleaned
26				No Longer Exists			X X
27	✓						
28	✓						cleaned
29	✓						
30	✓						
31				No Longer Exists			X X
32				No Longer Exists			
33	✓						
34				No Longer Exists			X X
35				No Longer Exists			
36				No Longer Exists			
37	✓						cleaned
38	✓						cleaned
39	✓						
40	✓						
41				This Drain Is Covered			X X
42	✓						cleaned

Sean Kirtz

PEPCO STORM DRAIN SHEET FOR WEDNESDAY

DATE

8/7/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS
43	✓						cleaned
44	✓						
45	✓						cleaned
46	✓						
47	✓						
48	✓						cleaned
49	✓						cleaned
50	Drain System Not Attach To The Drain System In The Yard						
51	✓						
52	✓						
53	✓						cleaned
54	✓						
55	No Filter Required, Solid Metal Plate						
56	✓						
57	✓						cleaned
58	✓						
59	No Filter Required, Solid Metal Plate						
60	✓						
61	✓						cleaned
62	✓						cleaned

Sven K. RTZ

PEPCO STORM DRAIN SHEET FOR THURSDAY

DATE 8/8/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
63	✓						cleaned	
64	✓							
65	✓							
66	✓						cleaned	
67	✓						cleaned	
68	✓							
69	✓							
70	✓							
71	✓						cleaned	
72	✓							
73	✓							
74	✓						cleaned	
75	✓							
76	✓							
77	✓						cleaned	
78	✓							
79	✓							
80	✓						cleaned	
81	✓						cleaned	
82	✓							
83	✓							
84		No Filter Required, Outside Of Pepco Yard						

Sven Kintz PEPCO STORM DRAIN SHEET FOR FRIDAY DATE 8/9/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
85	✓						cleaned	
86	✓							
87	✓						cleaned	
88	✓						cleaned	
89	✓							
90	✓							
91	✓						cleaned	
92		No Filter Required, Drains On Grass Towards The Corner						
93		No Filter Required, Drains On Grass Towards The Corner						
94		No Filter Required, Drains On Grass Towards The Corner						
95		No Filter Required, Drains On Grass Towards The Corner						
96		No Filter Required, Drains On Grass Towards The Corner						
97	✓							
98	✓						cleaned	
99	✓							
100	✓							
101	✓						cleaned	
102	✓							
103	✓							
104	✓							
105	✓						cleaned	
106	✓							
107	✓							
108	✓							
109	✓							
110	✓							

S. Kirtz 8/12/19

PEPCO STORM DRAIN SHEET FOR MONDAY Date

DRAIN NUMBER	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR ROOM	NEEDS GUARD PLUS	COMMENTS
1	✓						cleaned
2	✓						
3	✓						cleaned
4	✓						
5	✓						
6	✓						cleaned
7	✓						cleaned
8	✓						
9	✓						
10	✓						
11	✓						
12	✓						cleaned
13	✓						
14	✓						
15	✓						
16	No longer Exists						cleaned
17	✓						
18	✓						
19	✓						
20	✓						cleaned
21	✓						

* increment weather

need to order supplies from B/Ding 888
 have to get with Tim
 Tim Dinsmore wants me to take out filters etc that are prone to flooding due to rain scheduled

8/13/19

PEPCO STORM DRAIN SHEET FOR TUESDAY							DATE	COMMENTS
Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS		
22							No Longer Exists	
23							No Longer Exists	
24	✓							cleaned
25	✓							
26							No Longer Exists	
27	✓							
28	✓							cleaned
29	✓							cleaned
30	✓							
31							No Longer Exists	
32							No Longer Exists	
33	✓							
34							No Longer Exists	
35							No Longer Exists	
36							No Longer Exists	
37	✓							cleaned
38	✓							
39	✓							cleaned
40	✓							
41							This Drain Is Covered	
42	✓							

87, 88, 89, 90, 29, 30 - filters and booms removed to prevent flooding per Tim Dinsmore
 Drain 12 & 21 - cleaned out stores
 38 39 had to clean asphalt off of filters

Sven K102Z PEPCO STORM DRAIN SHEET FOR WEDNESDAY DATE 8/14/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
43	✓						cleaned	
44	✓							
45	✓							
46	✓						cleaned	
47	✓						cleaned	
48	✓							
49	✓							
50	Drain System Not Attach To The Drain System In The Yard							
51	✓						cleaned	
52	✓						cleaned	
53	✓							
54	✓							
55	No Filter Required, Solid Metal Plate							
56	✓							
57	✓						cleaned	
58	✓							
59	No Filter Required, Solid Metal Plate							
60	✓						cleaned	
61	✓							
62	✓						cleaned	

5 KIRTZ

PEPCO STORM DRAIN SHEET FOR THURSDAY

DATE

8/15/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
63	✓						cleaned	
64	✓							
65	✓							
66	✓						cleaned	
67	✓							
68	✓							
69	✓							
70	✓						cleaned	
71	✓							
72	✓							
73	✓						cleaned	
74	✓						cleaned	
75	✓							
76	✓							
77	✓							
78	✓							
79	✓						cleaned	
80	✓							
81	✓							
82	✓						cleaned	
83	✓							
84		No Filter Required, Outside Of Pepco Yard						

6/19/18

San Kretz

PEPCO STORM DRAIN SHEET FOR FRIDAY

DATE

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
85	✓							
86	✓						cleaned	
87	✓							
88	✓						cleaned	
89	✓							
90	✓							
91	✓						cleaned	
92		No Filter Required, Drains On Grass Towards The Corner						
93		No Filter Required, Drains On Grass Towards The Corner						
94		No Filter Required, Drains On Grass Towards The Corner						
95		No Filter Required, Drains On Grass Towards The Corner						
96		No Filter Required, Drains On Grass Towards The Corner						
97	✓							
98	✓						cleaned	
99	✓							
100	✓						cleaned	
101	✓							
102	✓							
103	✓							
104	✓						cleaned	
105	✓						cleaned	
106	✓							
107	✓							
108	✓						cleaned	
109	✓							
110	✓						cleaned	

waiting on
supply
order

8/19/19

SKIRTZ PEPCO STORM DRAIN SHEET FOR MONDAY							Date
DRAIN NUMBER	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS
1	✓						cleaned
2	✓						
3	✓						cleaned
4	✓						
5	✓						
6	✓						
7	✓						
8	✓						cleaned
9	✓						
10	✓						
11	✓						cleaned
12	✓						
13	✓						
14	✓						
15	✓						
16	No longer Exists						
17	✓						cleaned
18	✓						
19	✓						
20	✓						cleaned
21	✓						

Sven Kivitz DATE 8/27/19

PEPCO STORM DRAIN SHEET FOR WEDNESDAY

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS
43	✓						Cleaned
44	✓						
45	✓						
46	✓						Cleaned
47	✓						
48	✓						Cleaned
49	✓						Cleaned
50	Drain System Not Attach To The Drain System In The Yard						
51	✓						
52	✓						
53	✓						Cleaned
54	✓						
55	No Filter Required, Solid Metal Plate						
56	✓						
57	✓						Cleaned
58	✓						
59	No Filter Required, Solid Metal Plate						
60	✓						
61	✓						Cleaned
62	✓						

SKIRTZ DATE 8/22/19

PEPCO STORM DRAIN SHEET FOR THURSDAY

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
63	✓						clean	
64	✓							
65	✓							
66	✓						clean	
67	✓							
68	✓							
69	✓						clean	
70	✓						clean	
71	✓							
72	✓							
73	✓						clean	
74	✓							
75	✓							
76	✓							
77	✓							
78	✓						clean	
79	✓							
80	✓						clean	
81	✓							
82	✓							
83	✓							
84		No Filter Required, Outside Of Pepco Yard						

Sven Hertz DATE 8/23/19

PEPCO STORM DRAIN SHEET FOR FRIDAY

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS
85	✓						
86	✓						swept area around filter
87	✓						
88	✓						swept area around filter
89	✓						
90	✓						
91	✓						
92		No Filter Required, Drains On Grass Towards The Corner					
93		No Filter Required, Drains On Grass Towards The Corner					
94		No Filter Required, Drains On Grass Towards The Corner					
95		No Filter Required, Drains On Grass Towards The Corner					
96		No Filter Required, Drains On Grass Towards The Corner					
97	✓						
98	✓						
99	✓						swept area around filter
100	✓						
101	✓						
102	✓						
103	✓						swept area around filter
104	✓						
105	✓						swept area around filter
106	✓						swept area along filter
107	✓						
108	✓						
109	✓						
110	✓						swept area around filter

Sven Kirtz

PEPCO STORM DRAIN SHEET FOR FRIDAY

DATE

8/23/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS
85	✓						
86	✓						cleaned
87	✓						
88	✓						cleaned
89	✓						cleaned
90	✓						cleaned
91	✓						
92							No Filter Required, Drains On Grass Towards The Corner
93							No Filter Required, Drains On Grass Towards The Corner
94							No Filter Required, Drains On Grass Towards The Corner
95							No Filter Required, Drains On Grass Towards The Corner
96							No Filter Required, Drains On Grass Towards The Corner
97	✓						
98	✓						cleaned
99	✓						
100	✓						
101	✓						
102	✓						cleaned
103	✓						
104	✓						
105	✓						cleaned
106	✓						cleaned
107	✓						
108	✓						
109	✓						
110	✓						cleaned

Rashad Walcott

PEPCO STORM DRAIN SHEET FOR MONDAY DATE 8/26/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS
1	✓						
2	✓						
3		✓					
4	✓						
5	—————						
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16	No Longer Exists						
17							
18							
19							
20							
21							
22							
23							
24	↘						

S. Kietz

PEPCO STORM DRAIN SHEET FOR TUESDAY

DATE

9/27/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
22		No Longer Exists						
23		No Longer Exists						
24	✓						swept around filter	
25	✓							
26		No Longer Exists						
27	✓							
28	✓						Swept area around filters	
29	✓							
30	✓							
31		No Longer Exists						
32		No Longer Exists						
33	✓							
34		No Longer Exists						
35		No Longer Exists						
36		No Longer Exists						
37	✓							
38	✓						swept area around filter	
39	✓							
40	✓							
41		This Drain Is Covered						
42	✓						Swept area around filter	

skate PEPCO STORM DRAIN SHEET FOR WEDNESDAY DATE 4/28/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS
43	✓						
44	✓						cleaned
45	✓						
46	✓						
47	✓						cleaned
48	✓						
49	✓						
50	Drain System Not Attach To The Drain System In The Yard						
51	✓						
52	✓						cleaned
53	✓						
54	✓						
55	No Filter Required, Solid Metal Plate						
56	✓						
57	✓						cleaned
58	✓						
59	No Filter Required, Solid Metal Plate						
60	✓						
61	✓						cleaned
62	✓						cleaned

PEPCO STORM DRAIN SHEET FOR THURSDAY

DATE 8/29/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
63	✓						clean	
64	✓							
65	✓						cleaned	
66	✓							
67	✓							
68	✓						cleaned	
69	✓							
70	✓							
71	✓						cleaned	
72	✓							
73	✓							
74	✓						cleaned	
75	✓							
76	✓							
77	✓							
78	✓						cleaned	
79	✓							
80	✓							
81	✓						cleaned	
82	✓							
83	✓							
84	No Filter Required, Outside Of Pepco Yard							

Skiatz		PEPCO STORM DRAIN SHEET FOR FRIDAY							DATE 8/30/19
Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS		
85	✓						cleaned		
86	✓								
87	✓								
88	✓								
89	✓						cleaned		
90	✓								
91	✓						cleaned		
92		No Filter Required, Drains On Grass Towards The Corner							
93		No Filter Required, Drains On Grass Towards The Corner							
94		No Filter Required, Drains On Grass Towards The Corner							
95		No Filter Required, Drains On Grass Towards The Corner							
96		No Filter Required, Drains On Grass Towards The Corner							
97	✓						cleaned		
98	✓								
99	✓								
100	✓								
101	✓								
102	✓						cleaned		
103	✓								
104	✓								
105	✓						cleaned		
106	✓								
107	✓						cleaned		
108	✓								
109	✓								
110	✓						cleaned		

S Kirtz

PEPCO STORM DRAIN SHEET FOR TUESDAY

DATE

9/3/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
22		No Longer Exists						
23		No Longer Exists						
24	✓						cleaned	
25	✓							
26		No Longer Exists						
27	✓						cleaned	
28	✓						cleaned	
29	✓						cleaned	
30	✓							
31		No Longer Exists						
32		No Longer Exists						
33	✓							
34		No Longer Exists						
35		No Longer Exists						
36		No Longer Exists						
37	✓						cleaned	
38	✓							
39	✓						cleaned	
40	✓							
41		This Drain Is Covered						
42	✓						cleaned	

Drain #5 Filter
has been replaced

9/50

Scrap Storage,
Tran Storage Area,
and Building
68 the gates
are locked can't
get to those
drains/p/tees

9/4/19

PEPCO STORM DRAIN SHEET FOR WEDNESDAY									
Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	DATE	
43	✓								
44	✓						cleaned		
45	✓								
46	✓						cleaned		
47	✓						cleaned		
48	✓								
49	✓								
50	Drain System Not Attach To The Drain System In The Yard								
51	✓								
52	✓						cleaned		
53	✓						cleaned		
54	✓								
55	No Filter Required, Solid Metal Plate								
56	✓						cleaned		
57	✓								
58	✓								
59	No Filter Required, Solid Metal Plate								
60	✓								
61	✓						cleaned		
62	✓								

Ben Harts

gates to 3
 already are locked
 so cant access
 Drains in those
 areas
 . 5/1

Drain # 30
 has been drained
 it will be changed
 today as I
 had to cut off
 water because
 than sitters
 boom were
 drenched so
 ill change it
 in afternoon
 I have to
 cut down a
 filter since I
 dont have the
 proper size

9/5/19

PEPCO STORM DRAIN SHEET FOR THURSDAY DATE

Sven KURTZ

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS
63	✓						cleaned
64	✓						cleaned
65	✓						
66	✓						cleaned
67	✓						
68	✓						cleaned
69	✓						
70	✓						cleaned
71	✓						
72	✓						
73	✓						red
74	✓						
75	✓						
76	✓						cleaned
77	✓						
78	✓						
79	✓						cleaned
80	✓						
81	✓						
82	✓						cleaned
83	✓						

No Filter Required, Outside Of Pepco Yard

S. KURTZ

PEPCO STORM DRAIN SHEET FOR FRIDAY

DATE 9/6/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS
85							swept area around filter
86							
87							
88							swept area around filter
89							
90							
91							swept area around filter
92							No Filter Required, Drains On Grass Towards The Corner
93							No Filter Required, Drains On Grass Towards The Corner
94							No Filter Required, Drains On Grass Towards The Corner
95							No Filter Required, Drains On Grass Towards The Corner
96							No Filter Required, Drains On Grass Towards The Corner
97							
98							
99							swept area around filter
100							
101							swept area around filter
102							
103							
104							
105							
106							swept area around filter
107							swept area around filter
108							
109							
110							

Sven Gierke

PEPCO STORM DRAIN SHEET FOR MONDAY

DATE 9/9/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
1	✓							
2	✓							
3	✓							
4	✓							
5	✓							
6	✓							
7	✓							
8	✓							
9	✓							
10	✓							
11	✓						cleaned ground boom and top of filter	
12	✓							
13	✓							
14	✓							
15	✓							
16	No Longer Exists							
17	✓							
18	✓						Swept top of filter and ground boom	
19	✓							
20	✓							
21	✓						Swept top of filter and ground boom	
22	✓							
23	✓							
24	✓							

Starting
 Monday
 will be
 Staging to
 Replace all
 filter Dye
 To Quarter
 end

But I need
 10 3" yellow
 curb guard
 10 4" yellow
 curb guard
 3 90x10
 with the hat
 filter

15 45' x 45"
 with hat
 filters

SK:Z

SK:Z		PEPCO STORM DRAIN SHEET FOR WEDNESDAY					DATE 9/10/19		COMMENTS
Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS			
43	✓								
44	✓							swept up filter	
45	✓								
46	✓								
47	✓							cleaned out filter	
48	✓								
49	✓								
50		Drain System Not Attach To The Drain System In The Yard							
51	✓								
52	✓							swept around boom & filter	
53	✓								
54	✓								
55		No Filter Required, Solid Metal Plate							
56	✓							swept around boom & filter	
57	✓								
58	✓								
59		No Filter Required, Solid Metal Plate							
60	✓								
61	✓							swept around boom & filter	
62	✓								

William

DATE 9-11-19

PEPCO STORM DRAIN SHEET FOR TUESDAY

Orain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
22			No Longer Exists					
23			No Longer Exists					
24	✓							
25	✓							
26			No Longer Exists					
27	✓							
28	✓							
29	✓							
30	✓						New Filter 48X48	
31			No Longer Exists					
32			No Longer Exists					
33	✓							
34			No Longer Exists					
35			No Longer Exists					
36			No Longer Exists					
37	✓							
38	✓							
39	✓							
40	✓							
41	✓		This Drain Is Covered					
42	✓							

William

PEPCO STORM DRAIN SHEET FOR THURSDAY DATE 9-11-19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
63	✓							
64	✓						One New Guard Plus 4ft	
65	✓						One New Guard Plus 4ft	
66	✓							
67	✓							
68	✓							
69	✓							
70	✓							
71	✓							
72	✓							
73	✓							
74	✓							
75	✓							
76	✓							
77	✓							
78	✓						New Filter 48x48	
79	✓						New Filter 48x48	
80	✓						New Filter 48x48	
81	✓						New Filter 48x48	
82	✓						New Filter 48x48	
83	✓							
84		No Filter Required, Outside Of Pepco Yard						

couldnt access
 locked areas
 Tried for 45
 minutes to find
 lady w keys
 a guy came over
 I told him the
 Disappeared

a/so waiting on
 OR Dec

10 3' Mellon cabbage
 10 4' " "
 3 90x110 witch hats
 15 45x45 witch hats
 flooding To Finks,
 Swapping out
 5" filters

1/1
 9/13/19

PEPCO STORM DRAIN SHEET FOR FRIDAY							DATE	COMMENTS
Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS		
85	✓							
86	✓						Swept ground filter	
87	✓							
88	✓							
89	✓						Swept area ground filter	
90	✓							
91	✓							
92		No Filter Required, Drains On Grass Towards The Corner						
93		No Filter Required, Drains On Grass Towards The Corner						
94		No Filter Required, Drains On Grass Towards The Corner						
95		No Filter Required, Drains On Grass Towards The Corner						
96		No Filter Required, Drains On Grass Towards The Corner						
97	✓							
98	✓							
99	✓							
100	✓							
101	✓						had to adjust filter Due To	
102	✓							
103	✓							
104	✓						Swept ground filter	
105	✓							
106	✓							
107	✓						Swept ground filter	
108	✓						Swept ground filter	
109	✓							
110	✓							

Still waiting for drain order

10 3' Guibya
10 4' "
3 90"x16"
15 45"x45"

Still cannot find person with key to message area spend more time looking here when we could be cleaning

Sven Kirtz

PEPCO STORM DRAIN SHEET FOR MONDAY

DATE

9/16/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
1								
2								
3							Swept area around filter	
4								
5								
6								
7								
8							Swept up busted boom	
9								
10								
11								
12								
13							Swept around boom	
14								
15								
16	No Longer Exists							
17							Swept up around filter	
18								
19								
20								
21								
22								
23								
24							Swept area around filter	

SKATE PEPCO STORM DRAIN SHEET FOR MONDAY Date 9/16/19

DRAIN NUMBER	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS
1	✓						Swept area around book
2	✓						
3	✓						
4	✓						Swept area around filter
5	✓						
6	✓						
7	✓						Swept area around filters
8	✓						Swept area around filters
9	✓						
10	✓						
11	✓						
12	✓						
13	✓						Swept area around
14	✓						
15	✓						
16	No longer Exists						
17	✓						
18	✓						
19	✓						
20	✓						
21	✓						Swept area around

Steven

Kintz

PEPCO STORM DRAIN SHEET FOR TUESDAY

DATE

9/17/19

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS	
22		No Longer Exists						
23		No Longer Exists						
24	✓						SWEET SIPS GREEN BOOM	
25	✓							
26		No Longer Exists						
27	✓							
28	✓						SWEET GREEN ROUND BOOM	
29	✓							
30	✓						SWEET ACER ROUND BOOM	
31		No Longer Exists						SWEET ACER ROUND BOOM
32		No Longer Exists						
33	✓						SWEET ALLEN ROUND BOOM	
34		No Longer Exists						
35		No Longer Exists						
36		No Longer Exists						
37	✓						REPLACED BOOM (NO OTHER)	
38	✓							
39	✓							
40	✓							
41		This Drain Is Covered						
42	✓							

SWR K&PC PEPCO STORM DRAIN SHEET FOR WEDNESDAY DATE 9/18/17

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS
43	✓						SWEEP AREA around boom
44	✓						
45	✓						
46	✓						Replaced boom
47	✓						
48	✓						Picked up trash along fence
49	✓						
50	Drain System Not Attach To The Drain System In The Yard						
51	✓						
52	✓						
53	✓						SWEEP AREA around drain
54	✓						
55	No Filter Required, Solid Metal Plate						
56	✓						
57	✓						
58	✓						SWEEP UP dead grass from drain
59	No Filter Required, Solid Metal Plate						
60	✓						
61	✓						
62	✓						Pick up trash from around boom

Per James
Dilts Done
Touch Drain
33 are to
pump being
hooked to it

Sven Kutz		PEPCO STORM DRAIN SHEET FOR THURSDAY							DATE	COMMENTS
Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS		9/19/19		
63	✓								Swept area around drain	
64	✓								swept area around drain	
65	✓								swept area around drain	
66	✓									
67	✓									
68	✓								swept area around drain	
69	✓									
70	✓									
71	✓								clean up trash stuck in drain	
72	✓									
73	✓									
74	✓									
75	✓								swept area around drain	
76	✓									
77	✓									
78	✓								swept area around drain	
79	✓									
80	✓									
81	✓									
82	✓									
83	✓								Repaired Clean Litch Link full of gravel	
84									No Filter Required, Outside Of Pepco Yard	

was told to still not touch #33 Her per Jim Ditts

also told to leave packages for James Ditts in Building 32 By Refrigerator

DATE 9/20/19

PEPCO STORM DRAIN SHEET FOR FRIDAY

Sue Kintz

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS
85	✓						swept area around filter
86	✓						
87	✓						
88	✓						swept area around boom
89	✓						swept area around filter
90	✓						swept area around filter
91	✓						cleaned gravel out of filter
92							No Filter Required, Drains On Grass Towards The Corner
93							No Filter Required, Drains On Grass Towards The Corner
94							No Filter Required, Drains On Grass Towards The Corner
95							No Filter Required, Drains On Grass Towards The Corner
96							No Filter Required, Drains On Grass Towards The Corner
97	✓						
98	✓						swept area around drain
99	✓						
100	✓						
101	✓						swept area around filter
102	✓						
103	✓						
104	✓						
105	✓						swept area around boom
106	✓						
107	✓						
108	✓						
109	✓						
110	✓						

9/23/19

PEPCO STORM DRAIN SHEET FOR MONDAY							Date
DRAIN NUMBER	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR ROOM	NEEDS GUARD PLUS	COMMENTS
1	✓						cleared around filter
2	✓						
3	✓						
4	✓						
5	✓						cleaned filter out (gravel)
6	✓						
7	✓						
8	✓						
9	✓						swept outside of filter
10	✓						
11	✓						
12	✓						
13	✓						
14	✓						
15	✓						swept around filter
16	No longer Exists						
17	✓						
18	✓						
19	✓						
20	✓						ref/uffed booms
21	✓						

I need two
Green or orange
booms to put
around drain;
are to the first
No matter how
much I fluff
the booms up
they keep getting
run over and
ripped open
and come
my way
apparently
up area

changing

PEPCO STORM DRAIN SHEET FOR TUESDAY							DATE	COMMENTS	
Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	9/24/19		
22			No Longer Exists						
23			No Longer Exists						
24	✓							Swept around filter	
25	✓							checked filter and swept area	
26			No Longer Exists						
27	✓								
28	✓								
29	✓								
30	✓							fluffed up boom and swept	
31			No Longer Exists						
32			No Longer Exists						
33	✓							check filter to see if needed	
34			No Longer Exists						
35			No Longer Exists						
36			No Longer Exists						
37	✓								
38	✓							Swept up green around boom	
39	✓								
40	✓							Swept up green around boom	
41			This Drain Is Covered						
42	✓								

also need to order 15 to 20 green booms

Sven Kuetz DATE 9/25/19

PEPCO STORM DRAIN SHEET FOR WEDNESDAY

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS
43	✓						Swept around filters
44	✓						
45	✓						
46	✓						Swept around Boom
47	✓						
48	✓						
49	✓						cleaned grass out of filter
50	Drain System Not Attach To The Drain System In The Yard						
51	✓						
52	✓						
53	✓						Swept area around Boom
54	✓						
55	No Filter Required, Solid Metal Plate						
56	✓						
57	✓						
58	✓						
59	No Filter Required, Solid Metal Plate						
60	✓						Swept area around Boom
61	✓						
62							

Inlement
weather

Sven Krietz / DATE 9/26/19

PEPCO STORM DRAIN SHEET FOR THURSDAY							
Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS
63	✓						cleaned around drain
64	✓						swept around drain
65	✓						swept around boom filter
66	✓						
67	✓						swept around filter
68	✓						
69	✓						
70	✓						cleaned trash from filter
71	✓						
72	✓						
73	✓						
74	✓						
75	✓						
76	✓						
77	✓						swept around drain
78	✓						
79	✓						
80	✓						cleaned around f./bar
81	✓						
82	✓						
83	✓						swept around boom
84	No Filter Required, Outside Of Pepco Yard						

Supervisor

Sven Kutz

PEPCO STORM DRAIN SHEET FOR FRIDAY

DATE

9/27/19

COMMENTS

Drain Number	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR BOOM	NEEDS GUARD PLUS	COMMENTS
85	✓						cleaned around drain
86	✓						
87	✓						
88	✓						swept around boom
89	✓						
90	✓						
91	✓						Picked up trash from around drain
92							No Filter Required, Drains On Grass Towards The Corner
93							No Filter Required, Drains On Grass Towards The Corner
94							No Filter Required, Drains On Grass Towards The Corner
95							No Filter Required, Drains On Grass Towards The Corner
96							No Filter Required, Drains On Grass Towards The Corner
97	✓						
98	✓						swept area around filter
99	✓						
100	✓						
101	✓						swept area around filter
102	✓						swept area around filter
103	✓						
104	✓						
105	✓						
106	✓						
107	✓						swept area around filter
108	✓						
109	✓						
110	✓						

increment
weather

9/30/19

PEPCO STORM DRAIN SHEET FOR MONDAY Date

DRAIN NUMBER	OK	NEEDS FIXING	NEEDS FILTER	NEEDS GREEN BOOM	NEEDS REGULAR ROOM	NEEDS GUARD PLUS	COMMENTS
1	✓						Picked up Trash around filter
2	✓						
3	✓						
4	✓						swept around filter
5	✓						
6	✓						
7	✓						
8	✓						swept around filter
9	✓						
10	✓						
11	✓						
12	✓						
13	✓						
14	✓						
15	✓						
16	No longer Exists						
17	✓						
18	✓						
19	✓						
20	✓						swept area ^{9/30} filter
21	✓						swept area around filter

Paragraph 68.a.(4) of the Consent Decree

Monthly Site Inspections

The site-wide inspection logs for July - September are attached. Benning operating areas has been aggressively implementing the best management practices at the site including weekly inspection and maintenance of storm drain inlets, removing the equipment and materials that are no longer in use from the site to eliminate exposure to stormwater, covering or moving indoor the equipment that has the potential to contribute to pollutant loading, and increased supervision of the contractors working at the site to ensure they practice good housekeeping.

Transformer Storage Shed

Construction was completed by December 31, 2016 and the facility was placed in operation. The storage shed has been operating as designed for temporary storage of off-line and removed from service transformers and other electrical equipment while awaiting recycling or disposal.

Pepco – Benning Road Facility
Bulk Storage Monthly Inspection Report

Inspection Date: 7-10-2019 Inspection Time: 11:30AM
 Inspector: M. Banks Inspector's Signature: Maurice Banks



	Salt Shed		Soil Storage		Comments
	Yes	No	Yes	No	
Good Housekeeping Procedures					
Is the area free of potential discharges of leaks and spills?	✓		✓		
Is the site free of litter and debris?					
Are catch basins and other inlets in the area to the storm drain system free from debris?	✓		✓		
Are booms in place and in good condition at catch basins and other inlets to the storm drain system?	✓		✓		
Are witch hats in place, in good condition and free of debris at catch basins and other inlets to the storm drain system?	✓		✓		
Are there signs of drainage issue or overflow at any storm drain inlet?		✓		✓	
Bulk Storage Controls					
Are bulk storage areas covered and protected from precipitation?	✓		✓		
Is the storage area protected from run-on of stormwater?	✓		✓		
Is the area around the bulk storage area swept after each use and free of material that could mingle with stormwater?	✓		✓		
Stored materials do not have an odor or any other indicators of contamination?		✓		✓	
Is adequate storage space for bulk materials available? If no, disposal of excess materials must be arranged.	✓		✓		PICK UP TRASH AROUND AREA
Spill Prevention & Response					
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?	✓		✓		
Do spill kits contain the proper tools and equipment?	✓		✓		
Have all spills been properly cleaned up and disposed of properly in the respective area?	✓		✓		
Other Indicators of Illicit Discharges					
Is the area clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?	✓		✓		

Pepco -- Benning Road Facility
 Site Wide Monthly Inspection Report



	Former Power Plant Area		Former Cooling Tower Site		BSC East Area		BSC Central Area		BSC South Area		Comments
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	
Have all spills been properly cleaned up and disposed of properly in the respective area?	✓		✓		✓		✓		✓		
Structural Control Devices											
Has the vehicle wash catch basin been inspected for sediment build-up?	✓		N/A		N/A		N/A		N/A		
Is the wash water captured properly -- not entering storm drain system?			✓		✓		✓		✓		
Erosion and Sediment Controls											
Is there any soil erosion, dust or sediment build-up entering the storm drain inlets?	✓		✓		✓		✓		✓		
Are there uncovered pile of soil or junk metal equipment in the area?	✓		✓		✓		✓		✓		
Other Indicators of Illicit Discharges											
Is the area clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?	✓		✓		✓		✓		✓		

Pepco – Benning Road Facility
Bulk Storage Monthly Inspection Report

Inspection Date: 8-26-2019 Inspection Time: 1:30
 Inspector: Maurice Banks Inspector's Signature: Maurice Banks



	Salt Shed		Soil Storage		Comments
	Yes	No	Yes	No	
Good Housekeeping Procedures					
Is the area free of potential discharges of leaks and spills?	✓		✓		
Is the site free of litter and debris?	✓		✓		
Are catch basins and other inlets in the area to the storm drain system free from debris?	✓		✓		
Are booms in place and in good condition at catch basins and other inlets to the storm drain system?	✓		✓		
Are witch hats in place, in good condition and free of debris at catch basins and other inlets to the storm drain system?	✓		✓		
Are there signs of drainage issue or overflow at any storm drain inlet?		✓		✓	
Bulk Storage Controls					
Are bulk storage areas covered and protected from precipitation?	✓		✓		
Is the storage area protected from run-on of stormwater?	✓		✓		
Is the area around the bulk storage area swept after each use and free of material that could mingle with stormwater?	✓		✓		
Stored materials do not have an odor or any other indicators of contamination?	✓		✓		
Is adequate storage space for bulk materials available? If no, disposal of excess materials must be arranged.	✓		✓		
Spill Prevention & Response					
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?	✓		✓		
Do spill kits contain the proper tools and equipment?	✓		✓		
Have all spills been properly cleaned up and disposed of properly in the respective area?	✓		✓		
Other Indicators of Illicit Discharges					
Is the area clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?	✓		✓		

**Pepco – Benning Road Facility
Site Wide Monthly Inspection Report**

Inspection Date: M. Banks Inspector's Signature: Maurice Banks



Good Housekeeping Procedures

Are outside work areas clean, dry, and free of litter and debris?

Is the grass and plants properly maintained in the area?

Is the area free of potential discharges of leaks and spills?

Are containment areas in good condition, with valves closed?

Are drums labeled and stored on proper containment?

Are there any Frac Tanks in the area? If yes, indicate if properly labeled to identify the content?

Are catch basins and storm drain inlets in the area to the storm drain system free from debris?

Are booms in place and in good condition at catch basins and other inlets to the storm drain system?

Are witch hats in place, in good condition and free of debris at catch basins and other inlets to the storm drain system?

Are there signs of drainage issue or overflow at any storm drain inlet?

Spill Prevention & Response

Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?

Do spill kits contain the proper tools and equipment?

	Former Power Plant Area		Former Cooling Tower Site		BSC East Area		BSC Central Area		BSC South Area		Comments
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	
Are outside work areas clean, dry, and free of litter and debris?	✓		✓		✓		✓		✓		
Is the grass and plants properly maintained in the area?	✓		✓		✓		✓		✓		
Is the area free of potential discharges of leaks and spills?	✓		✓		✓		✓		✓		
Are containment areas in good condition, with valves closed?	✓		✓		✓		✓		✓		
Are drums labeled and stored on proper containment?	✓		✓		✓		✓		✓		
Are there any Frac Tanks in the area? If yes, indicate if properly labeled to identify the content?		N/A		N/A	✓			N/A		N/A	
Are catch basins and storm drain inlets in the area to the storm drain system free from debris?	✓		✓		✓		✓		✓		
Are booms in place and in good condition at catch basins and other inlets to the storm drain system?	✓		✓		✓		✓		✓		
Are witch hats in place, in good condition and free of debris at catch basins and other inlets to the storm drain system?	✓		✓		✓		✓		✓		
Are there signs of drainage issue or overflow at any storm drain inlet?	✓										
Spill Prevention & Response											
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?	✓		✓		✓		✓		✓		
Do spill kits contain the proper tools and equipment?	✓		✓		✓		✓		✓		



Pepco - Benning Road Facility

Site Wide Monthly Inspection Report

Maurice Banks
Maurice Banks

	Former Power Plant Area		Former Cooling Tower Site		BSC East Area		BSC Central Area		BSC South Area		Comments
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	
Have all spills been properly cleaned up and disposed of properly in the respective area?	✓		✓		✓		✓		✓		
Structural Control Devices											
Has the vehicle wash catch basin been inspected for sediment build-up?	✓		N/A		N/A		N/A		N/A		
Is the wash water captured properly -- not entering storm drain system?	✓										
Erosion and Sediment Controls											
Is there any soil erosion, dust or sediment build-up entering the storm drain inlets?											
Are there uncovered pile of soil or junk metal equipment in the area?		✓		✓		✓		✓		✓	
Other Indicators of Illicit Discharges											
Is the area clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?	✓		✓		✓		✓		✓		

Pepco – Benning Road Facility
Bulk Storage Monthly Inspection Report

Inspection Date: 9-19-2019
Inspector: M. Banks

Inspection Time: 11:30 AM
Inspector's Signature: Maurice Banks



	Salt Shed		Soil Storage		Comments
	Yes	No	Yes	No	
Good Housekeeping Procedures					
Is the area free of potential discharges of leaks and spills?	✓		✓		
Is the site free of litter and debris?					
Are catch basins and other inlets in the area to the storm drain system free from debris?	✓		✓		
Are booms in place and in good condition at catch basins and other inlets to the storm drain system?	✓		✓		
Are witch hats in place, in good condition and free of debris at catch basins and other inlets to the storm drain system?	✓		✓		
Are there signs of drainage issue or overflow at any storm drain inlet?		✓		✓	
Bulk Storage Controls					
Are bulk storage areas covered and protected from precipitation?	✓		✓		
Is the storage area protected from run-on of stormwater?	✓		✓		
Is the area around the bulk storage area swept after each use and free of material that could mingle with stormwater?	✓		✓		
Stored materials do not have an odor or any other indicators of contamination?					
Is adequate storage space for bulk materials available? If no, disposal of excess materials must be arranged.		✓	✓		
Spill Prevention & Response					
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?	✓		✓		
Do spill kits contain the proper tools and equipment?	✓		✓		
Have all spills been properly cleaned up and disposed of properly in the respective area?	✓		✓		
Other Indicators of Illicit Discharges					
Is the area clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?	✓		✓		

**Pepco – Benning Road Facility
Site Wide Monthly Inspection Report**

Inspection Date: _____ Inspection Time: _____
 Inspector: _____ Inspector's Signature: _____



	Former Power Plant Area		Former Cooling Tower Site		BSC East Area		BSC Central Area		BSC South Area		Comments
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	
Good Housekeeping Procedures											
Are outside work areas clean, dry, and free of litter and debris?	✓		✓		✓		✓		✓		
Is the grass and plants properly maintained in the area?	✓		✓		✓		✓		✓		
Is the area free of potential discharges of leaks and spills?	✓		✓		✓		✓		✓		
Are containment areas in good condition, with valves closed?	✓		✓		✓		✓		✓		
Are drums labeled and stored on proper containment?		N/A		N/A	✓		✓		✓		
Are there any Frac Tanks in the area? If yes, indicate if properly labeled to identify the content?		N/A		N/A	✓		N/A		N/A		
Are catch basins and storm drain inlets in the area to the storm drain system free from debris?	✓		✓		✓		✓		✓		
Are booms in place and in good condition at catch basins and other inlets to the storm drain system?	✓		✓		✓		✓		✓		
Are witch hats in place, in good condition and free of debris at catch basins and other inlets to the storm drain system?		✓	✓		✓		✓		✓		DRIN NORD NEW TOPS 78-79
Are there signs of drainage issue or overflow at any storm drain inlet?											
Spill Prevention & Response											
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?	✓		✓		✓		✓		✓		
Do spill kits contain the proper tools and equipment?	✓		✓		✓		✓		✓		

Pepco – Benning Road Facility

Site Wide Monthly Inspection Report



	Former Power Plant Area		Former Cooling Tower Site		BSC East Area		BSC Central Area		BSC South Area		Comments
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	
Have all spills been properly cleaned up and disposed of properly in the respective area?	✓		✓		✓		✓		✓		
Structural Control Devices											
Has the vehicle wash catch basin been inspected for sediment build-up?	✓		N/A		N/A		N/A		N/A		
Is the wash water captured properly -- not entering storm drain system?											
Erosion and Sediment Controls											
Is there any soil erosion, dust or sediment build-up entering the storm drain inlets?		✓		✓		✓		✓		✓	
Are there uncovered pile of soil or junk metal equipment in the area?		✓		✓		✓		✓		✓	
Other Indicators of Illicit Discharges											
Is the area clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?	✓			✓		✓		✓		✓	

Paragraph 68.a.(5) of the Consent Decree

Status of Stormwater Treatment System

The construction of the stormwater treatment system was completed in December 2017, and the system was placed into operation. In accordance with paragraph 39 of the Benning Consent Decree, Pepco conducted initial Acceptance Testing of the stormwater treatment system during the first and second quarters 2018 to evaluate whether the system meets the performance objectives in accordance with the Stormwater Treatment System Design Report.

As described in prior quarterly status reports, the initial acceptance testing results were inconclusive, but the analytical results of the first and second quarter 2018 sampling at Outfall 013 indicated that the treatment system was not functioning as expected. Pepco has been implementing a Compliance Action Plan prepared by AECOM (the consultant who designed the stormwater treatment system), and submitted to EPA on June 4, 2018, to evaluate the performance of the system, and to identify and implement corrective actions to ensure that the treatment system is functioning as intended to ensure compliance with the NPDES permit limits. The specific actions items were described in Table 1 of the Plan.

Table 1 has been periodically updated and provided to EPA as the action items have been completed. The attached Table 1 has been updated to identify the actions taken since the last update was provided to EPA on February 27, 2019. The bi-annual O&M inspection of the stormwater treatment system was conducted on May 30, 2019 by an authorized representative of Contech (the equipment supplier). The inspection showed that the Jelly Fish filters at Hotspots 1 and 4 have become occluded and needed to be replaced. The filters were replaced between July 24 -26, 2019.

AECOM and Contech completed the installation of 38 automatic grab samplers on August 29, 2019. On September 5th, 2019 the automatic grab samplers were able to collect samples from 32 of the 38 sample points. The reason that six samplers couldn't collect a sample were that the flows were either not large enough to trigger the automatic grab samplers or the automatic grab sampler carboy areas were flooded. PEPCO and AECOM are working to rectify these issues and collect data for these six sample points.

Initial results from this sampling event show that:

- The stormwater treatment units in low-traffic areas are generally performing better than those in high-traffic areas
- The Jellyfish units at Hot Spot 3 and Hot Spot 4 are performing well,
- The StormFilter units that were sampled (Hot Spot 1 and Hot Spot 4), have lower removal rates; however, these lower results may result from low influent concentrations (possibly attributable to successful treatment upstream).

A meeting has been scheduled in late October to review the data and the performance of the units with AECOM and our local stormwater O&M provider. We are also expecting to complete additional performance sampling in the 4th quarter, 2019.

We will report on the progress of our overall performance testing in the 4th quarter, 2019 update including data from the performance testing along with additional work completed on the system.

Table 1. Recommended Initial Action Plan (Version 9)

Task	Recommended Action	Structures	Action items For	Status (as of June 4, 2018)	Status (as of July 6, 2018)	Status (as of September 7, 2018)	Status (as of October 18, 2018)	Status (as of December 20, 2018)	Status (as of January 17, 2019)	Status (as of February 25, 2019)	Status (as of July 26, 2019)	Status (as of October 28, 2019)
1	<p>Review As-built Drawings</p> <ul style="list-style-type: none">) Rationale: Required by DOEE Stormwater Management Division as part of construction completion; also needed for system evaluation) Review, identify missing information and items needing clarification) Collect missing information) Evaluate potential impact of deviations) Identify and implement fixes, if needed 	All	AECOM/Flippo	<p>AECOM completed a review of as-built drawings on 4/30/18. Flippo responded 5/31/18. AECOM completed the additional as-built survey on 5/24/18 to fill data gaps identified by AECOM. AECOM currently performing an as-built review and hydraulic evaluation, which was anticipated to be completed by 6/8/18.</p>	<p>Pepco SWTM project team (Pepco, AECOM, and Flippo) participated in a technical meeting on 6/13/18 to discuss the proposed Initial Corrective Actions (ICAs) for stormwater treatment. Based on this meeting, an agreed upon draft schedule was developed for data collection, treatment design, and construction/installation.</p> <p>AECOM and Flippo have completed collection and review of initial (6/22/18) and additional survey data points (7/3/18). On 6/18/18, AECOM began working to finalize system hydraulic evaluation and corrective actions. AECOM is currently on schedule to deliver drawings and specifications for corrective actions to Pepco on 7/13/18.</p>	<p>AECOM delivered the Remedial Design (Rev 6) to Pepco on 7/20/18. The Remedial Design (Rev 6) included proposed modification to flow splitters and treatment units. Flippo began implementing the proposed modifications on 8/3/18 and completed work on 8/17/18. Pepco completed flushing of the drainage system to remove any construction related debris on 8/31/18.</p> <p>Following construction, AECOM received revised as-built drawings on 8/27/18. AECOM completed as-built review on 8/31/18, and noted no issues. AECOM uploaded the as-built data to the DOEE SW Database on 9/4/18.</p>	Task Completed.	No update (12/20/18).	No update (01/17/19)	No update (02/25/19)	No update (07/26/19)	Engaged Princeton Hydro to support investigation of Outfall 101. (10/28/2019)
2	<p>CCTV Inspection of Drainage System</p> <ul style="list-style-type: none">) Rationale: Consent Decree requirement; also needed for system performance evaluation) Includes new storm drain lines installed as part of treatment system, but not treatment system components or structures 	Site-wide storm drain system	AECOM/Pepco	<p>CCTV Inspection completed; accumulated sediment and debris identified during inspection (9.5 tons) was removed as of 5/29/18.</p>	<p>AECOM submitted draft report and received comments from Pepco. CCTV Inspection Report (Rev Final) submitted to Pepco on 7/5/18.</p>	<p>Pepco is in the process of engaging a contractor to make system repairs.</p>	System repair work expected to begin in October 2018.	Repair work is in progress and will be completed by 12/31/2018.	Priority repair/replacement work as identified by the CCTV inspection was completed on 12/26/2018. Remaining work to be completed in the first quarter 2019.	Remaining repair/replacement work to be completed in the first quarter 2019.	Storm drain repair/replacement work has been completed by Flippo in the first quarter of 2019.	Reviewed CCTV inspection to confirm work scope and will work with Flippo to repair three areas. (10/28/2019)
3	<p>Test Functioning of the Check Valves</p> <ul style="list-style-type: none">) Rationale: To ensure check 	Check valves at HS1 and HS4	Flippo	Completed on 4/24/18.	The need and use of check valves will be evaluated as part of Task 1.	The check valves were determined to be not warranted. Flippo removed the	Task completed.	No update (12/20/18).	No update (01/17/19)	No update (02/25/19)	No update (07/26/19)	No update (10/09/19)

Task	Recommended Action	Structures	Action items For	Status (as of June 4, 2018)	Status (as of July 6, 2018)	Status (as of September 7, 2018)	Status (as of October 18, 2018)	Status (as of December 20, 2018)	Status (as of January 17, 2019)	Status (as of February 25, 2019)	Status (as of July 26, 2019)	Status (as of October 28, 2019)
	valves are functioning as designed and not impeding flow J Flippo inspected the check valves and noted minor debris, but no blockage					check valves at FS-2 and FS-6 on 7/16/18 and 8/3/18, respectively.						
4	System Operation & Maintenance (O&M) J Rationale: O&M per manufacturer's recommendations key to system performance J Bi-annual O&M inspections by certified CONTECH O&M Contractor, as required by Consent Decree J Quarterly visual and physical inspection of treatment structure components J Cleaning of accumulated sediment in accordance with O&M manual including after bypass events J Replacement of Jellyfish and StormFilter media for proper performance J Documentation of O&M activities	Jellyfish, StormFilters, and DownSpout StormFilters	CONTECH/ Pepco/ i-STORMWATER (Pepco's O&M Contractor)	i-STORMWATER has performed two O&M inspections, 2/26/18 and 5/14/18 – 5/18/18. The most prevalent observation reported by i-STORMWATER was that only a fraction of stormwater was being diverted into the treatment units at the upstream flow splitters. Initial corrective action is to adjust flow splitters as necessary to ensure proper flow of stormwater into the treatment units. Additional corrective actions may be identified following completion of Task 1, which includes a full as-built review and hydraulic evaluation.	Following project team meeting on 6/13/18, O&M recommendations from i-STORMWATER were incorporated into the ICA table.	Recommendations have been addressed under Task 1.	Next O&M inspection by i-STORMWATER scheduled for November 2018.	O&M inspection completed by i-STORMWATER November 29, 2018.	No update (01/17/19)	No update (02/25/19)	O&M inspection completed by i-STORMWATER May 2019. Based on the findings of the inspection, i-STORMWATER completed replacement of Jellyfish filters at HS#1 and HS#4 on July 26, 2019.	I STORMWATER completed their 2 nd half, 2019 inspection the week of October 14 th .
5	Dry Condition Inspection J Rationale: To inspect each treatment structure. J Document any conditions or deficiencies impeding treatment.	All	AECOM/ i-STORMWATER/ CONTECH	Completed on 5/15/18. Recommendations from i-STORMWATER are the same as above.	Following project team meeting on 6/13/18, Dry Conditions Inspection recommendations from i-STORMWATER were incorporated into the ICA table.	Recommendations have been addressed under Task 1. Following cleaning/flushing of the storm drain lines, AECOM completed an additional Dry Conditions Inspection on 9/5/18 and 9/06/18, and no issues were noted. In addition, AECOM will lead CONTECH	On 9/21/18, AECOM completed an additional Dry Conditions inspection with CONTECH. CONTECH's observations at most structures identified that (a) Corrective actions by Flippo appear to have been done successfully; (b) Little to no observable flow (as	No update (12/20/18). See new Task 11.	No update (01/17/19). See Task 11.	No update (02/25/19). See Task 11.	AECOM completed a preliminary inspection on July 16, 2019 in preparation for installation of the automated samplers by Contech in August 2019.	AECOM has completed numerous inspections of the storm drain and treatment units during installation of the 38 ISCO automated samplers. O&M of the 38 ISCO automated samplers is completed weekly.

Task	Recommended Action	Structures	Action items For	Status (as of June 4, 2018)	Status (as of July 6, 2018)	Status (as of September 7, 2018)	Status (as of October 18, 2018)	Status (as of December 20, 2018)	Status (as of January 17, 2019)	Status (as of February 25, 2019)	Status (as of July 26, 2019)	Status (as of October 28, 2019)
						on an inspection of the systems on 9/21/18.	expected); and (c) No irregularities observed. Additional observations at I68 (Hotspot 2); JF-3A, JF-3B, SF-3A, and SF-3B (Hotspot 3); and JF-4 (Hotspot 4) require further evaluation. CONTECH is currently reviewing data and developing potential options to optimize performance at these treatment structures. See new Task 11.					
6	<p>Wet Condition Inspection</p> <p>) Rationale: To inspect and observe the functionality of treatment structures during a rain event.</p> <p>) Document any conditions or deficiencies impeding treatment.</p>	All	AECOM/ CONTECH/ i-STORMWATER	Completed on 5/18/18. Recommendations from i-STORMWATER are the same as above. Recommendations from CONTECH include:	Following project team meeting on 6/13/18, Dry and Wet Conditions Inspection recommendations from i-STORMWATER and CONTECH were incorporated into the ICA table.	Recommendations have been addressed under Task 1. Following cleaning/flushing of the storm drain lines, an additional Wet Conditions Inspection will be scheduled and led by AECOM. This is anticipated to be performed during a qualifying rain event in September 2018.	On 9/17/18 and 9/23/18, AECOM completed additional Wet Conditions inspections. Flow splitters (FS-1, -2, -3, -4, -5, and -6) and Jellyfish structures (JF-1, -3A, -3B, and -4) were observed to be functioning as designed, diverting and treating stormwater.	No update (12/20/18). See new Task 11.	No update (01/17/19). See Task 11.	No update (02/25/19). See Task 11.	No update (07/26/19). See Task 11.	No update (10/09/19).
				1. Modifications or repairs at flow splitters to ensure proper flow to treatment system 2. Resealing of structures forebay walls, clearwell walls, and longitudinal wall-to-floor joints. 3. Investigation of potential backwater conditions at StormFilter units 4. Repair leaks at deck fasteners at Jellyfish JF-1. 5. Repair joint leak in weir wall to filter deck at inlet Jellyfish I68. AECOM has collected additional field data to determine necessary adjustments to flow splitters and will document findings in a tech memo expected by 6/08/18. Corrective actions			Additional observations made at StormFilter Structures SF-1, -2, -3A, -3B, and -4 will require further evaluation to confirm design stormwater treatment. CONTECH is currently reviewing data and developing potential options to optimize performance at these treatment structures. See new Task 11.					

Task	Recommended Action	Structures	Action items For	Status (as of June 4, 2018)	Status (as of July 6, 2018)	Status (as of September 7, 2018)	Status (as of October 18, 2018)	Status (as of December 20, 2018)	Status (as of January 17, 2019)	Status (as of February 25, 2019)	Status (as of July 26, 2019)	Status (as of October 28, 2019)
				will be implemented as soon as possible thereafter. Additional corrective actions may be identified following completion of Task 1, which includes a full as-built review and hydraulic evaluation.								
7	Clean Jelly Fish Unit Deck) Rationale: Per CONTECH, sediment on JF deck could result in erroneous results) CONTECH recommends cleaning of deck and backwash pool prior to sampling) Sediment accumulates at these locations through grated covers or during bypass flow	Jellyfish	Pepco/ i-STORMWATER	Based on O&M Inspection completed 5/14/18 – 5/18/18 by i-STORMWATER, no cleaning was warranted at the Jellyfish units.	No update (7/6/18).	No update (8/28/18).	Next O&M inspection by i-STORMWATER is scheduled for November 2018.	O&M inspection completed by i-STORMWATER November 29, 2018.	No update (01/17/19)	No update (02/25/19)	No update (07/26/19)	See Task 4 for i STORMWATER update
8	Installation of Fixed Sampling Points) Rationale: Recommended by CONTECH upon reviewing two rounds of initial acceptance testing results) CONTECH recommends fixed, dedicated sample ports and using pumps for sampling) CONTECH's approach facilitates collection of more representative treated/untreated samples Based on a call with CONTECH technical staff, AECOM prepared a SOW for this installation	Jellyfish and StormFilters	AECOM/ i-STORMWATER	Completed on 5/29/18.	No update (7/6/18).	Fixed SW sampling points were inspected and blank samples were collected during the Dry Conditions inspection on 9/5/18 and 9/6/18. The SW sampling points were observed to be functioning as intended.	Task completed.	No update (12/20/18).	No update (01/17/19)	Fixed SW sampling points to be re-located / re-installed for performance testing in first quarter of 2019.	Fixed stormwater sampling points will be re-located / re-installed by Contech during installation of automated samplers in August 2019.	On August 23, 2019, AECOM installed new fixed sampling points at MH33. On August 27 & 28, 2019, AECOM installed 38 ISCO automated samplers at 19 treatment units to collect influent and effluent stormwater sample pairs.

Task	Recommended Action	Structures	Action items For	Status (as of June 4, 2018)	Status (as of July 6, 2018)	Status (as of September 7, 2018)	Status (as of October 18, 2018)	Status (as of December 20, 2018)	Status (as of January 17, 2019)	Status (as of February 25, 2019)	Status (as of July 26, 2019)	Status (as of October 28, 2019)
9	Additional Influent and Effluent Sampling) Rationale: Evaluate performance of individual treatment system components) Results of initial acceptance testing sampling (completed April 2018) may not be representative of system performance due to lack of proper flow to treatment components and difficulty of isolating influent and effluent flows for sampling) Additional samples to be collected using new sampling points once corrective actions identified in Tasks 1-8 are implemented.	Jellyfish and StormFilters	AECOM/ CONTECH	To be scheduled for qualifying rain event following completion of Tasks 1-8.	No update (7/6/18).	Tasks 1-8 have been completed. SW Sampling is anticipated to be performed during a qualifying rain event in September 2018.	Based on field observations during wet weather inspections following completion of system modification under Task 1, further evaluation is needed to confirm design stormwater treatment before proceeding with additional influent and effluent sampling. CONTECH is currently reviewing data and developing potential options to optimize performance at these treatment structures. See new Task 11.	It is anticipated that additional sampling will be completed following implementation of the proposed optimizations. See new Task 11.	No update (01/17/19). See Task 11.	Additional performance testing will be completed following re-installation of fixed sampling points.	Additional performance testing will be completed following installation of automated samplers and re-installation of fixed sampling points by Contech.	On August 27 & 28, 2019, AECOM installed 38 ISCO automated samplers at 19 treatment units to collect influent and effluent stormwater sample pairs. Stormwater samples were collected from 17 of the 19 locations and submitted for analysis. This analysis is being evaluated. The remaining 2 locations will be sampled during the next qualifying rain event.
10	Flood Treatment Structures to Rinse Fines) Rationale: To rinse filters and underdrains of zeolite dust per CONTECH recommendation) Zeolite dust itself has no metals, but could adsorb metals) Zeolite dust, if present in effluent, could result in higher effluent concentrations	StormFilters	Pepco/ i-STORMWATER	Need for this task will be reevaluated based on the findings of Tasks 1-9.	No update (7/6/18).	Tasks 1-8 have been completed. Pepco completed cleaning/flushing of the storm drain lines on 8/31/18.	Task completed.	Pepco completed cleaning/flushing of the storm drain lines on 11/30/18.	No update (01/17/19)	No update (02/25/19)	No update (7/26/19)	No update (10/09/19)
11	Evaluation of the Design to Optimize Operation of StormFilter Systems) Re-inspection of stormwater	All	CONTECH/ AECOM	NA	NA	NA	On 10/17/18, CONTECH completed an additional inspection of the StormFilters to confirm equipment	AECOM has completed rerunning the SWMM model for each hotspot based on additional data/information	Contech agreed with the adjustments proposed by AECOM and proposed additional adjustments to	On 2/5/19 implementation of the design modifications was completed to optimize system	AECOM will oversee the installation of automated samplers by Contech at the 38 individual treatment structures during	On August 27 & 28, 2019, AECOM installed 38 ISCO automated samplers at 19 treatment units to collect influent and

Task	Recommended Action	Structures	Action items For	Status (as of June 4, 2018)	Status (as of July 6, 2018)	Status (as of September 7, 2018)	Status (as of October 18, 2018)	Status (as of December 20, 2018)	Status (as of January 17, 2019)	Status (as of February 25, 2019)	Status (as of July 26, 2019)	Status (as of October 28, 2019)
	<p>treatment units and components to confirm equipment type and configuration.</p> <p>) Investigate water quality inflows to each hot spot treatment unit</p> <p>) Initial routing calculations for each structure</p> <p>) Rerun the SWMM model to include the Jellyfish filter and StormFilter treatment structures.</p> <p>) Design modifications (if necessary)</p> <p>) Check the hydraulic grade line (HGL) for water quantity flows.</p> <p>) Review data and develop potential options to optimize performance at these treatment structures.</p>					<p>type and configuration.</p> <p>AECOM is currently working with CONTECH to evaluate the performance of the StormFilter systems based on the as-built configurations. AECOM is currently developing and running a SWMM model for each hotspot and for the system leading to Outfall #13 based on additional data/information provided by CONTECH for their proprietary treatment units. Based on this more detailed and site-specific modeling, AECOM and CONTECH will develop detailed recommendations to optimize stormwater flow and performance at these treatment structures for a range of storm events up to maximum system design.</p>	<p>provided by CONTECH for their proprietary treatment units. Based on this more detailed and site-specific hydraulic model, AECOM has developed a set of proposed optimizations to improve stormwater flow splitter performance, and optimize treatment system function.</p> <p>The proposed optimizations are currently with CONTECH for review and determination of compliance with their proprietary treatment units.</p> <p>Further treatment system optimization adjustments will be implemented based on final recommendations from AECOM and CONTECH.</p>	<p>improve flow management at SF 4. No additional optimizations are recommended by Contech at this time to achieve design treatment.</p> <p>Per the SWMM, AECOM prepared the following adjustments to optimize system performance:</p> <p>) HS1 (SF1) is receiving greater than 100% of the design storm first-flush for treatment. No further adjustments are proposed.</p> <p>) HS2 (SF2) is currently receiving greater than 90% of design storm first-flush for treatment. Raising of weir walls at FS3 and FS4 is proposed to optimize the volume of stormwater that is being redirected for treatment.</p> <p>) HS3 (SF3A & SF3B) are currently receiving greater than 90% of a design storm first-flush for treatment. Raising the weir wall at FS5, removing flow restrictor plates to JF3A & JF3B, and adding MAW extensions to JF3A & JF3B are proposed to</p>	<p>performance as follows:</p> <p>) At HS1- there were no adjustments proposed or completed.</p> <p>) At HS2- the weir walls at FS3 and FS4 were raised to optimize the volume of stormwater redirected for treatment.</p> <p>) At HS3- the weir wall at FS5 was raised, the flow restrictor plates to JF3A & JF3B were removed, and MAW extensions were added to JF3A & JF3B to optimize the volume of stormwater redirected for treatment.</p> <p>) At HS4 - the weir wall at FS6 was raised, hi-flo cartridges were added at JF4, and the overflow assembly invert at SF4 was raised to optimize the volume of stormwater redirected for treatment.</p>	<p>August 2019. The automated samplers will be programmed to collect influent and effluent stormwater samples during a qualifying storm event once treated stormwater is discharged from a treatment structure. In addition, fixed sampling points will be re-installed as needed by Contech.</p>	<p>effluent stormwater sample pairs. Stormwater samples were collected from 17 of the 19 locations and submitted for analysis. This analysis is being evaluated.</p>	

Paragraph 68.a.(6) of the Consent Decree

Stormwater Management Training

The attached list includes the names of the employees working at Benning who received the Stormwater Management Training during the period from July through September 2019.

Description	Last Name	First Name	Org Desc	Job Pos Desc	Completion Date
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Bell	Justin	PEP Meter Services	Helper Meter Technician	9/13/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Fox	James	PEP Mobile Operations	Sr Substation Tech-Oper	9/15/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Reed	Arthur	PEP Credit & Collections-Pepco	Sr Supvr Customer Service	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Haynes	Laura	PEP Pepco Engineering	Sr Engineering Tech Specialist	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Parajuli	Amrit	PSC T&D Automation	General Engineer	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Washington	Tanjua	PEP Meter Services	Work Planner	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Harris	Cory	DPL Region Business	Business Analyst	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Tyler	Aaron	PEP Sub Construction & Maint	Gardener A NERC	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Kagle	Kenneth	PEP Meter Services	Supvr Meter and Installation	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Sturdivant	Roslyn	PEP Telecommunications	Service Associate 2	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Stewart	Rhonda	PEP Credit & Collections-Pepco	Customer Service Lead Teller	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Ross	Sandra	PEP Pepco-System Operations	Arranger	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Grace	Andre	PEP UG Maint & Construct	Helper Distribution Test	9/17/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Williams	James	PEP Pepco Engineering	Distribution Designer D	9/17/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Bryant	D'Andre	PEP Pepco Engineering	Engineer	9/17/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Parsons Jr	Charles	PEP Sub Construction & Maint	Lead Substation Tech	9/17/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Umana	Claudia	PEP Customer Operations	Sr Supvr Customer Service	9/17/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Rodriguez	Betzaida	PEP Pepco MD Energy Engineers (FE	General Engineer	9/17/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Cooke	Kellie	PEP Pepco Engineering	Distribution Designer C	9/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Coronejo	Eduardo	PEP Credit & Collections-Pepco	Customer Service Teller A	9/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Lee	Jonetta	PEP Remittance Processing-Pepco	Lead Receipts Processing Clerk	9/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hidalgo	Sylvia	PEP Remittance Processing-Pepco	Receipts Processing Clerk A	9/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hawkins	Paul	PEP Pepco Engineering	Distribution Designer B	9/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Kidwell	James	PEP Stores Pepco	Material Handler/Driver B	9/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Souder	Lisa	PEP Pepco Regional Business	Senior Service Associate	9/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Howard	Patricia	PEP Sub Construction & Maint	Sr Substation Tech SCD NERC	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Rivera	Jorge	PEP Pepco Transmission Planning	Sr Engineer	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Walthall	Steven	PEP Credit & Collections-Pepco	Collection Specialist	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Carnes	Alicia	PEP Credit & Collections-Pepco	Credit Analyst A	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Anderson	John	PEP Credit & Collections-Pepco	Collection Specialist	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Jenkins	Althea	PEP Credit & Collections-Pepco	Credit Analyst A	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Peterson	Edward	PEP Sub Construction & Maint	Sr Substation Tech SCD NERC	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Nicholson	John	PEP Transformer Shop Dist	Transformer Tester A	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Wright	Korinna	PEP Sub Construction & Maint	Service Associate 1	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Sharp	Tyreaa	PEP Credit & Collections-Pepco	Credit Analyst A	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Andrukaitis	Robert	PEP AM Project Management - Pepco	Prin Project Manager	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hemingway	Eliza	PEP Pepco Engineering	Senior Service Associate	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Williams	Sheldon	PEP OH Main & Construct-Fore	Lead Line Mechanic	9/20/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Cooper	Donna	PEP Government Affairs-Pepco	VP & President Pepco Region	9/20/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Boodoo	Evanson	PEP Sub Construction & Maint	Lead Substation Tech	9/22/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Sanders	Eric	PEP UG Maint & Construct	Cable Splicer Mechanic B	9/23/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Willett	David	PEP UG Maint & Construct	Cable Splicer Mechanic B	9/23/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Cooke	Bradley	PEP UG Maint & Construct	Cable Splicer Mechanic B	9/23/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Robinson	Phyllis	PEP Credit & Collections-Pepco	Credit Analyst A	9/23/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Jeffrey-Idun	Loretta	PSC Transmission Engineering - PHI	Sr Engineer	9/23/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Nicholson	John	PEP Transformer Shop Dist	Transformer Tester A	9/23/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Owens	George	PSC Transmission Engineering - PHI	Prin Engineer	9/23/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	White Jr	Frank	PEP Pepco OH Main & Constr-Rockvil	Supvr Distribution	9/23/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Aiken	Robert	PEP UG Maint & Construct	T&D Test Aide A	9/23/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Lucas	Japheth	PEP Pepco OH Main & Constr-Rockvil	Supvr Distribution	9/23/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hebb	Michael	PEP Sub Construction & Maint	Lead Substation Tech	9/24/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Walsh	Michael	PEP Pepco Engineering	Mgr Design Engineering	9/24/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Welsh	Scott	PEP Pepco OH Main & Constr-Rockvil	Lead Line Mechanic	9/24/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Rovinski Jr	Robert	PEP OH Main & Construct-Fore	Journey LM	9/24/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hernandez	Jaime	PEP Pepco OH Main & Constr-Rockvil	Apprentice LM2	9/24/2019

Description	Last Name	First Name	Org Desc	Job Pos Desc	Completion Date
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hernandez	Jaime	PEP Pepco OH Main & Constr-Rockvil	Apprentice LM2	9/24/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Watkins	Tami	PEP Government Affairs-Pepco	External Affairs Mgr	9/24/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Fofana	Toukara	PEP Pepco Engineering	Engineer	9/24/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Spence	Felecia	PEP Pepco Claims	Claims Coordinator	9/24/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hollar	Wesley	PEP Pepco OH Main & Constr-Rockvil	Journey LM	9/24/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Wright	Kevin	PEP Pepco Fleet	Supvr Fleet Maintenance	9/25/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	McConkey	Kelly	PEP OH Main & Construct-Fore	Apprentice LM1	9/25/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Wilkins	Antoine	PEP OH Main & Construct-Fore	Apprentice LM3	9/25/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	King	Ryan	PEP Pepco OH Main & Constr-Rockvil	Apprentice LM1	9/25/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hohl	Brian	PEP Pepco OH Main & Constr-Rockvil	Lead Line Mechanic	9/25/2019
Description	Last Name	First Name	Org Desc	Job Pos Desc	Completion Date
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Bell	Justin	PEP Meter Services	Helper Meter Technician	9/13/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Fox	James	PEP Mobile Operations	Sr Substation Tech-Oper	9/15/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Reed	Arthur	PEP Credit & Collections-Pepco	Sr Supvr Customer Service	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Haynes	Laura	PEP Pepco Engineering	Sr Engineering Tech Specialist	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Parajuli	Amrit	PSC T&D Automation	General Engineer	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Washington	Tanjua	PEP Meter Services	Work Planner	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Harris	Cory	DP&L Region Business	Business Analyst	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Tyler	Aaron	PEP Sub Construction & Maint	Gardener A NERC	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Kagle	Kenneth	PEP Meter Services	Supvr Meter and Installation	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Sturdivant	Roslyn	PEP Telecommunications	Service Associate 3	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Stewart	Rhonda	PEP Credit & Collections-Pepco	Customer Service Lead Teller	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Ross	Sandra	PEP Pepco-System Operations	Arranger	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Grace	Andre	PEP UG Maint & Construct	Helper Distribution Test	9/17/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Williams	James	PEP Pepco Engineering	Distribution Designer D	9/17/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Bryant	D'Andre	PEP Pepco Engineering	Engineer	9/17/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Parsons Jr	Charles	PEP Sub Construction & Maint	Lead Substation Tech	9/17/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Umana	Claudia	PEP Customer Operations	Sr Supvr Customer Service	9/17/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Rodriguez	Betzaida	PEP Pepco MD Energy Engineers (FE	General Engineer	9/17/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Cooke	Kellie	PEP Pepco Engineering	Distribution Designer C	9/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Coronejo	Eduardo	PEP Credit & Collections-Pepco	Customer Service Teller A	9/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Lee	Jonetta	PEP Remittance Processing-Pepco	Lead Receipts Processing Clerk	9/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hidalgo	Sylvia	PEP Remittance Processing-Pepco	Receipts Processing Clerk A	9/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hawkins	Paul	PEP Pepco Engineering	Distribution Designer B	9/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Kidwell	James	PEP Stores Pepco	Material Handler/Driver B	9/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Souder	Lisa	PEP Pepco Regional Business	Senior Service Associate	9/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Howard	Patricia	PEP Sub Construction & Maint	Sr Substation Tech SCD NERC	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Rivera	Jorge	PEP Pepco Transmission Planning	Sr Engineer	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Walthall	Steven	PEP Credit & Collections-Pepco	Collection Specialist	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Carnes	Alicia	PEP Credit & Collections-Pepco	Credit Analyst A	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Anderson	John	PEP Credit & Collections-Pepco	Collection Specialist	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Jenkins	Althea	PEP Credit & Collections-Pepco	Credit Analyst A	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Peterson	Edward	PEP Sub Construction & Maint	Sr Substation Tech SCD NERC	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Nicholson	John	PEP Transformer Shop Dist	Transformer Tester A	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Wright	Korinna	PEP Sub Construction & Maint	Service Associate 2	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Sharp	Tyreaasa	PEP Credit & Collections-Pepco	Credit Analyst A	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Andrukaitis	Robert	PEP AM Project Management - Pepco	Prin Project Manager	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hemingway	Eliza	PEP Pepco Engineering	Senior Service Associate	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Williams	Sheldon	PEP OH Main & Construct-Fore	Lead Line Mechanic	9/20/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Cooper	Donna	PEP Government Affairs-Pepco	VP & President Pepco Region	9/20/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Boodoo	Evanson	PEP Sub Construction & Maint	Lead Substation Tech	9/22/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Sanders	Eric	PEP UG Maint & Construct	Cable Splicer Mechanic B	9/23/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Willett	David	PEP UG Maint & Construct	Cable Splicer Mechanic B	9/23/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Cooke	Bradley	PEP UG Maint & Construct	Cable Splicer Mechanic B	9/23/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Robinson	Phyllis	PEP Credit & Collections-Pepco	Credit Analyst A	9/23/2019

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Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Nicholson	John	PEP Transformer Shop Dist	Transformer Tester A	9/23/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Owens	George	PSC Transmission Engineering - PHI	Prin Engineer	9/23/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	White Jr	Frank	PEP Pepco OH Main & Constr-Rockvil	Supvr Distribution	9/23/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Aiken	Robert	PEP UG Maint & Construct	T&D Test Aide A	9/23/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Lucas	Japheth	PEP Pepco OH Main & Constr-Rockvil	Supvr Distribution	9/23/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hebb	Michael	PEP Sub Construction & Maint	Lead Substation Tech	9/24/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Walsh	Michael	PEP Pepco Engineering	Mgr Design Engineering	9/24/2019
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Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Rovinski Jr	Robert	PEP OH Main & Construct-Fore	Journey LM	9/24/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hernandez	Jaime	PEP Pepco OH Main & Constr-Rockvil	Apprentice LM2	9/24/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hernandez	Jaime	PEP Pepco OH Main & Constr-Rockvil	Apprentice LM2	9/24/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Watkins	Tami	PEP Government Affairs-Pepco	External Affairs Mgr	9/24/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Fofana	Tounkara	PEP Pepco Engineering	Engineer	9/24/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Spence	Felecia	PEP Pepco Claims	Claims Coordinator	9/24/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hollar	Wesley	PEP Pepco OH Main & Constr-Rockvil	Journey LM	9/24/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Wright	Kevin	PEP Pepco Fleet	Supvr Fleet Maintenance	9/25/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	McConkey	Kelly	PEP OH Main & Construct-Fore	Apprentice LM1	9/25/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Wilkins	Antoine	PEP OH Main & Construct-Fore	Apprentice LM3	9/25/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	King	Ryan	PEP Pepco OH Main & Constr-Rockvil	Apprentice LM1	9/25/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hohl	Brian	PEP Pepco OH Main & Constr-Rockvil	Lead Line Mechanic	9/25/2019
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Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Haynes	Laura	PEP Pepco Engineering	Sr Engineering Tech Specialist	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Parajuli	Amrit	PSC T&D Automation	General Engineer	9/16/2019
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Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Tyler	Aaron	PEP Sub Construction & Maint	Gardener A NERC	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Kagle	Kenneth	PEP Meter Services	Supvr Meter and Installation	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Sturdivant	Roslyn	PEP Telecommunications	Service Associate 4	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Stewart	Rhonda	PEP Credit & Collections-Pepco	Customer Service Lead Teller	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Ross	Sandra	PEP Pepco-System Operations	Arranger	9/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Grace	Andre	PEP UG Maint & Construct	Helper Distribution Test	9/17/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Williams	James	PEP Pepco Engineering	Distribution Designer D	9/17/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Bryant	D'Andre	PEP Pepco Engineering	Engineer	9/17/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Parsons Jr	Charles	PEP Sub Construction & Maint	Lead Substation Tech	9/17/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Umana	Claudia	PEP Customer Operations	Sr Supvr Customer Service	9/17/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Rodriguez	Betzaida	PEP Pepco MD Energy Engineers (FE	General Engineer	9/17/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Cooke	Kellie	PEP Pepco Engineering	Distribution Designer C	9/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Coronejo	Eduardo	PEP Credit & Collections-Pepco	Customer Service Teller A	9/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Lee	Jonetta	PEP Remittance Processing-Pepco	Lead Receipts Processing Clerk	9/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hidalgo	Sylvia	PEP Remittance Processing-Pepco	Receipts Processing Clerk A	9/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hawkins	Paul	PEP Pepco Engineering	Distribution Designer B	9/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Kidwell	James	PEP Stores Pepco	Material Handler/Driver B	9/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Souder	Lisa	PEP Pepco Regional Business	Senior Service Associate	9/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Howard	Patricia	PEP Sub Construction & Maint	Sr Substation Tech SCD NERC	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Rivera	Jorge	PEP Pepco Transmission Planning	Sr Engineer	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Walthall	Steven	PEP Credit & Collections-Pepco	Collection Specialist	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Carnes	Alicia	PEP Credit & Collections-Pepco	Credit Analyst A	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Anderson	John	PEP Credit & Collections-Pepco	Collection Specialist	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Jenkins	Althea	PEP Credit & Collections-Pepco	Credit Analyst A	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Peterson	Edward	PEP Sub Construction & Maint	Sr Substation Tech SCD NERC	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Nicholson	John	PEP Transformer Shop Dist	Transformer Tester A	9/19/2019

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Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Wright	Korinna	PEP Sub Construction & Maint	Service Associate 3	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Sharp	Tyreasa	PEP Credit & Collections-Pepco	Credit Analyst A	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Andrukaitis	Robert	PEP AM Project Management - Pepco	Prin Project Manager	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hemingway	Eliza	PEP Pepco Engineering	Senior Service Associate	9/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Williams	Sheldon	PEP OH Main & Construct-Fore	Lead Line Mechanic	9/20/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Rosser	Nigel	PEP Mobile Operations	Mgr Subst & Services	8/26/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Dortch	Damaris	PEP T&S Wrk Mgmt Pepco	Mgr Work Management	8/26/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Jones	Jason	PSC PHI Power Procurement	Energy Acquisition Analyst	8/26/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Chatburn Jr	Paul	PEP Relay	Relay Tester A	8/27/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Rogers	Sean	BSC Security Operations	Security Supv, IAM Operations Team	8/27/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Jones	Dennis	PEP Telecommunications	Electronic Tech A	8/28/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	King	Gregory	PEP Pepco Regional Business	Sr Contract Coordinator	8/28/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Doherty	Kevin	PEP Telecommunications	Electronic Tech A	8/28/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Stephens	Mark	PEP OH Main & Construct-Fore	Lead Line Mechanic	8/28/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Dawson	Richard	PEP OH Main & Construct-Fore	Lead Line Mechanic	8/29/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Skelton	George	PEP Pepco Regional Business	Service Associate 2	8/29/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Kornegay	Keith	PEP Sub Construction & Maint	Sr Substation Tech SCD NERC	8/29/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Walker	Raphael	PEP Pepco-System Operations	Dist System Operator II	8/29/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Fore	Shaka	PEP Stores Pepco	Stock Handler A	8/29/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Tayloe Sr	Charles	PEP Stores Pepco	Lead Specialized Carrier/Stock Handler	8/29/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Campbell	Adrienne	PEP Pepco Substation Engineering	Sr Project Manager	8/29/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Price	Rodney	PSC Transmission Engineering - PHI	General Engineer	8/29/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Michael	Alyshia	PSC PHI Credit & Remittance	Business Analyst	8/29/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Call	David	PEP UG Maint & Construct	Mgr Const & Maint	8/29/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Ruffin	Anthony	PEP Government Affairs-Pepco	Sr Extern Affairs Specialist	8/29/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	ONeill	Ryan	PEP Pepco Engineering	Assoc Engineer	8/29/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hamlin	Chantay	PEP Credit & Collections-Pepco	Credit Analyst A	8/29/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	George	Winston E	PEP Mobile Operations	Sr Substation Tech-Oper	8/29/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Souverain	Machelle	PEP Pepco Regional Business	Business Analyst	8/30/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Alexander	Dimitri	PEP UG Maint & Construct	Cable Splicer Mechanic C	8/30/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Peterson	Michael	PEP Telecommunications	Electronic Tech A	8/30/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Prather	Aaron	PEP Stores Pepco	Stock Handler A	8/30/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Swann	Stacey	PEP Pepco Drafting	Design Tech A Elec Wiring	8/30/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Boone	Laura	PEP Pepco Key Account Management	Sr Account Representative	8/30/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Schupler	Charles	PSC Transmission Engineering - PHI	Mgr Engineering	8/30/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Myers	Kevin	PEP Pepco-System Operations	Complaint Dispatcher A	8/31/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Lawrence	Justin	PEP Pepco-System Operations	Sr Dist System Operator	9/1/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Ellerbe	Joel	PEP Pepco-System Operations	Complaint Dispatcher B	9/1/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Castanos	Maria	PEP Pepco-System Operations	Info Mgmt Analyst	9/2/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Call	David	PEP UG Maint & Construct	Mgr Const & Maint	9/3/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Gaddy-Barrie	Melinda	PEP Pepco OH Main & Constr-Rockvil	Work Planner	9/3/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Mckenzie	Brian	PEP Relay	Test Specialist	9/4/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Gardner	Duane	PEP Stores Pepco	Material Handler Driver A	9/4/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hickerson	Eric	PEP Mobile Operations	Sr Substation Tech-Oper	9/4/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Myers	Monchelle	PEP Pepco-System Operations	Information Desk Technician	9/4/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Rountree Jr	Robert	PEP Mobile Operations	Substation Tech Trainee III	9/4/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Morris	Ashlie	PEP Pepco-System Operations	Information Desk Technician	9/5/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Fields	Julian	PEP Mobile Operations	Lead Sub Technician Oper	9/5/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Jones	Timothy	PEP Mobile Operations	Substation Tech Trainee III	9/5/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Pope	Daphne	PEP Customer Operations	Sr Supvr Customer Service	9/5/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Culp	James	PEP Pepco Substation Engineering	Assoc Engineer	9/5/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Lanier	Ivan	PEP Government Affairs-Pepco	State Affairs Manager	9/5/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Thomas	Carolyn	PEP Credit & Collections-Pepco	Lead Credit Analyst	9/5/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Jones	Jernique	PEP Credit & Collections-Pepco	Credit Analyst A	9/5/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Carl	James	PEP OH Main & Construct-Fore	Journey LM	9/5/2019

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Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Elliott	Tamara	PEP Credit & Collections-Pepco	Credit Analyst A	9/5/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Greer	Ashley	PEP Pepco-System Operations	Complaint Dispatcher A	9/5/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Howard	Stephanie	PEP Meter Services	Service Associate 1	9/6/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Kim	Chi	PEP Building Svcs-Pepco	Lead Building Electrician	9/6/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Ford	Mitchell	PEP Telecommunications	Supvr Relay & Control	9/6/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Youngkin Sr	Stephen	PEP Telecommunications	Lead Electronic Tech	9/6/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Lambert	Elda	PEP Credit & Collections-Pepco	Credit Analyst A	9/6/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Skidmore Jr	Earl	PEP Telecommunications	Electronic Tech A	9/6/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Underwood	Shawn	PEP Pepco-System Operations	Complaint Dispatcher A	9/8/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Ruck III	Glenn	PEP Pepco MD Energy Engineers (FE	Sr Engineer	9/8/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Priddy	Kimberly	DPL System Operations-Delmarva	Dist System Operator II	9/9/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Burch	Darryl	PEP Sub Construction & Maint	Supvr Substations	9/9/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Antoine	Gail	PEP Pepco Engineering	Senior Service Associate	9/9/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Penn	Terence	PEP Stores Pepco	Material Handler Driver A	9/9/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Lebedeva	Luliia	PEP Regulatory Services - Pepco	Sr Rate Analyst	9/9/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Campitell	Anthony	PEP Pepco Regional Business	Mgr Bus Planning & Support	9/9/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Takouda	Tahou	PEP Pepco Engineering	Distribution Designer C	9/9/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Melendez	Rafael	PSC Construction Management	Sr Project Const Manager	9/9/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Christopher	Constance	PEP Pepco GPC Team	Assoc Account Representative	9/9/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	McKeown	Kevin	PSC PHI Protection & Control Eng	Engineer	9/9/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Kurowski	Patricia	PEP Pepco Transmission Planning	Mgr Trans Reliability Planning	9/9/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Fadis	Tonya	PEP Pepco Regional Business	Business Analyst	9/9/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Nareshkumar	Koushaly	PEP Pepco Transmission Planning	Sr Engineer	9/10/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Reddon	Cornell	PEP Credit & Collections-Pepco	Credit Analyst A	9/10/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Proctor Briscoe	Janice	PEP Credit & Collections-Pepco	Credit Analyst A	9/10/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Assefa	Abiy	PEP Pepco Engineering	Distribution Designer C	9/10/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Weadon	Donald	PEP UG Maint & Construct	Construction Mechanic	9/10/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Cruz-Reyes	Topacio	PSC Transmission Engineering - PHI	Assoc Engineer	9/10/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Cooke Jr	Alonzo	PEP Mobile Operations	Sr Substation Tech-Oper	9/11/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Lozano	John	PEP OH Main & Construct-Fore	Trainee LM	9/11/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Ingram	Jabriel	PEP OH Main & Construct-Fore	Trainee LM	9/11/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Snead	Rodrequiz	PEP OH Main & Construct-Fore	Trainee LM	9/11/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Millhouse	Antonio	PEP OH Main & Construct-Fore	Trainee LM	9/11/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Diggs	Kermit	PEP Pepco Engineering	Distribution Designer A	9/11/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Williams	Ronnie	PEP UG Maint & Construct	Helper Cable Splicer Mechanic	9/11/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Kyle	Dervon	PEP UG Maint & Construct	Helper Cable Splicer Mechanic	9/11/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Davis	Derrick	PEP UG Maint & Construct	Helper Cable Splicer Mechanic	9/11/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Spearman II	Don	PEP Pepco Engineering	Distribution Designer B	9/11/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Wilson	James	PEP UG Maint & Construct	Lead Cable Splicer Mechanic	9/12/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Bachman	Robert	PEP UG Maint & Construct	Lead Cable Splicer Mechanic	9/12/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Stevenson	Ivan	PEP UG Maint & Construct	Helper Cable Splicer Mechanic	9/12/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Wilburn	Mark	PEP UG Maint & Construct	Lead Cable Splicer Mechanic	9/12/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Rasmussen	Krysta	PEP Pepco Distribution Planning	Engineer	9/12/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Goins	Gregory	PEP UG Maint & Construct	Helper Cable Splicer Mechanic	9/12/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Dudley	David	PEP Meter Services	Helper Meter Technician	9/12/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Dorsey	Teressa	PEP Credit & Collections-Pepco	Customer Service Teller B	9/12/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Kelly	Darryl	PEP Pepco-System Operations	Information Desk Technician	9/12/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Duhart	Lakeisha	PEP Pepco-System Operations	Information Desk Technician	9/13/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Cottin	Andres	PEP Relay	Relay Tester B	9/13/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Ramos	Alberto	PEP AM Project Management - Pepco	Sr Project Manager	9/13/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Lowe	Valerie	PEP Meter Services	Meter Technician C	9/13/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Romano	Rafael	PEP Meter Services	Helper Meter Technician	9/13/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Crilley	Carmel	PEP Customer Care Billing-Pepco	Revenue Analyst A	9/13/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	TRUE	Nathan	PEP OH Main & Construct-Fore	Journey LM	9/24/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Nalls	Jeffrey	PEP OH Main & Construct-Fore	Lead Line Mechanic	8/20/2019

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Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Richardson	Valdis	PEP UG Maint & Construct	Supvr Distribution	9/3/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Jones	Jillian	PEP Pepco-System Operations	Complaint Dispatcher B	8/20/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Jones	Jillian	PEP Pepco-System Operations	Complaint Dispatcher B	8/20/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Regan	Gerard	PEP Relay	Relay Tester B	9/3/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Bond	Craig	PEP Sub Construction & Maint	Lead Substation Tech	9/17/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Dunn	Anthony	PEP Pepco Engineering	Technical Assistant A	9/3/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Barnes	Edward	PEP Telecommunications	Electronic Tech A	7/30/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Ruvunangiza	Marie Claire	PEP Pepco Distribution Planning	Engineer	7/30/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Forsee	Clyde	PEP Telecommunications	Lead Electronic Tech	7/2/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Clark III	Robert	PEP Transformer Shop Dist	Lead Transformer Tester	7/2/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Wilson	Thomas	PEP Pepco-System Operations	Sr Dist System Operator	7/3/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Schnetzler	Christopher	PEP Pepco Transmission	Sr Engineer	7/3/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Medina	Miladis	PEP KAST South	Account Representative	7/5/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Pao	Linda	PEP Pepco Substation Engineering	Sr Engineer	7/8/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Dent	Christopher	PEP Sub Construction & Maint	Substation Tech	7/8/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Smith	Antonio	PEP Pepco-Safety	Sr Safety Specialist	7/8/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Schumacher	Keith	PEP Field Training - Pepco	Sr Training Specialist	7/8/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Lacey	Sara	PSC Transmission Engineering - PHI	Mgr Engineering	7/8/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Graham	Donna	PEP Pepco Engineering	Work Planner	7/10/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Kozey	Matthew	PSC PHI Communications	Communications Manager	7/10/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Morton	Bee	PEP Pepco Distribution Planning	Prin Engineer	7/10/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Allie	Eric	PEP Pepco Engineering	Distribution Designer B	7/10/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Harbaugh	Ronald	PEP General Shops (Fabrication)	Lead Shop Mechanic/Certified Welder	7/11/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Di Lima	Anthony	PEP Pepco Engineering	Distribution Designer A	7/11/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Oliyide-Bailey	Michael	PEP Pepco Engineering	Distribution Designer A	7/11/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Ricci Jr	Gino	PEP Pepco Work Management	Work Week Manager	7/12/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Fowler	Bradley	PEP Pepco Engineering	Distribution Designer C	7/12/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Mccree	Keith	PEP Pepco-System Operations	Shift Manager TSO	7/12/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Scott	Xavior	PEP Pepco-System Operations	Sr Dist System Operator	7/13/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Reitmann	Greta	PEP Pepco-System Operations	Complaint Dispatcher A	7/13/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Waitkus	Andrew	PEP Pepco-System Operations	Sr Dist System Operator	7/15/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Boothe	Nathaniel	PEP Field Training - Pepco	Sr Training Specialist	7/15/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Khup	Dong	PEP Pepco Substation Engineering	Sr Engineer	7/15/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Locantore	Michael	PEP Pepco-System Operations	Sr Trans System Operator	7/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Armstrong	Nicole	PEP Pepco Regional Business	Sr Contract Coordinator	7/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Anderson	Jimmie	PEP Transformer Shop Dist	Transformer Tester B	7/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Champion	Michael	PEP Telecommunications	Lead Electronic Tech	7/16/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Suggs	Michelle	PEP Pepco Engineering	Work Planner	7/17/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Mattox	Mason	PEP Pepco Distribution Planning	Mgr Regional Capacity Planning	7/17/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Mikolaitis	Harold	PEP Relay	Relay Tester B	7/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Eric	Branislav	PEP Pepco Distribution Planning	Sr Engineer	7/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Pena	Jissel	PEP Pepco Engineering	Service Associate 1	7/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	MacDonald	Terence	PEP Relay	Relay Tester B	7/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Redman	Jhon	PEP Relay	Service Associate 1	7/18/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Briscoe	Deion	PEP Relay	Relay Tester C	7/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Reeves	Marvin	PEP Relay	Test Specialist	7/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Cruz-Reyes	Topacio	PSC Transmission Engineering - PHI	Assoc Engineer	7/19/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Tyler	Taiquia	PEP Stores Pepco	Stock Handler A	7/20/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Lynch	Armondo	PEP Sub Construction & Maint	Sr Substation Tech SCD NERC	7/20/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Awa	Ahmed	PEP Relay	Supvr Relay & Control	7/21/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Humphries	Clinton	PEP Relay	Test Specialist	7/22/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Peters	Schuann	PEP Relay	Test Specialist	7/22/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Wursta	Stephen	PEP Field Training - Pepco	Sr Training Specialist	7/22/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Bodjona	Rosemond	PSC Construction Management	Sr Project Const Manager	7/23/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Lovette	Willis	PEP Meter Services	Meter Technician A	7/23/2019

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Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Clark III	Robert	PEP Transformer Shop Dist	Lead Transformer Tester	7/25/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Tolbert	Booker	PEP Relay	Test Specialist	7/25/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Baxter	Matthew	PEP Pepco-System Operations	Mgr OCC Operations	7/25/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Glascoe	Patricia	PEP Relay	Senior Service Associate	7/29/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Fowler Jr	Ralph	PEP UG Maint & Construct	Work Planner	7/29/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Tessieri	David	PSC Construction Management	Sr Project Const Manager	7/29/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Lambert	Thaddeus	PEP Relay	Relay Tester A	7/30/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Patrick	Bonnie	PEP Customer Care Billing-Pepco	Revenue Analyst A	7/30/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Burkholder Jr	Robert	DPL System Operations-Delmarva	Dist System Operator II	7/31/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Cohen	Matthew	PEP Relay	Relay Tester A	7/31/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Shepp	Nicholas	PEP Pepco-System Operations	Sr Dist System Operator	8/1/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Collins	Charles	PEP Pepco-System Operations	Dist System Operator II	8/1/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Towns	Charles	PEP Pepco-System Operations	Dist System Operator II	8/1/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Young	Samuel	PEP Stores Pepco	Stock Handler A	8/1/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Mccree	Keith	PEP Pepco-System Operations	Shift Manager TSO	8/1/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Thomas	Sean	PEP Mobile Operations	Sr Substation Tech-Oper	8/1/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Kalejta III	Frank	PEP Pepco-System Operations	Prin Proj Outage Coordinator	8/1/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Pacheco	Christian	PEP Sub Construction & Maint	Substation Tech	8/2/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Hensley	Glen	PEP Sub Construction & Maint	Lead Substation Tech	8/2/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Erichsen	Jason	PEP Pepco Engineering	Distribution Designer D	8/2/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Ruggeri	Christopher	PEP Pepco-System Operations	Sr Subs System Operator	8/2/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Tyler	Charity	PEP Sub Construction & Maint	Sr Substation Tech SCD NERC	8/2/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Dyson	Brian	PEP Pepco-System Operations	Shift Manager TSO	8/2/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Proctor	Kiwania	PEP Telecommunications	Lead Electronic Tech	8/4/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Williams	Marnethia	PEP Pepco Drafting	Senior Service Associate	8/5/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Brooks	Kathleen	PEP Pepco Engineering	Senior Service Associate	8/5/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Spalding	John	PEP Telecommunications	Supvr Relay & Control	8/5/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Thomas	Sean	PEP Pepco Engineering	Distribution Designer D	8/5/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Ahmad	Bilal	PEP Pepco Substation Engineering	Sr Engineer	8/5/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Greenan	Mary Linda	PEP Government Affairs-Pepco	External Affairs Mgr	8/5/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Snodgrass	William	PEP Pepco Distribution Planning	Sr Engineering Tech Specialist	8/5/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Dallas	Chauncie	PEP Pepco Engineering	Supvr Designers	8/5/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Akhter	Sadnan	PEP Pepco Distribution Planning	Sr Engineer	8/5/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Latif	Saiful	PSC Transmission Engineering - PHI	General Engineer	8/5/2019
Pepco Environmental Storm Water Pollution Prevention Plan (CBT)	Lopez	William	PSC Transmission Engineering - PHI	Sr Engineer	8/5/2019

Paragraph 68.a.(7) of the Consent Decree

Stormwater Pollution Prevention Plan

The Stormwater Pollution Prevention Plan (SWPPP) has been updated and is attached. This update included the following changes:

- Expanded detail on industrial activities and associated pollutants
- Expanded inventory of materials and discussion of exposure potential
- Added non-stormwater discharge certification
- Identified Pollution Prevention Team personnel and their responsibilities
- Expanded sampling data summary for both outfalls
- Re-organized and updated existing BMPs (O&M sections have been updated to reflect requirements for the new treatment systems; also added discussions on Oil/Water Separators, Frac Tanks and Treatment Trailer)
- Inspections and monitoring section updated, and figure revised to be consistent with inspection forms.
- Expanded training program details.

Stormwater Pollution Prevention Plan

for:

Pepco Benning Service Center
3400 Benning Road NE
Washington, D.C. 20019

SWPPP Contact(s):

Pepco Holdings, Inc.
Hiedi Sturm
3400 Benning Road NE
Washington, DC 20019
(267) 533-1131
Hiedi.Sturm@Exeloncorp.com

SWPPP Preparation Date:

09/23/2019

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Attachment C – 2009 NPDES Industrial Permit

Attachment D – Consent Decree

Attachment E – Stormwater Treatment Measure Design Report

Attachment F – Manufacturer Product Manuals

Attachment G – Inspection Forms

ACRONYMS

AST	aboveground storage tank
BMP	best management practice
BOD	Biochemical Oxygen Demand
BSC	Benning Service Center
CCTV	closed circuit television
DC	District of Columbia
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethylene
DDT	Dichlorodiphenyltrichloroethane
E. coli	Escherichia coli
EPA	Environmental Protection Agency
HWCP	hazardous waste contingency plan
MS4	Municipal Separate Storm Sewer System
NAD	the North American Datum
NPDES	National Pollutant Discharge Elimination System
OWS	oil/water separator
PAH	Polycyclic aromatic hydrocarbons
PCB	Polychlorinated Biphenyl
Pepco	The Potomac Electric Power Company
RCRA	Resource Conservation and Recovery Act
SPCC	Spill Prevention, Control, and Countermeasures
SWPPP	Stormwater Pollutant Prevention Plan
T&D	transmission and distribution
TMDL	total maximum daily load
TSCA	Toxic Substance Control Act
TSS	total suspended solids
USGS	United States Geological Survey

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SECTION 1: FACILITY DESCRIPTION AND CONTACT INFORMATION

1.1 Facility Information

Facility Information

Name of Facility: Pepco Benning Service Center (BSC)

Street: 3400 Benning Road, NE

City: Washington, D.C.

ZIP Code: 20019

NPDES ID: DC0000094

Latitude/Longitude

Latitude:

38.8970 ° N

Longitude:

-76. 9521 ° W

Method for determining latitude/longitude (check one):

USGS topographic map (specify scale: 1:24000)

GPS

Other (please specify): _____

Horizontal Reference Datum (check one):

NAD 27

NAD 83

WGS 84

Is the facility located in Indian country?

Yes

No

Are you considered a "federal operator" of the facility?

Federal Operator – an entity that meets the definition of "operator" in this permit and is either any department, agency or instrumentality of the executive, legislative and judicial branches of the Federal government of the United States, or another entity, such as a private contractor, operating for any such department, agency, or instrumentality.

Yes

No

Estimated area of industrial activity at site exposed to stormwater: 77 acres

Discharge Information

Name(s) of surface water(s) that receive stormwater from your facility: Anacostia River

Does this facility discharge industrial stormwater directly into any segment of an "impaired water"?

Yes

No

If Yes, identify name of the impaired water(s) (and segment(s), if applicable): Anacostia River

Identify the pollutant(s) causing the impairment(s):

Biochemical oxygen demand (BOD), Escherichia coli (E. coli), Chlordane, Dichlorodiphenyldichloroethane (DDD), Dichlorodiphenyldichloroethylene (DDE),

Dichlorodiphenyltrichloroethane (DDT), Dieldrin, Heptachlor Epoxide, Polycyclic aromatic hydrocarbons (PAH) 1,2,3, polychlorinated biphenyls (PCBs), Arsenic, Copper, Zinc, Total Suspended Solids (TSS), Oil and Grease, Nitrogen, Phosphorus, and trash.

Which of the identified pollutants may be present in industrial stormwater discharges from this facility?

TSS, Copper, Zinc, and PCBs

Has a Total Maximum Daily Load (TMDL) been completed for any of the identified pollutants? If yes, please list the TMDL pollutants:

BOD, E. coli, Chlordane, TSS, Oil and Grease, and Nitrogen.

Does this facility discharge industrial stormwater into a receiving water designated as a Tier 2, Tier 2.5 or Tier 3 water? Yes No

1.2 Contact Information/Responsible Parties

Facility Operator/Owner:

Pepco Holdings, Inc
 701 9th Street, NW
 Washington, DC 20068

SWPPP Contact(s):

Primary:

Hiedi Sturm
 3400 Benning Road NE
 Washington, DC 20019
 (267) 533-1131
 Hiedi.Sturm@Exeloncorp.com

Backup:

Shirley Harmon, Mgr. Environmental Programs & Services

1.3 Stormwater Pollution Prevention Team

Table 1-1: Stormwater Pollution Prevention Team	
Staff Names	Individual Responsibilities
Hiedi Sturm, Sr. Environmental Program Manager, Environmental Service	Implementing and maintaining the program for SWPPP development and updates; Authorized signatory authority for SWPPP certification and future annual reports. Responsible for overall operations. Complete an annual review of the program and implement any

	revision within 30 days.
Kenny Guiles (UG); Tim Dinsmore (Environmental Field Service); Sean Burton (Facilities); Garry Gordon (VRM); Andy Hart (Stores); Fred Warren (Transformer Shop); Henry Couto/Mark Weiss (Substation)	Reporting spills as required, coordinating clean-up efforts, implementation of other applicable plans, monitoring stormwater as necessary, and completion of employee training needed. Responsible for regular inspections and maintenance.
Kenny Guiles (UG); Tim Dinsmore (Environmental Field Service); Sean Burton (Facilities); Garry Gordon (VRM); Andy Hart (Stores); Fred Warren (Transformer Shop); Henry Couto/Mark Weiss (Substation)	Assisting employee trainings in awareness of the plan, BMPs, material management, permit and assisting managers on other SWPPP duties. Training is completed annually for all employees on goals of stormwater pollution prevention, including: spill prevention, response, and reporting; good housekeeping; materials management; procedure updates; and review and revision of SWPPP as needed.

The United States Environmental Protection Agency (EPA) recommends, but does not require, the stormwater pollution prevention team include at least one individual from each shift to ensure that there is always a pollution prevention team member on-site. Each member of the stormwater pollution prevention team has ready access to the most updated copy of the facility SWPPP and other relevant documents.

1.4 Site Description

The Potomac Electric Power Company (Pepco) Benning Service Center facility consists of an irregularly-shaped parcel of approximately 77 acres in northeast Washington, D.C. It is located between Foote Street and I-295 to the east, Benning Road to the south and Anacostia Avenue to the west and north, with a portion of the site situated along the east bank of the Anacostia River just north of the Benning Road Bridge. The area generally consists of residential properties. See Figure A-1 in Attachment A for the general site location map.

The BSC occupies the largest part of the property. Employees work in maintenance and construction of Pepco's electric transmission and distribution (T&D) system; system engineering; vehicle fleet maintenance and refueling; and central warehousing for materials, supplies and equipment needed to operate the Pepco electrical distribution system. The facility is enclosed by a fence with two guarded entrances that are staffed 24 hours per day, 7 days per week. The facility also housed a former electric generating station that was decommissioned in June 2012, demolished in May 2015. All structures associated with the former power plant as well as the former cooling towers and bulk fuel storage tanks have been demolished. Thus all discharges associated with the former power plant, cooling towers and other structures have been completely eliminated. Currently, the physical layout of the facility consists of the following:

Warehousing/Storage Facilities/Areas:

- Central Storage Warehouse Facility (Building 88)
- Stock and non-stock storage warehouses (Buildings 35, 40, 41, 42, 60, 61, 65 and 66)
- Offline Scrap Transformer Storage (Building 67)
- T&D Holding Area/Oil Pumping Station
- Resource Conservation and Recovery Act (RCRA) listed hazardous and Toxic Substances Control Act (TSCA) regulated materials containment building (Building 68)
- Maintenance storage area (Building 36)
- Salt storage (Building 45)
- Transformer Oil Aboveground Storage Tanks (Building 29)
- Gasoline and Diesel Fueling Station with Aboveground Storage Tanks
- Several outdoor temporary storage/laydown areas for new equipment/products
- Several vehicle parking lots

Office/Shop Complexes:

- Kenilworth – Transformer Repair Shop, Substations, Meters, Lab, Offices (Buildings 54, 56)
- Kenilworth – T&D Test Shop (Building 57)
- T&D Offices (Building 59)
- Fleet Services and General Shops Services (Building 75)
- Stores, Facility, Environmental Management, and Security Services Department Administration Offices (Building 44);
- Former Fleet Maintenance Facility and Former Print Shop (Building 32)
- Office trailers located between the former power plant footprint and Building 32.

Water Management/Treatment Facilities:

- On-site lift station
- Oil/water separator (OWS) facilities
- Water quality structure
- Water Treatment System and Frac tanks

Active Substations/Switchyards:

- A 230 kV switchyard (Substation 7)
- A 115 kV switchyard (Substation 45)
- A 69 kV switchyard (Substation 41)

The industrial activities that occur outdoors and could be potentially exposed to stormwater include:

- Operation and maintenance activities at switchyards/substations

- Aboveground storage tank (AST) loading and unloading activities
- Equipment and materials storage, loading and unloading, and transportation in outdoor storage areas
- Vehicle and equipment fueling at the fueling station
- Oil/Water separator operations

The activities that occur indoors include:

- Vehicle fleet maintenance.
- Transmission and distribution facility operation
- Transformer repair, testing, draining, and oil pumping operations
- Equipment and material storage
- Hazardous waste handling

Stormwater runoff from the facility is conveyed through a storm drain system and is discharged to the Anacostia River and City storm drains at various outfalls. The majority of the stormwater runoff from the service center is conveyed through a 48-inch then 52-inch storm drainpipe to the Anacostia River at Outfall 013. A smaller area of the site to the west of the former generating station drains stormwater to the Anacostia River at Outfall 101. The remaining areas at the facility flow to the Municipal Separate Storm Sewer System (MS4) owned and operated by the Government of the District of Columbia. See Figure B-1 in Attachment B for the drainage areas and outfalls.

Pepco currently holds a National Pollutant Discharge Elimination System (NPDES) Industrial Permit No. DC0000094 issued by EPA Region III on June 19, 2009, effective July 19, 2009, and administratively extended since July 19, 2014. The provisions in the 2009 NPDES permit remain in effect pending EPA's issuance of a new NPDES permit for the facility. A copy of the 2009 NPDES Industrial Permit can be found in Attachment C.

Pepco entered into a Consent Decree in 2017 to ensure that Pepco continues to take measures, both existing and new, to achieve compliance with the Clean Water Act and its NPDES permit with respect to discharges of metals and other pollutants from the facility into the Anacostia River.

Per the compliance requirements set forth in the Consent Decree, Pepco is continuing to implement Best Management Practices (BMPs) to reduce pollutants in stormwater discharged into the drainage system and other measures as necessary to attain compliance with the NPDES permit limits and requirements applicable to its stormwater discharges. Refer to the Consent Decree (Attachment D) for details regarding the actual actions and deadlines.

1.5 General Location Map

The general location map for this facility can be found in Attachment A.

1.6 Site Map

The site map for this facility can be found in Attachment B.

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SECTION 2: POTENTIAL POLLUTANT SOURCES

This Section describes areas at the BSC where industrial materials or activities are exposed to stormwater, including: outdoor storage areas, the fueling station, the T&D holding area, oil/water separator facility, and the three substations.

2.1 Potential Pollutants Associated with Industrial Activity

The table below lists the potential pollutants or pollutant constituents that are associated with the industrial activities identified in Section 1.4.

Industrial Activity	Potential Pollutants
Operation and maintenance activities at transmission and distribution substations	Transformer oil, cable oil, PCB contaminated oils, Diesel fuel
Transformer maintenance, storage and transportation	Transformer oil, PCB contaminated oils, Metals
PCB contaminated materials storage and handling	PCBs
Metal materials and equipment storage and handling	Metals
Construction materials storage	Sediment, suspended solids
Vehicle and equipment fueling	Gasoline, diesel fuel, engine oil
AST loading and unloading activities	Gasoline, diesel fuel, various oils
Oil/water separator operation and maintenance	Various oils
Fleet vehicle parking and operation	Gasoline, diesel fuel, engine oil

Industrial activities taking place indoors are not exposed to stormwater.

2.2 Inventory of Exposed Materials

Two Spill Prevention, Control, and Countermeasures (SPCC) plans have been developed for the BSC (one for the service center, and one for the three substations located in the service center). Refer to the SPCC plans for detailed inventory of oil-containing equipment and devices. Areas located indoor are not exposed to stormwater and are equipped with sufficient control measures to contain runoff. Releases from indoor areas are not likely to affect stormwater discharge at the facility.

The BSC discharges stormwater to Anacostia River through Outfall 013 and Outfall 101 only. The majority of the stormwater runoff from the service center is conveyed to the Anacostia River at Outfall 013. A smaller area of the site to the west of the former power plant area drains stormwater to the Anacostia River at Outfall 101. Currently there is no industrial activity occurring within the Outfall 101 drainage area. The table below describes the areas and potential pollutants exposed to stormwater. Refer to the Site Map in Attachment B for locations.

Table 2-2: Inventory of Exposed Materials

Areas and Potentially Exposed Material	Description of Potential Exposure	Discharge Points that are likely to be affected
A1 – Fueling Station and ASTs (one 12,000-gallon diesel AST and one 12,000-gallon gasoline AST)	Sufficient containment provided. Only exposed to stormwater if spills/leaks occur from vehicles and equipment fueling activities, and/or from loading and unloading ASTs.	Outfall 013
A2 – Storage Area North of Building 29 (two oil-containing transformers with volumes of 10,989 gallons and 13,550 gallons)	Sufficient containment provided. Only exposed to stormwater if spills/leaks occur during the transport of transformers.	Outfall 013
A3 – Storage/Laydown Area East of Building 65 (various oil-containing transformers with volumes up to 752 gallons)	Only exposed to stormwater if spills/leaks from transformers occur.	Outfall 013
A4 – Storage Area North of Building 88 (various oil-containing transformers with volumes up to 590 gallons)	Only exposed to stormwater if spills/leaks from transformers occur.	Outfall 013
A5 – Storage Area Southeast of Substation 7 (various oil-containing transformers with volumes up to 17,395 gallons)	Sufficient containment provided. Only exposed to stormwater if spills/leaks occur during the transport of transformers.	Outfall 013
A6 – Pad-Mount Transformers Southeast of Substation 7 (two oil-containing transformers with volume of 200 gallons each)	Only exposed to stormwater if spills/leaks from transformers occur.	Outfall 013
A7 – Pad-Mount Transformer in East Corner of Site (one oil-containing transformers with volume of 200 gallons)	Only exposed to stormwater if spills/leaks from transformers occur.	Outfall 013

Table 2-2: Inventory of Exposed Materials

Areas and Potentially Exposed Material	Description of Potential Exposure	Discharge Points that are likely to be affected
A8 – Pad-Mount Transformer East of Building 54 (one oil-containing transformers with volume of 200 gallons)	Only exposed to stormwater if spills/leaks from transformers occur.	Outfall 013
A9 – Building 56 Generator (generator set diesel tank)	Only exposed to stormwater if spills/leaks occur from the generator and when loading diesel tanks.	Outfall 013
A10 – Building 59 Generator (generator set diesel tank)	Only exposed to stormwater if spills/leaks occur from the generator and when loading diesel tanks.	Outfall 013
A11 – Building 88 Generator (generator set diesel tank)	Only exposed to stormwater if spills/leaks occur from the generator and when loading diesel tanks.	Outfall 013
A12 – T&D Holding Area (various oil-containing transformers; storage drums with oils or oil-contaminated solid waste)	Sufficient containment provided. Only exposed to stormwater if spills/leaks occur during the transport of transformers and drums, and during drum loading operation.	Outfall 013
A13 – Building 29 (four new and used mineral oil ASTs with volume of 12,000 gallon each)	Sufficient containment provided. Only exposed to stormwater if spills/leaks occur during loading and unloading the ASTs	Outfall 013
A14 – Oil/Water Separator 01 (various oils in the two 7,000-gallon concrete holding vaults without cover; various storage drums for debris and used skimmer filters)	Only exposed to stormwater if spills/leaks occur during oil/water separator operations, and during drum loading and transporting activities.	Outfall 013
A15 – Water Treatment Trailer with Frac Tanks (various oil; PCB-contaminated sludge)	Only exposed to stormwater if spills/leaks occur during loading and unloading activities.	Outfall 013

Table 2-2: Inventory of Exposed Materials

Areas and Potentially Exposed Material	Description of Potential Exposure	Discharge Points that are likely to be affected
A16 – Storage Area North of Substation 7 (various oil-containing transformers)	Sufficient containment provided. Only exposed to stormwater if spills/leaks occur during the transport of transformers	Outfall 013
A17 – Fleet Truck Parking Area west of Building 59 (Engine oil, gasoline, and diesel fuel)	Only exposed to stormwater if spills/leaks from fleet vehicles occur	Outfall 013
A18 – Aboveground Storage Tank Outside Building 38 (one 250-gallon diesel AST)	Sufficient containment provided. Only exposed to stormwater if spills/leaks occur during loading and unloading the ASTs	Outfall 013
A19 – Salvage Yard (various electrical equipment; and metal components/pieces)	Equipment and metal components are stored in closed dumpsters to avoid contact with precipitation. Only exposed to stormwater during transport of the equipment or components.	Outfall 013
A20 – Storage Area East of Building 88 (metal pipes, metal frames, metal manhole lids)	Exposed to precipitation	Outfall 013
A21 – Storage Area Northwest of Substation 7 (construction materials: soils, sand, stone, and bricks)	Exposed to precipitation	Outfall 013
A22 – Storage Area North of Building 65 (construction materials: soils, sand, stone, and bricks)	Exposed to precipitation	Outfall 013
A23 – Storage Area Southwest of Building 56 (various oil-containing transformers)	Only exposed to stormwater if spills/leaks from transformers occur.	Outfall 013
A24 – Storage Area West of Fueling Station (spools of electrical cable)	Exposed to precipitation	Outfall 013

Table 2-2: Inventory of Exposed Materials

Areas and Potentially Exposed Material	Description of Potential Exposure	Discharge Points that are likely to be affected
A25 – Storage Area South of Substation 7 (spools of electrical cable)	Exposed to precipitation	Outfall 013
A26 – Storage Area North of Building 67 (metal manhole covers and concrete components of drain pipe)	Exposed to precipitation	Outfall 013
A27 – Storage Area South of Building 68 (spools of electrical cable)	Exposed to precipitation	Outfall 013
A28 – Salt Storage Building (Building 45)	Only exposed to stormwater during salt loading and unloading.	Outfall 013
A29 – Oil/Water Separator 02 (various oils in the first and the third chambers of the OWS)	This OWS is located indoors and not exposed to precipitation. Stormwater transmitted from the on-site lift station to the OWS is treated for removal of oil, and subsequently discharged to the storm drain.	Outfall 013
A30 – Water Quality Structure (potential oils entering the structure)	Only exposed to stormwater when oils are present in the stormwater runoff at Substation 7.	Outfall 015
A31 – Containment Area South of Building 67 (transformers temporarily dropped off and staged)	Exposed to precipitation	Outfall 013
Substation 45 (various oil-containing transformers and equipment with volume up to 25,388 gallons)	Sufficient containment provided. Only exposed to stormwater if spills/leaks occur during the transport of contaminated water from containments.	Outfall 013
Substation 41 (various oil-containing transformers and equipment with volume up to 30,130 gallons; and an AST with volume of 660 gallons)	Sufficient containment provided. Only exposed to stormwater if spills/leaks occur during the transport of contaminated water from containments, and during loading and unloading ASTs.	Outfall 013

Table 2-2: Inventory of Exposed Materials

Areas and Potentially Exposed Material	Description of Potential Exposure	Discharge Points that are likely to be affected
Substation 7 (various oil-containing transformers and equipment with volume up to 10,300 gallons; and an AST with volume of 1,000 gallons)	Sufficient containment provided. Only exposed to stormwater if spills/leaks occur during the transport of contaminated water from containments, and during loading and unloading ASTs.	Outfall 013

No significant spills or leaks of oil, toxic or hazardous substances have occurred in the past three years in areas draining to a stormwater conveyance at the BSC.

2.3 Non-stormwater Discharges Documentation

A non-stormwater discharge is any discharge from the facility that is not composed entirely of rainfall or snowmelt runoff. Typical non-stormwater discharges allowed per EPA guidance include:

- Discharges from emergency/unplanned fire-fighting activities;
- Fire hydrant flushing;
- Potable water, including water line flushing;
- Uncontaminated condensate from air conditioners, coolers/chillers, and other compressors and from the outside storage of refrigerated gases or liquids;
- Irrigation drainage;
- Landscape watering provided all pesticides, herbicides, and fertilizers have been applied in accordance with the approved labeling;
- Pavement wash waters where no detergents or hazardous cleaning products are used, and the wash waters do not come into contact with oil and grease deposits, sources of pollutants associated with industrial activities, or any other toxic or hazardous materials, unless residues are first cleaned up using dry clean-up methods and appropriate control measures have been implemented to minimize discharges of mobilized solids and other pollutants;
- Routine external building washdown/power wash water that does not use detergents or hazardous cleaning products;
- Uncontaminated groundwater or spring water;
- Foundation or footing drains where flows are not contaminated with process materials; and
- Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from the cooling tower.

An evaluation of the facility's non-stormwater discharge was conducted on May 16, 2019 and no unauthorized non-stormwater discharges other than the ones listed above were observed. The following table documents the evaluation:

Date of Test or Evaluation	Outfall Directly Observed During the Evaluation	Method Used to Evaluate Discharge	Results from Test for the Presence of Non-stormwater Discharge	Name of Person Who Conducted the Evaluation
5/16/2019	Outfall 013 and Outfall 101	Visual inspection	No non-stormwater discharge	Qiang Huang P.E.

2.4 Salt Storage

The salt storage pile at the Benning Service Center is stored in a partially enclosed, three sided structure (Building 45) located near the northern boundary of the facility. The salt is used for deicing. Salt is exposed to stormwater only during loading and unloading operations.

2.5 Sampling Data Summary

In accordance with the 2009 NPDES permit, Pepco monitors water quality of the stormwater discharges through the collection of quarterly samples. These samples are analyzed for cadmium, copper, iron, lead, nickel, zinc, and TSS based on TMDL allocations that were established for the Upper Anacostia River subsequent to the previous permit (issued November 2000). This permit identified effluent limitations for the parameters, including daily maximum and monthly average concentrations, as presented in the table below. Attachment C contains detailed information on the 2009 NPDES permit.

	Outfall 013		Outfall 101	
	Daily Maximum (mg/l)	Monthly Average (mg/l)	Daily Maximum (mg/l)	Monthly Average (mg/l)
pH	Not less than 6.0 standard units nor more than 8.5 standard units			
Oil and Grease	N/A	N/A	Monitor only	
Cadmium	0.00495	0.00208	Monitor only	
Copper	0.01344	0.00524	Monitor only	
Iron	1.0	0.69	Monitor only	
Lead	0.06458	0.05660	Monitor only	
Nickel	0.117	0.073	Monitor only	
Zinc	0.11718	0.07311	Monitor only	
TSS	100	30	Monitor only	

The majority of stormwater runoff from the facility is conveyed through a reinforced concrete pipe trunk line to the Anacostia River via Outfall 013. A smaller area of the site to the west of the former generating station drains stormwater to the Anacostia River at Outfall 101. As Outfall 013 and Outfall 101 are located off-site, the permit allows stormwater samples to be collected from MH33 and Manhole K, respectively. These manholes are the most downstream and on-site manholes that are located upstream of the outfalls.

Historical sampling data from Outfall 013 and Outfall 101 is available from the quarterly NPDES monitoring requirements. The compliance sampling data collected after the cleanout of the storm drain system in 2018,

and after the implementation of additional BMPs is more representative of current conditions. Therefore only compliance analytical data collected after 2017 is included for the sampling data summary in this SWPPP.

The table below summarizes the analytical results of the recent quarterly stormwater sampling at Outfall 013.

Metals and TSS	NPDES Discharge Limits for Outfall 013		2018	2018	2018	2019
	Daily Maximum (mg/l)	Monthly Average (mg/l)	April	September	December	March
Cadmium	0.00495	0.00208	ND	-	ND	ND
Copper	0.01344	0.00524	0.0068	0.0044	0.0026	0.0053
Iron	1.0	0.69	0.6	0.26	0.13	0.32
Lead	0.06458	0.05660	0.0126	-	0.0011	0.0032
Nickel	0.117	0.073	0.0026	-	0.0024	0.0023
Zinc	0.11718	0.07311	0.0745	0.0329	0.0183	0.0271
TSS	100	30	61	38	2.4	30

Over the last four quarterly sampling events (2nd quarter of 2018 through 2nd quarter of 2019), stormwater analytical data for Outfall 013 was reported at concentrations less than the daily maximum limits for all permit parameters. Similarly, analytical data for cadmium, iron, lead, and nickel were reported at concentrations less than the permit monthly average limits. Only copper, zinc, and TSS were reported at concentrations greater than the permit monthly average over the last four quarters of sampling. More recently, no excursions were reported for the 4th quarter of 2018 and essentially the first quarter of 2019 sampling events. All permit parameters were reported at concentrations less than the most restrictive effluent limitations.

The table below summarizes the analytical results of the recent quarterly stormwater sampling at Outfall 101. There is no effluent limitation for discharge at Outfall 101.

Metals and TSS	NPDES Discharge Limits for Outfall 101		2018	2018	2018	2019
	Daily Maximum (mg/l)	Monthly Average (mg/l)	April	September	December	March
Cadmium	Monitor only		0.000732	0.000375	0.000269	0.000723
Copper	Monitor only		0.116	0.0515	0.0317	0.079
Iron	Monitor only		7	0.88	2.2	4.2
Lead	Monitor only		0.117	0.0415	0.038	0.0798
Nickel	Monitor only		0.118	0.0231	0.027	0.0778
Zinc	Monitor only		0.293	0.123	0.0995	0.188
TSS	Monitor only		250	100	50	160

SECTION 3: STORMWATER CONTROL MEASURES

This section includes both structural BMPs and non-structural BMPs that have been implemented at the BSC to comply with the requirements in the 2009 NPDES permit and the Consent Decree.

3.1 Minimize Exposure

Preventing stormwater from coming into contact with potential pollution sources is generally more effective and less costly than removing pollutants from stormwater. Multiple structural controls and procedures are implemented and maintained at BSC to minimize the exposure of industrial activities to rain, snow, snowmelt and runoff.

Offline Scrap Transformer Storage (Building 67)

A storage building was constructed in December 2016 for the purpose of proper storage of off-line transformers that are in poor condition and designated for scrapping. Poor conditions increase the chance of spills/leaks from the transformers. The transformers are placed inside Building 67 prior to processing or disposal, where potential spills and leaks from the transformers are contained by control measures within the building, eliminating exposure to stormwater. An outdoor containment area is also constructed to the south of Building 67 for transformers drop-off and temporary staging.

Indoor Operations

Industrial activities, such as hazardous waste management, vehicle maintenance, certain equipment and material storage, and transformer processing, are conducted in designated indoor areas with sufficient containment measures to avoid exposure to stormwater.

Containment Structures

Various containment structures were implemented to prevent potential pollutants from contact with stormwater runoff. Secondary containment basins for active transformers and ASTs provide sufficient containment volumes for spills or leaks. Solid concrete floors and surrounding curbs/berms are provided at the T&D holding area where off-line transformers are drained and processed. These activities take place in a designated area under a canopy. Retained water in the containments is discharged manually after inspection for contamination, or automatically through special valves controlled by oil sensors. This practice prevents spills/leaks or contaminated water from contact with stormwater runoff and discharging to the outfalls. Refer to the SPCC plans for details of various containment structures.

Canopy Structures

Canopies are provided in outdoor locations at the fueling station area, the T&D holding area, and multiple loading dock areas. Fueling operations for vehicles and equipment, off-line transformers draining, and material loading/unloading processes are covered by canopies to avoid direct contact with precipitation.

3.2 Good Housekeeping

Good housekeeping practices help maintain a clean and orderly work environment, which reduces the possibility of accidental spills caused by mishandling of materials or improper storage. Elements of good housekeeping apply to the operation and maintenance of industrial machinery and processes, material storage practices, material inventory controls, routine and regular cleanup schedules, and the organization of work areas. The facility uses good housekeeping BMPs in all outdoor and indoor areas. Good

housekeeping practices are conducted regularly onsite, and the associated BMPs inspections occur according to the inspection schedule discussed in Section 4.

- All materials are stored in designated areas in an orderly and appropriate manner.
- Containers are appropriately labeled.
- Floors, ground surfaces, and work areas are kept clean and dry.
- Materials and equipment stored temporarily at the salvage yard are hauled off-site frequently for scrap.
- Disposal bins are provided with lids/covers, and are replaced with new ones when they become rusty.
- Drums are provided at the outdoor oil/water separator facility for debris and used skimmer filters removed from the skimmer. The drums are kept closed with lids and emptied when full.
- Hazardous waste is stored indoors in Building 68 with sufficient containment measures implemented. Waste is hauled off-site for appropriate disposal at least every 90 days and more frequently if needed. Refer to the Hazardous Waste Contingency Plan (HWCP) for the Benning Service Center for details regarding hazardous waste management.

As a part of routine monthly inspection, the facility is inspected to identify any unneeded, used, or scrap equipment or materials that are exposed to stormwater. Such equipment or materials are removed from the facility or placed under cover. Examples of such equipment or materials include metal drums, cable reels, transformer protectors or other parts and metal skids.

3.3 Maintenance

Pepco performs preventive maintenance on equipment, facilities, and structural BMPs as needed to keep them in proper operating condition and avoid spills/leaks or pollutants. The preventive maintenance practices consist of the inspection of equipment, operational systems, outdoor storage tanks, and stormwater control devices.

When equipment, facilities, or any structural BMPs need to be replaced or repaired, necessary repairs and modifications will be made as expeditiously as possible. In addition, non-structural control measures such as employee training and adequate spill response supplies/kits are maintained.

Storm Drain System Maintenance

The storm drain system at BSC is maintained in accordance with good engineering practices to minimize sediment buildup in the lines, ensure proper flows, and maintain the structural integrity of the system. At least once per year, the system is inspected by a qualified contractor using closed circuit television (CCTV) or other appropriate technology. In conjunction with the inspection, any accumulated sediments are removed and damaged lines are promptly repaired or replaced.

Storm Drain Inlet Control BMPs Maintenance

The control BMPs (refer to Section 3.6 for BMP details) installed at every outdoor storm drain inlet/catch basin are inspected weekly and cleaned, adjusted, or replaced as necessary, in accordance with the manufacturer's or supplier's specifications. A backup supply of inlet controls, including any custom-fitted filters or booms, is maintained at the facility so that needed replacements can be made within 48 hours.

Stormwater Treatment System Maintenance

A stormwater treatment system was installed at four locations identified to be the hotspots for contribution of metals to stormwater runoff before discharging at Outfall 013. The treatment system consists of suspended solids removal and metal removal systems. Details on the treatment systems are discussed in Section 3.6 and in Attachment G. Maintenance schedule and practices can be found in Attachment G.

Bioretention Facility Maintenance

Three stormwater bioretention facilities were installed at the BSC, located at the two former cooling tower areas and the fueling station, respectively. These bioretention areas are designed to filter and retain stormwater runoff before conveying the stormwater to the storm drain system and discharging at Outfall 013. The maintenance schedule for the bioretention areas is summarized in the table below.

Description	Method	Frequency	Time of the Year
Inspect soil and repair erosion	Visual	When needed	When needed
Re-mulch any void areas	By hand	When needed	When needed
Remove previous mulch layer before applying new layer (optional)	By hand	Once every two to three years	Spring
Add mulch (optional)	By hand	Once per year	Spring
Remove and replace dead and diseased vegetation	By hand	Twice per year	March 15 to April 30 and October 1 to November 30
Treat all diseased trees and shrubs	Mechanical or by hand	When needed	When needed
Watering of plant material at the end of each day for 14 consecutive days after planting is completed	By hand	Immediately after completion of planting	When needed
Replace any deficient stakes or wires	By hand	When needed	When needed

Spill Response Kits Maintenance

Spill kits are stationed at various locations throughout the facility, including Building 57, Building 88, T&D Holding area, fueling station area, Building 68, and the salvage yard. Spill equipment supplies are inspected monthly as part of the monthly site wide inspection. The available spill response equipment is described in the table below. Spill kits locations are identified in the Site Map in Attachment B.

ITEM DESCRIPTION	STOCK NUMBER
Item available in the Emergency Equipment Storage area in Building 57 and 88	
55-gallon drum, solid, DOT-approved	9739-0171
Sorbent boom	9765-1114
Speedi-Dry	9724-0146
Sorbent cloth	9765-2872
Plastic askarel bag	9739-0163
Sorbent socks	9724-0145

Table 3-2: Spill Response Equipment	
ITEM DESCRIPTION	STOCK NUMBER
Coveralls	9714-0693
Rainsuits	9714-0404
Rubber boots	9714-0493
Shoe covers	9714-0498
Safety goggles	9714-0569
Rubber gloves	9765-6020
Respirators	9714-0571
Respirator filters	9714-0567
"Oil Spill Area" yellow tape	9739-0283
Face shields	9714-0583
Headbands for face shield	9714-0547
Shovels, square point	9714-1205
Picks	9714-1202
Handles for the picks	9714-1818
Rags	9724-0402
Bales of sorbent booms	9765-1114
Rolls of sorbent cloth	9765-2872
Visqueen plastic	9714-2308
Item available in the emergency spill clean-up material storage container	
Spill report packages (blue envelopes)	N/A
Hazardous waste chain of custody forms	9742-0250
Drum contents labels	9739-0646
Absorbent rolls	9724-0263
Visqueen	9714-2308
Speedi-Dry	9724-0146
Shovel, round point	9714-1206
Shovel, square point	9714-1205
Street booms	9714-0204
Boom handles	9714-0211
Solid waste drum	9739-0171
Oil drum	9739-0170
Absorbent booms	9724-0264
Plastic Askarel bags	9739-0163
Protective coveralls (large)	9714-0681
Protective coveralls (extra large)	9714-0692
Cover/shoe	9714-0498
Goggles	9714-0569
Cotton gloves	9714-0467
Rubberized cotton gloves	9714-0465

Table 3-2: Spill Response Equipment	
ITEM DESCRIPTION	STOCK NUMBER
"Oil Spill Area" yellow tape	9739-0283
Absorbent pads	9724-0265
Traffic cones (28 inch)	9739-0124
Buckets (12 quarts)	9714-2836
Large funnel	N/A
Cheesecloth	9724-0402
Soil sample kit (including bottles for oil samples)	Oil & Gas Lab

3.4 Spill Prevention and Response

Refer to the SPCC plans for details regarding the requirements and the corresponding BMPs, as well as the reporting and training procedures for spill prevention and response. General structural controls or procedures implemented at BSC to minimize the potential for leaks, spills, and other releases are summarized below:

- Containers that could be susceptible to spills or leaks are clearly labelled to encourage proper handling and facilitate rapid response. Containers are inspected monthly to ensure the containment structures have no leaks, cracks, or corrosion problems, and that the outlets are properly sealed.
- Preventive measures such as enclosure/cover, berms and secondary containment are used for transformer processing, material storage areas, loading and unloading, and T&D operations at substations to minimize the exposure to stormwater runoff. Rainwater is drained from berm areas or containment structures only after careful inspection by trained personnel. If no sheen, color, foam, visible stains, floating solids, or suspended solids are evident in collected rainwater, the water is manually removed from the containment areas using a portable pump and discharged to the storm drain system. Otherwise, rainwater accumulated in the berm areas or containment structures will be collected, sampled, and disposed off-site at a certified facility as appropriate.
- Emergency response procedures are identified in the SPCC plans, including spill response procedures, immediate removal actions, and follow-up corrective actions.
- Cleanup activities of spills occurring within containment structures typically involve using a product recovery pump followed by application of appropriate absorbent materials. Cleaning operations are carried out in berm areas that prevent runoff and ensure that wash water does not flow to storm drains.
- In addition to the preventive measures, active containment measures will be implemented in the event of a spill. Temporary dams consisting of sandbags, bales, or soil can be constructed across ditches outside the BSC perimeter to prevent further migration. Additional short-term containment can be provided by temporary berms and sorbents. Sanding of small spill areas can be helpful in preventing further oil migration. Prompt cleanup of a spill will be performed to avoid subsequent spreading of the oil. Absorbent booms will be used to prevent stormwater from transporting oil away from the spill location. Appropriate measures will be taken to prevent and control downstream migration of any spilled oil. If oil reaches navigable waters or

- adjoining shorelines (Anacostia River), temporary containment measures including use of booms, straw skimmers, bales, dikes, and sorbents will be implemented. Selection of appropriate measures for a given site depends on type and size of the navigable water or shoreline, flow rate, size of spill, and factors related to weather conditions at the time the spill occurred. In fast-moving rivers, booms can be placed along the outer edge of meanders where currents will direct oil toward the boom. The angle of the boom to the bank will be selected based on the current velocity.
- Pepco has identified spill response contractors for tank cleaning, spill containment, equipment cleanup, waste oil removal, and vacuum pumping. The contractors include Miller Environmental, HydroChemPSC, and ACV Enviro.
 - Spill kits are stationed at various locations throughout the facility and are inspected monthly.

3.5 Erosion and Sediment Controls

All pervious areas on site are either filled with an infiltration layer of stone/gravel (such as the former generating station area and the former cooling tower area), or covered with vegetation (such as landscaping islands, and bioretention areas) to eliminate exposed soil at the facility. Rip-rap is installed at the entrance of the bioretention area by the fueling station to reduce runoff velocity and minimize soil erosion. Bioretention areas are regularly inspected for soil erosion. A silt fence is installed in the construction material storage area (A21) adjacent to the Foote Street gate. No significant area of erosion that requires stabilization is identified at the BSC. If in the future any area exhibits significant soil erosion, or any earth disturbance activities occur, the impacted areas will be stabilized and protected in accordance to the Erosion and Sediment Control Manual developed by the District Department of Energy and Environment. In the District of Columbia, a Soil Erosion and Sediment Control Plan is required as part of the building permit process for construction and redevelopment projects that clear, grade, or in any way disturb the earth's surface.

Various control measures are used to remove sediment from stormwater runoff before discharging at outfalls. The control measures include sediment filters installed at every outdoor storm drain inlet, stormwater treatment system design for sediment removal, annual inspection and cleaning of the storm drain system, and the bioretention areas constructed to retain and infiltrate stormwater runoff.

3.6 Management of Runoff

Stormwater runoff from the facility is conveyed through a drain system and is discharged to the Anacostia River and City storm sewers at various outfalls. The majority of the storm water runoff from the service center is conveyed through a storm drainpipe to the Anacostia River at Outfall 013. A smaller area of the site to the west of the former generating station drains stormwater to the Anacostia River at Outfall 101.

Storm Drain Inlet Controls

Stormwater runoff enters the storm drain system through various inlets and catch basins located throughout the site. Every storm drain inlet and catch basin at the facility is fitted with a sediment filter and/or a metal absorbing device for removal of TSS and dissolved metals. The control devices utilized for the storm drain inlet controls include Ultra-Drain Guard®, Ultra-Curb Guard Plus®, and Ultra-Filter Socks®.

The Ultra-Drain Guard® is a specialized catch basin insert that has quilted sections sewn into the body of the unit where stormwater flows through. A custom blend of heavy metal removal media is contained in each section. A non-permeable, PVC skirt at the top of the unit funnels all water to the lower portion of the Ultra-Drain Guard® where it is forced to move through the media before it can move on into the storm drain. This BMP removes hydrocarbons, heavy metals, sediment, and other organics from stormwater runoff.

The Ultra-Curb Guard Plus® protects curb inlets from sediment-laden stormwater runoff. The wedge-shaped, heavy-duty foam secures the unit in curb inlet, while multiple units can be quickly and easily connected to form longer lengths. The woven, polypropylene material provides high flow rate for the stormwater passing through the units before it gets into the storm drain system.

The Ultra-Filter Socks® are used in front of, or around the storm drain inlets/catch basins for sediment and heavy metal removal. The woven polymer casing allows water to pass through quickly while filtration media removes pollutants. Different types of media are available depending on which pollutant is targeted for removal.

The specifications of these devices can be found in Attachment H. The devices are installed and maintained in accordance with the manufacturer's or supplier's specifications. Pepco has designated a dedicated contractor (ACV Enviro) for routine inspection and maintenance of the inlet controls.

Stormwater Treatment System

A stormwater treatment system was installed at the BSC in 2017 to treat stormwater runoff before discharging at Outfall 013. The water quality treatment measures for this project have been designed to reduce pollutant loads from a 1-inch storm event for stormwater runoff collected by on-site inlets and catch basins, which drain via the underground separate storm drain system and discharge at Outfall 013. Stormwater treatment is provided at the four Hotspots using combinations of Contech DownSpout StormFilter®, Jellyfish® Filter, and StormFilter® stormwater treatment systems. The Hotspot locations and treatment methods were determined based on facility-wide stormwater sampling performed in 2015 and 2016 and the resulting pollutant contamination loads. The Hotspot locations include:

- Hotspot 1: transformer test shop area. Hotspot 1 is located in the southeast portion of the site. This location is chosen as the area contributes significant levels of zinc, in both total and dissolved forms, and copper to a lesser extent, but still high levels. Elevated concentrations of copper (total and dissolved), total iron, and zinc (total and dissolved) were frequently present in stormwater samples collected from runoff in this area. The treatment at Hotspot 1 consists of StormFilter® units to treat runoff from the loading dock roof which sheds significant levels of zinc and copper.
- Hotspot 2: salvage yard area. Hotspot 2 is located in a relatively central part of the site. This area is a contributor of elevated levels of total and dissolved copper as well as dissolved zinc. The treatment at Hotspot 2 consists of Jellyfish® Filter units for stormwater flows. Downstream of the Jellyfish® Filter unit are combined and routed through a StormFilter® unit for removal of the dissolved fraction prior to entering the main trunk line.
- Hotspot 3: former fuel tank area. Hotspot 3 is located near the former fuel tank area in a relatively central part of the site. This area is a contributor of all pollutants except for possibly the dissolved form of zinc. The percentage of site-wide total pollutant loading (total and dissolved) for which this sub-basin is responsible varies by metal of concern. The treatment at this location includes a Jellyfish® Filter followed by a combination of flows that are split in half

- with each half routed through a Jellyfish® Filter and StormFilter® combination unit arranged to remove TSS and related metals from the stormwater prior to entering the main trunk line.
- Hotspot 4: former power plant area. Hotspot 4 is located just east of the former power plant footprint in the northwestern portion of the site. This area contributes to high loading of both total and dissolved copper, iron, nickel, and TSS. The treatment at Hotspot 4 is a combination of Jellyfish® Filter and StormFilter® arranged to remove TSS and related metals from the stormwater prior to entering the main trunk line.

DownSpout StormFilter® systems were installed at the existing loading dock roof downspouts on the west side of Building 56 to provide filtration of roof runoff with high concentrations of dissolved metals such as zinc, copper, and lead. This treatment measure is a passive, aboveground, pretreatment system that utilizes StormFilter® cartridges.

New inlets and manholes were constructed as part of the treatment system, and equipped with Jellyfish Filters® to collect and/or treat stormwater runoff from areas that are predominantly impervious, in both inline and offline configurations, in order to remove TSS, oil, and floatable trash from stormwater at pollutant source locations. This treatment measure is an underground, pretreatment system that utilizes membrane filtration cartridges.

StormFilter® stormwater treatment devices include large underground concrete vaults that house a large number of rechargeable self-cleaning, media-filled cartridges that trap particulates and absorb pollutants such as dissolved metals, hydrocarbons, nutrients, metals, and other common pollutants found in stormwater runoff. The filter media in the StormFilter® cartridges are customized at each hotspot to target site-specific pollutants. This treatment measure is the primary water quality treatment technology at each of the Hotspot locations.

Details on the stormwater treatment system can be found in Attachment H.

Oil/Water Separator 01 (OWS 01)

Located to the south of Building 75, OWS 01 consists of two 7,000-gallon open topped concrete holding tanks and a gravel area for staging drums. Manhole oil/water mixture is brought in from both onsite and offsite locations and is processed through the holding tanks. Oil is skimmed and accumulated in a 950-gallon underground vault, which is inspected after processing. Used skimmer filters and debris are stored in drums in a gravel area surrounding the oil/water separator concrete tanks. Water accumulated in the holding tank is sampled and analyzed, and discharged to the storm drain system if the analytical results comply with the effluent limits required by the 2009 NPDES permit.

Oil/Water Separator 02 (OWS 02)

Oil/Water Separator 02 is constructed above the ground level in a metal building next to the lift station in the former cooling tower area. The building provides cover, houses the skimmer equipment and provides access for operation and maintenance of the OWS. Stormwater from the yard drains in the area enters the lift station, where a pump is configured to transmit the water to the OWS when the water level reaches a float switch. This OWS consists of a rectangular, concrete structure that is approximately 40 feet long by 7.4 feet wide by 10 feet high. The concrete structure is divided into three chambers. The first chamber receives stormwater transmitted from the lift station and acts as a flow equalization, sedimentation, and oil separation chamber. The second chamber acts as a clear water collection chamber, and the third chamber receives oil skimmed from the first chamber and acts as an oil collection tank. Treated water from the

second chamber is discharged to the storm drain at the monitoring point 201 specified in the 2009 NPDES permit, which requires quarterly sampling of such discharge at monitoring point 201.

Water Quality Structure

This water quality structure is an underground oil & grit separator located to the north of Substation 7. Stormwater runoff from Substation 7 and sheet flows from nearby road surface enter the structure, where solid sediment and any oil, if present, are retained in the treatment chambers. The structure discharges to Outfall 015, a MS4 outfall located at the northeastern edge of the property. No oil is expected to enter this structure under normal operations of BCS and Substation 7. The structure is inspected for maintenance once or twice a year, during which accumulated water and oil will be pumped out for offsite disposal.

Frac Tanks and Water Treatment Trailer

Offsite manhole sludge (lead-containing sludge) is transported by Vac truck to a Frac tank (closed-top) and water treatment area to the east of the fueling station. Decanted water from the Vac trucks is pumped to the oil/water separator, while the sludge is hauled off-site for disposal. The lead-containing sludge is received once per week and shipped off-site the same day.

3.7 Salt Storage Piles or Piles Containing Salt

The salt storage pile at Benning Service Center is stored in Building 45 located near the northern boundary of the facility. Building 45 is a partially enclosed, covered, and three sided structure. The area in front of Building 45 is graded to prevent runoff from getting into the building. Straw bales are placed in front of the building to keep salt from contacting stormwater runoff.

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SECTION 4: SCHEDULES AND PROCEDURES

4.1 Routine Facility Inspections

The facility inspection program at BSC evaluates the adequacy and condition of existing control measures. Pepco documents the findings of the inspections and maintains the inspections forms/reports with the SWPPP.

Due to the complexity of the site, various routine inspections are described as follows.

Weekly Storm Drain Inlets/Catch Basins Inspection

On a weekly basis each storm drain inlet/catch basin control is inspected for sediment and pollutant accumulation, proper placement, structural condition, and general effectiveness. During inspection, any accumulated sediment is removed from the inlet controls and any controls that are damaged or no longer functional are replaced within 48 hours. Storm drain inlet controls are replaced at the end of their service lives as recommended by the vendor specifications. If inspections show that the inlet control in a particular location is underperforming, Pepco will replace it with a heavier duty or more effective control device. Refer to the Attachment H for details on control devices. The inspections are conducted by a team consisting of one or more dedicated contractor and one member of the stormwater pollution prevention team. An inspection form is provided in the Attachment I.

In addition to the weekly inspection, a drive-by inspection of storm drain inlets will be conducted following a precipitation event that exceeds 0.5 inch as measured by the rain gauge at the facility. This practice helps the controls function properly. The drive-by inspection may be conducted by a single person. Inspections will be documented using the inspection form, noting any corrective actions performed during the inspection or requiring follow up.

Following the completion of the weekly inspection, necessary corrective actions identified during the inspection are documented. Corrective actions are recorded on the inspection log, which is reviewed and signed monthly by a member of the stormwater pollution prevention team. Pepco will evaluate and install other storm drain inlet controls as necessary to achieve performance objectives. The replacement of underperforming inlet controls will be documented along with the actions taken to correct the underperformance.

Substations Inspection

Refer to the SPCC plans developed for BSC and the three substations for details regarding inspections of the substations. Inspections are conducted by qualified personnel with at least one member of the stormwater pollution prevention team.

Monthly Site Wide Inspection

A monthly inspection is completed to assess the overall site conditions, evaluate the adequacy of existing site control measures, and identify issues that need to be addressed. The inspection is conducted by qualified personnel with at least one member of the stormwater pollution prevention team. Control measures information can be found in Section 3. The inspection is documented using the Monthly Site-Wide Inspection Form provided in Attachment I. The Monthly Site-Wide Inspection Form includes inspection conducted at specific areas or buildings and general areas which are termed as BSC East Area, BCS Central Area, and BCS South Area. The boundaries of those general areas are illustrated in the Site Map in Attachment B.

At least once during each calendar year, the monthly inspection must be conducted during a period when stormwater discharge is occurring to ensure controls are functioning properly.

Biannual Stormwater Treatment System Inspection

Twice per year an inspection is conducted to assess the adequacy of the stormwater treatment system installed in the storm drain system, and identify issues that need to be addressed. The inspection is conducted by a qualified contractor with at least one member of the stormwater pollution prevention team. Refer to the Attachment H for details regarding the inspection of the treatment devices. An inspection report is provided by the contractor upon completion.

Annual Storm Drain System Inspection

An annual inspection of the storm drain system is conducted using CCTV or other appropriate measures. The inspection is conducted by a qualified contractor and identifies areas of pollutant buildup or structural defects. An inspection report is provided by the contractor documenting the inspection results. Following the completion of the inspection, sediment or other pollutant buildup will be removed as necessary. In the event that structural repairs are necessary, Pepco will engage a contractor to implement such repairs. Documentation of the repairs will be maintained along with other documentation of actions to implement this SWPPP.

4.2 Monitoring

As required by the Consent Decree, Pepco performs quarterly stormwater sampling required by the current NPDES permit to monitor stormwater discharges at Outfall 013.

Per the NPDES permit requirements, stormwater sampling is conducted at Outfall 013 following these criteria:

- Samples are collected from the discharge resulting from a storm event that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch) storm event.
- Samples are taken quarterly during the periods of January through March, April through June, July through September, and October through December.
- The grab samples are taken during the first 30 minutes of the discharge. If the collection of a sample during the first 30 minutes is impracticable, a sample will be taken during the first hour of the discharge, and Pepco will submit with the monitoring report a description of why a sample during the first 30 minutes was impracticable.

Stormwater sampling protocol is outlined in the Storm Water Sampling Handbook. The sampling, handling, and shipping procedures discussed in the handbook document are applicable to the stormwater monitoring at the BSC.

The grab samples from Outfall 013 are analyzed for pH, TSS, oil and grease, copper, lead, zinc, cadmium, iron, and PCBs. Numeric limitations of these pollutants can be found in the NPDES permit in Attachment D. The total volume of the discharge during the storm event is estimated.

Monitoring data is submitted on Discharge Monitoring Report Forms postmarked no later than 28th of the month. A separate Discharge Monitoring Report Form is required for each storm event in the sampling

period. Signed copies of the Discharge Monitoring Report are submitted to the EPA Regional Administrator and the District of Columbia at the following addresses:

US EPA Region III
Office of Standards, Assessment & Information Management (3WP60)
1650 Arch Street
Philadelphia, Pennsylvania 19103

US EPA Region III
Water Protection Division
1650 Arch Street
Philadelphia, Pennsylvania 19103

District Department of Energy and Environment (DOEE)
Water Quality Division, 6th Floor
1200 First Street, N.E.
Washington, DC 20002

4.3 Spill Reporting

Refer to the SPCC plans in Attachment F for details on how to respond to a spill, including reportable quantities, who to notify, when to notify, local, state and federal agency contacts, spill response contractor contacts. The On-Scene Coordinator is responsible for ensuring that all appropriate agencies are notified in the event of a spill. In general, when reporting a spill to an outside agency, the following information is required:

- The exact address or location and phone number of the facility
- The date and time of the discharge
- The type of material discharged
- Estimates of the total quantity discharged
- The source of the discharge
- A description of all affected media
- The cause of the discharge
- Any damages or injuries caused by the discharge
- Actions being used to stop, remove, and lessen the effects of the discharge
- Whether an evacuation may be needed
- The names of individuals and/or organizations who have also been contacted

4.3.1 District of Columbia Reporting

An oil discharge >25 gallons or any oil discharge to water should be immediately (less than 2 hours) reported to the DC Emergency Operations Center (EOC) of the Homeland Security & Emergency

Management Agency (HSEMA) (formerly the DC Mayor's Command Center) @ 202-727-6161. The DC EOC will forward the spill information to the District Department of Energy and the Environment (DOEE).

If DOEE requests a written report, the On-Scene Coordinator must contact the Regional Environmental Compliance Specialist immediately. The Regional Environmental Compliance Specialist must complete this report (with the On-Scene Coordinator's input, if necessary) and forward it to DOEE at the following address by the requested date:

DC Department of Energy and Environment
1200 First St NE
Washington, DC 20002

4.3.2 Federal Reporting

National Response Center Spill Reporting

In the case of an oil release to a waterway, the On-Scene Coordinator, with assistance from the Regional Environmental Compliance Specialist, shall immediately notify the National Response Center (NRC) @ 1-800-424-8802.

In the case of an oil release more than 1,000 gallons; or two reportable spills greater than 42 gallons within the last twelve months, a written report (see 40 CFR 112.4(a) for report details) shall be submitted to the EPA Region III office within 60 days.

EPA Spill Reporting

If a report is required in response to a spill or spills as described above, the report will be prepared by the Regional Environmental Compliance Specialist and submitted to the EPA Regional Office and to DOEE – see addresses below.

U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

DC Department of Energy and Environment
1200 First St, NE
Washington, DC 20002

Internal Spill Reporting

The On-Scene Coordinator is required to submit a written Spill Report to the Regional Environmental Compliance Specialist, and distribute copies as necessary, for any spill or release. The report is to be prepared and submitted within 5 days of the incident. The On-Scene Coordinator may request the assistance of the Regional Environmental Compliance Specialist in the investigation.

4.4 Employee Training

Employee training is an integral part of successful implementation of the SWPPP. Training to ensure general awareness of the requirements under the SWPPP is provided to all employees and contractors whose activities may affect the quality of stormwater discharges at the site. The focus of the training program is to educate employees on recognition and prevention of various situations that may lead to contamination of stormwater discharges. More specific training is provided to members of the stormwater pollution prevention team and other employees and contractors whose job responsibilities include implementation of the SWPPP. The personnel who are required to be trained must also be trained to understand the following, if related to the scope of their job duties:

- An overview of what is in the SWPPP;
- Spill response procedures, good housekeeping, maintenance requirements, and material management practices;
- The location of all controls on the site required by this permit, and how they are to be maintained

The training will be conducted by the Training Department, which maintains the records of training. Details on the training program are listed in the table below.

Content of Training	Frequency/Schedule	Personnel
Overview of the SWPPP and the NPDES permit	Orientation and Annually	stormwater pollution prevention team; Employees whose job duties include implementing the SWPPP; Employees and contractors who work in areas where industrial materials or activities are exposed to stormwater
Components of the SWPPP regarding the design, installation, maintenance, and/or repair of controls (including pollution prevention measures)	Annually	stormwater pollution prevention team; Employees and contractors who work in areas where industrial materials or activities are exposed to stormwater
Components of the SWPPP, SPCC, and HWCP regarding the storage and handling of chemicals and materials	Annually	stormwater pollution prevention team;
Components of the SWPPP regarding conducting and documenting	Annually	stormwater pollution prevention team;

monitoring and inspections		
----------------------------	--	--

4.5 Recordkeeping and Reporting

Per EPA guidance, two types of written records are maintained as part of the SWPPP:

- Documentation of spills, leaks, and other discharges;
- Records of routine maintenance and inspections.

Review of these records enhances the effectiveness of the SWPPP and allows for early detection of potential problems.

Documentation regarding spills, maintenance, and inspections is kept on file as part of the SWPPP and maintained in accordance with EPA and DOEE requirements. The records are maintained by the Corporate Environmental Group for a minimum of three years.

Spill incidents, response procedures, and documentation procedures at the BSC are listed in the SPCC plans. Specific inspection procedures for oil tank indicators, oil storage tanks, oil handling equipment, hazardous and non-hazardous waste containers, and tank trailers and trucks at the BSC are also outlined in the SPCC plans. The SPCC plans also contain inspection and maintenance logs. The stormwater pollution prevention team reviews the maintenance and inspection logs annually.

SECTION 5: SWPPP CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name:

Shirley H. Harmon

Title:

Manager, Environmental Programs + Services

Signature:

S. H. Harmon

Date:

10/30/2019

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SECTION 6: SWPPP MODIFICATIONS

In accordance with the EPA requirements, the stormwater pollution prevention team will update this SWPPP annually. The SWPPP will also be updated as necessary to reflect changes in the design, construction, operation, or maintenance of facilities at the Benning Service Center. In addition, the SWPPP will be updated if directed by the EPA.

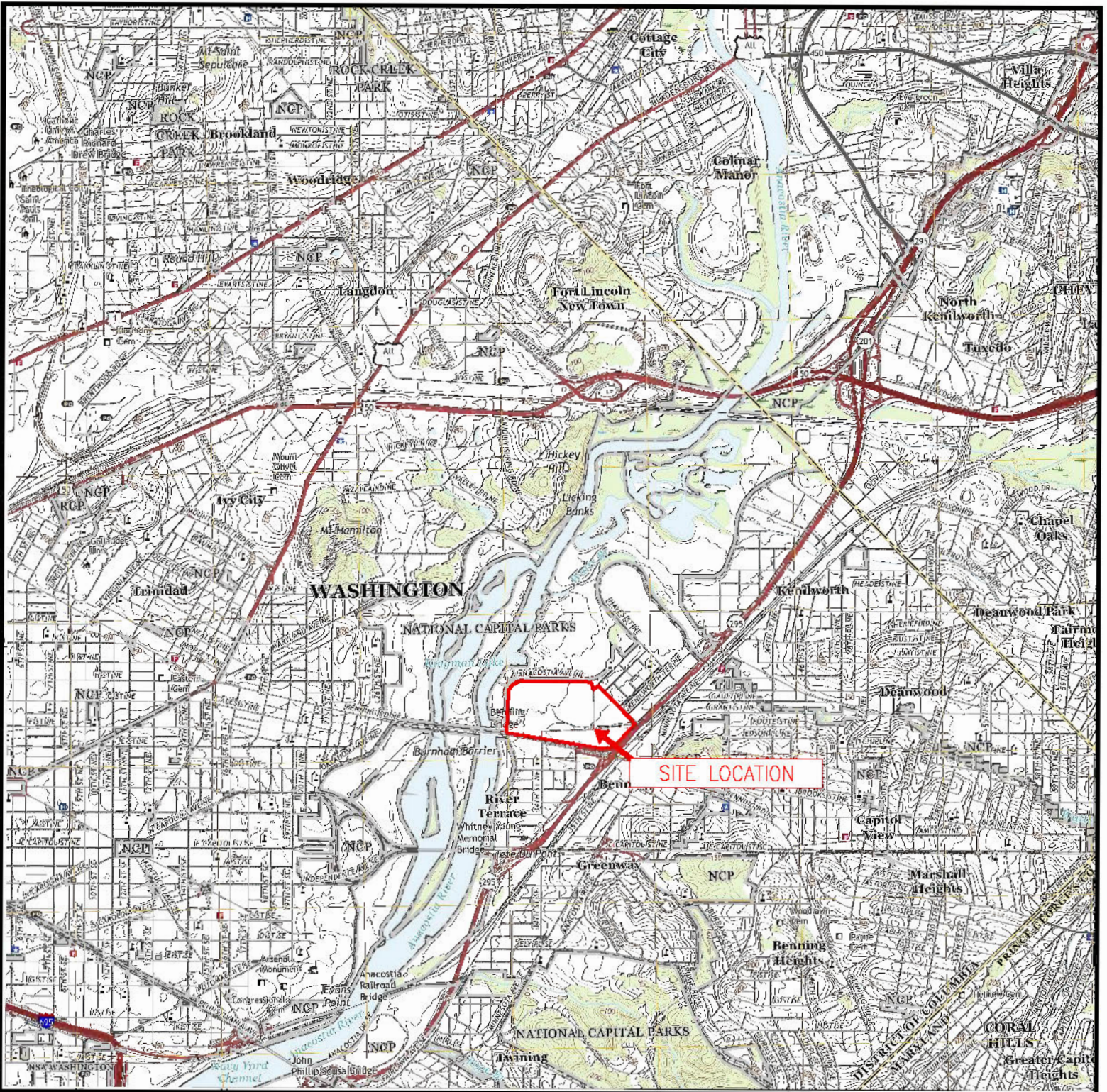
To update the SWPPP annually, the components of the SWPPP and the control measures and procedures implemented are evaluated annually. This process promotes an on-going commitment to evaluate potential pollution sources and existing measures and controls.

Modifications that have been made to the SWPPP are summarized in the table below.

Description of Modification	Date	Recorded By
Initial Plan	July 1995	Pepco
Document revision	December 2010	Colin Danville
Document revision	June 2012	Colin Danville
Document revision	November 2013	Colin Danville
Document revision	September 2015	Colin Danville
Document revision	September 2016	Amec Foster Wheeler
Document revision	June 2017	Colin Danville
Update with new control measures	August 2019	Ghirmay Berhe

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Attachment A
General Location Map



AECOM ENVIRONMENT
 8000 VIRGINIA MANOR ROAD, SUITE 110
 BELTSVILLE, MARYLAND 20705
 PHONE: (301) 289-3900
 FAX: (301) 289-3901
 WEB: [HTTP://WWW.AECOM.COM](http://www.aecom.com)

BENNING SERVICE CENTER
 STORMWATER POLLUTION
 PREVENTION PLAN
 3400 BENNING ROAD NE
 WASHINGTON DC, 20019



SCALE:


















SOURCE: USGS WASHINGTON EAST QUADRANGLE,
 DISTRICT OF COLUMBIA-MARYLAND 7.5-MINUTE SERIES

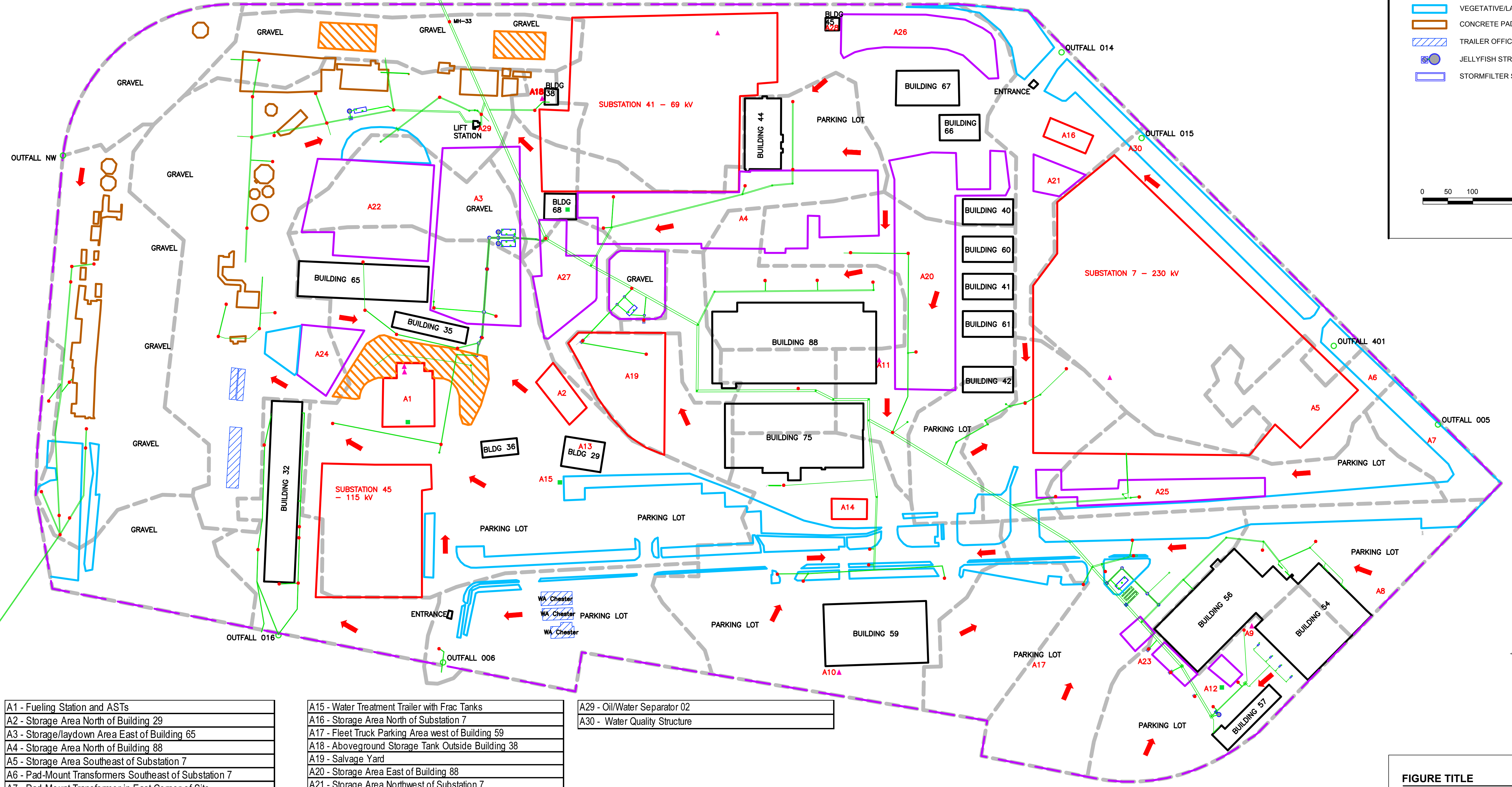
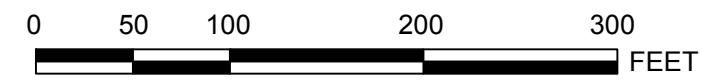
FIGURE A-1
 SITE LOCATION MAP

Attachment B
Site Map

ANACOSTIA RIVER

LEGEND

-  STORM DRAIN
-  RUNOFF DIRECTION
-  STORM DRAIN INLET/CATCH BASIN
-  ABOVEGROUND STORAGE TANK
-  SPILL KIT
-  PROPERTY BOUNDARY
-  DRAINAGE AREA BOUNDARY
-  BUILDING
-  OUTDOOR STORAGE AREA
-  BIO-RETENTION AREA
-  VEGETATIVE/LANDSCAPE AREA
-  CONCRETE PAD
-  TRAILER OFFICE
-  JELLYFISH STRUCTURE
-  STORMFILTER STRUCTURE



A1 - Fueling Station and ASTs
A2 - Storage Area North of Building 29
A3 - Storage/laydown Area East of Building 65
A4 - Storage Area North of Building 88
A5 - Storage Area Southeast of Substation 7
A6 - Pad-Mount Transformers Southeast of Substation 7
A7 - Pad-Mount Transformer in East Corner of Site
A8 - Pad-Mount Transformer East of Building 54
A9 - Building 56 Generator
A10 - Building 59 Generator
A11 - Building 88 Generator
A12 - T&D Holding Area
A13 - Building 29
A14 - Oil/Water Separator 01

A15 - Water Treatment Trailer with Frac Tanks
A16 - Storage Area North of Substation 7
A17 - Fleet Truck Parking Area west of Building 59
A18 - Aboveground Storage Tank Outside Building 38
A19 - Salvage Yard
A20 - Storage Area East of Building 88
A21 - Storage Area Northwest of Substation 7
A22 - Storage Area North of Building 65
A23 - Storage Area Southwest of Building 56
A24 - Storage Area West of Fueling Station
A25 - Storage Area South of Substation 7
A26 - Storage Area North of Building 67
A27 - Storage Area South of Building 68
A28 - Salt Storage Building 45

A29 - Oil/Water Separator 02
A30 - Water Quality Structure

FIGURE TITLE

FIGURE B-1
 SITE MAP

Attachment C
2009 NPDES Industrial Permit

**AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
INDUSTRIAL PERMIT NO. DC0000094**

In compliance with the provisions of the Clean Water Act, as amended, 33 U.S.C. §1251 et seq.
(the "Act"),

Potomac Electric Power Company, Inc.

Is authorized to discharge from a facility located at

Benning Generating Station
3400 Benning Road, NE
Washington, DC 20019

To receiving waters named

Anacostia River


In accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

The issuance date of this permit is June 19, 2009.

This permit shall become effective one month from the date of the issuance.

This permit and the authorization to discharge shall expire 5 years from the date of issuance, unless the permittee has submitted a complete and timely application for a new permit, and EPA, through no fault of the permittee, does not issue a new permit before the expiration date of this permit.

Signed this 19th day of June, 2009.



Jon M. Capacasa, Director
Water Protection Division
U.S. Environmental Protection Agency
Region III

PART I. A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from internal monitoring point 003* (oil/water separator).

Such discharges shall be limited and monitored as specified below:

Discharge Limitations				Monitoring Requirements		Notes
Parameter	Mass Units (lbs/day)		Concentration (mg/l)		Monitoring Frequency	Sample Type
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily		
Flow (mgd)	Report	Report	Report	Report	1 per Discharge	meas
pH	not less than 6.0 standard units nor more than 8.5 standard units				1 per discharge	grab
Oil and Grease	N/A	N/A	15.0	20.0	1 per discharge	grab
PCBs	No Discharge	No Discharge	No Discharge	No Discharge	1 per discharge	grab
Total Suspended Solids (TSS)	N/A	N/A	30.0	100.0	1 per Discharge	grab

For purposes of evaluating compliance, the monitoring event just prior to discharge shall be considered representative of the discharge.

- 1) The discharge of PCBs from this outfall is prohibited under this permit. For the purposes of reporting, the permittee shall use the reporting threshold equivalent to the ML. See Part VII.A for a discussion of these requirements.

PART I. B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - Storm Water Discharges

During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge storm water from outfalls 013/

These discharges shall be monitored at outfalls 013, when no blowdown or basin cleaning is being discharged.

Discharge Parameter		Mass Units (lbs/day)			Concentration (mg/l)		Monitoring Requirements (3)		Notes
		Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Monitoring Frequency	Sample Type		
Flow (mgd)	N/A	N/A	N/A	N/A	N/A		est.	5	2,3,4
pH	not less than 6.0 standard units nor more than 8.5 standard units						Grab	1/quarter	
TSS	N/A	N/A	30	100			Grab	1/quarter	1
Oil and Grease	N/A	N/A	N/A	N/A			Grab	1/quarter	
Copper	N/A	N/A	5.24 ug/l	13.44 ug/l			Grab	1/quarter	1
Lead	N/A	N/A	56.60 ug/l	64.58 ug/l			Grab	1/quarter	1
Zinc	N/A	N/A	73.11 ug/l	117.18 ug/l			Grab	1/quarter	1
Cadmium	N/A	N/A	2.08 ug/l	4.95 ug/l			Grab	1/quarter	1
Iron	N/A	N/A	0.69 ug/l	1.00 ug/l			Grab	1/quarter	1

PCBs	N/A	N/A	monitor only	monitor only	1/quarter	Grab	6
WET	N/A	N/A			1 per 5 yr	24 hr comp	7

- 1) For outfall 013 see Part VII. Special Conditions B., C., D., E., and F for additional monitoring and reduction requirements for TMDL related pollutants and non-TMDL metals discharges. These requirements are based on DMR analytical data.
- 2) All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch) storm event.
- 3) Samples shall be taken quarterly during the periods of January through March, April through June, July through September, and October through December.
- 4) The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the permittee shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.
- 5) Estimate of the total volume of the discharge during the storm event.
- 6) See Special Condition VII.A for additional PCB sampling and reporting requirements.
- 7) Tests shall be performed in accordance with 40 C.F.R Part 136.3 and EPA Document 821-R-02-012, *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Fresh Water and Marine Organisms*, October 2002, or subsequent EPA approved method. At least one of the tests must be conducted during the summer months. If unacceptable toxicity is confirmed for any species from any test, within one year of the testing, a plan for the conduct of water column or sediment Toxicity Identification Evaluation (TIE) testing of that discharge will be prepared and submitted to EPA. Appropriate TIE testing will be conducted for that discharge during the following 12 months.

PART I. C. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - other storm water discharges

During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge storm water from outfall 101. The permittee shall complete the monitoring station at manhole K as expeditiously as possible, and no later than two years from the effective date of this permit. In the interim, the permittee shall use best efforts to obtain representative samples.

These discharges shall be monitored at manhole K⁷¹ for outfall 101.

Discharge Limitations				Monitoring Requirements (3)		Notes	
Discharge Parameter	Mass Units (lbs/day)		Concentration (mg/l)		Monitoring Frequency	Sample Type	
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily			
Flow (mgd)	N/A	N/A	N/A	N/A	During sampling event	est.	2,3,4
pH	not less than 6.0 standard units nor more than 8.5 standard units				1/quarter	Grab	5
TSS	N/A	N/A	Monitor only	Monitor only	1/quarter	Grab	
Oil and Grease	N/A	N/A	Monitor only	Monitor only	1/quarter	Grab	
Metals	N/A	N/A	Monitor only	Monitor only	1/quarter	Grab	1
PCBs	N/A	N/A	Monitor only	monitor only	1/quarter	Grab	6
Whole Effluent Toxicity Testing (WET)	N/A	N/A			Once during this permit cycle (5 yrs)	24-hr composite	8

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- 1) Outfall 101 shall be monitored for the metals total recoverable iron, cadmium, nickel, copper, lead and zinc.
- 2) All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch) storm event.
- 3) Samples shall be taken quarterly during the periods of January through March, April through June, July through September, and October through December.
- 4) The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the permittee shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.
- 5) Estimate of the total volume of the discharge during the storm event.
- 6) See Special Condition VII.A for additional PCB sampling and reporting requirements.
- 7) See Special Condition Part VII.H. Manhole K.
- 8) Tests shall be performed in accordance with 40 C.F.R. Part 136.3 and EPA Document 821-R-02-012, *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Fresh Water and Marine Organisms*, October 2002, or subsequent EPA approved method. At least one of the tests must be conducted during the summer months. If unacceptable toxicity is confirmed for any species from any test, within one year of the testing, a plan for the conduct of water column or sediment Toxicity Identification Evaluation (TIE) testing of that discharge will be prepared and submitted to EPA. Appropriate TIE testing will be conducted for that discharge during the following 12 months.

PART I. D. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall(s) 202 and 203 (cooling tower blowdown units 15 and 16).

Discharge Limitations				Monitoring Requirements		
Discharge	Mass Units (lbs/day)		Concentration (mg/l)		Monitoring Frequency ^{2/}	Sample Type
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily		
Flow (mgd)	N/A	N/A	N/A	N/A	continuous	meas.
pH	not less than 6.0 nor greater than 8.5 standard units				1/ quarter	grab
Bromine ^{2/}	N/A	N/A	NL	NL	1/ quarter	grab
Free Available Chlorine ^{1/}	N/A	N/A	0.2	0.5	1 / quarter	grab
Total Chromium (Net) ^{5/}	N/A	N/A	0.2	0.2	1 / quarter	grab
Total Zinc (Net) ^{5/6/}	N/A	N/A	1.0	1.0	1/ quarter	grab
PCBs ^{4/}	N/A	N/A	N/A	No Discharge	1 / quarter	grab

There shall be no discharge of substances in amounts that float as debris, scum, oil, or foam to form nuisances in the receiving waters.

- 1) Neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day at concentrations of 0.2 mg/l for an average monthly and 0.5 mg/l for a maximum daily.

- 2) The permittee has since at least 2000 used bromine as a biocide in the cooling tower blowdown and may continue to do so. Permittee shall request approval from EPA and DDOE if it wishes to use a different biocide. Such approval shall not be granted until the permittee demonstrates, to the satisfaction of EPA and DDOE, that a new additive will not cause toxic discharges.
- 3) Monitoring frequency applies to times when facility is operating.
- 4) The discharge of PCBs from these outfalls is prohibited under this permit. See Part VII.A of this permit.
- 5) NET Limits are carried over from the previous permit for total chromium and total zinc. This discharge is comprised of once through cooling water. Past analyses of intake and effluent show that concentrations of zinc and chromium are similar. This permit allows net credits provided simultaneous (or nearly simultaneous) samples are taken at both the intake and discharge monitoring point for these samples.
- 6) In accordance with the TMDL for zinc, if zinc is detected at outfall 013, Best Management Practices (BMPs) should be placed at the internal monitoring point to reduce the discharge. See Part VII.C and D of this permit.

See Part VII Special Condition G for additional temperature requirements on this discharge.

PART I. E. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall(s) 202 and 203 (cooling tower basin washwater units 15 and 16).

Discharge Limitations			Monitoring Requirements		
Discharge	kg/day (lb/day)		Concentration (mg/l)	Monitoring Frequency	Sample Type
	Average Monthly	Maximum Daily			
Flow (mgd)	N/A	N/A	N/A	1/quarter	est.
pH	not less than 6.0 nor greater than 8.5 standard units			1/quarter	grab
Total Suspended Solids	N/A	N/A	30 mg/l	1/quarter	grab
PCBs ^{1/2}	N/A	N/A	N/A	1/quarter	grab

1) The discharge of PCBs from these outfalls is prohibited under this permit.

2) Refer to Special Condition VII.A

There shall be no discharge of substances in amounts that float as debris, scum, oil, or foam to form nuisances in the receiving waters.

This monitoring requirement refers to times when the facility is operating.

PART I. F. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning the effective date and lasting through the expiration date, the permittee is authorized to discharge from internal monitoring point 201 (oil/water separator, demineralizer regeneration wastewater, ash settling tank effluent, drains from #2 and #4 fuel unloading areas, boiler blowdown, sump for groundwater infiltration, fireside washing).

Such discharges shall be limited and monitored as specified below:

Discharge Limitations		Concentration (mg/l)			Monitoring Requirements	
Discharge Parameter	Mass Units (lbs/day)	Concentration (mg/l)		Monitoring Frequency	Sample Type	
	Average Monthly	Maximum Daily	Average Monthly			
Flow (mgd)	Report	Report	Report	1/quarter	estimate	
pH	not less than 6.0 standard units nor more than 8.5 standard units			1/quarter	grab	
Oil and Grease	N/A	N/A	10.0	1/quarter	grab	
TSS	N/A	N/A	30.0	1/quarter	grab	
PCB ¹	No Discharge	No Discharge	No Discharge	1/quarter	grab	

1) The discharge of PCBs from this outfall is prohibited under this permit. See Part VII.A for a discussion of these requirements.

There shall be no discharge of substances in amounts that float as debris, scum, oil, or foam to form nuisances in the receiving waters.

PART I. G. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning the effective date and lasting through the expiration date, the permittee is authorized to discharge hydrostatic tank test water and washwater. These wastewaters shall be analyzed prior to discharge, then directed through the oil water separator prior to discharge from monitoring point 201.

Such discharges shall be limited and monitored as specified below:

Discharge Parameter	Mass Units (lbs/day)				Concentration (mg/l)			Monitoring Requirements	
	Average Monthly		Maximum Daily		Average Monthly	Maximum Daily	Inst. Maximum	Monitoring Frequency	Sample Type
	N/A	N/A	N/A	N/A	N/A	0.5 (MGD)	N/A	continuously	meas.
Flow (mgd)	N/A	N/A	N/A	N/A	N/A	0.5 (MGD)	N/A	continuously	meas.
pH	not less than 6.0 standard units nor more than 8.5 standard units							1/discharge	grab
TSS	N/A	N/A	30	N/A	60	N/A	N/A	1/discharge	grab
Total Residual Chlorine	N/A	N/A	0.1	N/A	N/A	N/A	N/A	1/discharge	grab
BOD	N/A	N/A	30	N/A	60	N/A	N/A	1/discharge	grab
Benzene	N/A	N/A	< 1.0	N/A	N/A	N/A	N/A	1/discharge	grab
Oil and Grease	N/A	N/A	10	N/A	15	N/A	N/A	1/discharge	grab

1/ Discharges of contaminated wastewater resulting from hydrostatic testing and cleaning of product storage tanks and distribution piping are prohibited, unless suitable treatment is provided to ensure compliance with applicable effluent limitations.

There shall be no discharge of substances in amounts that float as debris, scum, oil, or foam to form nuisances in the receiving waters.

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Samples shall be taken at the following location: at the tanks prior to discharge to the oil/water separator. If the sample exceeds the above effluent limits, it will not be considered violations if the flow is recycled and treated until the limits are met prior to discharge to the oil /water separator.

Hydrostatic test and wash water for all used tanks, pipes and pipelines shall also be monitored for the last material stored or conveyed in them.

When the test or wash waters are discharged into the oil/water separator the rate of discharge shall not exceed the design capacity of the treatment system.

No discharge shall be initiated until after analysis which demonstrates that the hydrostatic test or wash water complies with the limitations is performed. All samples shall be collected using the grab method and shall be collected and analyzed for the above listed parameters prior to the discharge.

PART II. STORM WATER MANAGEMENT

A. Recording of Results

For each measurement of sample taken pursuant to the storm event monitoring requirements of this permit, the permittee shall record and report with the Discharge Monitoring Report the following information:

1. The date and duration (in hours) of the storm event(s) sampled;
2. The rainfall measurements or estimates (in inches) of the storm event which generated the sampled discharge; and
3. The duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.

B. Sampling Waiver

1. **Adverse Conditions** - When the permittee is unable to collect samples within a specified sampling period due to adverse climatic conditions, the permittee shall collect a substitute sample from a separate qualifying event in the next period and submit the data along with an description of the adverse conditions and the data for the routine sample in that period. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such a local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).
2. **Reduced Monitoring** - The permittee may request a permit modification pursuant to 40 C.F.R. 122.62 and 124.5 to reduce the frequency or extent of monitoring. EPA may approve such a permit modification if it determines that reduced monitoring will not adversely affect water quality or impair compliance with other terms of this permit. In making this determination, EPA shall consider the likelihood of future discharges from the immediate storm sewer.

C. Storm Water Pollution Prevention Plan (SWPPP)

The permittee shall continue to implement the SWPPP submitted to EPA in August 2001. The permittee shall review the existing Storm Water Pollution Prevention Plan (SWPPP) for the facility to determine the need to modify the SWPPP to reduce pollutants in storm water discharges associated with industrial activities (including but not limited to pollutants in the receiving waters that are subject to TMDLs, i.e., biological oxygen demand, total suspended solids, metals, and organics). The permittee shall also determine whether it is necessary to modify the SWPPP to address any change in design, construction, operation or maintenance to achieve any TMDLs established for the Anacostia River or which creates a potential for the discharge of pollutants to the waters of the District.

No later than one year after the issuance date of this permit, the permittee shall notify EPA and the District Department of the Environment (DDOE) in writing about the results of this review. If the review results in any changes to the SWPPP, the permittee shall also submit a modified SWPPP to EPA and DDOE, and shall implement the changes to the SWPPP.

PART III. GENERAL CONDITIONS

1. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and may result in an enforcement action; permit termination, revocation and reissuance, or modification; and denial of a permit renewal application.

2. Water Quality Standards Compliance

- a. The permittee shall not discharge any substances in amounts or combinations that do any one of the following: settle to form objectionable deposits; float as debris, scum, oil or other matter to create a nuisance; produce objectionable odor, color, taste or turbidity; cause injury to, be toxic to, or produce adverse physiological or behavioral changes in humans, plants or animals; produce undesirable or nuisance aquatic life or result in the dominance of nuisance species; or impair the biological community that naturally occurs in the waters or depends upon the waters for its survival and propagation.
- b. The permittee shall not discharge untreated sewage or litter, and shall not place or allow to be placed unmarked submerged or partially submerged man-made structures that would constitute a hazard to users of Class A waters.
- c. The permittee shall maintain the aesthetic qualities of the receiving waters, and shall not construct, place or moor facilities not primarily and directly water oriented in, on, or over the receiving waters unless: 1) the facility is for general public benefit and service; and 2) land based alternatives are not available.

3. Penalties for Violations of Permit Conditions

The Clean Water Act provides that any person who violates any permit condition or limitation implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act, or any permit condition or limitation implementing of any section, or any requirement imposed in an approved pretreatment program and any person who violates any Order issued by EPA under Section 301(a) of the Act, shall be subject to a civil penalty not to exceed \$27,500 per day for each violation, and to an action for appropriate relief including a permanent or temporary injunction.

Any person who negligently violates Section 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act, any permit condition or limitation implementing any such section, shall be punished by a fine of not less than \$2,500 nor more than \$27,500 per day of such violation, or by imprisonment for not more than 1 year, or by both.

Any person who knowingly violates any permit condition or limitation implementing Section 301, 302, 305, 307, 308, 318, or 405 of the Clean Water Act, shall be punished by a fine of not less than \$5,000 nor more than \$50,000 per day of such violation or by imprisonment for not more than 3 years, or by both.

Any person who knowingly violates any permit condition or limitation implementing Section 301, 302, 305, 307, 308, 318, or 405 of the Clean Water Act, and who knows at the time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine or not more than \$250,000, or by imprisonment of not more than 15 years, or by both.

4. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

5. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

- a. Violation of any terms or conditions of this permit;
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge;
- d. Information newly acquired by the Agency, including but not limited to the results of any studies, planning, or monitoring described and/or required by this permit;
- e. Facility modifications, additions, and/or expansions;
- f. Any anticipated change in the facility discharge, including any new significant industrial discharge or changes in the quantity or quality of existing industrial discharges that will result in new or increased discharges of pollutants;
- g. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or
- h. Any revisions of the District of Columbia's water quality standards and 40 C.F.R. § 131.36, which are the basis of the effluent limitations in this permit.
- i. Any TMDL established or approved by EPA which would affect a discharge from this facility to the Anacostia River.

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition. When a permit is modified, only conditions subject to modification are reopened.

6. Toxic Pollutants

Notwithstanding paragraph III.5 above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under section 307(a) of the Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, the Director shall institute proceedings under these regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.

7. Civil and Criminal Liability

Except as provided in permit conditions on "Bypassing" Section IV.3. and "Upsets" Section IV.4., nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

8. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

9. States Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Act.

10. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

11. Severability

The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstances, are held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

12. Transfer of Permit

In the event of any change in ownership or control of facilities from which the authorized discharge emanates, the permit may be transferred to another person if:

- a. The current permittee notifies the EPA, in writing of the proposed transfer at least 30 days in advance of the proposed transfer date;
- b. The notice includes a written agreement, between the existing and new permittee containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

- c. The EPA does not notify the current permittee and the new permittee of intent to modify, revoke and reissue, or terminate the permit and require that a new application be submitted.

13. Construction Authorizations

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.

14. Reopener Clause for Permits

This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Section 301, 302, 304, or 307 of the Clean Water Act, in accordance with the 1987 Chesapeake Bay Agreement and subsequent agreements based on water quality considerations, to achieve any TMDLs, and if the effluent standard or limitation so issued or approved:

- a. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b. Controls any pollutant not limited in the permit. The permit, as modified or reissued under this paragraph, shall also contain any other requirements of the Act then applicable.

This permit may be reopened as specified in 40 C.F.R. Part 122.44.

PART IV. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and system of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

2. Need to Halt or Reduce Activity

Upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities

a. Definitions

- i. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- ii. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs c. and d. of this section.

c. Notice

- i. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- ii. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part VI.6. (24-hour notice).

d. Prohibition of bypass

1. Bypass is prohibited and EPA may take enforcement action against a permittee for bypass, unless:
 - i. The Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee, in the exercise of reasonable engineering judgment, could have installed adequate backup equipment to prevent a bypass during normal periods of equipment downtime and preventative maintenance; and
 - iii. The permittee submitted notices as required under paragraph c. of this section.
2. EPA may approve an anticipated bypass, after considering its adverse effects, if EPA determines that it will meet the three conditions listed above in paragraph d. (1) of this section.

4. Upset Conditions

- a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph c. of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
- d. An upset occurred and that the permittee can identify the specific cause(s) of the upset;
- e. The permitted facility was at the time being properly operated;
- f. The permittee submitted notice of the upset as required in Part VI.6; and
- g. The permittee complied with any remedial measures required under Part III.4.
- h. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

5. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent all pollutants from such materials from entering navigable waters, except as authorized in this permit.

PART V. MONITORING AND RECORDS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit. Monitoring points shall not be changed without notification to and the approval of EPA.

Special monitoring procedures apply to oil storage tanks to be hydrotested. If the sample is above the permit limits, the water will be recirculated and treatment continued until the required limits are achieved.

2. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to insure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device.

3. Monitoring Procedures

a. Monitoring must be conducted according to test procedures approved under 40 C.F.R. Part 136, unless other test procedures have been specified in this permit.

b. The permittee shall use Method 608 for PCB monitoring, as provided in Part VII.A of this permit.

4. Penalties for Tampering

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

5. Reporting of Monitoring Results

Monitoring results must be reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1). Monitoring results obtained during the previous months shall be summarized and reported on a DMR form postmarked no later than the 28th day of the following month.

Signed and certified duplicate copies of DMR's shall be certified in accordance with Part VI.11 and submitted to the Regional Administrator and the District of Columbia Department of the Environment (DDOE), Water Quality Division at the following addresses:

U.S. EPA Region III
Water Protection Division
NPDES Discharge Monitoring Reports (3WP40)
1650 Arch Street
Philadelphia, PA 19103

District of Columbia
Department of the Environment
Water Quality Division, 6th Floor
51 N Street, NE
Washington, DC 20002
Attn: Monir Chowdhury, Ph.D.

6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 C.F.R. 136 or as specified in this permit, the result of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report (DMR) form. Such frequency shall also be indicated.

7. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of EPA at any time.

8. Record Contents

Records of monitoring information shall include:

- a. The date, exact place, time and methods of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

9. Inspection and Entry

The permittee shall allow EPA, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the permittee's premises at reasonable times where a regulated facility or activity is located or conducted, or where records are required to be kept under the conditions of this permit;

- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), processes, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times for the purpose of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

10. Definitions

- a. The "daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.
- b. The "average monthly discharge limitation" means the highest allowable average of "daily discharge" over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during the month.
- c. The "average weekly discharge limitation" means the highest allowable average of "daily discharge" over a calendar week, calculated as the sum of all daily discharge measured during a calendar week divided by the number of daily discharges measured during the week.
- d. "The maximum daily discharge" limitations mean the highest allowable "daily discharge."
- e. Composite Sample - A combination of individual samples obtained at regular intervals over a time period. Either the volume of each individual sample is proportional to discharge flow rates or the sampling interval (for constant volume samples) is proportional to the flow rates over the time period used to produce the composite.
- f. Grab Sample - An individual sample collected in less than 15 minutes.
- g. "I-s" (immersion stabilization) a calibrated device is immersed in the effluent stream until the reading is stabilized - a calibrated device is until the reading is stabilized.
- h. The "monthly average" temperature means the arithmetic mean of temperature measurements made on an hourly basis, or the mean value plot of the record of a continuous automated temperature recording instrument, either during a calendar or operating month if flows are of shorter duration.

- i. The "daily maximum" temperature means the highest arithmetic mean of the temperature observed for any two (2) consecutive hours during a 24-hour day, or during the operating day if flows are of shorter duration.
- j. "At outfall XXX" - A sample location before the effluent joins or is diluted by any other waste stream, body of water, or substance or as otherwise specified.
- k. Estimate - To be based on a technical evaluation of the sources contributing to the discharge including, but not limited to pump capabilities, water meters and batch discharge volumes.
- l. Non-contact cooling water means the water that is contained in a leak-free system, i.e. no contact with any gas, liquid, or solid other than the container for transport; the water shall have no net poundage addition of any pollutant over intake water levels, except as authorized by this permit.

PART VI. REPORTING REQUIREMENTS

1. Planned Changes

The permittee shall give written notice to EPA as soon as possible of any planned physical alterations or additions to the permitted facility, or any change in chemical additives. If EPA determines that any such changes will require a permit modification, it shall so inform the permittee within thirty (30) days so the permittee can submit the appropriate permit application information.

2. Anticipated noncompliance

The permittee shall give advance written notice to EPA of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers

This permit is not transferable to any person except after notice to EPA as specified in Part III.12. EPA may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

4. Monitoring Reports

Monitoring results shall be reported at the intervals and in the form specified in Section V.5.

5. Compliance Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance may include any remedial actions taken, and the probability of meeting the next scheduled requirement.

6. Twenty-Four Hour Reporting

The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

The following shall be included as information which must be reported within 24 hours:

- a. Any unanticipated bypass which exceeds any effluent limitation in the permit.
- b. Any upset which exceeds any effluent limitation in the permit.
- c. Violation of a maximum daily discharge limitation for any of the pollutants listed by EPA under 40 C.F.R. § 122.44(g).

EPA may waive the written report on a case-by-case basis if the oral report has been received within 24 hours and the noncompliance does not endanger health or the environment.

7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Part VI. 1, 4, 5, and 6 at the time monitoring reports are submitted. The reports shall contain the information listed in Part VI.6.

8. Changes in Discharges of Toxic Substances

The permittee shall notify EPA in writing as soon as it knows or has reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, in a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (i) One hundred micrograms per liter (100 ug/l);
 - (ii) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - (iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application;
 - (iv) The level established by EPA under 40 C.F.R. § 122.44(f).

For activity that has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant that is not limited by this permit, the notification levels of 122.42(a)(2) shall apply.

9. Duty to Provide Information

The permittee shall furnish to EPA, within a reasonable time, any information which EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to EPA, upon request, copies of records required to be kept by this permit.

10. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit. EPA may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. In the event that a timely and complete reapplication has been submitted and EPA is unable, through no fault of the permittee, to issue a new permit before the expiration date of this permit, the terms and conditions of this permit are automatically continued and remain fully effective and enforceable.

11. Signatory Requirements

All applications, reports or information submitted to EPA shall be signed and certified as required by 40 C.F.R. § 122.22.

12. Availability of Reports

Unless a business confidentiality claim is asserted pursuant to 40 C.F.R. Part 2, all reports submitted in accordance with the terms of this permit shall be available for public inspection at the offices of the DDOE and the Regional Administrator. If a business confidentiality claim is asserted, the report will be disclosed only in accordance with the procedures in 40 C.F.R. Part 2. As required by the Act, permit applications, permits and effluent data shall not be considered confidential.

13. Penalties for Falsification of Reports

The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring report or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

14. Correction of Reports

If the permittee becomes aware that it submitted incorrect information in any report to EPA, it shall promptly submit the correct information.

PART VII. SPECIAL CONDITIONS

A. Conditions Applicable to PCB Sampling and Limits

1. For purposes of this permit, "PCB" includes PCB-1242, PCB-1254, and PCB-1260. An analysis shall be made for each of the above PCB Aroclors at the outfalls where PCB sampling is required and the result for each aroclor shall be reported on the Discharge Monitoring Report (DMR). Where the individual measurement of each aroclor is less than the minimum level (ML) listed below, using EPA Method 608, each individual measurement recorded in the Discharge Monitoring Report (DMR) shall be zero.
2. All data equal to or above the ML shall be reported as the measured value. For the purpose of evaluating compliance with the "no discharge" PCB limit of Part I, of this permit, any individual PCB measurement, reported in the DMR as less than the ML shall be reported as zero and not be considered a violation of this permit
3. The permittee shall submit to EPA the laboratory reports showing the actual recorded values even if those results are below 1 ug/l and the results of the EPA Method 608 quality control checks for each aroclor. The laboratory results shall be submitted annually.
4. In addition to testing process and storm water discharges with EPA Method 608, storm water discharge samples shall be tested using method 1668B. In the event that the analytical results of the samples tested using method 1668B are below the detection limit of the test, this testing may be discontinued after one year, or four quarters of sampling. If the results of this testing are at or above the detection limit of method 1668B, the testing shall be continued during the life of this permit. Within six months of the recording of the first result above the detectible level the permittee shall submit to EPA and DDOE a plan to determine the source or sources of the PCB discharge and a pollutant minimization plan. This plan shall include a detailed schedule, with milestones, and appropriate Best Management Practices to achieve the DDOE's Water Quality Standard for PCBs.
5. For compliance purposes of this permit, only those results determined using EPA Method 608 (or, following permit modification, any other current method established under 40 C.F.R. Part 136) for PCBs will be used. ASTM Method D 4059 entitled "Standard Test Method for Analysis of Polychlorinated Biphenyls in Insulating Liquids by Gas Chromatography" will be used for quantitative determination of Aroclors 1242, 1254 and 1260 in waters associated with discharge monitoring and reports requirements. Method section 13.2 describes the quantification procedure when a single Aroclor is present in the chromatogram. Method section 13.3 describes the quantification procedure when multiple Aroclors are present in the chromatogram.
6. For purposes of demonstrating compliance with the PCB limitations in the permit for outfalls 202, and 203 and 013, the permittee shall collect a sample of the river water at the intake. Samples of river water must be collected within one hour of the time of collecting of the analytical samples, and the permittee shall record the time of sampling of both samples. In the event that any discharge monitoring results show that PCBs are present in the effluent from the above outfalls, based on the procedures in this Part, and the permittee establishes that PCBs are present at levels equal to or greater in the intake water than the effluent water, the effluent results of the outfalls shall not be considered a violation of this permit.

7. The ML is defined as the lowest concentration in a sample equivalent to the concentration of the lowest calibration standard analyzed in a specific analytical procedure assuming that all the method-specified sample weights, volumes, and processing steps have been followed. All compliance monitoring must be performed in accordance with the method specified below and must use a standard equivalent to the concentration of the ML specified below:

Parameter	Analytical Method	ML and Lowest Calibration Concentration
PCB 1260	608	1.0 ug/L
PCB 1242	608	1.0 ug/L
PCB 1254	608	1.0 ug/L

8. Laboratory reliability and accuracy shall be established by a demonstration that the laboratory is capable of achieving an ML of 1.0 ug/l in laboratory water. In addition, as required by EPA Method 608, the laboratory is to spike 10% of the samples from each outfall at the concentration of the limit (1 Ug/l) or 1 - 5 times higher than the background concentration whichever is larger. (See Method 608 Section 8.3.1). This spiking shall be performed for the first six months of this permit by each laboratory submitting analytical results to EPA. All of this data shall be submitted to EPA along with the DMRs. In the comment section of the DMR, the permittee shall report the calibration standards used.
9. If the permittee demonstrates that it cannot achieve the MDL of any particular Aroclor due to matrix interferences, see 40 C.F.R. Part 136, Appendix A, Method 608, Section 14.1, the permittee may request in writing that EPA adjust the ML and lowest calibration concentration for that Aroclor upward to an achievable level. If EPA agrees with the permittee's demonstration, it may grant such a request through a letter to the permittee. The permittee's submission of such a request shall not affect the determination of compliance with PCB discharge limits, unless and until EPA grants the request.
10. For the purposes of this permit, all PCB analyses for compliance will be performed using the EPA Method 608 Procedure, e.g., extraction with methylene chloride. Quantification and extract cleanup will be performed for Aroclors 1242, 1254 and 1260 in waters associated with discharge monitoring and reporting requirements using the following applicable sections of ASTM Method D 4059 entitled, "Standard Method Analysis of Polychlorinated Biphenyls in Insulating Liquids by Gas Chromatography". ASTM Method 13.2 describes the quantification procedure when a single aroclor is present in the chromatogram. ASTM Method section 13.3 describes the quantification procedure when multiple aroclors are present in the chromatogram. ASTM method section 12.4 entitled "Removal of Interferences" will be used to clean extracts with sulfuric acid of Florisil adsorbent.
- If other Aroclors such as 1016, 1221, 1232 and 1248 are detected in samples, these should be noted as estimates, on the DMR. Quantification of Aroclors 1016, 1221, 1232 and 1248 should be estimated using Aroclor 1242 (not 1254 or 1260) as per sections 13.2 and 13.3 as appropriate.
11. After successfully demonstrating compliance for a one year period, the permittee may request in writing that EPA reduce the monitoring frequency or extent of monitoring. If

EPA agrees with the permittee's demonstration it may grant such a request through a permit modification.

12. Because results obtained using Method 1668B are for investigative purposes, these results may be submitted to EPA and DDOE on a separate letter report, rather than the DMRs. They may be submitted at the time of the Annual Laboratory Report as required at Part VII.A.3 above.
- B. Special Condition for Monitoring at Outfall 013.** The monitoring point for Outfall 013 shall be the manhole located just prior to where the 54-inch pipe discharges to the Anacostia River (Outfall O13B) or at the discharge point to the river (Outfall 013A). In reports of monitoring at Outfall 013A or 013B, the permittee shall note the date, time and all other conditions specified in Part A. of this permit. In addition, for monitoring at Outfall 013A, permittee shall note the tidal conditions at the time of monitoring.
 - C. Best Management Practices (BMPs) -** The Permittee shall maintain the storm water BMPs in the facility's SWPPP in an acceptable manner. BMPs are intended to be managed at internal monitoring points or other internal positions as required to reduce pollutant loads.
 - D. Iron -** No later than 12 months after the effective date of this permit the permittee shall conduct a study to determine the source or sources of the iron released in storm water, and shall submit the results of this study to EPA. Within 3 years after the effective date of this permit permittee must have identified and installed appropriate BMPs to return and sustain the release of total iron to 1.0 mg/l. BMPs are intended to be placed at internal monitoring points or other internal positions as required to reduce pollutant loads.
 - E. TMDL Implementation Plan -** On or before one year after the effective date of this permit, the permittee shall submit to the EPA and the DDOE, for comment, a Plan which describes all previous, on-going and future efforts by the permittee to meet pollutant reduction loads required by the Anacostia River TMDLs (TSS, total recoverable iron, copper, lead and zinc). This plan should also include efforts to meet pollutant loads for the non-TMDL metals (cadmium and nickel), because they have been identified in storm water at levels that pose a reasonable potential to exceed DC water quality standards.

The Plan shall identify a base year upon which the percent reduction for each pollutant is calculated. The base year shall be one of the years between 2005 and 2007, and may be the year in which the highest discharge concentration for each pollutant has occurred. The highest concentration for each pollutant may not be higher than any numeric limit established in the 2000 issued permit. Percent reductions shall be based upon the following: (excerpted from approved TMDLs)

Lower Anacostia River TMDL	TMDL Developed	EPA Approval Date	Waste Load Allocation (WLA)
Fecal Coliform	June 2003	August 28, 2003	97% from direct storm water discharges, not applicable to this permit
Oil and Grease	October 2003	October 31, 2003	Stream not impaired, not applicable to this permit

Organics and Metals	August 2003	October 23, 2003	Copper - 1% reduction Lead - 1% reduction Zinc - 1% reduction PAH - 98% reduction
TSS	June 2007	June 15, 2007	TSS - 85% reduction
BOD, total nitrogen, total phosphorous	May 2001	February 27, 2008	BOD - 50% reduction, not applicable to this permit

The implementation plan shall describe the method by which compliance with each pollutant reduction is calculated and each BMP used to meet each reduction. All BMPs identified by the Plan shall be in place on or before three years of the effective date of this permit. Percent reductions shall be reported beginning no later than the first month after the BMPs are in place or 37 months after the effective date of this permit, whichever is sooner.

Because these are new requirements, the plan may consider, but is not limited to such things as, off set trading or other institutional or physical improvements necessary to meet the TMDL based reductions. TMDL based reductions for each of the metals, based upon a reasonable potential analysis is:

Storm water Discharge Concentration Goals for Metals

Average Daily Monitoring Sample
 Monthly Max. Frequency type

	Average	Daily	Monitoring	Sample	Monthly	Max.	Frequency	type
Iron (Tot. Recov.)	N/A	N/A	N/A	N/A	N/A	1/quarter	Grab	
Cadmium	N/A	N/A	0.0021	0.0045	1/quarter	Grab		
Nickel	N/A	N/A	0.073	0.117	1/quarter	Grab		
Copper	N/A	N/A	0.005	0.0134	1/quarter	Grab		
Lead	N/A	N/A	0.056	0.0645	1/quarter	Grab		
Zinc	N/A	N/A	0.0731	0.117	1/quarter	Grab		

F. TMDL Based Limits. Since the last issuance of this permit, the DDOE has issued, and EPA has approved, numerous TMDLs for the Upper Anacostia River. Each has been evaluated for relevance to this permit and new TMDL derived limits have been established as appropriate. TMDL derived limits were considered for both process and storm water releases. Control to TMDL derived limits shall be accomplished using BMPs.

G. Temperature. Part I.D establishes a new limit for temperature for the discharge from the cooling tower blowdown units 15 and 16. The limit is that expressed in the District of Columbia Water Quality Standard as being 32.2 degrees C maximum and not more than 2.8 degrees C maximum change above ambient water temperature (hereafter, "temperature limit"). For the

purpose of this permit, this temperature limit shall apply at the discharge into the receiving waters, and shall be monitored as follows:

Immediately prior to any planned discharge from the cooling tower basins, the permittee shall measure the temperature of the water in the cooling tower basins and ambient Anacostia River water temperature. The ambient Anacostia River water temperature shall be measured as follows: (a) the permittee shall obtain water temperature data from the DDOE monitoring station at Benning Road Bridge, currently available at <http://www.ysieconet.com/public/WebUI/Default.aspx?hidCustomerID=167>; (b) if data from the DDOE Benning Road Bridge station is unavailable, the permittee shall contact DDOE to obtain alternative ambient Anacostia River water temperature monitoring results; (c) if water temperature monitoring results are not available from DDOE, the permittee shall take a physical measurement of the ambient Anacostia River water temperature in the vicinity of outfall 013, at a point upstream that is not subject to temperature effects from the facility's discharge.

If the temperature of the water in the cooling tower basins exceeds the temperature limit, the permittee shall not discharge this water until its temperature complies with the temperature limit.

Beginning with the effective date of this permit and for one calendar year, the permittee shall physically obtain four (4) ambient river water measurements. These measurements are in addition to electronic measurement obtained from DDOE. These measurements may be taken from the bank of the Anacostia River upstream, but in the vicinity of, outfall 013. The permittee shall take no fewer than four (4) such ambient measurements, from different discharge events, as evenly spaced throughout the year as possible. The permittee's ambient temperature measurements are to be compared with the electronic DDOE temperature to determine the correlation between the two ambient water measurements. The results shall be reported to EPA and DDOE with the DMRs.

H. Manhole K. Within six months of the effective date of this permit, the permittee shall submit for comment to EPA and DDOE a plan with an implementation schedule to retrofit manhole K into a reliable monitoring point for storm water for outfall 101. Construction of the engineered improvement shall begin no later than six months after submission of the plan. Sampling from the manhole shall commence no later than eighteen months after submission of the plan.

Beginning with the effective date of this permit and lasting until the engineered improvement is completed; the permittee is authorized to discharge from outfall 101 and must use its best efforts to obtain representative samples in accordance with Part I.C of this permit.

Attachment D
Consent Decree

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

UNITED STATES OF AMERICA,)
)
 Plaintiff,)
)
 and)
)
 ANACOSTIA RIVERKEEPER,)
)
 Plaintiff-Intervenor)
)
 v.)
)
 POTOMAC ELECTRIC POWER COMPANY,)
)
 Defendant.)
_____)

Civil Action No. 1:15-cv-01845

CONSENT DECREE

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Plaintiff United States of America, on behalf of the United States Environmental Protection Agency (“EPA”), filed a Complaint in this action on October 30, 2015, alleging that Potomac Electric Power Company (“Pepco”) violated Section 309(b) and (d) of the Federal Water Pollution Control Act (“Clean Water Act” or “CWA”), 33 U.S.C. § 1319(b) and (d).

The Complaint against Pepco alleges that Pepco violated the terms and conditions of its National Pollutant Discharge Elimination System (“NPDES”) permit, issued by EPA to Pepco in 2009 pursuant to CWA Section 402(b), 33 U.S.C. § 1342(b), for Pepco’s facility located at 3400 Benning Road N.E., Washington, D.C (“Facility”). Specifically, the United States alleges that on numerous occasions Pepco exceeded the permit effluent limitations for metals and Total Suspended Solids (“TSS”) in its stormwater discharges through Outfall 013 into the Anacostia River.

Pursuant to CWA regulations at 40 C.F.R § 122.6(a) the 2009 Permit is administratively extended and its provisions remain in effect pending EPA’s issuance of a subsequent NPDES Permit for the Facility.

The Facility functions as the Service Center for Pepco’s electric distribution system in the District of Columbia. A portion of the Facility also was formerly the site of an electric generating station. The generating station ceased operation in June 2012, and by May 2015 the generating station structures were demolished, the building debris was removed, and the building footprint was backfilled to grade with stone.

Pepco independently is conducting a Remedial Investigation and Feasibility Study of the Facility and the adjacent segment of the Anacostia River pursuant to other environmental statutes, and in 2011 entered into a judicial consent decree with the District of Columbia for that work in the case, *District of Columbia v. Potomac Electric Power Company et al.*, Civil Action No. 1:11-cv-00282 (BAH)(D.D.C).

Notice of the United States' Complaint in this matter was provided to the District of Columbia at the time of filing.

On March 11, 2016, Anacostia Riverkeeper filed an uncontested Motion to Intervene in the pending lawsuit (Rec. Doc. 7), and the Court in a minute order granted that Motion on March 14, 2016.

Pepco does not admit any liability to the United States arising out of the transactions or occurrences alleged in the Complaint.

The Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid litigation between the Parties and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law except as provided in Section I, and with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, and Section 309(b) of the CWA, 33 U.S.C. § 1319(b) and over the Parties. Venue lies in this District pursuant to Section 309(b) of the CWA, 33 U.S.C. § 1319(b), and 28 U.S.C. §§ 1391 (b) and (c) and 1395(a), because the violations alleged in the Complaint are alleged to have occurred in, and Pepco is located and conducts business in, this judicial district. For purposes of this Decree, or any action to enforce this Decree, Pepco consents to the Court's jurisdiction over this Decree and any such action and over Pepco and consents to venue in this judicial district.

2. For purposes of this Consent Decree, Pepco agrees that the Complaint states claims upon which relief may be granted pursuant to Section 309(b) and (d) of the CWA, 33 U.S.C. § 1319(b) and (d), but does not admit any liability under these claims.

II. APPLICABILITY

3. The obligations of this Consent Decree apply to and are binding upon Pepco and any successors, assigns, or other entities or persons otherwise bound by law, and the United States.

4. No transfer of ownership or operation of the Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve Pepco of its obligation to ensure that the terms of the Decree are implemented. At least 60 Days prior to such transfer, Pepco shall

provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer, together with a summary of the principal terms of the prospective transfer, to EPA Region III, the United States Attorney for the District of Columbia, and the United States Department of Justice, in accordance with Section XVII (Notices). Any attempt to transfer ownership or operation of the Facility without complying with this Paragraph constitutes a violation of this Decree.

5. Pepco shall provide a copy of this Consent Decree to all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Decree, as well as to any contractor retained to perform work required under this Consent Decree. Pepco shall advise such contractor that its performance of the work must be in conformity with the terms of this Consent Decree.

6. In any action to enforce this Consent Decree, Pepco shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

III. OBJECTIVES

7. The objectives of the Parties in entering into this Consent Decree are to ensure that Pepco continues to take measures, and performs additional measures, necessary to achieve compliance with the Clean Water Act and its NPDES permit with respect to discharges of metals and other pollutants from the Facility into the Anacostia River. The obligations of this Consent Decree to treat and control stormwater run-off have the objective of causing Pepco to attain, and

thereafter maintain, full compliance with the foregoing standards and requirements on a permanent and sustainable basis.

IV. DEFINITIONS

8. Terms used in this Consent decree that are defined in the CWA or in regulations promulgated pursuant to the CWA shall have the meanings assigned to them in the CWA or such regulations, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

“BMP” or “Best Management Practice” shall mean measures to reduce or eliminate pollutant loads in stormwater flows entering into the Facility’s stormwater Drainage System.

“Complaint” shall mean the complaint filed by the United States in this action;

“Consent Decree” or “Decree” shall mean this Decree and all appendices attached hereto listed in Section XXVI;

“Day” shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day;

“Drainage System” shall mean the system of pipes, manholes, other inlets, and any other connected components and appurtenances, used to carry stormwater or permitted process

water flows from within the Facility to the Anacostia River through Outfalls 013 and 101.

“Effluent Limits” shall mean the limits imposed by Pepco’s NPDES Permit on discharges from the Facility, including the concentration-based limits for discharges of metals and Total Suspended Solids from Outfall 013.

“EPA” shall mean the United States Environmental Protection Agency and any of its successor departments or agencies;

“Effective Date” shall have the definition provided in Section XVIII;

“Facility” shall mean the Service Center and former Generating Station owned and operated by Pepco, located at 3400 Benning Road N.E., Washington, D.C.;

“NPDES Permit” shall mean National Pollutant Discharge Elimination System Industrial Permit No. DC0000094, issued by EPA Region III to Pepco on June 19, 2009, and effective July 19, 2009, which has been administratively extended from July 19, 2014, and any subsequent NPDES Permits issued to Pepco at this Facility.

“Operating Group” shall mean the various functional departments within Pepco’s organizational structure, and, in the event of a corporate reorganization, any comparable operational units that subsequently may be formed.

“Paragraph” shall mean a portion of this Decree identified by an arabic numeral;

“Parties” shall mean the United States and Pepco;

“Pepco” shall mean defendant Potomac Electric Power Company and any successors thereto;

“Performance Standards” shall mean the standards to be developed pursuant to Section VI.B., Paragraph 37.d to govern the design of the Treatment System.

“Place into Operation” shall mean to achieve steady-state operation and to operate consistently in such a way as to accomplish the intended function (i.e., following acceptance testing), even though all construction close-out activities (such as completion of a punchlist and resolution of contract disputes or close-outs) may not yet be completed.

“Section” shall mean a portion of this Decree identified by a roman numeral;

“State” shall mean the District of Columbia;

“Storm Drain Inlets” shall mean manholes, drains and any other constructed opening at the surface through which stormwater and other flows enter the Drainage System.

“Storm Drain Inlet Controls” shall mean the booms, filters, and other devices deployed in and around each Storm Drain Inlet at the Facility to prevent and filter metals, TSS, and other pollutants from entering the Drainage System at the Facility.

“Stormwater” shall have the meaning set forth in 40 C.F.R. § 122.26(b)(13).

“Stormwater Retention Project Abandonment” shall mean, solely for purposes of the stipulated penalty in Paragraph 82.b associated with the Stormwater Retention Project, that prior to satisfactory completion of the project: (1) Pepco notifies EPA that it will no longer pursue the Stormwater Retention Project, because it is technically infeasible or for any other reason; or (2) EPA determines that Pepco is not diligently pursuing the Stormwater Retention Project; or (3) more than nine months have elapsed after the deadline in Section VIII, Paragraph 54 for completion of the Stormwater Retention Project.

“SWPPP” or “SWP3” shall mean the Stormwater Pollution Prevention Plan required by Section II.C of Pepco’s NPDES Permit and Section VI.D of this Consent Decree, to serve as a complete and comprehensive compendium of all material stormwater related activities, procedures, and records at the Facility.

“TMDL” or “Total Maximum Daily Load” shall mean the total maximum daily loads of various pollutants and wasteload allocations for the Anacostia and Chesapeake Bay, developed pursuant to CWA Section 303(d)(1)(C), 33 U.S.C. § 1313(d)(1)(C);

“Treatment System” shall mean the control technology to be selected and installed permanently pursuant to Section VI.B to filter and remove metals and suspended solids from the stormwater in the Drainage System prior to discharge to the Anacostia River. Such technology may be applied at multiple locations within the Drainage System.

“United States” shall mean the United States of America, acting on behalf of EPA;

“Work” shall mean Pepco’s obligations set forth in Section VI (Compliance Requirements);

V. CIVIL PENALTY

9. Within 30 Days after the Effective Date, Pepco shall pay the sum of \$1,600,000.00 (One Million Six Hundred Thousand Dollars) as a civil penalty, together with interest accruing from the date on which the Consent Decree is lodged with the Court, at the rate specified in 28 U.S.C. § 1961 as of the date of lodging.

10. Pepco shall pay the civil penalty due via FedWire Electronic Funds Transfer (“EFT”) to the U.S. Department of Justice account, in accordance with instructions provided to Pepco by the Financial Litigation Unit (“FLU”) of the United States Attorney’s Office for the District of Columbia after the Effective Date. The payment instructions provided by the FLU will include a Consolidated Debt Collection System (“CDCS”) number, which Pepco shall use to identify all payments required to be made in accordance with this Consent Decree. The FLU will provide the payment instructions to:

Jeffrey Snyder
Assistant Treasurer
Pepco Holdings, Inc.
500 N. Wakefield Drive
Newark, DE 19702
Jeff.snyder@pepcoholdings.com

on behalf of Pepco. Pepco may change the individual to receive payment instructions on its behalf by providing written notice of such change to the United States and EPA in accordance with Section XVII (Notices).

At the time of payment, Pepco shall send notice that payment has been made: (i) to EPA via email at cinwd_acctsreceivable@epa.gov or via regular mail at EPA Cincinnati Finance Office, 26 W. Martin Luther King Drive, Cincinnati, Ohio 45268; (ii) to the United States via email or regular mail in accordance with Section XVII and (iii) to EPA in accordance with Section XVII. Such notice shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in *United States et al. v. Potomac Electric Power Company*, and shall reference the civil action number, CDCS Number and DOJ case number 90-5-1-1-11336.

11. Pepco shall not deduct any penalties paid under this Decree pursuant to this Section or Section XI (Stipulated Penalties) in calculating its federal income tax.

VI. COMPLIANCE REQUIREMENTS

12. Overview. Pepco shall continue to implement Best Management Practices that it has adopted to reduce pollutants in stormwater discharged into the Drainage System; adopt new BMPs and other measures as necessary to attain compliance with the NPDES Permit limits and requirements applicable to its stormwater discharges; and install and operate stormwater treatment system(s) as set forth in this Section.

A. Stormwater System Best Management Practices.

13. Drainage System Maintenance and Integrity: Pepco certifies that it has developed a map and characterization of its Drainage System at the Facility and has identified the areas that contribute to or drain into each manhole and inlet. Pepco shall update its Drainage System map as changes are made to that system, and shall maintain an up-to-date map as part of the SWPPP.

14. Pepco shall maintain its Drainage System in accordance with good engineering practices. Pepco shall take reasonable actions to minimize sediment build-up in the laterals and trunk lines so as to eliminate that potential source of metals contamination of the stormwater and to sustain flow through the system and also shall maintain the structural integrity of the system.

15. Pepco certifies that in 2015 it performed a closed circuit television (CCTV) inspection of the main trunk line of the Drainage System and subsequently cleaned out the trunk and lateral lines and made necessary repairs to the underground pipes.

16. Pepco shall perform, using a qualified contractor, an annual internal visual inspection of the Drainage System, including the main trunk line and laterals, using CCTV or other appropriate technology. Pepco shall remove sediments and other pollutants from the Drainage System to ensure that the sediments are not discharged through Outfall 013, and shall repair and replace pipes as necessary, consistent with EPA Guidance Document EPA/625/6-91/030 – Sewer System Infrastructure Analysis and Rehabilitation.

17. Pepco shall prepare a written summary of the results of the annual Facility Drainage System inspection and sediment removal activities, and a schedule for all additional structural repairs that ensures their completion as soon as practicable after identification. For any corrective actions requiring more than six months from the date of the inspection to complete, Pepco shall provide EPA with a notice describing the actions and explaining the reasons that completion will require more than six months, and such actions shall be subject to EPA review and approval. The summary shall be included as an appendix to the next quarterly report that is due at least 30 days following the annual inspection as set forth in Section X (Reporting Requirements) below.

18. Storm Drain Inlet Controls: Pepco certifies that it has worked with vendors and consultants to install Storm Drain Inlet Controls on all Storm Drain Inlets leading to Outfall 013 and Outfall 101 at the Facility.

19. Pepco shall continue to use Storm Drain Inlet Controls on all Storm Drain Inlets. Pepco shall ensure that each inlet filter is properly sized and fitted to the inlet and shall operate and maintain the filters or booms as per the manufacturer's or vendor's specifications.

20. Pepco shall maintain adequate staff and/or funding for qualified stormwater contractor support and shall have dedicated staff or contractors on-site during business hours. Pepco shall maintain a back-up supply of appropriately graded, heavy-duty metal sorbent inlet filters, including custom-fitted inlet filters, and booms, to ensure that replacements are made within 48 hours of discovery of the need for replacements.

21. Storm Drain Inlet Inspection Program: Pepco shall inspect each Storm Drain Inlet at the facility at least once per week to ensure that the Storm Drain Inlet Controls are properly in place and functioning as intended, and shall perform a drive-by inspection of the Storm Drain Inlets following precipitation events exceeding .5 inches. The regular weekly inspections shall be conducted by a team consisting of one or more dedicated contractors and one Pepco representative from the Underground Maintenance and Construction Department or other appropriate Department. The precipitation-based inspections may be conducted by a single person, either a dedicated contractor or an appropriate Pepco representative. Pepco shall ensure it maintains adequate staff or a vendor to conduct the routine and precipitation-based inspections.

22. During each inspection, any accumulated sediment shall be removed from the Storm Drain Inlet Controls around the inlet and any Controls that are damaged or no longer functional shall be replaced within 48 hours of discovery of the need for replacement.

23. The Storm Drain Inlet Controls also shall be replaced at the end of their service lives as recommended by vendor specifications. If inspections show the Storm Drain Inlet Control in a particular location is underperforming, Pepco shall replace it with a heavier duty or more effective control. Pepco shall then evaluate the performance of the replacement Storm Drain Inlet Control to verify that it is achieving required performance objectives. If the replacement Storm Drain Inlet Control does not achieve performance objectives, Pepco shall evaluate and install other Storm Drain Inlet Controls as necessary to achieve those objectives. The replacement of underperforming Storm Drain inlet Controls shall be reported in the Quarterly Report, together with the actions taken by Pepco to correct the underperformance.

24. All Storm Drain Inlet inspections shall be documented in a log, database or spreadsheet which shall include the date of inspection, inspector name or designation, specific controls required for each inlet, a narrative description of the condition of each inlet and any maintenance or replacement performed, along with the date of such maintenance or replacement, during the inspection. The inspection logs shall be reviewed and signed by the responsible manager or his designee on a monthly basis.

25. Pepco shall submit copies of the logs for each quarter with its quarterly reports pursuant to Section X (Reporting Requirements).

26. Metals Management: Pepco shall take the following actions to eliminate or minimize stored and staged metals at the facility that may be a source of metals in stormwater that flows to the Facility Drainage System.

27. Pepco certifies that it has made arrangements with its vendors to remove offline or removed-from-service distribution system transformers from the Facility on a weekly basis in order to minimize the number of such transformers staged at the Facility at any given time and the length of time that any individual transformer is exposed to stormwater before removal from the site. Pepco shall continue such practice until such time as offline or removed-from-service transformers are staged in the new covered structure to be built pursuant to Paragraph 53.

28. Pepco shall request that its vendors (i) use newer disposal bins and replace rusty bins; (ii) place scrap metal bins indoors wherever possible; and (iii) empty scrap metal bins as soon as possible after they are filled. Pepco has implemented and shall continue such practices.

29. All wiring splicing activities conducted as part of Pepco's cable installation and repair training shall take place indoors. Pepco certifies that it does not conduct other outdoor training activities that potentially contribute to metals contamination of stormwater but in the event it develops such programs, it shall provide enhanced housekeeping and cleanup for them or conduct such activities indoors to the extent that adequate indoor space is available.

30. During each monthly inspection pursuant to Paragraph 48 below, Pepco shall identify any unneeded, used, or scrap equipment or materials which are exposed to storm water that flows to the Facility Drainage System and shall arrange to have such equipment or materials removed from the facility or relocated under cover.

31. Spill Control: Pepco shall set forth procedures in its SWPPP for the response to and clean-up of spills containing oil, grease, metals, PCBs, or hazardous substances. Pepco shall follow such SWPPP procedures in responding to and cleaning up spills at the Facility. A list of any such spills, along with the measures taken in response, shall be maintained as part of the SWPPP.

32. Discharges of PCBs: Discharges of PCBs through any outfall are prohibited. Pepco shall advise EPA by phone within 24 hours and in writing within five days of any spills or releases of PCBs outside secondary containment areas at the facility.

B. Treatment System.

33. Pepco shall install a permanent system for the treatment of storm water to be discharged from the Facility's Drainage System (the "Treatment System") to achieve the objectives of this Consent Decree as set forth in Section III (Objectives).

34. The Treatment System shall operate in addition to the Best Management Practices described in Section VI.A above.

35. The Treatment System shall provide in-pipe treatment to reduce concentrations of dissolved and particulate metals in appropriate areas sufficient to attain compliance with the Effluent Limits in Pepco's NPDES Permit. Pepco thus far has identified the following "hot spots" where it shall provide treatment, subject to the further design work pursuant to Paragraph 37:

- a. Hotspot 1A: Roof Drains at building 35
- b. Hotspot 1B: Roof Drains at buildings #54 and 56
- c. Hotspot 1C: Transformer Shop (Inlets 42 and 43)
- d. Hotspot 2: Former Power Plant Area (Inlet 17)
- e. Hotspot 3: Former Fuel Tank Area (Inlet 08)
- f. Hotspot 4: Salvage Yard (Inlets 65 and 66).

In the event Pepco, upon review of its data collection and pilot projects in Paragraph 37 below, identifies additional “hot spots” where Treatment Systems may be considered, adopts changes to planned treatment technologies, or eliminates any of the locations a. through f. above, it shall provide the underlying data and justification for these changes in the Final Conceptual Design Report and/or Final Treatment System Design Report pursuant to Paragraphs 37.c and 37.d below.

36. The Treatment System shall utilize industry accepted technology, properly sized and customized for the Pepco installation. The Treatment System shall employ filtration, chemically-assisted separation, mechanically-assisted separation or a combination of these technologies as necessary to fully achieve the Objectives of this Consent Decree.

37. Design and installation of the Treatment System shall be sequenced and implemented pursuant to the following schedule:

- a. Additional data collection: Pepco shall collect data concerning flow rates in areas of the Drainage System where treatment will be provided, and perform any other sampling necessary for design of the Treatment System. It shall use such data to calibrate its stormwater model, and shall complete the data collection as soon as practicable but no later than September 30, 2016.
- b. Bench testing and pilot projects: Pepco shall perform bench scale treatability testing and pilot projects on different technologies and media

to provide data concerning their performance. It shall use the results of the bench scale testing and pilot projects, along with other information, to select the technologies to be used in the Treatment System. Pepco shall complete its bench testing and pilot projects as soon as practicable but no later than September 30, 2016.

- c. Final Conceptual Design Report: On or before November 15, 2016, Pepco shall submit to EPA for its review and comment a revised conceptual design report, which shall (i) summarize results of the foregoing data collection, bench scale testing and pilot projects and (ii) describe the specific Treatment System components selected (including treatment media), and the likely location of such components, and (iii) explain the underlying justification and rationale for the selection of Treatment System components and locations.
- d. Final Design of the Treatment System: As soon as practicable, but no later than February 15, 2017, Pepco shall submit for EPA review and approval a Final Treatment System Design Report (Final TSDR). The Final TSDR shall include: (1) the location, type, and sizing of the specific Treatment System components necessary to meet the objectives of this Consent Decree; (2) the expected minimum contaminant removal percentage for each Treatment System component (“Performance Standards”); (3) the criteria for performance acceptance testing for each

individual Treatment System component; and (4) a preliminary plan for Operation and Maintenance of the Treatment System.

- e. Applications for permits: Pepco shall arrange for a pre-application scoping meeting with the District of Columbia permitting agency(ies) on or before January 15, 2017. Pepco shall apply for any permits required by District of Columbia statutes or regulations no later than 90 days after it submits the Final TSDR to EPA for its review and approval or five days after EPA approves the Final TSDR, whichever is later. Any contention by Pepco that it failed to meet a deadline due to a delay in obtaining approval of a permit shall be evaluated under the Force Majeure provisions in Section XII of this decree.

- f. Installation and Construction: Pepco shall commence construction and installation of the Treatment System as soon as practicable but no later than June 15, 2017. After EPA approves the Final TSDR, any proposed substantive revision to the Final TSDR regarding the location, type, or sizing of a Treatment System component, schedule for installation, or the criteria for performance acceptance testing shall be submitted to EPA for review and approval not less than 90 days prior to installation of that revised Treatment System component.

g. Treatment System Placed into Operation: Pepco shall place the Treatment System into Operation on or before December 31, 2017. It shall send a Notice to EPA pursuant to Section XVII (Notices) of this Consent Decree certifying pursuant to Section X (Reporting), Paragraph 71 the date that the Treatment System was Placed into Operation.

38. Construction Oversight. Pepco shall ensure that the treatment system has been built to the design in the Final TSDR and is certified by a licensed Professional Engineer having the necessary training and experience to properly evaluate and certify conformance to the Final TSDR. Pepco shall maintain documentation at the facility demonstrating that the treatment system was constructed as specified in the design and make such documentation available to EPA upon request.

39. Acceptance Testing. Pepco shall perform field testing of each treatment system upon completion of construction to demonstrate that the system achieves the performance objectives called for in the Final TSDR. Acceptance testing shall also serve as the baseline for tracking any changes in the performance of the treatment system over time.

40. Operation and Maintenance (O & M). Pepco shall properly operate and maintain the Treatment System in accordance with the Operation and Maintenance Plan. All O&M activities shall be documented in a log or spreadsheet that identifies the date of activity, the individual and department, vendor, or contractor performing O&M activities, and the specific O&M activities completed. The information shall be maintained in the SWPPP. Pepco may rely

on the authorized representative of the manufacturer or other qualified third party to operate and maintain the Treatment System but Pepco remains solely responsible under this Consent Decree for the Treatment System's proper operation and maintenance.

41. Ongoing Performance Testing. At least once every 180 days from the date the Treatment System is first placed into operation in accordance with Paragraph 37.g. of this Consent Decree, Pepco shall conduct performance (i.e., pollutant removal effectiveness) testing of all components of the Treatment System to determine (a) changes in performance rates over time, (b) changes required in the O&M procedures, (c) if remedial measures are required to ensure that any treatment component continues to achieve the applicable Performance Standard, and if necessary (d) the need for feedback for updating the Performance Standards for any future treatment system designs. This testing program should be documented in the O&M log for each treatment system. The results of performance testing shall be documented in a report that identifies the date of testing, process deployed, and the need for additional testing activities or other remedial activities, including a date for their completion. Where testing reveals that the performance of a Treatment System component is no longer meeting the applicable Performance Standard, Pepco shall (a) notify EPA of that failure within five Days and (b) develop and submit to EPA within 30 days thereafter a corrective action plan to return the Treatment System component to its Performance Standard.

42. In the event EPA issues an NPDES Permit for the Facility that contains more stringent limits for metals at Outfall 013, or new limits at Outfall 101, Pepco shall analyze the data concerning the performance of the BMPs and Treatment System and their removal rates

against the more stringent standards or new standards. As soon as practicable but no later than 120 days from issuance of the final NPDES Permit effluent limits, Pepco shall submit to EPA for review and approval a plan to add additional treatment and/or BMPs to meet the more stringent standards, or for a new Treatment System or BMPs for Outfall 101, along with a schedule for their design and implementation, or justify why no additional treatment is needed. Upon approval by EPA, any new components to the Treatment System or additional BMPs shall be implemented. Nothing in this Paragraph shall act as an extension of the effective date of the NPDES Permit effluent limits or Pepco's obligation to comply with such limits.

43. After the Treatment System is Placed into Operation, in the event the Treatment System and BMPs provided for in this Section fail to attain compliance with the Effluent Limits at Outfall 013 in Pepco's NPDES Permit, or with new limits at Outfall 101 in a future NPDES Permit, as evidenced by the exceedances of effluent limits in three consecutive quarters of sampling, Pepco shall submit to EPA for its review and approval an analysis of the reasons for the effluent limit exceedances, a plan for additional Treatment System components to attain compliance, and a schedule for design and implementation of such additional treatment. This Paragraph does not excuse Pepco from liability for any violation of the Effluent Limits nor from any stipulated penalties.

C. Corporate Practices and Recordkeeping.

44. Training: Pepco shall require employee training at least annually to ensure that each employee is aware of stormwater requirements as necessary for the tasks each employee performs and the areas of the Facility in which he or she works. Most employees shall receive general stormwater awareness training. Those employees directly responsible for implementation of the SWPPP shall receive more extensive training commensurate with their responsibilities.

45. Pepco shall update as necessary its training program for employees and contractors at the Facility who are directly responsible for storm water management to reflect (a) new site conditions after shut down and demolition of the former power plant, (b) responsibilities and requirements for implementation, inspection, and maintenance of storm drain controls and BMPs at the facility, (c) the installation and operation/maintenance of the Stormwater Treatment Systems, and (d) the SWPPP in effect at the time of the training and in particular new provisions in that SWPPP. Pepco shall ensure such training will be provided to designated employees and contractors at least once per year, and shall maintain records to document that such training has occurred.

46. The updated training program(s) shall be submitted to EPA for review and comment in the next quarterly report falling at least 30 days from any update. Pepco shall include as part of the quarterly reports under Section X (Reporting Requirements) a list of

persons who received training related to stormwater management during the prior quarter, the dates of the training and the topics covered.

47. Management: Pepco shall create an interdisciplinary pollution prevention team comprised of at least one liaison from each company Operating Group at the Facility and one representative from Pepco's corporate environmental department. The team members shall be identified in the SWPPP. Pepco shall designate one member of the team to act as the "Coordinator" for stormwater compliance at the Facility and implementation of the requirements of this Consent Decree that pertain to stormwater management practices at the Facility.

48. On a monthly basis, the Coordinator or his or her designees shall perform a site-wide stormwater inspection of the facility, in coordination with the Operating Group liaison for each area, to assess compliance with the Facility's SWPPP and the requirements of this Consent Decree that pertain to stormwater management at the Facility. The inspection team shall prepare a report of the inspections, summarizing findings, including instances of non-compliance and any corrective actions taken. Copies of the monthly inspection reports shall be submitted to EPA as part of the quarterly reports required under Section X (Reporting Requirements) of this Consent Decree

49. Recordkeeping: Pepco shall maintain an orderly and accessible system of records for the Best Management Practices and Treatment System set forth in Section VI. A and VI. B above to facilitate compilation of Facility data and an understanding of the Stormwater Drainage

System. It may continue to use its work order system or other programs to schedule, track and record information as follows:

- a. Storm Drain Inlet Controls--for each inlet: the type of control in place; the history of inspection, maintenance and replacement activities; the identity of the inspecting team; and dates of inspections, as per Paragraphs 24 and 25 above.
- b. Drainage System: the location of trunk lines, lateral lines, and inlets; the history of inspection of each component, including the results of annual inspections; and the maintenance, structural repair and/or replacement of each component, including sediment removal activities. For any structural repair that cannot be performed immediately, the work order system shall include a schedule for the repair that ensures completion as soon as practicable as set forth in Paragraph 17 above.
- c. Sampling associated with manholes, inlets and pipes: For each sample collected upstream of Outfall 013, the parameter, results, location, date, and total precipitation for that day and the duration of any wet weather event.
- d. Treatment System: the date of installation, the date and results of any acceptance testing; the date, nature, and results of subsequent performance

testing; date and description of any operational issues; and date and nature of maintenance activities, as per Section VI.B. above.

D. Stormwater Pollution Prevention Plan.

50. No more than thirty days from entry of the consent decree, Pepco shall submit an updated SWPPP as required by its NPDES Permit and consistent with EPA publication, "Developing Your Stormwater Pollution Prevention Plan: A Guide for Industrial Operators," Feb. 2009, or other applicable EPA guidance, that incorporates the requirements of this Consent Decree, including but not limited to:

- a. Training requirements and implementation, as provided in Section VI.C, Paragraphs 44 and 45;
- b. Inspection protocols and implementation, as provided in Section VI.A, Paragraphs 16, 21, 24, 31 and 41;
- c. Logs of inspections of Storm Drain Inlets and corrective actions taken, as provided in Section VI.A, Paragraphs 24 and 25;
- d. Metals Management Program, as provided in Section VI.A, Paragraphs 26 through 30;
- e. Treatment System data, as provided in Section VI.C., Paragraph 49.d above.

51. The comprehensive SWPPP shall be updated and amended promptly any time there is a significant change in BMPs or treatment at the Facility, or as otherwise required. The updated portions of the SWPPP shall be submitted to EPA in the next quarterly report following no less than 30 days from the update. If there are no such changes, Pepco shall review and revise the SWPPP as necessary at least annually and in accordance with permit requirements to ensure that it remains complete and up-to-date.

E. Sampling.

52. Pepco shall perform the sampling required by the NPDES Permit.

VII. ADDITIONAL INJUNCTIVE RELIEF

53. Covered Storage Shed. Not later than December 31, 2016, Pepco shall construct a covered structure at the facility for the storage of offline or removed-from-service transformers and other electric distribution system equipment while being stored for processing, re-use, recycling, or disposal.

VIII. MITIGATION PROJECT

54. Pepco shall design and construct a project consisting of a bioinfiltration basin, wetland, plantings, or similar green stormwater controls designed to capture, retain and filter or treat stormwater that currently drains to Outfall 101, as set forth more fully in Appendix A (Stormwater Retention Project). The Stormwater Retention Project shall be completed on or before June 30, 2018.

55. On or before June 30, 2017, Pepco shall submit to EPA for review and approval pursuant to Section IX (Review and Approval of Submissions to EPA) a Stormwater Retention Project Plan, which shall include:

- a. The design of the Stormwater Retention Project;
- b. A schedule for its construction; and
- c. A plan for its operation and maintenance, which shall include regular inspections, replacement of vegetation as needed, and other necessary measures to ensure its ability to retain and filter stormwater as required in this Section.

56. The Stormwater Retention Project shall satisfy the following criteria:

- a. The Stormwater Retention Project shall provide retention sufficient to meet or exceed the District of Columbia stormwater retention standards, *i.e.*, the volume of rainfall from a 1.2 inch storm, for the area drained by Outfall 101.
- b. Pepco shall ensure that the soil and subsurface soils are clean under District of Columbia stormwater standards and any other applicable regulations so that an infiltration stormwater control is appropriate.
- c. Pepco shall treat any stormwater not retained by the Stormwater Retention Project, due to extreme storm events or otherwise, by (1) directing the

overflow or excess volume of water to the Drainage System for Outfall 013; or (2) through other appropriate measures sufficient to treat any discharge so that it will meet District of Columbia water quality standards and Total Maximum Daily Loads for the Anacostia River.

- d. Pepco shall properly operate and maintain the Stormwater Retention Project.
- e. Pepco shall obtain and comply with all necessary permits from the District of Columbia or EPA.

57. Pepco is responsible for the satisfactory completion of the Stormwater Retention Project in accordance with the requirements of this Decree. "Satisfactory completion" means the Project has been Placed into Operation, is capable of meeting or exceeding the 1.2 inch standard required by the District of Columbia stormwater regulations, and any volume of water in excess of the Stormwater Retention Project's designed retention is addressed appropriately. Pepco may use contractors or consultants in planning and implementing the Stormwater Retention Project.

58. Pepco shall report on the progress of the Stormwater Retention Project in its quarterly reports pursuant to Section X until it is Placed into Operation. Pepco shall report on its Operation and Maintenance of the Stormwater Retention Project in its quarterly reports.

59. Pepco shall finance the Stormwater Retention Project itself and will not receive reimbursement or funding from any other party. It shall absorb any cost overruns associated with the Stormwater Retention Project.

60. Pepco shall not apply for, request, or seek to benefit in any way from a Stormwater Retention Credit provided under the District of Columbia Stormwater Regulations, a waiver or reduction of DC stormwater fees, or similar incentive programs for implementation of Green Infrastructure.

61. Any public statement, oral or written, in print, film, or other media, made by Pepco making reference to the Stormwater Retention Project under this Decree shall include the following language: "This project was undertaken in connection with the settlement of an enforcement action, *United States v. Potomac Electric Power Company et al.*, Civil Action No. 1:15-cv-01845 (D.D.C.), taken on behalf of the U.S. Environmental Protection Agency under the Clean Water Act."

62. For federal income tax purposes, Pepco agrees that it will neither capitalize into inventory or basis nor deduct any costs or expenditures incurred in performing the Stormwater Retention Project.

IX. REVIEW AND APPROVAL OF SUBMISSIONS TO EPA

63. After review of any plan, report, or other item that is required to be submitted pursuant to this Consent Decree, EPA shall in writing: (a) approve the submission; (b) approve

the submission upon specified conditions; (c) approve part of the submission and disapprove the remainder; or (d) disapprove the submission.

64. If the submission is approved pursuant to Paragraph 63, Pepco shall take all actions required by the plan, report, or other document, in accordance with the schedules and requirements of the plan, report, or other document, as approved. If the submission is conditionally approved or approved only in part pursuant to Paragraph 63(b) or (c), Pepco shall, upon written direction from EPA, take all actions required by the approved plan, report, or other item that EPA determines are technically severable from any disapproved portions, subject to Pepco's right to dispute only the specified conditions or the disapproved portions, under Section XIII (Dispute Resolution).

65. If the submission is disapproved in whole or in part pursuant to Paragraph 63(c) or (d), Pepco shall, within 45 days or such other time as the Parties agree to in writing, correct all deficiencies and resubmit the plan, report, or other item, or disapproved portion thereof, for approval, in accordance with the preceding Paragraphs. If the resubmission is approved in whole or in part, Pepco shall proceed in accordance with the preceding Paragraph.

66. If a resubmitted plan, report, or other item, or portion thereof, is disapproved in whole or in part, EPA may again require Pepco to correct any deficiencies, in accordance with the preceding Paragraphs, subject to Pepco's right to invoke Dispute Resolution and the right of EPA to seek stipulated penalties as provided in the preceding Paragraphs.

67. Any stipulated penalties applicable to the original submission, as provided in Section XI, shall accrue during the 45 day period or other specified period, but shall not be payable unless the resubmission is untimely or is disapproved in whole or in part; provided that, if the original submission was so deficient as to constitute a material breach of Pepco's obligations under this Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.

X. REPORTING REQUIREMENTS

68. Pepco shall submit the following reports:

- a. Quarterly Reports: On or before April 30, July 31, October 31, and January 31 of each year, commencing on the first quarterly date that is at least 30 days after the lodging of this Consent Decree, until termination of this Decree pursuant to Section XXI, Pepco shall submit a quarterly report for the preceding three months, in the form of one hard copy and a computer disc to the NPDES Program Branch, and computer discs to EPA ORC and DOJ, that shall include with respect to the reporting period:
 - (1) Copies of all discharge monitoring reports submitted to EPA for the quarter pursuant to Section V.5 of the NPDES Permit, copies of any five-day letter submitted to EPA pursuant to Section VI.6 of the NPDES Permit;

- (2) Results of the annual inspection of the Drainage System required in Section VI.A. Paragraph 16 and any subsequent actions taken, including clean-out or repairs;
- (3) Logs of the inspections of Storm Drain Inlets including corrective actions taken;
- (4) Results of monthly inspections required by Paragraph 48, including actions taken in connection with the metals management program in Section VI.A, Paragraphs 26 to 30, including any change in agreements with vendors or scrap dealers; completion of the covered structure required in Paragraph 53; a summary of equipment or materials removed from exposure to stormwater and identification of any remaining equipment or materials to be removed from exposure to storm water pursuant to Paragraph 30; activities identified as potentially contributing to metals contamination of stormwater and steps taken to eliminate them; and actions taken as a result of monthly Facility-wide inspections;
- (5) Progress in and status of designing and constructing the Treatment System(s), including compliance with milestones and deadlines during the reporting period; an explanation or justification for failure to meet any deadline in the reporting period; any delays

encountered that might jeopardize meeting one or more future deadlines and an explanation of the reasons for such delay and attempts to mitigate it; and results attained in acceptance and performance testing;

- (6) Training: list of persons who received training related to stormwater management during the prior quarter, the dates of the training and the topics covered.;
- (7) SWPPP: status of any updates and copies of updated portions of the SWPP;
- (8) Any corporate reorganizations changing the management responsibilities in Paragraph 47;
- (9) Additional Work: progress in completion of the covered storage structure in Section VII.
- (10) Stormwater Retention Project: a discussion of Pepco's progress in satisfying its obligations in connection with the Stormwater Retention Project under Section VIII, including, at a minimum, a narrative description of activities undertaken; status of any construction or compliance measures, including any milestones in

the Stormwater Retention Project Plan; and operation and maintenance activities; and

(11) a description of any non-compliance with the requirements of this Consent Decree and Effluent Limits and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation.

b. If Pepco violates, or has reason to believe that it may violate, any requirement of this Consent Decree or the Effluent Limits that is not subject to reporting requirements in the next Paragraph (i.e., imminent threats to public health or the environment), Pepco shall notify the United States of such violation and its likely duration, in writing, within ten working Days of the Day Pepco first becomes aware of the violation, with an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, Pepco shall so state in the report. Pepco shall investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause of the violation, within 30 Days of the Day Pepco becomes aware of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves Pepco of its obligation to provide the notice required by Section XII (Force Majeure).

69. Whenever any violation of this Consent Decree or of any applicable permits or any other event affecting Pepco's performance under this Decree, or the performance of its Facility, may pose an imminent threat to the public health or welfare or the environment, Pepco shall notify EPA orally or by electronic or facsimile transmission as soon as possible, but no later than 24 hours after Pepco first knew of the violation or event. Pepco shall provide a written notice and explanation within 5 days after Pepco first knew of the violation or event.

70. All reports shall be submitted to the persons designated in Section XVII (Notices). Pepco also shall post on its website, in a location available to the general public, the quarterly reports required under Section X and NPDES Permit sampling under Section VI.E, Paragraph 52. Pepco also shall post to its website the Final Treatment System Design Report required under Paragraph 37.d and the Stormwater Retention Project Plan required under Paragraph 55 promptly following their submission to EPA.

71. Each report submitted by Pepco under this Section shall be signed by an official of the submitting party and include the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

72. In every instance in Section VI where Pepco “certifies” a particular fact, the Pepco official executing this consent decree certifies as follows:

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

73. This certification requirement does not apply to emergency or similar notifications if compliance would be impractical.

74. The reporting requirements of this Consent Decree do not relieve Pepco of any reporting obligations required by the CWA or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.

75. Any information provided pursuant to this Consent Decree may be used by the United States in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

XI. STIPULATED PENALTIES

76. Pepco shall be liable for stipulated penalties to the United States for violations of this Consent Decree as specified below, unless excused under Section XII (Force Majeure). A violation includes failing to perform any obligation required by the terms of this Decree, including any work plan or schedule approved under this Decree, according to all applicable

requirements of this Decree and within the specified time schedules established by or approved under this Decree.

77. Late Payment of Civil Penalty. If Pepco fails to pay the civil penalty required to be paid under Section V (Civil Penalty) when due, the following stipulated penalties shall accrue:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$ 2,000.....	1 st through 14 th day
\$ 3,000.....	15th through 30th day
\$ 4,000.....	31st day and beyond

78. Effluent Limits.

a. The following stipulated penalties shall accrue per quarter for each violation of the Effluent Limits occurring after December 31, 2017, or any later date by which the Treatment System must be placed into operation as a result of an extension granted by EPA pursuant to Paragraph 95 due to an event of Force Majeure:

Each violation of a Daily Maximum Effluent Limit \$15, 000

Each violation of a Monthly Average Effluent Limit\$10, 000

b. Pepco shall pay a stipulated penalty of \$8,500 per quarter for each exceedance of the numeric value for any parameter listed in the Table in

Appendix B occurring on or before December 31, 2017, or any later date by which the Treatment System must be placed into operation as a result of an extension granted by EPA pursuant to Paragraph 95 due to an event of Force Majeure.

79. Compliance -- BMPs.

- a. The following stipulated penalties shall accrue per violation per Day for each violation of the requirements identified in subparagraph 79.b:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$ 1,000.....	1 st through 14 th day
\$ 2,500.....	15 th through 30 th day
\$ 4,000.....	31 st day and beyond

- b. Any failure to satisfy any of the requirements of Section VI.A (BMPs), including any provision in the following Paragraphs: ¶¶ 13-16 (Drainage System); ¶¶18-20 (Storm Drain Inlet Controls; ¶¶ 21-25 (Storm Drain Inlet Inspection Program); ¶¶ 26-30 (Metals Management); ¶¶ 31 (Spill Control); and ¶ 32 (Discharges of PCBs).

80. Compliance– Treatment System.

- a. After December 31, 2017, the following stipulated penalties shall accrue per violation per Day for each violation of the requirements identified in Section VI.B (Treatment System):

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$ 5,000.....	1 st through 14 th day
\$ 8,000.....	15 th through 30 th day
\$ 10,000.....	31 st day and beyond

- b. The following stipulated penalties shall accrue per violation per Day for each violation prior to December 31, 2017, of the requirements identified in Section VI.B (Treatment System); provided, however, that stipulated penalties for any interim deadline shall be deferred and, if Pepco satisfactorily Places into Operation the Treatment System on or before December 31, 2017, such stipulated penalties shall be waived:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$ 2,000.....	1 st through 14 th day
\$ 3,000.....	15 th through 30 th day
\$ 6,000.....	31 st day and beyond

81. General Requirements.

- a. The following stipulated penalties shall accrue per violation per Day for each violation of the requirements identified in subparagraph b. below:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$ 2,000.....	1 st through 14 th day
\$ 3,000.....	15 th through 30 th day
\$ 4,000.....	31 st day and beyond

- b. Each failure to allow access as per Section XIV; violation of the requirements of Section X (Reporting); and violation of or any non-compliance with any other requirement of this Consent Decree not listed in the other Paragraphs in this Section.

82. Stormwater Retention Project.

- a. If Pepco fails to comply with the milestones in the Stormwater Retention Project Plan for implementing the Stormwater Retention Project, Pepco shall pay stipulated penalties for each failure to meet an applicable deadline, as follows:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
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\$ 2,000.....	1 st through 20 th day
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\$ 5,000.....	21 st day and beyond
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b. In the event of a Stormwater Retention Project Abandonment, as defined in Section IV, Paragraph 8, whether due to a *force majeure* event or not, Pepco shall pay a stipulated penalty of \$500,000. The penalty under this subparagraph shall accrue as of the date the Stormwater Retention Project Abandonment occurs. If Pepco fails to meet the deadline in Paragraph 54, but has diligently pursued completion of the Project, confirms its intention to complete the Project, and thereafter diligently pursues the Project to satisfactory completion within nine months of the deadline in Paragraph 54, Pepco shall be subject to stipulated penalties for late completion pursuant to subparagraph a and not under this subparagraph b. The amount of the stipulated penalty for a Stormwater Retention Project Abandonment under this subparagraph b shall not be offset by costs incurred by Pepco in connection with the project.

83. Except as provided in paragraph 87, stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.

84. Pepco shall pay any stipulated penalty within 30 Days of receiving the United States' written demand.

85. The United States may in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due it under this Consent Decree.

86. Stipulated penalties and interest shall continue to accrue as provided in Paragraph 105, during any Dispute Resolution, but need not be paid until the following:

- a. If the dispute is resolved by agreement or by a decision of EPA that is not appealed to the Court, Pepco shall pay accrued penalties determined to be owing, together with interest, to the United States within 30 Days of the effective date of the agreement or the receipt of EPA's decision or order.
- b. If the dispute is appealed to the Court and the United States prevails in whole or in part, Pepco shall pay all accrued penalties determined by the Court to be owing, together with interest, within 60 Days of receiving the Court's decision or order, except as provided in subparagraph c, below.
- c. If any Party appeals the District Court's decision, Pepco shall pay all accrued penalties determined to be owing, together with interest, within 15 Days of receiving the final appellate court decision.

87. Obligations Prior to the Effective Date. Upon the Effective Date, the stipulated penalty provisions of this Decree pertaining to (1) violations of consent decree deadlines and

requirements for construction of the Treatment System that have occurred prior to the Effective Date of this Decree; and/or (2) any NPDES effluent violations subsequent to the date this Decree is lodged with the Court shall be retroactively enforceable, provided that stipulated penalties that may have accrued prior to the Effective Date may not be collected unless and until this Consent Decree is entered by the Court.

88. Pepco shall pay stipulated penalties owing to the United States in the manner set forth and with the confirmation notices required by Section V (Civil Penalty), Paragraph 10, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.

89. If Pepco fails to pay stipulated penalties according to the terms of this Consent Decree, Pepco shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States from seeking any remedy otherwise provided by law for Pepco's failure to pay any stipulated penalties.

90. The payment of penalties and interest, if any, shall not alter in any way Pepco's obligation to complete the performance of the requirements of this Consent Decree.

91. **Non-Exclusivity of Remedy.** Stipulated penalties are not the United States' exclusive remedy for violations of this Consent Decree. Subject to the provisions of Section XV (Effect of Settlement/Reservation of Rights), the United States expressly reserves the right to seek any other relief it deems appropriate for Pepco's violation of this Decree or applicable law,

including but not limited to an action against Pepco for statutory penalties, additional injunctive relief, mitigation or offset measures, and/or contempt. However, the amount of any statutory penalty assessed for a violation of this Consent Decree shall be reduced by an amount equal to the amount of any stipulated penalty assessed and paid pursuant to this Consent Decree.

XII. FORCE MAJEURE

92. “Force majeure,” for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of Pepco, of any entity controlled by Pepco, or of Pepco’s contractors, that delays or prevents the performance of any obligation under this Consent Decree despite Pepco’s best efforts to fulfill the obligation. The requirement that Pepco exercise “best efforts to fulfill the obligation” includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event (a) as it is occurring and (b) following the potential force majeure, such that the delay and any adverse effects of the delay are minimized. “Force Majeure” does not include Pepco’s financial inability to perform any obligation under this Consent Decree.

93. Permits. Where any compliance obligation under this Section requires Pepco to obtain a federal, state, or local permit or approval, Pepco shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals. Pepco may seek relief under the provisions of Section XII (Force Majeure) for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any

permit or approval required to fulfill such obligation, if Pepco has submitted timely and complete applications and has taken all other actions necessary to obtain all such permits or approvals.

94. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, Pepco shall provide notice orally or by electronic or facsimile transmission to EPA, within 72 hours of when Pepco first knew that the event might cause a delay. Within seven days thereafter, Pepco shall provide in writing to EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Pepco's rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of Pepco, such event may cause or contribute to an endangerment to public health, welfare or the environment. Pepco shall include with any notice all available documentation supporting the claim that the delay was attributable to a force majeure event. Failure to comply with the above requirements shall preclude Pepco from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. Pepco shall be deemed to know of any circumstance of which Pepco, any entity controlled by Pepco, or Pepco's contractors knew or should have known.

95. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those

obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. EPA will notify Pepco in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

96. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Pepco in writing of its decision.

97. If Pepco elects to invoke the dispute resolution procedures set forth in Section XIII (Dispute Resolution), it shall do so no later than 15 days after receipt of EPA's notice. In any such proceeding, Pepco shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Pepco complied with the requirements of Paragraphs 93 and 94. If Pepco carries this burden, the delay at issue shall be deemed not to be a violation by Pepco of the affected obligation of this Consent Decree identified to EPA and the Court.

XIII. DISPUTE RESOLUTION

98. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. Pepco's failure to seek resolution of a dispute

under this Section shall preclude Pepco from raising any such issue as a defense to an action by the United States to enforce any obligation of Pepco arising under this Decree.

99. Informal Dispute Resolution. Any dispute subject to Dispute Resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when Pepco sends the United States a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 30 Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States shall be considered binding unless, within 30 Days after the conclusion of the informal negotiation period, Pepco invokes formal dispute resolution procedures as set forth below.

100. Formal Dispute Resolution. Pepco shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting Pepco's position and any supporting documentation relied upon by Pepco.

101. The United States shall serve its Statement of Position within 45 Days of receipt of Pepco's Statement of Position. The United States' Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States. The United States' Statement of

Position shall be binding on Pepco, unless Pepco files a motion for judicial review of the dispute in accordance with the following Paragraph.

102. Pepco may seek judicial review of the dispute by filing with the Court and serving on the United States, in accordance with Section XVII (Notices), a motion requesting judicial resolution of the dispute. The motion must be filed within 15 Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph. The motion shall contain a written statement of Pepco's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

103. The United States shall respond to Pepco's motion within the time period allowed by the Local Rules of this Court. Pepco may file a reply memorandum, to the extent permitted by the Local Rules.

104. Standard of Review

- a. Disputes Concerning Matters Accorded Record Review. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 100 pertaining to the adequacy or appropriateness of plans, procedures to implement plans, schedules or any other items requiring approval by EPA under this Consent Decree; the adequacy of the performance of work undertaken pursuant to this Consent Decree; and all

other disputes that are accorded review on the administrative record under applicable principles of administrative law, Pepco shall have the burden of demonstrating, based on the administrative record, that the position of the United States is arbitrary and capricious or otherwise not in accordance with law.

- b. Other Disputes. Except as otherwise provided in this Consent Decree, in any other dispute brought under Paragraph 100, Pepco shall bear the burden of demonstrating that its position complies with this Consent Decree and better furthers the objectives of the Consent Decree set forth in Section III.

105. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Pepco under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 86. If Pepco does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XI (Stipulated Penalties).

XIV. INFORMATION COLLECTION AND RETENTION

106. The United States and its representatives, including attorneys, contractors, and consultants, shall have the right of entry into any facility covered by this Consent Decree, at all reasonable times, upon presentation of credentials, to:

- a. monitor the progress of activities required under this Consent Decree;
- b. verify any data or information submitted to the United States in accordance with the terms of this Consent Decree;
- c. obtain samples and, upon request, splits of any samples taken by Pepco or its representatives, contractors, or consultants;
- d. obtain documentary evidence, including photographs and similar data; and
- e. assess Pepco's compliance with this Consent Decree.

107. Upon request, Pepco shall provide to EPA or its authorized representatives splits of any samples taken by Pepco. Upon request, EPA shall provide to Pepco splits of any samples taken by EPA.

108. Until five years after the termination of this Consent Decree, Pepco shall retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors' or agents' possession or control, or that come into its or its

contractors' or agents' possession or control, and that relate in any manner to Pepco's performance of its obligations under this Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States, Pepco shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

109. At the conclusion of the information-retention period provided in the preceding Paragraph, Pepco shall notify the United States at least 90 Days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraph and, upon request by the United States, Pepco shall deliver any such documents, records, or other information to EPA. Pepco may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal law. If Pepco asserts such a privilege, it shall provide the following: (a) the title of the document, record, or information; (b) the date of the document, record, or information; (c) the name and title of each author of the document, record, or information; (d) the name and title of each addressee and recipient; (e) a description of the subject of the document, record, or information; and (f) the privilege asserted by Pepco. However, no documents, records, or other information created or generated pursuant to the requirements of this Consent Decree shall be withheld on grounds of privilege.

110. Pepco may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2. As to any

information that Pepco seeks to protect as CBI, Pepco shall follow the procedures set forth in 40 C.F.R. Part 2.

111. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States pursuant to applicable federal laws, regulations, or permits, nor does it limit or affect any duty or obligation of Pepco to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XV. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

112. This Consent Decree resolves the civil claims of the United States for the violations alleged in the Complaint filed in this action through the date of lodging.

113. The United States reserves all legal and equitable remedies available to enforce the provisions of this Consent Decree. Except as provided in the preceding paragraph, this Consent Decree shall not be construed to limit the rights of the United States to obtain penalties or injunctive relief under the CWA or implementing regulations, or under other federal laws, regulations, or permit conditions. The United States further reserves all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, Pepco's Facility, whether related to the violations addressed in this Consent Decree or otherwise.

114. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, civil penalties, other appropriate relief under any statute relating to the Facility or to Pepco's violations of the Effluent Limits or its NPDES Permit, specifically including but not limited to actions concerning legacy contamination at that Facility and/or in the Anacostia River, Pepco shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 112.

115. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. Pepco is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits; and Pepco's compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States does not, by its consent to the entry of this Consent Decree, warrant or aver in any manner that Pepco's compliance with any aspect of this Consent Decree will result in compliance with provisions of the CWA, 33 U.S.C. § 1251, *et seq.*, or with any other provisions of federal, State, or local laws, regulations, or permits.

116. This Consent Decree does not limit or affect the rights of Pepco or of the United States against any third parties, not party to this Consent Decree, nor does it limit the rights of

third parties, not party to this Consent Decree, against Pepco, except as otherwise provided by law.

117. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

XVI. COSTS

118. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated penalties due but not paid by Pepco.

XVII. NOTICES

119. Unless otherwise specified in this Decree, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

As to the United States by email:

eescdcopy.enrd@usdoj.gov

Re: DJ # 90-5-1-1-11336

As to the United States by first-class mail:

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
Box 7611 Ben Franklin Station
Washington, D.C. 20044-7611
Re: DOJ No. 90-5-1-1-11336

As to EPA:

Chief
NPDES Enforcement Branch (3WP42)
Water Protection Division
U.S. Environmental Protection Agency, Region 3
1650 Arch St.
Philadelphia, PA 19103-2029

As to Pepco:

Wesley L. McNealy
Director, Environmental Services
Pepco Holdings, Inc.
701 Ninth Street, NW
Washington, DC 20068
wlmcnealy@pepco.com

120. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.

121. Notices submitted pursuant to this Section shall be deemed submitted upon mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

XVIII. EFFECTIVE DATE

122. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket; provided, however, that Pepco hereby agrees that it shall be bound to perform duties scheduled to occur prior to the Effective Date. In the event the United States withdraws or withholds consent to this Consent Decree before entry, or the Court declines to enter the Consent Decree, then the preceding requirement to perform duties scheduled to occur before the Effective Date shall terminate.

XIX. RETENTION OF JURISDICTION

123. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections XIII and XX, or effectuating or enforcing compliance with the terms of this Decree.

XX. MODIFICATION

124. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Decree, it shall be effective only upon approval by the Court.

125. Any disputes concerning modification of this Decree shall be resolved pursuant to Section XIII (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 104, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

XXI. TERMINATION

126. After Pepco has completed the requirements of Section VI (Compliance Requirements), has thereafter maintained continuous compliance with all effluent limits in the NPDES Permit (or any renewed or reissued permit) and has otherwise maintained satisfactory compliance with this Consent Decree for a period of three years, has complied with all other requirements of this Consent Decree, including those relating to the Stormwater Retention Project required by Section VIII, and has paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree, Pepco may serve upon the United States a Request for Termination, stating that Pepco has satisfied those requirements, together with all necessary supporting documentation.

127. Following receipt by the United States of Pepco's Request for Termination, the Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether Pepco has satisfactorily complied with the requirements for termination of this Consent Decree. If the United States agrees that the Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Decree.

128. If the United States does not agree that the Decree may be terminated, Pepco may invoke Dispute Resolution under Section XIII. However, Pepco shall not seek Dispute Resolution of any dispute regarding termination until 180 Days after service of its Request for Termination.

XXII. PUBLIC PARTICIPATION

129. This Consent Decree shall be lodged with the Court for a period of not less than 30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. Pepco consents to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified Pepco in writing that it no longer supports entry of the Decree.

XXIII. SIGNATORIES/SERVICE

130. Each undersigned representative of Pepco and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.

131. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Pepco agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

XXIV. INTEGRATION

132. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and supersedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. Other than deliverables that are subsequently submitted and approved pursuant to this Decree, the Parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Consent Decree.

XXV. FINAL JUDGMENT

133. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States and Pepco. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

XXVI. APPENDICES

134. The following Appendices are attached to and part of this Consent Decree:

“Appendix A” is the conceptual description of the Stormwater Retention Project referenced in Section VIII (Mitigation Project), Paragraph 54.

“Appendix B is the Table of Parameters referenced in Section XI (Stipulated Penalties), Paragraph 78.

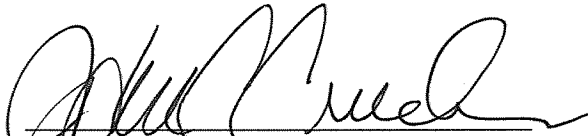
Dated and entered this day of _____, 2017

UNITED STATES DISTRICT JUDGE


THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States et al. v. Potomac Electric Power Company et al.*, Civil Action No. 1:15-cv-01845

FOR THE UNITED STATES OF AMERICA:

Date



JOHN C. CRUDEN
Assistant Attorney General
Environment and Natural Resources Division
U.S. Department of Justice




NANCY A. FLICKINGER
Senior Attorney
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
Washington, DC 20044-7611


THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States v. Potomac Electric Power Company, et al., Civil Action No. 1:15-cv-01845*

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:


12/21/2016
Date


SHAWN M. GARVIN
Regional Administrator
U.S. Environmental Protection Agency Region III
1650 Arch Street
Philadelphia, PA 19103-2029

December 16, 2016
Date


MARY B. COE
Regional Counsel
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

December 16, 2016
Date


ROBERT J. SMOLSKI
Assistant Regional Counsel
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

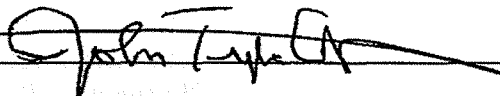
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~~THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States v. Potomac Electric Power Company, Civil Action No. 1:15-cv-01845*~~

FOR POTOMAC ELECTRIC POWER COMPANY

12/12/16

Date



John Tyler Anthony
Senior Vice President and
Chief Operating Officer
Potomac Electric Power Company.
701 Ninth Street, N.W.
Washington, DC 20068

APPENDIX A

Appendix A

Conceptual Description of Stormwater Retention Project

The Stormwater Retention Project at the PEPCO facility will have two primary objectives. One objective is to eliminate the discharge of stormwater from the facility to the Anacostia River via Outfall 101. The other objective is to capture, retain, and treat on-site the stormwater that otherwise would have been discharged via Outfall 101 through the use of green stormwater management infrastructure. This green retention feature will rely on the water quality and water quantity (volume) control benefits provided by vegetation and soil. The retention feature will consist of one or more shallow, depressed, vegetated systems, potentially also including some deeper areas to meet storage capacity requirements. It will be designed to promote natural processes which are well documented to provide water quality treatment benefit, including direct settlement, adsorption, and biological processes including vegetative uptake of pollutants. To meet design requirements, the Project may entail substantial amendments to native soils or the importation of soil suitable for the unique hydrologic conditions within the stormwater retention feature. At a minimum, the retention feature will provide temporary storage for stormwater runoff both within the depressed surface storage area as well as the engineered soil layer with sufficient capacity to accommodate flows from the 1.2 inch (90th percentile) storm for the area drained by Outfall 101 in accordance with the District of Columbia's stormwater regulations. The Project also will provide appropriate management for any stormwater overflows from the retention feature either by (1) directing the overflow or excess volume of water to the Drainage System for Outfall 013; or (2) through other appropriate measures sufficient to treat any discharge so that it will meet District of Columbia water quality standards and Total Maximum Daily Loads for the Anacostia River.

APPENDIX B

Appendix B

Effluent Concentrations at Outfall 013 Triggering Stipulated Penalties
Pursuant to Paragraph 78.b.

Constituent	Concentration
pH	not less than 6.0 standard units nor more than 8.5 standard units
TSS (monthly average)	30 mg/L
TSS (daily maximum)	100 mg/L
copper	26.88 ug/L
lead	129.16 ug/L
zinc	234.36 ug/L
cadmium	4.95 ug/L
iron	2.00 mg/L

Attachment E
Stormwater Treatment Measures Design Report



An Exelon Company

Prepared for:
Pepco
Washington, D.C.

Prepared by:
AECOM
Beltsville, Maryland
February 2017

STORMWATER TREATMENT MEASURES DESIGN REPORT

Benning Road Facility
3400 Benning Road, NE
Washington, DC 20019



An Exelon Company

STORMWATER TREATMENT MEASURES DESIGN REPORT

Benning Road Facility
3400 Benning Road, N.E.
Washington, DC 20019

PREPARED FOR:

Potomac Electric Power Company
701 9th Street, NW
Washington, DC 20068

PREPARED BY:

AECOM
8000 Virginia Manor Road, Suite 110
Beltsville, MD 20705

February 2017



An Exelon Company

STORMWATER TREATMENT MEASURES DESIGN REPORT

Hydrologic and Hydraulic Model

Prepared By: Manasa Damera, P.E. CFM
Water Resource Engineer

Reviewed By: Mary Roman, PE, CFM
Program Manager

Mass Balance

Prepared By: Mary Sawitzki, P.E.
Senior Waste Water Engineer

Reviewed By: Mark Landrigan, P.E.
Senior Project Engineer

Civil / Site Design

Prepared By: Nitin Khanna, P.E.
Senior Civil Engineer

Reviewed By: AJ Zimmerman, P.E.
Principal Civil Engineer

Prepared By: Sarah J. Napier, P.E.
Senior Civil Engineer

Report

Prepared By: Brian P. McCarthy
Deputy Project Manager

Reviewed By: Ravi Damera, P.E., BCEE
Senior Project Manager



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1.0 INTRODUCTION

AECOM has prepared this Stormwater Treatment Measures Design Report (Design Report) on behalf of Potomac Electric Power Company (Pepco) to describe the proposed stormwater treatment measures for Pepco's Benning Road facility (the Site), located at 3400 Benning Road NE, Washington, DC. The general Site location is shown on **Figure 1-1**.

Pepco has employed various Best Management Practices (BMPs) over the past seven years to reduce metals and total suspended solids (TSS) concentrations in stormwater discharges from the facility. Pepco has tasked AECOM to identify and design stormwater treatment measures to supplement the BMPs to help ensure consistent compliance with the effluent limits for metals and TSS identified in the facility's National Pollutant Discharge Elimination System (NPDES) permit. The purpose of this report is to describe the treatment measures at a design level.

1.1 Scope

AECOM has been tasked with reviewing available stormwater data, screening and evaluating treatment options, and designing treatment measures to reduce the concentrations of metals (specifically cadmium, copper, iron, lead, nickel, and zinc) and TSS prior to discharge at Outfall 013. All work will be performed in accordance with the applicable District Department of Energy & Environment (DOEE) and the U.S. Environmental Protection Agency (USEPA) guidance documents.

Specifically, the development of this document included the following activities:

- Data gathering and review
- Hydraulic and hydrologic modeling
- Identification of pollutant load sources or hotspots
- Design of treatment measures
- Identification of implementation considerations and limitations
- Development of a proposed implementation schedule

This document provides the final selection of specific areas at the Site which have been targeted for stormwater treatment (referred to as "Hotspots") and the design of associated treatment measures. Please note that the drawings and specification packages will go through further refinement as part of permitting and procurement process. Therefore, these elements are currently designated as 65% design.

1.2 Organization

This report is organized into the following sections:

- Section 1 Introduction (this section)
- Section 2 Project Background
- Section 3 Hydraulic and Hydrologic Modeling
- Section 4 Pollutant Load Summary
- Section 5 Design
- Section 6 Implementation Considerations
- Section 7 Limitations
- Section 8 Schedule

Figures, tables and supporting appendices are provided following Section 8.

2.0 PROJECT BACKGROUND

The 77-acre Site is bordered by a District of Columbia Solid Waste Transfer Station to the north, Kenilworth Maintenance Yard which is owned by the National Park Service (NPS) to the northwest, the Anacostia River to the west, Benning Road to the south, and residential areas to the east and south (across Benning Road). Most of the Site is comprised of the Benning Service Center, which involves activities related to construction, operation and maintenance of Pepco's electric power transmission and distribution system serving the Washington, DC area. The Site is also the location of three substations serving Pepco's transmission and distribution system. The Site was formerly the location of the Benning Road Power Plant, which was permanently shut down on June 1, 2012. Demolition and removal of the power plant building and related infrastructure commenced in 2014, and all demolition and Site restoration activities were completed in May 2015, with the exception of the removal of concrete basins for the former cooling towers, which are scheduled to be removed within the next four months.

The majority of stormwater runoff from the facility is conveyed through a 48-inch concrete trunk line which widens to 54 inches before it discharges to the Anacostia River via Outfall 013. Pepco has employed various BMPs to control the concentrations of metals and suspended solids in stormwater discharges, including installation and maintenance of storm drain inlet controls and removal of accumulated sediment from the facility's storm drain pipe during annual cleanouts. The treatment measures described in this report will provide additional reduction of metal contaminants in stormwater discharged at Outfall 013 to achieve consistent compliance with the facility's NPDES permit limits.

2.1 Regulatory Compliance History

2.1.1 NPDES Permit

The facility's NPDES permit (No. DC0000094) was last renewed in July of 2009. At that time, the Benning Generating Station and Power Plant were still in operation. The 2009 permit included for the first time specific discharge limits on the concentration of certain metals such as copper, lead, and zinc based on Total Maximum Daily Load (TMDL) allocations that had been established for the Upper Anacostia River subsequent to the previous permit (which was issued in November of 2000). As explained in the Fact Sheet prepared for the 2009 permit renewal, USEPA expected that compliance with these new limits would be accomplished using BMPs and USEPA required that the BMPs necessary to meet these new numerical limits be in place within three years after the effective date of the permit, unless Pepco could demonstrate that additional time was necessary to meet the limits.

In accordance with the 2009 permit requirements, Pepco submitted a TMDL implementation plan to USEPA outlining the various BMPs to be employed at the facility to reduce metals concentrations in stormwater discharges. The plan called for implementation in three phases. Phase I included storm drain inlet maintenance. Phase II included metals management (e.g., removing unnecessary stored metal, improving general housekeeping measures such as repair and maintenance of secondary containment structures and covering dumpsters). Phase III included future recommendations for additional BMPs and low impact development structures (LIDs) if necessary to meet the permit requirements.

The Phase I and Phase II control measures were designed and implemented between 2010 and 2012. These measures were effective in achieving significant reductions in metal concentrations in stormwater discharged from the facility compared to the baseline concentrations prior to the 2009 permit renewal. In particular, based on the stormwater sampling conducted in January 2013 following the completion of Phase I and Phase II control measures, copper concentrations were reduced by 73 percent and zinc concentrations were reduced by 87 percent. Despite these reductions, the BMPs employed to that point were not sufficient to meet the new numeric permit limits for copper and zinc. As a result, Pepco implemented Phase III of the TMDL Implementation Plan in accordance with a supplemental compliance plan submitted to USEPA in December 2014.

The Phase III plan included the following specific actions:

- Identify and address conditions, activities and/or operations at Benning Service Center that may be significant contributors to metals in stormwater.
- Evaluate and potentially enhance existing storm drain inlet controls.
- Investigate potential groundwater infiltration to the storm drain system.
- Conduct targeted sampling at storm drain inlets to identify locations where metals loading is greatest and where additional controls can be employed.

Pepco has completed the four elements of the Phase III plan. A closed-circuit television (CCTV) inspection of the main storm drain conducted in June 2015 and of the lateral storm drains, or tributaries, in June 2016 identified several locations where substantial sedimentation had accumulated within the storm drain pipe and locations with defects that allow infiltration of groundwater. Pepco completed cleaning of the main storm drain pipe in August 2015, which resulted in removal of approximately 47 cubic yards of accumulated sediment, and thereafter completed patching/repairs of several identified defects in the storm drain system. Removal of this accumulated sediment appears to have further improved the quality of the stormwater discharges at Outfall 013. Pepco completed four rounds of targeted stormwater sampling following the storm drain cleanout between September 2015 and March

2016 and AECOM completed three rounds of additional sampling between June 2016 and August 2016. As summarized in Section 2.2 and 2.3, the results of these targeted sampling events form the basis for the selection of Hotspots for targeted treatment and the design of treatment measures.

2.1.2 Consent Decree

On January 13, 2017, a Consent Decree was filed with the US District Court for the District of Columbia that will resolve an enforcement action by the United States against Pepco for alleged violations of the permit effluent limitations for metals and TSS in stormwater discharges through Outfall 013 into the Anacostia River. Among other requirements, the Consent Decree obligates Pepco to design, construct and operate a system for the treatment of stormwater to be discharged at Outfall 013. The treatment system described in this report is intended to satisfy this requirement of the Consent Decree.

2.2 Data Review and Summary

2.2.1 Stormwater Sampling and Analysis

Seven rounds of targeted stormwater sampling and analysis were performed at the Site between September 2015 and August 2016. These events included four Pepco sampling events from September 2015 to March 2016, and three AECOM sampling events from June to August 2016. In addition, six quarterly rounds of compliance stormwater sampling and analysis were performed at the Site between September 2015 and December 2016. Each of the targeted and compliance sampling events were undertaken during a qualifying storm event, as defined by the NPDES Permit.

Although historical sampling data from Outfall 013 is available from the quarterly NPDES monitoring requirements, the targeted and compliance sampling data collected after the August 2015 cleanout of the storm drain system is more representative of current conditions. Historical data was collected prior to the demolition of the fuel tank and power plant areas. Therefore, only targeted and compliance analytical data collected after the August 2015 storm drain cleanout have been considered for the treatment system design.

Stormwater samples were analyzed by USEPA Method 200.7 for metals and Standard Methods (SM) 2540D for TSS. Based on the seven rounds of stormwater sampling and analysis, copper, iron, and zinc were identified as the primary metals of concern for the stormwater discharged at Outfall 013. The findings of the stormwater sampling and analysis are presented in Appendix A of the Final Conceptual Design Report (AECOM, 2016).

2.2.2 Flow Rate Sampling

Limited flow rate measurements were collected during the July 2016 and August 2016 sampling events in order to better calibrate the stormwater model. AECOM utilized portable velocity meters (Hach FH950) to measure velocity at select locations. Up to three velocity measurements were collected from the targeted stormwater sample locations as well as additional locations on the main trunk line. The velocity measurements were utilized to calibrate the stormwater model.

2.2.3 Media Evaluation and Treatability Study

The identified metals of concern, copper, iron, and zinc, are commonly precipitated into their respective oxides. As a result, the design of the treatment measures will include precipitation and filtration to remove solids as well as adsorption using sorptive media (e.g., Contech StormFilter®) to remove dissolved metals. AECOM completed a sorptive media evaluation which included Zeolite, granular activated carbon (GAC), CSF leaf media, MetalRx leaf media, BioChar, and Modified Peat. Based on the findings of the media evaluation, AECOM selected GAC, Zeolite, and Zeolite + Peat for the laboratory bench-scale media treatability study to provide a basis of selecting the initial media to be used by sorptive media devices when the design is implemented.

All three solid filtration media were effective in removing dissolved metals from stormwater. However, AECOM has selected Zeolite blended with GAC. When compared to the other sorptive media, Zeolite has a much greater capacity to adsorb metals and was observed to be most effective for short contact times. Blending GAC with the Zeolite will provide improved efficiency at the relatively low contaminant loadings characteristic of current stormwater flows discharging at Outfall 013.

In addition, the treatability study concluded that much of the metals contamination was associated with the suspended solids fractions of the water; therefore an effective water treatment system should include a particle removal step to reduce the amount of solids being discharged. The findings of the treatability study are presented in Appendix C of the Final Conceptual Design Report (AECOM, 2016).

2.2.4 Inlet and Topographic Survey

AECOM conducted an inlet survey of the storm drain structures that contribute to the discharge at Outfall 013. Detailed invert information, such as pipe coordinates, elevation, size, and material was collected for the inlet and outlet pipes. Coordinate and elevation information from rims of manhole and inlet structures were collected along with invert elevations of connecting pipes within the manhole and inlet structures. AECOM conducted a survey of Site topography at 1-foot contours, including utilities, buildings, sidewalks, driveways, gravel surfaces, vegetated areas, fences, spot elevations, storm water inlets, curb inlets, top of grate, and other major visible site improvements. The Maryland State Plane of the 2011 North

American Datum (NAD 83/2011) was used as the horizontal control datum and the District of Columbia Department of Public Works Datum (DC DPW) was used as the vertical control datum.

The topographic survey data was used by Pepco to revise drainage area boundaries. These revised drainage area boundaries were incorporated into the designation of hotspots and subsequent treatment system design. This information is essential to sizing the equipment and siting each treatment system. The findings of the inlet and topographic survey were utilized to generate the design presented in this report.

2.3 Final Hotspot Selection

Over the course of this project, the locations of Hotspots for targeted treatment of stormwater have been updated based on additional analytical data, inlet and topographic survey data, and continued revisions of the model. **Table 2-1** presents a cross-reference between the final Hotspot designations and the Hotspot designations in the Conceptual Design Report (November 2016).

Table 2-1: Revised Hotspot Identifications Crosswalk

Final Hotspot ID	Site Location	Sub-basin ID	Contributing Locations	Original Hotspot ID
1	Transformer Test Shop	17E	Building #54	1B
		17A-17D	Inlets 42-46	1C
2	Salvage Yard	10A, 10B, 31	Inlets 65, 66, and 68	4
3	Former Fuel Tank Area	6A, 6B	Inlets 2, 3, 4, 5, 7	3
		6C	Building #35, Inlet 108	1A
4	Former Power Plant Area	2	Inlets 15, 17, 18, 27	2



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3.0 HYDRAULIC AND HYDROLOGIC MODELING

AECOM developed an existing conditions hydrology model to estimate the discharges from the 1-inch and the 1-year storm events at different study points at the Site including the areas identified as source areas for the high metal concentrations during the Site visit. The developed hydrology model was used to size the proposed treatment systems and to estimate the anticipated impacts on the concentrations of metals in stormwater at Outfall 013 from the approximate initial surface runoff of a 1-inch (85th percentile) storm event. In accordance with guidance from the District Department of Energy and Environment (DOEE), the hydrology model was also used to estimate the first flush volume from a 1-inch storm event for the targeted areas to demonstrate the effectiveness of the proposed treatment systems in meeting permit limits at Outfall 013. These conditions are selected based on the DOEE stormwater guidance and NPDES sampling protocols which are presumed to measure peak contaminant concentrations during the design storm events.

The hydrology model was developed using the Environmental Protection Agency's Stormwater Management Model version 5.1 (EPA-SWMM 5.1; USEPA, 2015) and the DOEE storm event design criteria in accordance with the Final Stormwater Management Guidebook (DOEE, 2013) and the NPDES permit sampling requirements. The hydrology model was created for the entire Pepco Site using the spatial data provided by Pepco, current Geographic Information System (GIS) datasets from the Washington, DC Office of the Chief Technology Officer (OCTO) and the precipitation data from the National Oceanic and Atmosphere Administration (NOAA) Atlas 14.

Thirty-three drainage areas were delineated for the hydrologic analysis based on the drainage area data provided by AMEC and based on the current topographic conditions at the Site (evaluated using ArcGIS 10.1). Three of the drainage areas were further divided into sub-basins to provide design flows at locations with potential for implementing treatment measures to remove metals. The impervious area for the facility was updated based on Site AutoCAD data, the Pepco Benning Road RI/FS impervious area figure, imagery from 2015, and the field investigation. Since demolition of the power plant, facility impervious area has decreased due to replacing asphalt areas with loose gravel. **Figure 3-1** includes the Site drainage areas. Figure 4-2 of the Hydrologic, Hydraulic and Pollutant Load Analysis Report (**Appendix A**) provides the updated pervious and impervious surface cover for the facility.

The 24-hour Soil Conservation Service (SCS) rainfall distribution was used to model rainfall, the infiltration for pervious areas at the Site was calculated using the SCS Runoff Curve Number (RCN) methodology as described in the Natural Resources Conservation Service (NRCS) Technical Release

(TR-55) manual and the dynamic wave equation was used for routing in the storm drain pipes. Hydrologic response of the three existing Low Impact Development (LID) projects was simulated using the EPA-SWMM LID Controls option.

A detailed description of specific data sources used in the development of the hydrology model is provided in **Appendix A**. Hydrologic simulations were conducted for the 1-inch and 1-year storm events and the resulting maximum storm event flows for the delineated drainage areas are also included in **Appendix A**.

Based on the field investigation and sampling data, several potential areas of concern were identified as focus areas where stormwater treatment systems may be necessary. These potential treatment measures were included in the hydrology model to evaluate the effects of the treatment measures and ensure that District Department of Energy and Environment design requirements (DOEE, 2013) related to the maintenance or decrease of the discharges from the 2- and 15-year storm events are met. The hydrology model was also used to estimate the first flush volume from a 1-inch storm event for the focus areas following DOEE guidance. **Appendix A** provides the maximum storm event flows where treatment measures are proposed to be implemented. Based on the findings of the Hydrologic and Hydraulic Report (**Appendix A**), **Table 3-1** presents the flow rates for a 1-inch storm event, which is the proposed design storm event.

Table 3-1: Modeled Flows at Hotspot Areas

Hotspot	Site Location	Location Description	Peak Flow for 1-inch 24-hour storm event	
			(cfs)	(gpm)
1	Transformer Test Shop	Building #54 (Sub-basin 17E)	1.11	498.2
		Inlets 42-46 (Sub-basin 17A)	0.6	269.3
		Inlets 42-46 (Sub-basin 17B)	0.31	139.1
		Inlets 42-46 (Sub-basin 17C)	0.16	71.8
2	Salvage Yard	Inlets 65, 66, 68 (Sub-basin 10B)	0.6	269.3
		Inlets 65, 66, 68 (Sub-basins 31)	0.62	278.3
3	Former Fuel Tank Area	Building #35, Inlets 2, 3, 4, 5, 7 (Sub-basins 6B)	4.43	1,988.3
		Inlet 10 (Sub-basins 6C)	0.21	94.3
4	Former Power Plant Area	Inlets 15, 17, 18, 27 (Sub-basin 2)	2.46	1,104.1
Notes: cfs = cubic feet per second gpm = gallons per minute				

The EPA-SWMM model produced runoff estimates suitable for design for the focus areas. Proposed treatment measures have been modeled as storage areas with specified storage and ratings curves based on the specifications from the manufacturer of the system components.

The specific data sources that were used for the model include:

1. Topography (used to create drainage areas and calculate slopes)
 - a. Surveyed topography provided in AutoCAD by PEPCO.
 - b. Contour data surveyed by AMT (2016) and provided by Pepco.
 - c. 1 meter Digital Elevation Model (DEM) grid available from the USGS.
 - d. 2 foot contours from the District of Columbia.
2. Drainage Areas
 - a. Drainage areas updated by AMEC based on the Site plan originally prepared for the NPDES Permit Renewal in April 2005.
 - b. The drainage areas provided by AMEC were split into smaller segments, sub-basins, so flows could be provided at focus design areas.
3. Impervious area (see Figure 3-1 of **Appendix A**)
 - a. Surveyed areas provided in AutoCAD by PEPCO.
 - b. The preliminary impervious areas calculated as part of the Draft Remedial Investigation Report for the Benning Road Site (February 2016).
 - c. Imagery from 2015 by Google Earth and the field investigation were used to update the impervious areas.
4. Invert elevations
 - a. Storm Sewer plan and profile for the main line created by Merestone Consultant, Inc., and provided by PEPCO.
 - b. Inlet data for the storm drain structures, including invert and lateral pipes elevations, surveyed by AMT (2016) and provided by Pepco.
5. Spatial locations of storm drains, inlets, and manholes for main line and laterals
 - a. Spatial data provided by AMEC, digitized from Site Plan for NPDES Permit Renewal (completed by Malcolm Pirnie, April 2005) and updated based on existing conditions).
 - b. Aerial imagery and information gathered from the field investigation were used to verify the spatial data provided by AMEC.
6. Soil Data
 - a. The Natural Resources Conservation Service (NCRS) soil survey geographic database (SSURGO).
7. Lift Station and Oil Water Separator (upstream of MP 201)

- a. The system schematic provided by PEPCO was used to estimate the hydraulic properties of the existing system.
8. Land Cover for Pervious Areas (required for curve numbers and manning's n values)
 - a. Estimated based on aerial imagery and photographs from the field investigation.
 9. Calibration of the Hydrology Model
 - a. Flow data collected at some locations at the facility on July 28, 2016 and August 21, 2016 storm events and the hourly precipitation data for the two storm events at Washington/Ronald Reagan National Airport obtained from NOAA's Quality Controlled Local Climatological Data (QCLCD) were used to calibrate the hydrology model. The parameters that were modified for calibration are the RCN and the corresponding depression storage on pervious area inputs based on the highly urban setting of the Site. **Appendix A** includes the details of the calibration methodology.

4.0 MASS BALANCE

4.1 Mass Loading Calculations

The pollutant loading evaluation was conducted using the compiled data set from the completed stormwater sampling events and the SWMM model of the 1-inch rainfall event. This data set is appropriate for gauging point source loads, or Hotspots, of particular pollutants and represents the best information available to date. It is important to note the median and maximum loadings for all pollutants were modeled in the SWMM software. These loads were modeled as occurring at measured concentrations throughout the entire storm duration instead of through a factored or scaled approach. As a result, the pollutant loads reported by the SWMM model are conservatively high compared to actual expected loading over the duration of the storm event.

The modeled loads were tabulated based on pollutant type, pollutant form (total or dissolved) and drainage area source. A summary of pollutant loading in the form of drainage area percent contribution was created and used to verify the locations of high pollutant loading (Hotspots). In instances where no data existed for drainage areas contributing to Outfall 013, median and maximum concentrations equal to one-half of the highest detection limit value for each pollutant reported by the testing laboratory were used in the load tabulation. This evaluation resulted in some redistribution of pollutant loading; however, there was no change to the identified Hotspot locations as loads from those locations remained elevated with respect to the rest of the site. As noted in Section 2.3 above, a total of four Hotspots were identified with Hotspot 1 located at the most upstream point of the main trunk line which is adjacent to the Kenilworth Office Building #54 and Building #57 on the southeast corner of the site. Hotspot 4, the most downstream Hotspot, is located downstream of inlet 17 on a lateral line located west of the lift station and oil water separator.

Samples collected at two locations from the main trunk line, manhole 57 (located at the downstream end of drainage area 19 on the east side of the Building #75) and manhole 37 (located downstream of manhole 57, within drainage area 11 and south of Building #68), were used to evaluate connectivity between measured and modeled loads. Measured loads in the trunk line at manholes 57 and 37 were compared to the sum of the modeled loads from the upstream drainage areas tributary to each of the two manholes. The majority of the resulting ratios were within a range of values indicative of acceptable connectivity.

The model loads were adjusted using compliance sampling analytical data for Outfall 013 from the last six quarters of sampling, two quarters of 2015 and all four quarters of 2016. Median and maximum

discharge concentrations were calculated from the Outfall 013 data for each pollutant. These values were then used to scale the conservative, model-produced pollutant loads using the percent load distribution that had been modeled in the SWMM software.

Following this step, a pollution reduction analysis was completed. The adjusted maximum total loads for copper, iron, zinc, and TSS as well as the maximum dissolved loads for the metals listed were increased by a factor of 1.5 to 2.0 to provide a minimum safety factor of 1.5 in the load reduction step. Cadmium, nickel, and lead are consistently discharged in stormwater runoff at Outfall 013 at levels well below the NPDES discharge limits; therefore, these metals were not analyzed as part of the pollutant reduction step. However, the proposed stormwater treatment systems will also work to remove these metals, both in total and dissolved form.

The pollutant loading evaluation utilized reduction factors which were appropriate for the following Contech® stormwater treatment technologies chosen for the treatment system at the site: DownSpout StormFilter™ and StormFilter®, both of which are used to remove dissolved parameters, as well as the Jellyfish® Filter, which is used to target removal of total suspended solids (TSS) and total metals.

A bench scale treatability study, as described in AECOM's Conceptual Design Report (November 2016), was performed using stormwater from the Site to identify the best adsorptive media for the application. Results of the bench scale treatment study indicated that Zeolite A and granular activated carbon (GAC) were the most effective at removing a range of dissolved pollutants. Based on the study results, Zeolite A blended with GAC were specified as a combined adsorptive media for use in the DownSpout StormFilter™ and StormFilter® units for the project.

Jellyfish® Filter units will be placed upstream of the StormFilter® units. This will serve to enhance the ability of the StormFilter® units to remove the dissolved metals portion in the site runoff. Jellyfish® Filter units will act to remove TSS and particulate metals thus reducing competition for available adsorption sites in the StormFilter® media. The range of pollutant reduction factors for the StormFilter® media and Jellyfish® Filter units, as described in Contech publications, found in review of other literature, and measured in the bench scale media evaluation testing, is presented in **Table 4-1**.

Table 4-1: Stormwater Treatment System Pollutant Reduction Factor Ranges

Unit Type	Contech® Jellyfish® (Filtration)				Contech® StormFilter® (Adsorption)		
Source	Total Copper	Total Zinc	TSS	Other metals	TSS	Total Copper and Zinc	Dissolved Copper and Zinc
Literature Review	86%-90%	51%-70%	86%-90%	64%-81%	25%-50%	34%-70%	8%-65%
Contech® Publications	>80%	>50%	89%	--	--	--	--
Bench Scale Study Results ¹	--	--	--	--	--	55%-100%	60%-96%

¹Reported bench scale study reduction range results are also representative of total and dissolved iron and lead reductions.

Table 4-2 outlines the estimated reduction factors that were applied to the pollutants at each Hotspot based on arrangement of the Jellyfish® and StormFilter® units, which will be used in combination at each Hotspot. This sequential arrangement of the treatment units acts to compound the reduction factors. The unit reduction factors chosen for application in the pollutant reduction model were generally more conservative when compared to the literature review and bench scale ranges identified in **Table 4-1**.

Table 4-2: Applied Pollutant Reduction Factors

Pollutant	Jellyfish® ¹	StormFilter® ¹
Copper	80%	60%
Iron	50%	60%
Zinc	50%	60%
TSS ²	89%	--

¹Estimated reduction factors may differ from actual reductions observed due to various site-specific conditions and facility operations.
² Estimated reduction factor for TSS is applicable to 20 microns or greater.

Results of the conservative pollutant load reduction analysis indicate that the proposed stormwater treatment system design should be effective to reduce pollutant loadings of copper, iron, zinc, and TSS to below the permitted NPDES discharge levels. Based on the modeled storm event, the applied pollutant reduction factors presented in **Table 4-2** would also be representative of the anticipated percent removal of metals concentrations in stormwater discharges. Therefore, it has been estimated that following treatment the metals and TSS concentrations in stormwater will be below the permitted NPDES discharge levels at Outfall 013.

Table 4-3 below summarizes the fractional percentages of existing, pre-treatment loads for copper, iron, zinc, and TSS as calculated using the approach described in this document.

Table 4-3: Initial Load Distribution – Before Treatment

Hotspot	Sub-basin ID	Copper		Iron		Zinc		TSS	
		Median	Max	Median	Max	Median	Max	Median	Max
1 Transformer Test Shop	17A – 17E	7%	12%	7%	8%	12%	9%	6%	7%
2 Salvage Yard	10A, 10B, 31	7%	4%	1%	<1%	3%	1%	3%	6%
3 Former Fuel Tank Area	6A, 6B, 6C	14%	32%	49%	47%	27%	72%	37%	55%
4 Former Power Plant Area	2	8%	13%	15%	29%	6%	4%	11%	24%
All Hotspots		36%	61%	72%	86%	48%	86%	57%	92%
All Other Areas		64%	39%	28%	14%	52%	14%	43%	8%
Outfall 013		100%	100%	100%	100%	100%	100%	100%	100%

1. Based on Median and Maximum Values from SWMM Model and Mass Balance Calculations.
2. Fraction is with respect to total load.

Table 4-4 summarizes the fractional percentages of estimated, post- treatment loads for copper, iron, zinc, and TSS as calculated using the approach described in this document.

Table 4-4: Final Estimated Load Distribution – After Treatment

Hotspot	Sub-basin ID	Copper		Iron		Zinc		TSS	
		Median	Max	Median	Max	Median	Max	Median	Max
1 Transformer Test Shop	17A – 17E	1%	4%	5%	8%	6%	6%	<1%	5%
2 Salvage Yard	10A, 10B, 31	2%	1%	1%	<1%	2%	1%	1%	5%
3 Former Fuel Tank Area	6A, 6B, 6C	3%	11%	36%	42%	17%	60%	40%	42%
4 Former Power Plant Area	2	2%	4%	11%	26%	4%	3%	12%	18%
All Hotspots (estimated)		8%	20%	53%	76%	29%	70%	53%	70%
All Other Areas (estimated)		92%	80%	47%	24%	71%	30%	47%	30%
Outfall 013 (estimated)		100%	100%	100%	100%	100%	100%	100%	100%

1. Based on Median and Maximum Values from SWMM Model and Mass Balance Calculations.
2. Fraction is with respect to total load.
3. Based on estimated reductions provided by Contech®.

5.0 DESIGN

5.1 Overview of Design Criteria

Based on the analytical results of targeted sampling, the following design criteria have been developed for localized treatment of metals at the individual Hotspots in order to reduce the contaminant loading at Outfall 013. Contaminant concentrations and NPDES discharge limits at Outfall 013 are summarized in **Table 5-1** below.

Table 5-1: Permit Concentration Limits for Outfall 013

Metals	NPDES Discharge Limits for Outfall 013		Maximum Concentration for Outfall 013
	Daily Maximum (mg/l)	Monthly Average (mg/l)	Total Conc. (mg/l)
Cadmium	0.00495	0.00208	0.00025
Copper	0.01344	0.00524	0.0222
Iron	1.0	0.69	2.2
Lead	0.06458	0.05660	0.013
Nickel	0.117	0.073	0.005
Zinc	0.11718	0.07311	0.175
TSS	100	30	25

Note:

- Maximum concentrations are peak concentrations observed at Outfall 013 during the quarterly NPDES sampling. Maximum concentrations are the peak concentrations reported from six sampling events from 09/2015 through 12/2016.
- The grey shaded metals include the primary metals of concern (copper, iron, and zinc) observed at concentrations greater than the NPDES discharge limits. Non-shaded metals were observed at concentrations less than the NPDES discharge limits.

5.2 Overview of Design Development

Selection of stormwater management treatment measures follows a systematic decision tree which incorporates Site conditions, flow rates for the first flush portion of storm events, contaminants of concern, and the state of contamination (i.e. dissolved or suspended solids). Design efforts have focused on treatment measures at the Hotspots, as close to the source of contaminants as is practical. This approach offers the following advantages:

1. Independent system failures do not risk discharge exceedances to the same extent as a single, centralized system;
2. Focused systems may be customized to specific local contaminants;

3. Focused systems allow application of risk based safety factors when designing remedies; and
4. Focused systems will improve attention to problem areas on-site, increasing the likelihood of identifying and eliminating contaminant sources.

The following treatment designs have been developed based on the stormwater analytical data and modelling data for each of the identified Hotspots. Each treatment recommendation is based on the contaminants and conditions specific to each Hotspot which contribute to elevated discharges at Outfall 013.

5.3 Treatment Design

The water quality treatment measures for this project have been designed to reduce pollutant loads from a 1-inch storm event for stormwater runoff collected by on-site inlets and catch basins, which drain via an underground separate storm drain system and discharge at Outfall 013 (see C0101, Existing Drainage Area Map). Stormwater treatment will be provided at the four Hotspots using combinations of Contech® DownSpout StormFilter™, Jellyfish® Filter, and StormFilter® stormwater treatment systems. As described in Section 2.3, the Hotspot locations and treatment methods were determined based on facility-wide stormwater sampling performed in 2015 and 2016 and the resulting pollutant contamination loads.

DownSpout StormFilter™ systems will be installed at the existing loading dock roof downspouts on the west face of Building #56 to provide filtration of roof runoff determined to have high concentrations of dissolved metals such as zinc, copper, and lead. This treatment measure is a passive, aboveground, pretreatment system that utilizes StormFilter® cartridges.

All new inlets and manholes installed as part of the treatment system will be equipped with Jellyfish® Filters to collect and/or treat stormwater runoff from surface areas that are predominantly impervious, in both inline and offline configurations, in order to remove TSS, oil, and floatable trash from stormwater at pollutant source locations. This treatment measure is an underground, pretreatment system that utilizes membrane filtration cartridges.

StormFilter® stormwater treatment devices will be installed as large underground concrete vaults that house a large number of rechargeable, self-cleaning, media-filled cartridges that will trap particulates and absorb pollutants such as dissolved metals, hydrocarbons, nutrients, metals, and other common pollutants found in stormwater runoff. The filter media in the StormFilter® cartridges will be customized at each hotspot to target site-specific pollutants. This treatment measure is the primary water quality treatment technology at each of the Hotspot locations.

In order to construct and install the underground Jellyfish® Filter and StormFilter® systems and supporting storm drain infrastructure, selective site clearing, grubbing, and demolition will be required. Asphalt and concrete pavement will be saw-cut and removed to a minimal depth and footprint to allow for excavation, trenching, and sheeting and shoring (to be determined by the Contractor). Excavated materials shall be sampled for petroleum hydrocarbons, metals, Polycyclic Aromatic Hydrocarbons (PAHs), and Polychlorinated biphenyls (PCBs) at a minimum. Any soil that cannot be reused as backfill shall be stored temporarily on-site in containers provided by Pepco for disposal by Pepco.

New storm drain piping, for conveyance and storage of stormwater, and new flow splitters and manholes will be required upstream from the new StormFilter® structures in order to divert the 1-inch storm to the StormFilter® structures and to reduce peak runoff flows, providing the appropriate level of filtration within the StormFilter® structures. Storm drain piping and structures have been designed in accordance with Appendix F (Stormwater Conveyance System Design), Appendix G (Design of Flow Control Structures), and Appendix H (Acceptable Hydrological Methods and Models) of the DOEE SWMG.

Site and utility work will involve installing and testing new storm drain piping and new storm drain and stormwater treatment structures, including but not limited to all equipment, cartridges, underdrains, weir walls, manhole access covers, inlet and outlet pipe connections, etc. Subbase material will be placed below new piping and utility structures, and trenches and excavations will be backfilled per standard District of Columbia requirements. Structures will be anchored as needed due to the water table level on-Site (method of anchoring to be determined by the Contractor and to comply with the 2009 District of Columbia Department of Transportation (DDOT) Design and Engineering Manual). Concrete and asphalt pavement surfaces will be replaced in kind, and in line and grade. Permanent stabilization will be provided in existing pervious areas that are to be replaced, in kind and in line and grade.

Before breaking ground the Contractor will be required to contact DOEE to schedule a pre-construction meeting with the DOEE Inspector at the facility Site. DOEE standard Erosion and Sediment Control (ESC) measures found in the 2003 Soil ESC Handbook will be utilized and routinely maintained by the Contractor for the full duration of construction in order to eliminate the potential for sediment generated by construction activities to enter the downstream storm drain system and in turn the Anacostia River. ESC measures will include, but not be limited to, straw bale dikes; silt fence; standard, at grade, and curb inlet protection (in conjunction with the existing filter bag inlet protection currently in place and maintained by Clean Venture, under contract to Pepco, on all existing inlets); dewatering and filtering practices; and dust control. Construction vehicles will be restricted from driving in areas of exposed soil and will be brushed clean using a broom prior to leaving the construction zone.

Stormwater Performance Requirements set forth in the DOEE SWMG and in Section 520 (Stormwater management: Performance Requirements for Major Land-Disturbing Activity) of Chapter 5 (Water Quality and Pollution) of Title 21 (Water and Sanitation) of the DC Municipal Regulations (DCMR) are exempted per DCMR Section 517 (Stormwater Management: Exemptions) as follows:

- Section 517.2: The project is being conducted solely to install BMPs in compliance with a Court-Approved Consent Decree and in compliance with a NPDES permit;
- Section 517.3: The project is a land-disturbing activity that consists solely of cutting a trench for utility work and related replacement of pavement and does not involve reconstruction of any DDOT roadways.

A description of each Hotspot and its specific, prescribed pretreatment and water quality treatment devices is provided below with reference to the Civil Design 65% Submittal plan set.

5.3.1 Hotspot 1: Transformer Test Shop

Hotspot 1 is located in the southeast portion of the Site. This location was chosen as the area contributes significant levels of zinc, in both total and dissolved forms, and copper to a lesser extent, but still high levels. Elevated concentrations of copper (total and dissolved), total iron, and zinc (total and dissolved) were frequently present in stormwater samples collected from runoff in this area. The treatment at Hotspot 1 consists of StormFilter™ units to treat runoff from the loading dock roof (sub-basin 17E) which sheds significant levels of zinc and copper. Zinc and copper removal rates, via the downspout media filters, are reported by Contech to be sufficient to achieve necessary discharge concentrations.

Discharge from the downspout StormFilter™ units transitions to surface flow, combines with flow from sub-basin 17D, then enters a Jellyfish® Filter for removal of portions of TSS and total metals.

Stormwater from each of sub-basins 17A through 17C is treated by a Jellyfish® Filter to be located in each sub-basin's grated inlet. Stormwater from these units will flow to the main trunk to combine with discharge from the unit that treats the combined flow from sub-basins 17D and 17E. The combined discharge from sub-basin 17 flows to a StormFilter® unit for removal of the dissolved fraction prior to entering the main trunk line.

The full treatment design for this Hotspot is included in the Civil Design 65% Submittal plan set (**Appendix B**). A summary of the pretreatment and water quality treatment components is presented below.

Refer to C0106 for the following pretreatment systems:

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- Four (4) new DownSpout StormFilter™ systems including one (1) standard filtration cartridge,
- One (1) new 48" dia. flow splitter manhole and 96" dia. Jellyfish® Filter manhole combination, and
- Three (3) new Jellyfish® Filter grate inlet structures.

Refer to C0107 for the following water quality treatment system:

- One (1) new High Density Polyethylene (HDPE) pipe detention storage pipe system including:
 - one (1) 72" dia. flow splitter manhole,
 - one (1) 12" section of HDPE low flow pipe,
 - a series of serpentine-aligned 36" HDPE storage pipes,
 - one (1) 6" section of HDPE flow restricting outlet pipe, and
- One (1) new StormFilter® stormwater treatment device including 61 - 27"-tall, media-filled cartridges.

5.3.2 Hotspot 2: Salvage Yard

Hotspot 2 is located in a relatively central part of the Site. This area is a contributor of elevated levels of total and dissolved copper as well as dissolved zinc. The treatment at Hotspot 2 consists of Jellyfish® Filter units for stormwater flows from Sub-basin 10A and Sub-basin 31. Downstream of the Jellyfish® Filter unit, flows from Sub-basins 10A, 10B, and 31 are combined and routed through a StormFilter® unit for removal of the dissolved fraction prior to entering the main trunk line.

The full treatment design for this Hotspot is included in the Civil Design 65% Submittal plan set (**Appendix B**). A summary of the pretreatment and water quality treatment components is presented below.

Refer to C0108 for the following pretreatment systems:

- Two (2) new Jellyfish® Filter grate inlet structures.

Refer to C0108 for the following water quality treatment systems:

- Two (2) new 48" dia. flow splitter manholes, and
- One (1) new StormFilter® stormwater treatment device including 31 - 27"-tall, media-filled cartridges.

5.3.3 Hotspot 3: Former Fuel Tank Area

Hotspot 3 is located near the former fuel tank area in a relatively central part of the Site. This area is a contributor of all pollutants except for possibly the dissolved form of zinc. The percentage of Site-wide total pollutant loading (total and dissolved) for which this sub-basin is responsible varies by metal of concern. The treatment at this location includes a Jellyfish® Filter at Inlet 108 (Sub-basin 6C) followed by the combination of flows from Sub-basins 6A, 6B, and 6C that will be split in half with each half routed

through a Jellyfish® Filter and StormFilter® combination unit arranged to remove TSS and related metals from the stormwater prior to entering the main trunk line.

The full treatment design for this Hotspot is included in the Civil Design 65% Submittal plan set (**Appendix B**). A summary of the pretreatment and water quality treatment components is presented below.

Refer to C0108 for the following pretreatment systems:

- One (1) new Jellyfish® Filter grate inlet structure,
- One (1) new 60" dia. flow splitter manhole,
- One (1) new 96" dia. Jellyfish® Filter manhole, and
- One (1) new 120" dia. Jellyfish® Filter manhole.

Refer to C0108 for the following water quality treatment systems:

- One (1) new StormFilter® stormwater treatment device including 44 - 27"-tall, media-filled cartridges, and
- One (1) new StormFilter® stormwater treatment device including 61 - 27"-tall, media-filled cartridges.

5.3.4 Hotspot 4: Former Power Plant Area

Hotspot 4 is located just east of the former power plant footprint in the northwestern portion of the Site. This area contributes to high loading of both total and dissolved copper, iron, nickel, and TSS.

The treatment at Hotspot 4 is a combination of Jellyfish® Filter and StormFilter® placed between Inlet 17 and Inlet 27 arranged to remove TSS and related metals from the stormwater prior to entering the main trunk line.

The full treatment design for this Hotspot is included in the Civil Design 65% Submittal plan set (**Appendix B**). A summary of the pretreatment and water quality treatment components is presented below.

Refer to C0109 for the following pretreatment systems:

- One (1) new 48" dia. flow splitter manhole, and
- One (1) new 72" dia. Jellyfish® Filter manhole.

Refer to C0109 for the following water quality treatment systems:

- One (1) new StormFilter® stormwater treatment device including 51 - 27"-tall, media-filled cartridges.

Figure 4-1 provides a Site layout with each hotspot area identified.

5.4 Other Design Considerations

In addition to this Stormwater Treatment Measures Project, Pepco is planning to install two stormwater retention projects and has recently finished construction on a storage shed for out-of-service transformers awaiting disposal.

One of the two stormwater retention treatment projects is a green infrastructure project in the area of the former power plant. This project has two objectives. One objective is to eliminate the discharge of stormwater from the facility to the Anacostia River via Outfall 101. The second objective is to capture, retain, and treat on-site the stormwater that otherwise would have been discharged via Outfall 101 through the use of green stormwater management infrastructure. This green retention feature will rely on the water quality and water quantity (volume) control benefits provided by vegetation and soil. The retention feature will consist of one or more shallow, depressed, vegetated systems, potentially also including some deeper areas to meet storage capacity requirements. It will be designed to promote natural processes which are well documented to provide water quality treatment benefit, including direct settlement, adsorption, and biological processes including vegetative uptake of pollutants. It is anticipated that stormwater overflows from the retention feature will be appropriately managed by directing the overflow or excess volume of water to the main storm sewer system (at a point to be determined as part of the detailed design of this project).

The second stormwater retention project will be located in the footprint of the former cooling towers, and is intended to treat the surface runoff from the area around the former cooling towers. This project will have both retention upstream and will discharge downstream of the existing lift station and oil/water separator and the planned water quality treatment system for Hotspot 4.

Construction of the Transformer Storage Shed was recently completed. This structure will be used to stage transformers and other electrical equipment removed from service on Pepco's electric distribution system awaiting disposal. Use of this shed for this purpose is expected to reduce the metal concentrations in stormwater at discharge area 17, where such equipment previously was stored in areas exposed to storm events.

In addition, Pepco will continue to maintain the inlet controls and other stormwater BMPs implemented at the Site.

5.5 Design Conclusions

Data analysis performed to evaluate Hotspot contributions applied the 1-inch design storm event maximum flow values and the median and maximum concentration values from focused sampling events at the various stormwater inlets and manhole locations. The model of contaminant loadings indicates that greater than two thirds of contaminants measured at Outfall 013 are captured within the four Hotspots. Data input to the model likely overestimates contaminant loading because the sampling data reflected maximum loading periods of storm events yet is modeled to occur during the entirety of the storm up to attaining peak flow. Based on the model and pollutant load analysis, if treatment at these four Hotspots achieves manufacturer's estimated contaminant reduction, then the overall treatment at the Hotspots is expected to sufficiently reduce stormwater contaminant loading to achieve consistent compliance with the NPDES permit limits at Outfall 013 for design storm events.

6.0 IMPLEMENTATION CONSIDERATIONS

6.1 Agency Oversight and Permitting

6.1.1 Federal

The Consent Decree established a schedule for deliverables and approvals for the Stormwater Treatment Measures Project. To date, USEPA has reviewed and approved the following project documents for the Stormwater Treatment Measures Project:

- Draft Design Basis Report, February 2016
- Draft Conceptual Design, May 2016
- Final Conceptual Design, November 2016

This Design Report provides the final Hotspot selection and the design of associated treatment measures. This Report is subject to review and approval by EPA, and the subsequent installation, testing, and operation of the treatment system will be subject to EPA oversight pursuant to the Consent Decree. Furthermore, compliance with the Consent Decree and 2009 NPDES Permit are applicable throughout the Stormwater Treatment Measures Project.

6.1.2 District of Columbia

On December 28, 2016, Pepco and AECOM met with Elias Demessie of the DOEE for pre-application meeting to discuss the Stormwater Treatment Measures Project at the Benning Road Facility. A summary of the project background, scope of the project, compliance rationale, and proposed water quality treatment BMPs was presented by Pepco and AECOM to DOEE.

DOEE described the permitting and approval procedures. For this project, a building/construction permit from the District of Columbia Department of Consumer and Regulatory Affairs (DCRA) and an ESC permit from the DOEE to construct the new treatment measures and supporting structures will be required.

Pepco and AECOM also noted that the project is:

- being conducted for the sole purpose of installing pollution controls in accordance with a Consent Decree negotiated between the USEPA and Pepco and in compliance with the NPDES permit; and
- a land-disturbing activity that consists solely of cutting a trench for utility work and related replacement of pavement, does not involve reconstruction of roadway or other redevelopment, and all work lies within Pepco property.

Following this meeting, Pepco and AECOM submitted a Project Narrative and Existing Conditions Plan to DOEE.

Pepco and AECOM requested that the DOEE make a determination regarding a land-disturbance exemption from Stormwater Treatment Performance Requirements per the DC DOEE Stormwater Guidebook and DC Municipal Regulations Chapter 21-5, Water Quality and Pollution; 21-517 Stormwater Management: Exemptions.

On January 6, 2017, following a discussion with DOEE's Stormwater Division, Elias Demessie granted Pepco's request for a land-disturbance exemption from the performance requirement as per Section 517.3 of the DC Municipal Regulations Chapter 21-5, Water Quality and Pollution. Following approval of the exemption, Pepco and AECOM began application preparation for a DCRA Building Permit (including filing fees) and a DOEE ESC permit.

6.2 Operation and Maintenance

Selected treatment measures include particulate removal, sorptive media filters, and combinations thereof. The use of particulate filters in combination with media filters is designed to improve the duration of media efficacy by capturing fine particulates which would otherwise blind the sorptive media. Based on manufacture's literature, particulate filters capture 80 to 90 percent of particles and could thereby reduce total metals by 50 to 75 percent. The Contech Jellyfish®, a particulate filter, was selected to achieve necessary particulate reductions. The Contech StormFilter®, a sorptive media filter, was selected to reduce particulate contamination and absorb dissolved metals. The sorptive media cartridges will contain Zeolite blended with GAC to absorb dissolved metals. While the actual percent removal will vary based on the metals of concern, a review of available literature estimates that sorptive media filters will remove 34%-70% of total copper and zinc. Sorptive media volumes have been sized for change outs no more frequently than two times per year, based on manufacturer recommendations.

As per Inspection and Maintenance Manuals for Jellyfish® and StormFilter® from Contech®, pollutants must be removed periodically so that the treatment performance of the control technology maintains its full efficiency and effectiveness. Regular inspection and maintenance are required to insure proper functioning of the system. Maintenance frequencies and requirements are Site specific and dependent on the pollutant load characteristics. Maintenance activities may be required in the event of an upstream chemical spill or due to excessive sediment loading from Site erosion or extreme storm events. Contech suggests inspecting the system after each major storm event.

Based on recommendations from Contech, AECOM proposes the following inspection schedule:

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- Upon completion of construction activities to install the treatment systems and prior to putting the treatment systems into service. Remove any construction debris or construction-related sediment within the device. Repair any damage to system components.
- Two inspections during the first year of operation to assess the sediment and floatable pollutant accumulation, and confirm proper functioning of the system.
- Inspection frequency in subsequent years will be determined based on the O&M Plan developed in the first year of operation. Minimum inspection frequency will be at least once per year.
- Inspections will also be performed following each major storm event and immediately after any upstream spill.

Based on recommendations from Contech, AECOM proposes the following maintenance activities:

- Remove any oil, floatable trash, and debris
- Remove any collected sediments
- Remove, rinse, and re-install the filter cartridges.
- Replace filter cartridge tentacles (as needed for Jellyfish Filter®)
- Replace sorptive media cartridges (as needed for StormFilter®)
- Containerize any waste materials generated during maintenance activities.

The combined treatment system is expected to include four (4) Downspout StormFilter® units, ten (10) Jellyfish® filter units, and five (5) StormFilter® units. The estimated number of Jellyfish® cartridges is 80 and it is anticipated that two inspection and maintenance events will be necessary per year. The estimated number of StormFilter® cartridges is 220 and it is anticipated that the cartridges will need to be replaced every five years. **Appendix C** includes Inspection and Maintenance Manuals for the selected BMPs.

6.3 Performance Testing

Initial acceptance testing will be conducted during a qualifying storm event during the first quarter following completion of construction and placement of the treatment system into operation. Influent and effluent samples will be collected at each treatment system component and submitted for laboratory analysis of dissolved and total metals and TSS. Analytical results for influent and effluent samples will be compared to calculate site-specific removal percentages for each treatment component at each Hotspot. System performance will be deemed acceptable if (a) the site-specific removal percentages equal or exceed the pollutant reduction factors presented in **Table 4-2** above, or (b) effluent concentrations otherwise indicate that the concentrations of metals and TSS in stormwater at Outfall 013 will be below the permitted NPDES discharge levels.

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Following initial acceptance testing, influent and effluent samples will be collected at each Hotspot during a qualifying storm event at least once every 180 days to ensure that system performance remains acceptable.

7.0 LIMITATIONS

The design was based on several assumptions as noted below. Some of the assumptions noted below present an uncertainty, while others could provide an added factor of safety.

Data Collection

- Given the age of the system, as-built drawings of the storm drain system are not available. Inlet and topographic surveys, closed-circuit television inspections, and historical knowledge were used to recreate the storm drain profiles of site-wide storm drain system. Following the identification of Hotspots, two additional field survey efforts were performed to verify or revise inlet and topographic data including elevations, diameters, and connections. System conditions which could not be verified or revised were identified as determined according to records (DATR).
- Multiple rounds of analytical results collected during September 2015 and December 2016 constitute the dataset upon which the design was based. The data was collected by multiple parties and to fulfill multiple objectives. The nature of the limited dataset could pose an uncertainty with respect to the prediction of removal rates.
- The design assumed that stormwater samples collected during qualifying storm events were representative of the Site conditions.

Modeling

- A detailed topographic survey with 1-foot contour intervals was completed at each of the four Hotspots. However, inferred topography based on previously collected survey data and available aerial imagery were used for other areas for modeling purposes.
- The proposed design storm event approximates the flow associated with the initial surface runoff of a 1-inch (85th percentile) storm event.

Design

- The media evaluation and bench scale treatability study were performed based on a snapshot of analytical concentrations observed during one of the targeted sampling activities. Long-term field pilot tests or longer startup periods are often used to avoid uncertainties arising from variability in stormwater chemical makeup.

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- The efficiency and effectiveness of selected treatment technologies may vary due to site-specific conditions and has only been approximated based on available literature, Contech publications, and the bench-scale media treatability study.
- Collapsed and corroded corrugated metal piping will be removed from sub-basins 2, 6, 10 and 17 to eliminate a likely source of metals and suspended solids in stormwater flows which could compromise downstream treatment devices.
- All the excavated material will be sampled for Petroleum Hydrocarbons, Metal, Polycyclic Aromatic Hydrocarbons (PAHs), and Polychlorinated biphenyls (PCBs) at a minimum. Any soil that cannot be reused as backfill shall be containerized in containers provided by Pepco for disposal by Pepco.

Some of the uncertainties discussed above are typically managed through additional data collection. Due to the tight design and implementation schedule and relatively dry rainy season, opportunities for additional data collection have been limited. The uncertainties were/should be managed as follows:

- A factor of safety was introduced into the design process by doubling the calibrated metal loads during the pollution reduction analysis.
- Benefits from any future additional BMPs were not accounted for. This would result in an additional factor of safety.
- Additionally, a longer iterative performance monitoring and fine-tuning of system operations may be necessary to further address the uncertainties.
- Treatment systems will be operated and maintained in accordance with manufacturer's specifications and recommendations.

8.0 SCHEDULE

Following submittal of the Design Report, the project schedules will entail obtaining permits and approvals, procurement of a construction contractor and long lead items, and construction and installation of the treatment measures at the four Hotspots. While permitting and approval activities are already underway, procurement activities will begin following submission of this Design Report. The full project schedule is presented as **Appendix D**.



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Figures



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Appendix A Hydrologic, Hydraulic and Pollutant Load Analysis Report



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Appendix B Civil / Site Design Package and Specifications



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Appendix C Contech O&M Manuals



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Appendix D Schedule

Attachment F
Manufacturer Product Manuals

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Ultra-Drain Guard[®], Heavy Metal Model



Remove Heavy Metal Runoff Water At The Storm Drain

- Specialized catch basin insert has “quilted” sections sewn into the body of the unit where stormwater flows through.
- A custom blend of heavy metal removal media is contained in each section (pouch).
- A non-permeable, PVC skirt at the top of the unit funnels all water to the lower portion of the Ultra-Drain Guard where it is forced to move through the media before it can move on into the storm drain.
- This BMP removes hydrocarbons, heavy metals, sediment, and other organics from stormwater and industrial runoff.
- **Helps comply with NPDES, 40 CFR 122.26 (1999) when used as Best Management Practice in Storm Water Pollution Prevention Plans.**

Ultra-Drain Guard [®] , Heavy Metal Model	
Part#	9397
Dimensions In. (mm)	48 x 36 x 18 (1,219 x 914 x 457)
Flow Rate GPM (LPM)	275 (1,040)
Sediment Cap. lbs. (Kg)	30 (13.5)
Oil Capacity Gals. (L)	0.23 (0.87)
Metal Capacity grams	190
Weight lbs. (Kg)	6.5 (3.0)



Filterable Metals:

- Rubidium
- Lithium
- Potassium
- Caesium
- Ammonium
- Sodium
- Calcium
- Silver
- Cadmium
- Lead
- Zinc
- Barium
- Strontium
- Copper
- Mercury
- Magnesium
- Iron
- Cobalt
- Aluminum
- Chromium

U.S. Patent Nos. 5,372,714; 5,575,925; 6,632,501; Other Patents Pending

Six pounds of heavy metal removal media is contained in the lower portion of the Drain Guard.





Ultra-Drain Guard, Heavy-Metal Model®

SPECIFICATIONS

Material Specifications		
Properties	ASTM Test	Value
Skirt Material: Non-permeable , flexible PVC	----	----
Collection Area Material: Non-Woven, Polypropylene Geotextile	----	----
Grab Tensile	D 4632	220 lbs.
Elongation	D 4632	50%
Trapezoid Tear	D 4533	95 lbs.
Puncture	D 4833	135 lbs.
Mullen Burst	D 3786	420 psi
Permittivity	D 4491	1.5 sec ⁻¹
A.O.S. (U.S. sieve no.)/ Microns	D 4751	80/ 180
UV Stability (strength retained%) 500 hrs	D 4355	70%
Fabric Weight (oz./yd ²) (typical)	D 5261	8 oz/yd ²
Flow (through material)	D 4491	90 gpm / ft ²
Flow (bypass ports gpm)	----	770 gpm
Flow (bypass ports cfs)	----	1.7cfs

Unit Specifications						
Model	Oil Capture	Sediment Capture	Metal ¹ Capture	Collection Area	Flow Rate	Dimensions
Heavy-Metal	.23 gal	30 lbs.	190 grams	10" diameter x 18" depth	275 gpm	48"x36"x18"

¹Please see table below for a list of filterable metals.

Filterable Metals			
Rubidium	Sodium	Zinc	Magnesium
Lithium	Calcium	Barium	Iron
Potassium	Silver	Strontium	Cobalt
Cesium	Cadmium	Copper	Aluminum
Ammonium	Lead	Mercury	Chromium

02/3/2012

Ultra-Curb Guard Plus®



Protect Curb Inlets From Sediment-Laden Stormwater Runoff

- Quick and easy installation.
- Modular design — build to any length.
- Units can be quickly and easily connected to form longer lengths.
- Wedge-shaped, heavy-duty foam secures unit in curb inlet.
- Woven, polypropylene material provides high flow rate — will not cause ponding or flooding.
- **Helps comply with NPDES, 40 CFR 122.26 (1999) and TMDL requirements.**

Ultra-Curb Guard Plus®		
Part#	Dimensions in. (mm)	Weight lbs. (kg)
9248	4 dia. x 36 L (102 x 915)	6.0 (3.0)
9251	4 dia. x 48 L (102 x 1,220)	8.0 (3.5)

U.S. Patent No. 7,563,364



Modular design allows units to be connected to make any length desired (3 units shown).

Ultra-Filter Socks®



Stop Harmful Substances From Entering The Stormwater System

- Use in front of storm drains, around downspouts, in gullies, and ditches, or anywhere there is potential for harmful stormwater runoff.
- Woven polymer casing allows water to pass through quickly while filtration media inside removes pollutants.
- Available in 9-foot lengths. Units can be overlapped for longer coverage.
- Looped ends allow units to be staked in place and also assist in transport.
- Available with different types of media depending on which pollutant is present.*
- Option for heavy-metal removal available.



Ultra-Filter Socks®			
Part#	Description	Dimensions in. (mm)	Weight lbs. (kg)
9453	Activated Carbon	108 x 7 x 4 (2,743 x 178 x 102)	40.0 (18.0)
9455	Sorb 44	108 x 7 x 4 (2,743 x 178 x 102)	15.0 (7.0)
9457	Sediment Removal	108 x 7 x 4 (2,743 x 178 x 102)	40.0 (18.0)
9456	Phos Filter	108 x 7 x 4 (2,743 x 178 x 102)	66.0 (30.0)
9454	Heavy Metal Removal	108 x 7 x 4 (2,743 x 178 x 102)	35.0 (16.0)

*Multiple Ultra-Filter Socks can be used in a "treatment train" if the potential for more than one contaminant or a large quantity of a single contaminant is present.

Media Descriptions

- **Activated Carbon:** Excellent "polishing media". Helps remove certain chemicals, hydrocarbons and odors.
- **Sorb 44:** Used to remove oil and other hydrocarbons.
- **Sediment Removal:** Recycled rubber media provides weight, keeps unit in place, allows maximum water flow.
- **Phos Filter:** Excellent for removal of phosphorous.
- **Heavy Metal Removal:** Custom filter media helps remove zinc, lead, copper and other harmful, heavy metals.



ULTRA-FILTER SOCK SPECIFICATIONS

MATERIAL SPECIFICATIONS		
Properties	ASTM Test	Value
Material: High Density Polyethylene (HDPE), Woven Geotextile	---	---
Grab Tensile (MD/TD)	D 4632	326 / 216 lbs
Trapezoid Tear (MD/TD)	D 4533	141 / 70 lbs
Puncture	D 4833	109 lbs
Mullen Burst	D 3786	376 psi
UV Resistance (2000 hours)	D 4355	> 70%

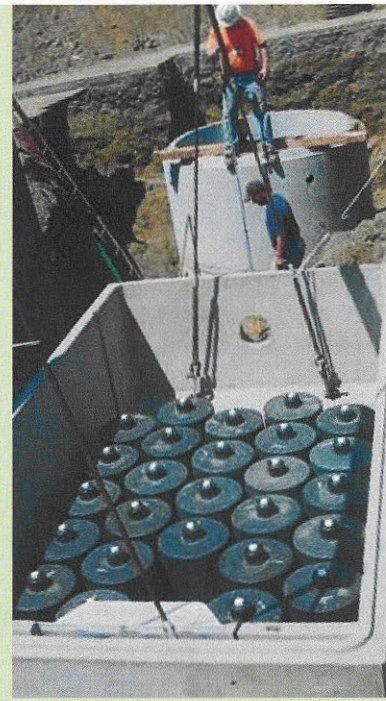
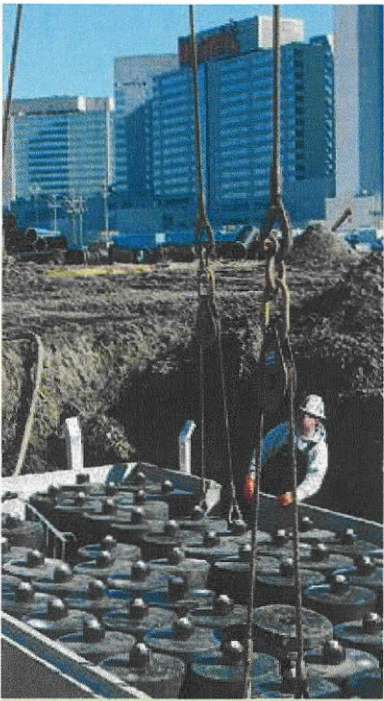
MEDIA SPECIFICATIONS	
Media Type	Capacity Information*
Activated Carbon	<ul style="list-style-type: none"> Each Filter Sock is filled with granular activated carbon. This media is an excellent polishing filter, due to its immense surface area and the wide range of components it is capable of absorbing. Helps with removing odors. Dry Filter Sock Weight of approximately 36 lbs
Heavy Metal Removal Media	<ul style="list-style-type: none"> Each Filter Sock can remove up to 1145 grams of heavy metals Removal rates up to 50% per Filter Sock See Heavy Metal Removal Data Sheet for more information Dry Filter Sock Weight is approximately 32.5 lbs
Sorb 44	<ul style="list-style-type: none"> Each Filter Sock can absorb up to 5.33 gallons (20 liters) of hydrocarbon Dry Filter Sock Weight is approximately 9 lbs
PhosFilter	<ul style="list-style-type: none"> Each Filter Sock can remove up to 26 lbs of phosphorus with up to 95% efficiency Dry Filter Sock Weight is approximately 50 lbs
Sediment Removal Media	<ul style="list-style-type: none"> Recycled rubber material keeps unit in place and allows for maximum water flow Dry Filter Sock Weight is approximately 40 lbs

* Note – All information is based on a standard 9-foot long Ultra-Filter Sock

07/12/2011

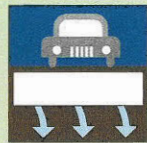
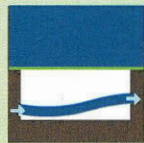
11542 Davis Creek Court • Jacksonville, FL 32256 • 904.292.1611 • 800.353.1611 • Fax
904.292.1325

E-mail: info@stormwaterproducts.com • www.stormwaterproducts.com



CONTECH[®]
ENGINEERED SOLUTIONS

The Stormwater Management StormFilter[®]



Solutions
Guide

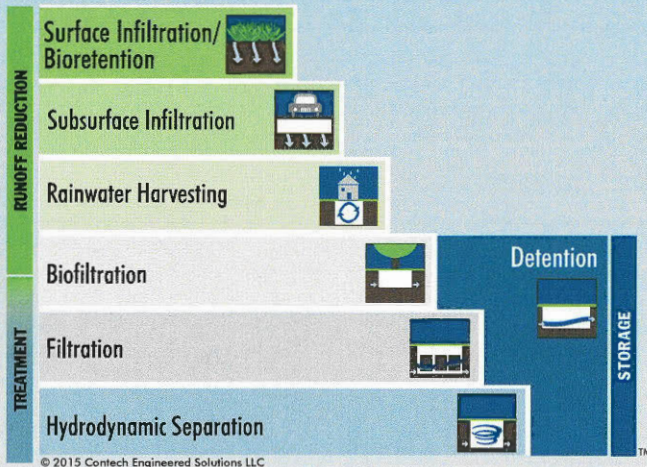


Stormwater Filtration



Selecting the right stormwater solution just got easier...

It's simple to choose the right low impact development (LID) solution to achieve your runoff reduction goals with the Contech UrbanGreen® Staircase. First, select the runoff reduction practices that are most appropriate for your site, paying particular attention to pretreatment needs. If the entire design storm cannot be retained, select a treatment best management practice (BMP) for the balance. Finally, select a detention system to address any outstanding downstream erosion.

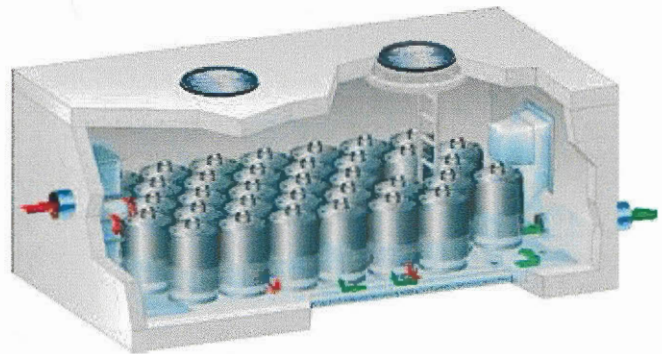


Highly Effective Pollutant Removal

Stormwater quality standards are becoming increasingly complex, especially with the advent of total maximum daily load (TMDL) requirements. Meeting pollutant reduction goals typically requires a technology that is highly effective at removing solids and associated pollutants from stormwater. In some cases, the technology must also be capable of removing dissolved pollutants such as metals and phosphorus. Using a variety of media, filtration systems can meet that need.

For almost two decades the Stormwater Management StormFilter® has helped you meet the most stringent stormwater requirements. The system has been continually tested and refined to ensure maximum reliability and performance.

Learn more about filtration at www.ContechES.com/stormfilter



The Stormwater Management StormFilter helps you meet the most stringent stormwater requirements ❖❖❖

Choosing the Right System

The Fundamentals of Filtration

The performance and longevity of media filtration systems is governed by a number of variables that must be carefully considered when evaluating systems, including media type, media gradation, hydraulic loading rate. Understanding these variables requires careful testing and development of performance and longevity data to support proper filter design.

Media Surface Area

Filtration flow rates are typically expressed as a surface area specific operating rate such as gallons per minute per square foot (gpm/ft²) of surface area. Lower specific operating rates translate to better performance and longer maintenance cycles. Specific operating rates higher than 2 gpm/ft² of media surface area negatively impact performance and longevity.

Surface vs. Radial Cartridge Filtration

When assessing filtration systems, it is important to consider whether filtration occurs primarily at the media surface or throughout a bed of media like in radial-cartridge filters. All else equal, radial-cartridge filters are longer lasting, since pollutants are captured and stored throughout the bed, as opposed to predominantly on the media surface. Radial cartridge filters capture more mass of pollutants per unit area of filter surface. Surface filters, such as membranes, are prone to rapid failure due to clogging, as pollutants occlude the media surface which requires frequent backwashing.

Media Hydraulic Conductivity and Flow Control

Filtration media is able to pass more flow per unit of media when it is new versus when it has been in operation for a while. With time, pollutants accumulate in the media bed and reduce its hydraulic capacity. It is critical that filtration devices are designed with excess hydraulic capacity to account for this loss. Also, finer media gradations remove finer particles, but have lower hydraulic capacity and occlude more rapidly. High performance and superior longevity can be achieved by controlling the flow through a more coarse media bed.

Performance: Laboratory Testing

Laboratory testing provides a means to generate hydraulic and basic performance data, but should be complimented with long-term field data. Laboratory performance trials should be executed with a fine sediment gradation such as Sil-Co-Sil 106 which has a median particle size of 22 microns. Testing with coarser gradations is not likely to be representative of field conditions.

Performance: Field Testing

Long-term field evaluations should be conducted on all filtration devices. Field studies should comply with the Technology Acceptance Reciprocity Partnership (TARP), Environmental Technology Verification (ETV) or the Technology Assessment Protocol – Ecology (TAPE) protocols. Testing should be overseen by a reputable third-party to be considered valid.

Longevity

It is essential that loading trials be conducted to evaluate the longevity of a media filter. These trials must be executed with "real" stormwater solids and not silica particles. Reliance on silica particles to assess longevity grossly overstates the loading capacity of the media and the results of such trials should not be relied on. Knowing how much mass a media filter can capture before failure allows it to be sized for a desired maintenance interval by estimating the pollutant load that will be delivered to the filter.



The Stormwater Management StormFilter®

A best management practice (BMP) designed to meet stringent regulatory requirements; the Stormwater Management StormFilter removes the most challenging target pollutants – including fine solids, soluble heavy metals, oil, and total nutrients – using a variety of media. For more than two decades, StormFilter has helped clients meet their regulatory needs and through product enhancements the design continues to be refined for ease of use.

Here's Why StormFilter is the Best Filter Available:

Superior Hydraulics

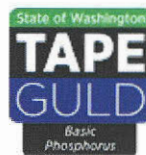
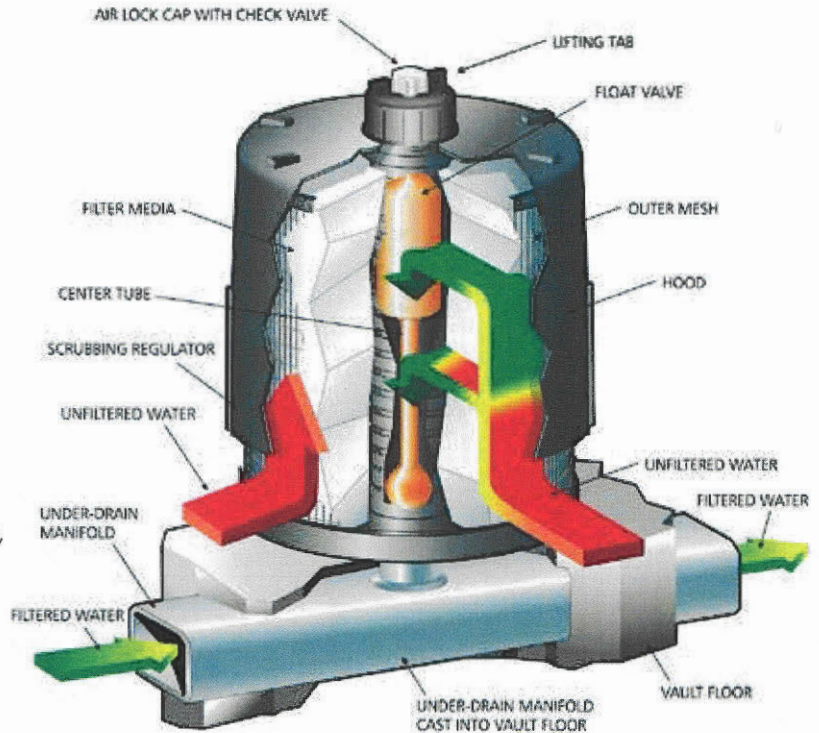
- External bypass – Protects treatment chamber from high flows and ensures captured pollutants are not lost during low frequency, high intensity storm events
- Multiple cartridge heights – Minimize head loss to fit within the hydraulic grade line and shrink system size, reducing install costs
- Over 30 StormFilter configurations in use across the country

Reliable Longevity

- One-of-a-kind self-cleaning hood – Prevents surface blinding, ensures use of all media, and prolongs cartridge life
- One to two-year maintenance cycles - Fewer maintenance events compared to similar products reduces costs over the lifetime of the system
- 15-years of maintenance experience – Predictable long-term performance comes standard

Proven Performance

- Only proven filter on the market - Performance verified by the WA Ecology and NJ DEP, and system approved for use with numerous local agencies
 - Qualifies for LEED® Sustainable Site Credit 6.2 – Stormwater Quality Control
- Achieve water quality goals with confidence – Easy approval speeds permitting
- 8th Generation Product – Design refined and perfected over two decades of research and experience
- Full-scale testing at more than 10 sites around the United States



Underground System Maximizes Land Use and Development Profitability

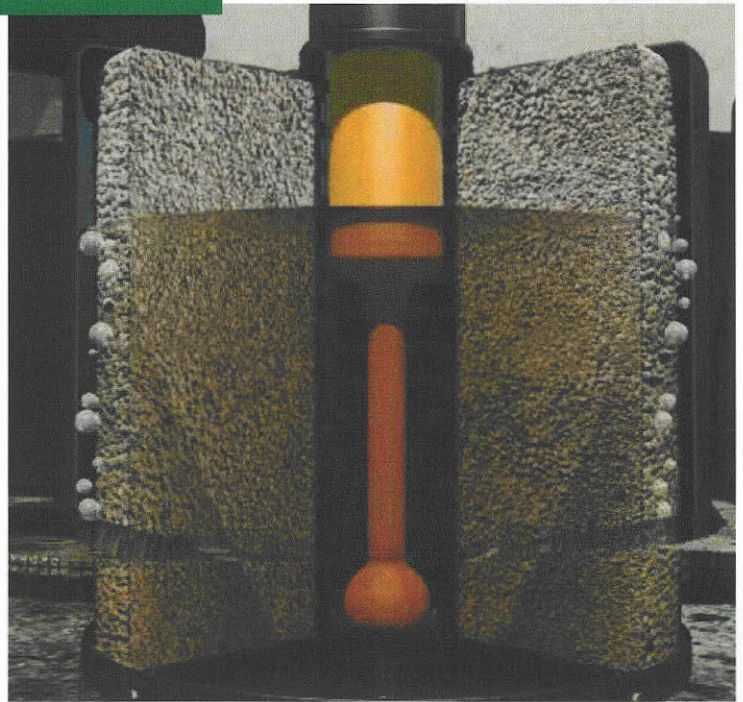
- Save land space, allow denser development and reduce sprawl
- Add parking, increase building size, develop outparcels by eliminating aboveground systems
- Compact design reduces construction and installation costs by limiting excavation

Patented Siphon-Actuated Filtration

During a storm, runoff passes through the filtration media and starts filling the cartridge center tube. Air below the hood is purged through a one-way check valve as the water rises. When water reaches the top of the float, buoyant forces pull the float free and allow filtered water to drain.

After the storm, the water level in the structure starts falling. A hanging water column remains under the cartridge hood until the water level reaches the scrubbing regulators at the bottom of the hood. Air then rushes through the regulators releasing water and creating air bubbles that agitate the surface of the filter media, causing accumulated sediment to drop to the vault floor. This patented surface-cleaning mechanism helps restore the filter's permeability between storm events.

See the StormFilter in action at www.ContechES.com/stormfilter



Self-cleaning hood prevents surface blinding, ensures use of all media, and prolongs cartridge life



For even more information, check out the StormFilter Animation available at www.conteches.com/videos

Configurations and Applications

The StormFilter technology can be configured to meet your unique site requirements. Here are a few of the most common configurations, however many other configurations are available. Please contact your Contech Project Consultant to evaluate the best options for your site or find out more in the [StormFilter Configuration Guide available on www.ContechES.com/stormfilter](http://www.ContechES.com/stormfilter).

Upstream Treatment Configurations

The following suite of StormFilter configurations are easily incorporated on sites where LID site design is recommended. These low-cost, low-drop, point-of-entry systems also work well when you have a compact drainage area.



CatchBasin StormFilter

- Combines a catch basin, a high flow bypass device, and a StormFilter cartridge in one shallow structure
- Treats sheet flow
- Uses drop from the inlet grate to the conveyance pipe to drive the passive filtration cartridge
- No confined space required for maintenance

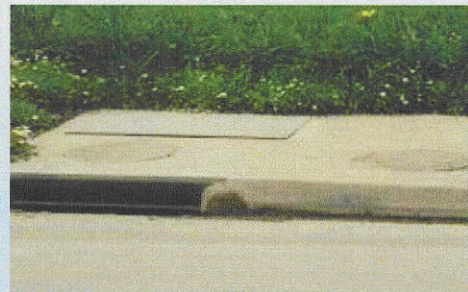
CatchBasin StormFilter



Curb Inlet

- Accommodates curb inlet openings from 3 to 10 feet long
- Uses drop from the curb inlet to the conveyance pipe to drive the passive filtration cartridges

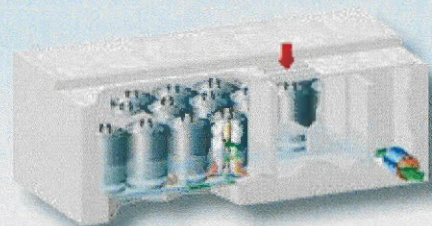
Curb Inlet



Linear Grate

- Can be designed to meet volume based sizing requirements
- Can be installed in place of and similar to a typical catch basin
- No confined space entry required for maintenance
- Accommodates up to 29 StormFilter cartridges

Linear Grate



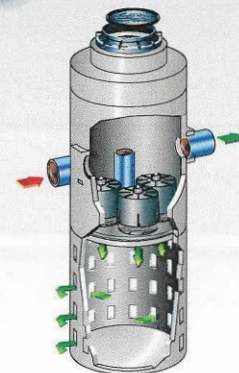
Infiltration/Retrofit Configuration

Infiltration

- Provides treatment and infiltration in one structure
- Available for new construction and retrofit applications
- Easy installation



Infiltration



Roof Runoff Treatment Configuration



DownSpout

- Easily integrated into existing gutter systems to treat pollution from rooftop runoff
- Fits most downspout configurations and sizes; single or dual-cartridge models available
- Treats up to 14,000 square feet of rooftop area per dual-cartridge system

DownSpout StormFilter



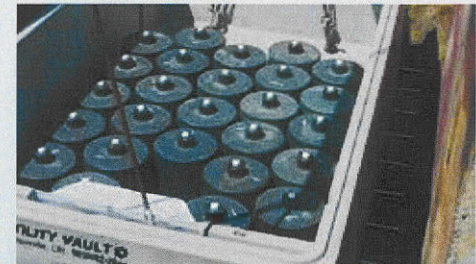
Downstream Treatment Configurations

Conventional stormwater treatment involves collecting, conveying and treating stormwater runoff with an end of pipe treatment system before discharging off-site. StormFilter configurations suitable for these applications are listed below and can be engineered to treat a wide range of flows.

Vault / Monhole

- Treats small to medium sized sites
- Simple installation - arrives on-site fully assembled
- May require off-line bypass structure

Vault



High Flow

- Treats flows from large sites
- Consists of large, precast components designed for easy assembly on-site
- Several configurations available, including: CON/SPAN®, Panel Vault, Box Culvert, or Cast-In-Place

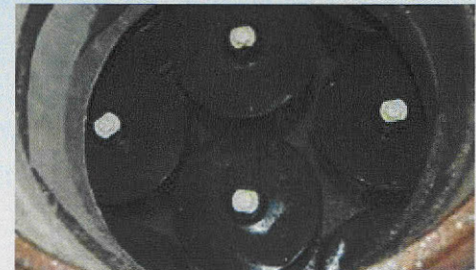
High Flow



Volume

- Meets volume-based stormwater treatment regulations
- Captures and treats specific water quality volume (WQv)
- Provides treatment and controls the discharge rate
- Can be designed to capture all, or a portion, of the WQv

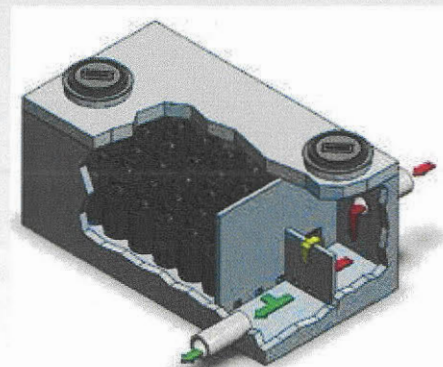
Manhole



Peak Diversion


- Provides off-line bypass and treatment in one structure
- Eliminates material and installation cost of additional structures to bypass peak flows
- Reduces the overall footprint of the treatment system, avoiding utility and right-of-way conflicts
- Internal weir allows high peak flows with low hydraulic head losses
- Accommodates large inlet and outlet pipes (up to 36") for high flow applications


Peak Diversion





Media Options


Our filtration products can be customized using different filter media to target site-specific pollutants. A combination of media is often recommended to maximize pollutant removal effectiveness.

- 

PhosphoSorb® is a lightweight media built from a Perlite-base that removes total phosphorus (TP) by adsorbing dissolved-P and filtering particulate-P simultaneously.
- 

Perlite is naturally occurring puffed volcanic ash. Effective for removing TSS, oil and grease.
- 

CSF® Leaf Media and **MetalRx™** are created from deciduous leaves processed into granular, organic media. CSF is most effective for removing soluble metals, TSS, oil and grease, and buffering acid rain. MetalRx, a finer gradation, is used for higher levels of metal removal.
- 

Zeolite is a naturally occurring mineral used to remove soluble metals, ammonium and some organics.
- 

GAC (Granular Activated Carbon) has a micro-porous structure with an extensive surface area to provide high levels of adsorption. It is primarily used to remove oil and grease and organics such as PAHs and phthalates.

	PhosphoSorb	Perlite	CSF	MetalRx	Zeolite	GAC
Sediments	•	•	•			
Oil and Grease	•	•	•	•		
Soluble Metals	•		•	•	•	
Organics			•	•		•
Nutrients	•	•	•	•	•	
Total Phosphorus	•					

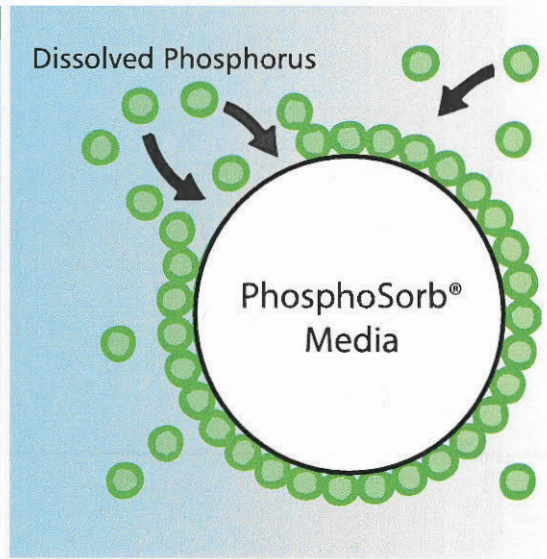
Note: Indicated media are most effective for associated pollutant type. Other media may treat pollutants, but to a lesser degree.

ZPG™ media, a proprietary blend of zeolite, perlite, and GAC, is also available and provides an alternative where leaf media cannot be used.

Focus on Phosphorous

Stormwater runoff with elevated phosphorus concentration can significantly impair water quality. More stringent stormwater regulations calling for higher levels of phosphorus removal are currently being implemented. To meet these requirements, more than just the physical separation of particulate P is needed. That's where the PhosphoSorb media can help.

A cost-effective, lightweight, adsorptive filtration media, PhosphoSorb offers the effective adsorption capacity of dissolved phosphorus and retention capacity of particulate phosphorus. Initial field results suggest removal of greater than 65% of the total phosphorus load can be expected when influent concentrations exceed 0.1 mg/l, and the media can remain in operation for more than 1 year without requiring maintenance due to media occlusion.

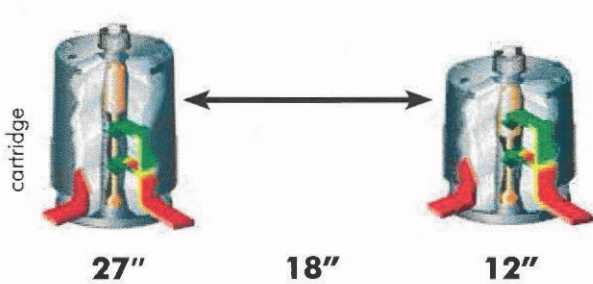


Cartridge Options

With multiple cartridge heights available, you have a choice when fitting a StormFilter system onto your site.

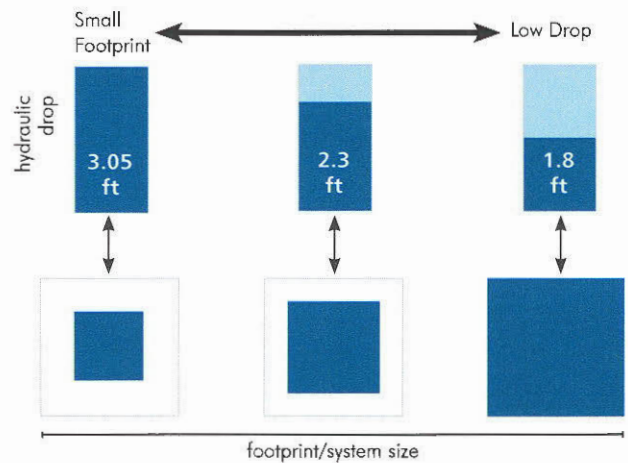
The 27" cartridge provides 50% more treatment per square foot of system than the 18" cartridge. So, you are meeting the same treatment standards with fewer cartridges, which means a smaller system.

If you are limited by hydraulic constraints, choose our low drop cartridge, which provide filtration treatment with only 1.8 feet of headloss.



Cartridge Flow Rates

Cartridge Type	Hydraulic Drop	Treatment Capacity (gpm)	
		1 gpm/ft ²	2 gpm/ft ²
StormFilter 27"	3.05 feet	11.25	22.5
StormFilter 18"	2.3 feet	7.5	15
StormFilter Low Drop	1.8 feet	5	10
MFS 22"	2.3 feet	9	18
MFS 12"	1.4 feet	5	10

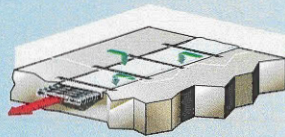


Multiple cartridge heights are available to meet your hydraulics needs ❖❖❖

StormFilter Accessories

Drain-Down

- Provides complete dewatering of the StormFilter vault by gradually removing residual water in the sump after the storm event
- Aids in vector control by eliminating mosquito-breeding habitat
- Eliminates putrefaction and leaching of collected pollutants
- Lowers maintenance cost by reducing decanting and disposal volume



Sorbent Hood Cover

- Absorbs free surface oil and grease on contact
- Will not release captured oil, even when saturated
- Made from recycled synthetic fiber



Cartridge Lifting Hook

- Specially designed to help you easily lift cartridges during maintenance



Maintenance

Longevity is a function of applying existing filtration physics to the maximum extent possible in order to decrease maintenance frequency without sacrificing performance. Maintenance is an integral part of ensuring long term effectiveness of a filter system. The quality of treatment can only be guaranteed by a well maintained structure, whether it is proprietary or nonproprietary. The notion that some BMPs, including low impact development (LID) structures, have no maintenance cost burden is a misconception.

Longer Maintenance Intervals Reduce Life Cycle Costs

Maintenance intervals can be a large unseen cost for developers and owners. Including a maintenance interval in the product specification will ensure that no one is surprised with high long term costs.

The Stormwater Management StormFilter can be designed with up to a 2 year maintenance interval, proven by over a decade of installations, which can greatly reduce costs. Our filter cartridges are made with 60% of recyclable material.

Ease of Maintenance Matters

The StormFilter has been optimized over time to make maintenance easy. Cartridges feature a 1/4 turn connector, so they can be quickly removed and installed. A removable hood allows for effortless access to spent media, especially compared to sealed systems that require cutting the cartridge hood. Finally, all StormFilter structures can be accessed without restriction for inspection, media replacement, and washing of structure.

Experience Counts

Contech has over 120,000 StormFilter cartridges in use throughout the country. We have a plant dedicated to the production of filtration cartridges based in Portland, OR, that supports maintenance events with exchange of full cartridge and maintenance contracts. All cartridge components go through a QA/QC review at the refilling point to ensure that the correct media gradation is supplied and that it is packed properly which provides reliable operation and performance.

Not All Stormwater Filtration Systems are the Same

When you choose the Stormwater Management StormFilter, you are choosing the industry leading technology. Our experienced design engineers can help you design the system that will work for your site and your budget.

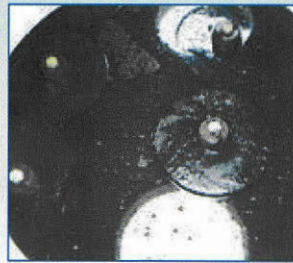
Maintenance Required If:



Greater than 4" of sediment is on the structure floor



Greater than 1/4" of sediment is on the top of the cartridges



Greater than 4" of standing water in vault for more than 24 hours after a storm

Annual StormFilter vault inspection is recommended and it doesn't require confined space entry ❖❖❖



Pollutants must be removed to restore the StormFilter to its full efficiency and effectiveness.

Spent filter media can be dumped directly onto the structure floor, so the emptied lightweight cartridges can be easily removed, thus eliminating the need for handling heavy units.



Easy to access treatment system can make a difference in maintenance expenses.



StormFilter structures can be accessed without confined space for inspection.

The quality of treatment can only be guaranteed by a well maintained structure





LEARN MORE

- Access project profiles, photos, videos and more online at www.ContechES.com/stormfilter

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- Submit your system requirements on our product Design Worksheet www.ContechES.com/start-a-project

USE OUR ONLINE TOOLS

- Low Impact Development Site Planner www.ContechES.com/LIDsiteplanner



COMPLETE SITE SOLUTIONS



TREATMENT SOLUTIONS

Helping to satisfy stormwater management requirements on land development projects

- Stormwater Treatment
- Detention/Infiltration
- Rainwater Harvesting
- Biofiltration/Bioretenion

PIPE SOLUTIONS

Meeting project needs for durability, hydraulics, corrosion resistance, and stiffness

- Corrugated Metal Pipe (CMP)
- Steel Reinforced Polyethylene (SRPE)
- High Density Polyethylene (HDPE)
- Polyvinyl Chloride (PVC)

STRUCTURES SOLUTIONS

Providing innovative options and support for crossings, culverts, and bridges

- Plate, Precast & Truss bridges
- Hard Armor
- Retaining Walls
- Tunnel Liner Plate



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The product(s) described may be protected by one or more of the following US patents: 5,707,527; 5,788,848; 5,985,157; 6,027,639; 6,350,374; 6,406,218; 6,641,720; 6,511,595; 6,649,048; 6,991,114; 6,998,038; 7,186,058; 7,296,692; 7,297,266 related foreign patents or other patents pending.

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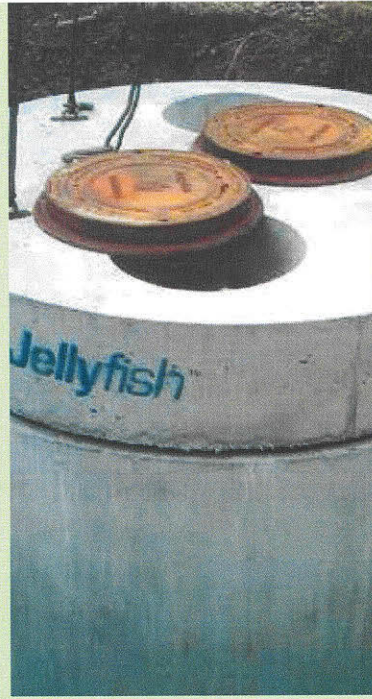
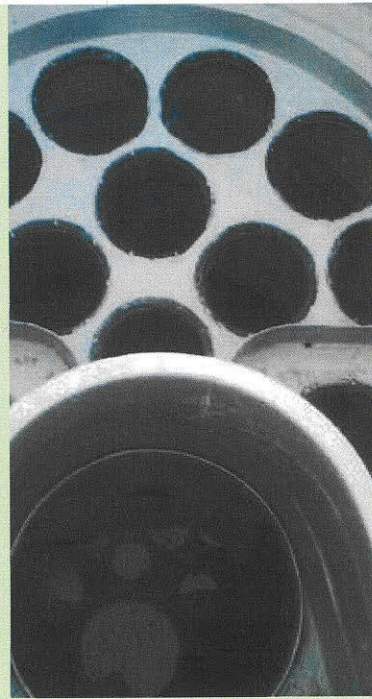


StormFilter Brochure MC 1.5M 6/16

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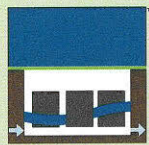
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FSC

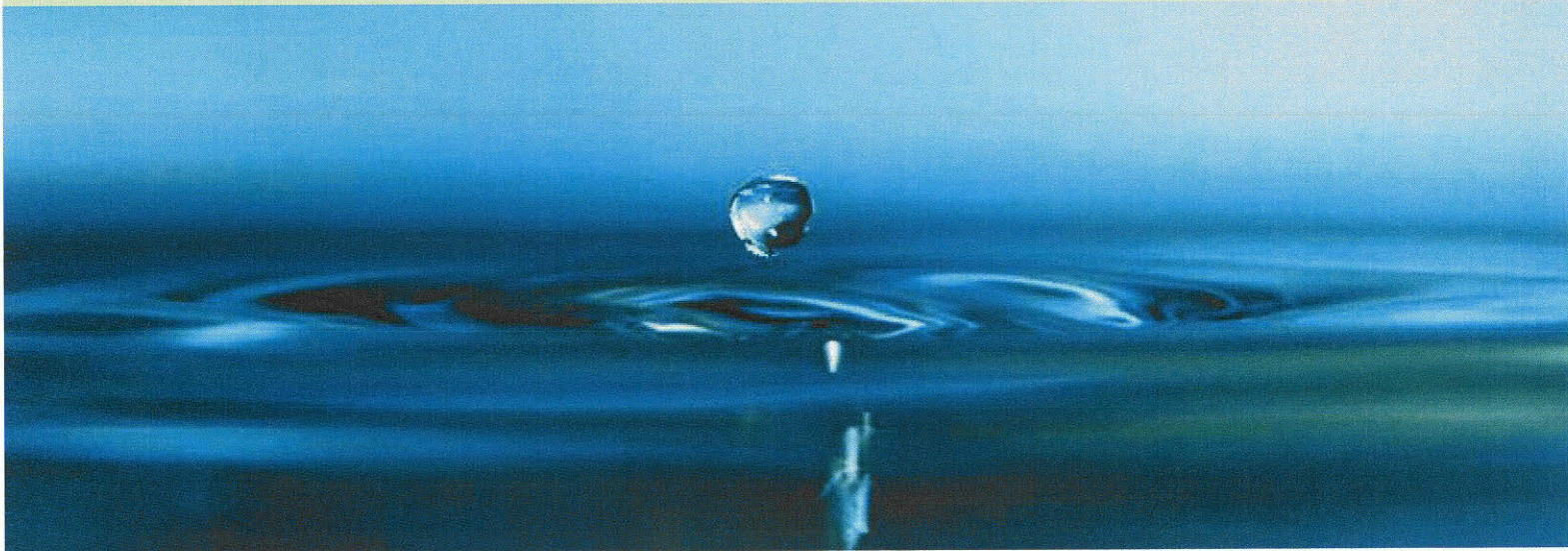


CONTECH[®]
ENGINEERED SOLUTIONS

Jellyfish[®] Filter



**Solutions
Guide**

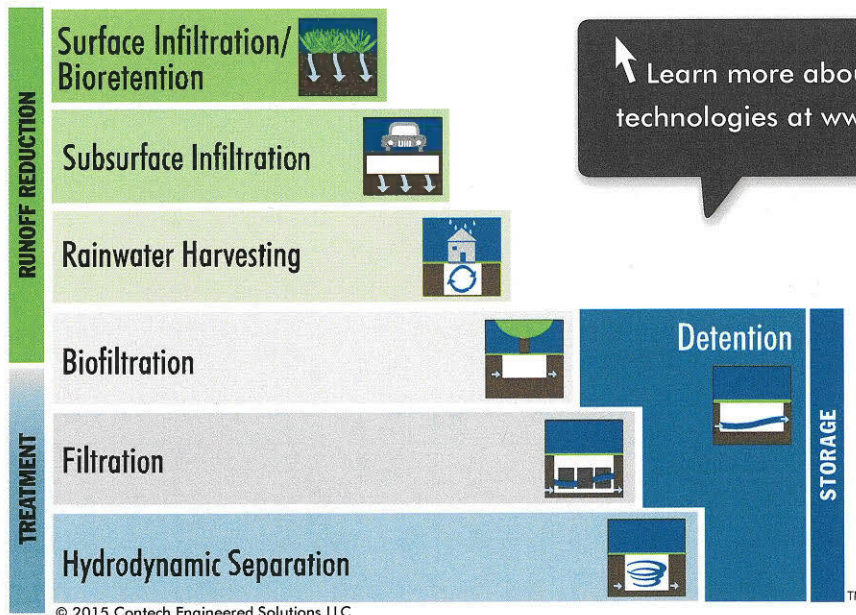


UrbanGreen® Stormwater Solutions from Contech



Selecting the Right Stormwater Solution Just Got Easier...

It's simple to choose the right low impact development (LID) solution to achieve your runoff reduction and treatment goals with the Contech UrbanGreen® Staircase. First, select the runoff reduction practices that are most appropriate for your site, paying particular attention to pretreatment needs. If the entire design storm cannot be retained, select a best management practice (BMP) to treat the balance. Finally, select a detention system to address any outstanding downstream erosion.



Learn more about all of our stormwater technologies at www.ContechES.com/stormwater

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Learn About the Jellyfish® Filter

Go online and watch our animation to learn how the Jellyfish Filter works. The animation also highlights important features of the Jellyfish Filter including...

- Applications
- Performance test results
- Inspection and maintenance
- Regulatory approvals

To view the Jellyfish Filter animation, visit: www.conteches.com/jellyfish



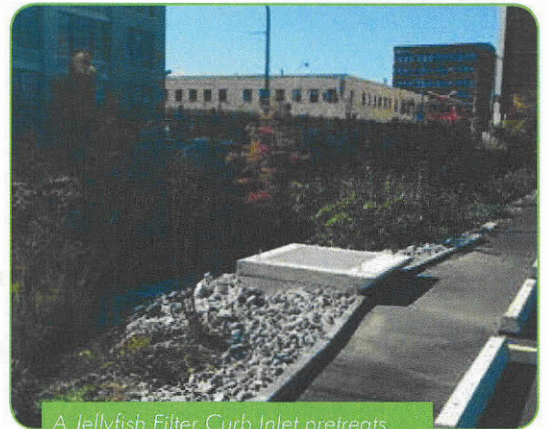
Jellyfish® Filter

Filtration as a Stormwater Management Strategy

Stormwater regulations are increasingly calling for more robust treatment levels. In addition to the removal of suspended solids, many regulations now require best management practices to remove significant amounts of nutrients, metals, and other common pollutants found in stormwater runoff. Meeting these regulations often requires the use of a filtration solution.

Low Impact Development (LID) and Green Infrastructure (GI) are complimented by filtration solutions. Benefits of LID and GI systems include retaining runoff and aesthetic appeal. Keeping LID and GI sites free from fine sediments, oils, trash, and debris while functioning as designed can be time consuming and costly.

As a result, the practice of combining LID and GI with filtration is becoming more common. Providing a single point of maintenance promotes proper system functionality and increases the aesthetic appeal by removing unsightly trash and debris.

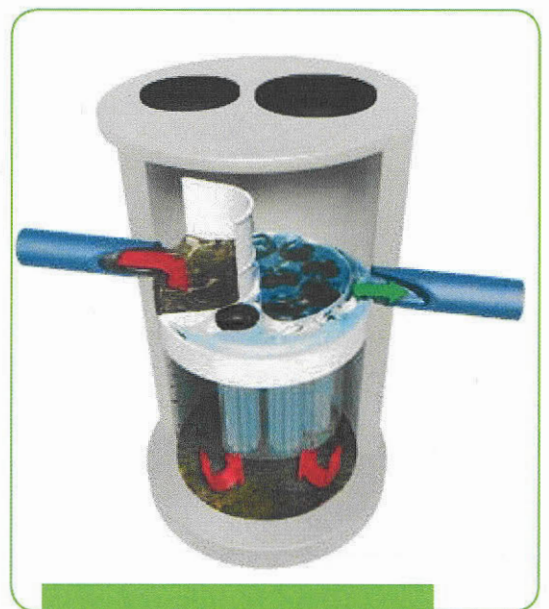


A Jellyfish Filter Curb Inlet pretreats runoff entering a bioretention system.

The Jellyfish[®] Filter - Setting New Standards in Stormwater Treatment

The Jellyfish Filter is a stormwater quality treatment technology featuring high surface area and high flow rate membrane filtration at low driving head. By incorporating pretreatment with light-weight membrane filtration, the Jellyfish Filter removes floatables, trash, oil, debris, TSS, fine silt-sized particles, and a high percentage of particulate-bound pollutants; including phosphorus and nitrogen, metals and hydrocarbons.

The high surface area membrane cartridges, combined with up flow hydraulics, frequent backwashing, and rinsable/reusable cartridges ensures long-lasting performance.



The Jellyfish Filter.

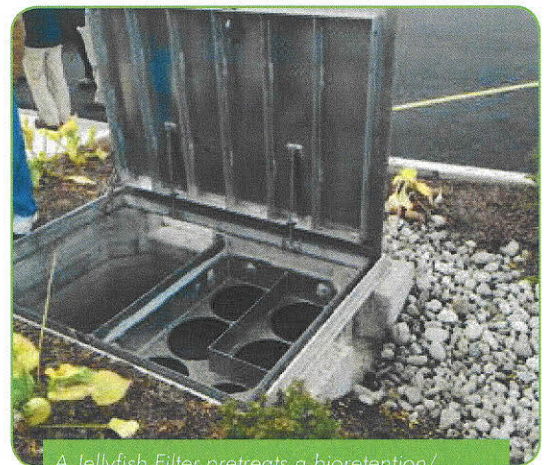


Jellyfish® Filter Features and Benefits

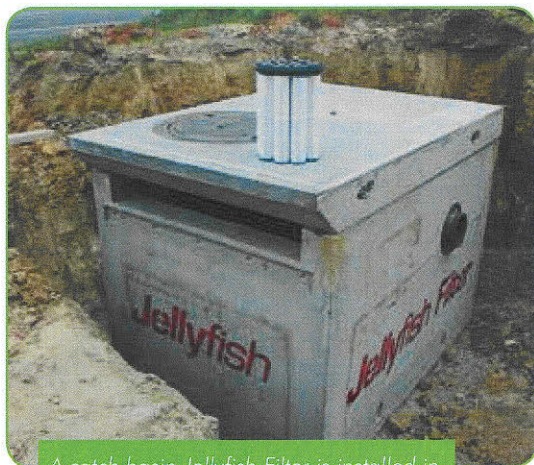
FEATURES	BENEFITS
1. High surface area, high flow rate membrane filtration	1. Long-lasting and effective stormwater treatment
2. Highest design treatment flow rate per cartridge (up to 80 gpm (5 L/S))	2. Compact system with a small footprint, lower construction cost
3. Low driving head (typically 18 inches (457 mm) or less)	3. Design Flexibility, lower construction cost
4. Lightweight cartridges with passive backwash	4. Easy maintenance and low life-cycle cost
5. 3 rd party verified field performance per TARP Tier II protocol	5. Superior pollutant capture with confidence

Jellyfish® Filter Applications

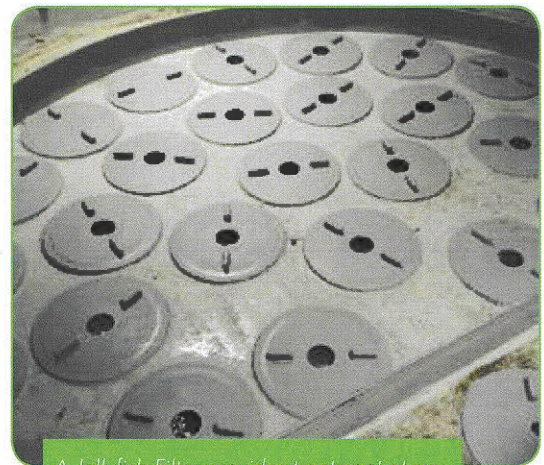
- Urban development
- Highways, airports, seaports, and military installations
- Commercial and residential development, infill and redevelopment, and stormwater quality retrofit applications
- Pretreatment for Low Impact Development (LID), Green Infrastructure (GI), infiltration, and rainwater harvesting and reuse systems
- Industrial sites



A Jellyfish Filter pretreats a bioretention/bioswale system at a commercial site in Ontario, Canada.



A catch basin Jellyfish Filter is installed in a commercial development in Virginia.



A Jellyfish Filter provides treatment at an Industrial Park in Lake Tahoe, Nevada.

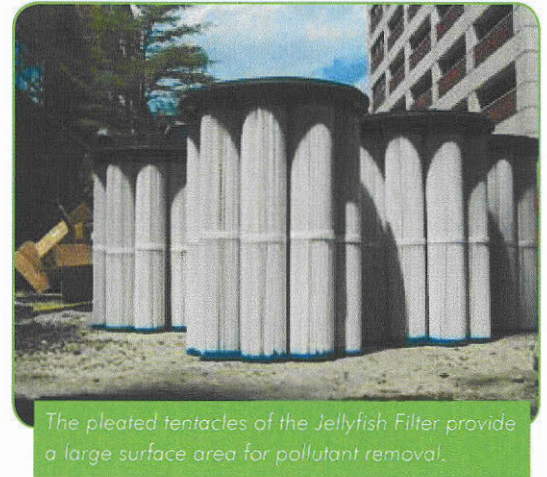
Jellyfish® Filter Field Performance Test Results

POLLUTANT OF CONCERN	% REMOVAL
Total Trash	99%
Total Suspended Solids (TSS)	89%
Total Phosphorus (TP)	59%
Total Nitrogen (TN)	51%
Total Copper (TCu)	>80%
Total Zinc (TZn)	>50%
Turbidity (NTU)	<15%

Sources:

TARP II Field Study – 2012 JF 4-2-1 Configuration

MRDC Floatables Testing – 2008 JF6-6-1 Configuration



Jellyfish® Filter Approvals

The Jellyfish Filter is approved through numerous state and federal verification programs, including:

- New Jersey Corporation for Advanced Technology (NJCAT) – Field Performance Verification per TARP Tier II Protocol
- New Jersey Department of Environmental Protection (NJDEP) – Certification
- Washington State Department of Ecology (TAPE – CULD)
- Maryland Department of the Environment (MD DOE)
- Texas Commission on Environmental Quality (TCEQ)
- Virginia Department of Environmental Quality (VA DEQ)
- Ontario Ministry of the Environment – New Environmental Technology Evaluation (NETE) – Certification
- New York Department of Environmental Conservation (DEC)
- City of Denver
- Los Angeles County

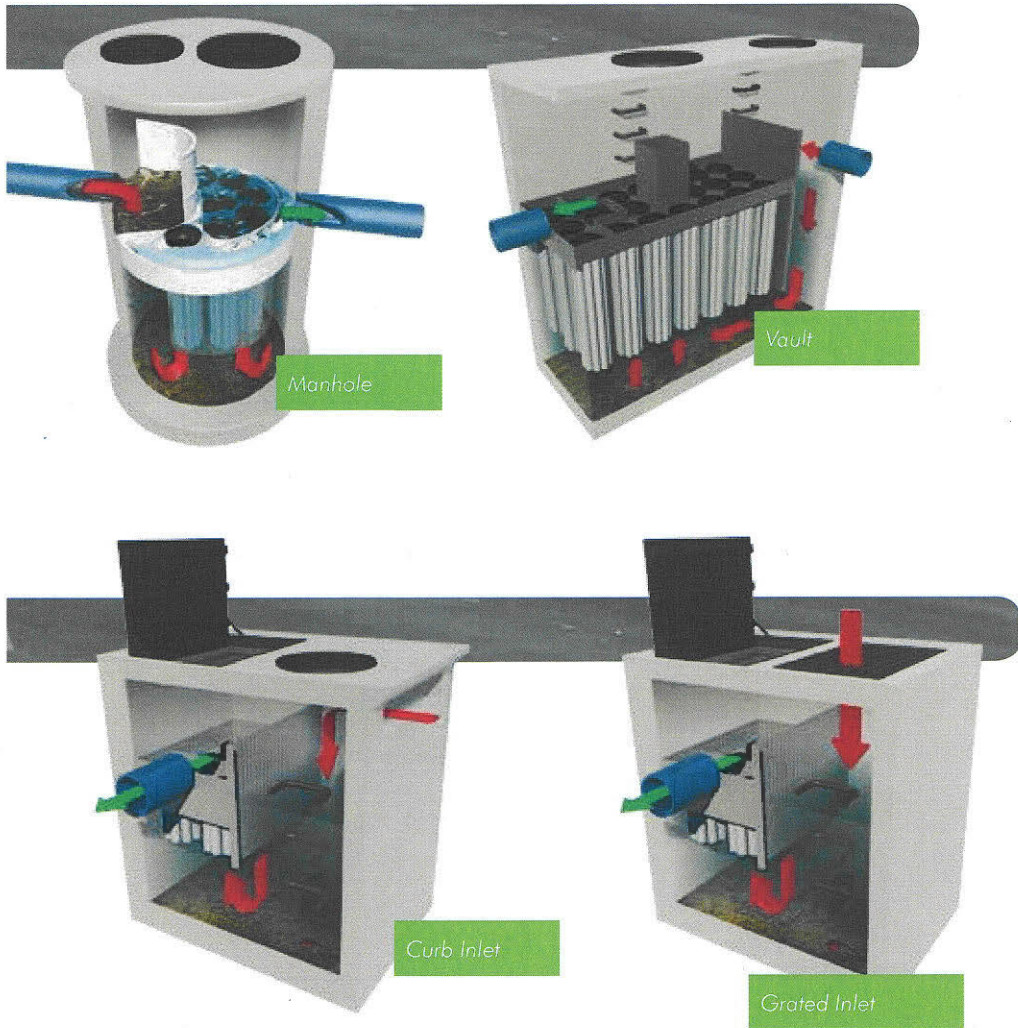


Learn more at www.ContechES.com/jellyfish



Jellyfish® Filter Configurations

The Jellyfish Filter is available in a variety of configurations. Typically, 18 inches (457 mm) of driving head is designed into the system. For low drop sites, the designed driving head can be less.



Lightweight Jellyfish Filter Configurations

Custom configurations include Jellyfish Filter tanks made from fiberglass for site specific applications.



A Jellyfish Filter was constructed from fiberglass to reduce the weight of the system, allowing for a suspended installation above an underground parking structure. The reduced weight eliminated the need for structural changes, and suspending the Jellyfish resulted in no loss of parking space, maximizing real-estate value.

Other custom configurations include:

- Peak Diversion Manhole and Vault Configurations for online capability (internal bypass)

Jellyfish® Filter Maintenance

Inspection and maintenance activities for the Jellyfish Filter typically include:

- Visual inspection of deck, cartridge lids, and maintenance access wall.
- Vacuum extraction of oil, floatable trash/debris, and sediment from manhole sump.
- External rinsing and re-installing of filter cartridges.
- Replacement of filter cartridge tentacles as needed. Cartridge replacement intervals vary by site; replacement is anticipated every 2-5 years.

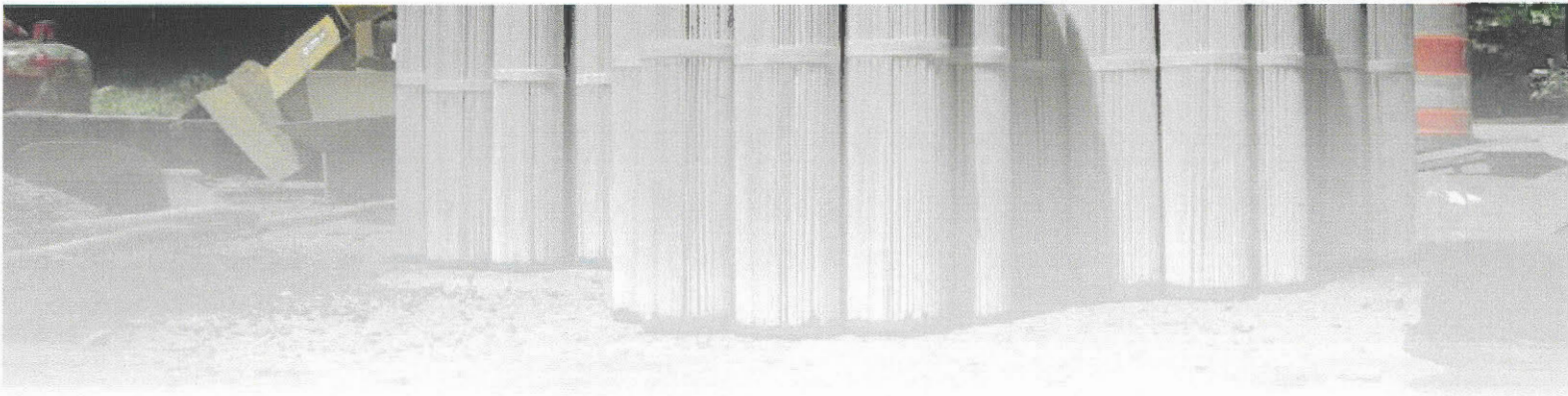


The Jellyfish Filter tentacle is light and easy to clean.

Jellyfish® Filter Inspection and Maintenance Video

Inspecting and maintaining the Jellyfish Filter is easier than you may think. Watch the Jellyfish inspection and maintenance video at www.ContechES.com/jellyfish





LEARN MORE

- Access project profiles, photos, videos and more online at www.ContechES.com/jellyfish

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- Submit your system requirements on our product Design Worksheet www.ContechES.com/start-a-project

USE OUR ONLINE TOOLS

- Low Impact Development Site Planner www.ContechES.com/LIDsiteplanner



COMPLETE SITE SOLUTIONS



TREATMENT SOLUTIONS

Helping to satisfy stormwater management requirements on land development projects

- Stormwater Treatment
- Detention/Infiltration
- Rainwater Harvesting
- Biofiltration/Bioretenion

PIPE SOLUTIONS

Meeting project needs for durability, hydraulics, corrosion resistance, and stiffness

- Corrugated Metal Pipe (CMP)
- Steel Reinforced Polyethylene (SRPE)
- High Density Polyethylene (HDPE)
- Polyvinyl Chloride (PVC)

STRUCTURES SOLUTIONS

Providing innovative options and support for crossings, culverts, and bridges

- Plate, Precast & Truss bridges
- Hard Armor
- Retaining Walls
- Tunnel Liner Plate

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FSC



Operation and Maintenance

DownSpout StormFilter™

Single-Stage Units

Important: These guidelines should be used as a part of your site stormwater management plan.

Overview

The single-stage DownSpout StormFilter™ (DSF) consists of a multi-chamber plastic unit that can contain up to two StormFilter cartridges. By configuring the StormFilter cartridges with various filter media, the DSF is designed to remove pollutants such as soluble zinc and other metals from rooftop runoff.

The DSF is installed above ground, occupying a small footprint (2.5' x 5'), and is easily integrated into most existing downspout configurations. The system can be equipped with built-in ports for viewing and sample collection to simplify monitoring. For higher levels of treatment, a second stage can be added.

One single-stage, two-cartridge DSF unit can treat runoff from roof areas up to 14,000 square feet. The DSF is also designed with an internal high flow bypass to minimize re-suspension of trapped pollutants in cases where extreme flows exceed the water quality design flow.

Design Operation

The DSF is installed as the primary receiver of roof runoff. Runoff is directly discharged to the DSF cartridge chamber by the existing downspout system. Once in the cartridge chamber, polluted water ponds and percolates horizontally through the media in the filter cartridges. Treated water collects in each cartridge's center tube from where it is directed by an under-drain manifold to the outlet pipe on the downstream side of the overflow weir and discharged.

When flows into the DSF exceed the water quality design value, excess water spills over the overflow weir, bypassing the cartridge chamber, and discharges to the outlet pipe.

Applications

The DSF is an affordable, easily-maintained solution for treating rooftop runoff from industrial facilities, warehouses, and commercial buildings. Its modular and changeable cartridges allow it to be upgraded to meet changing removal requirements without requiring purchase of additional equipment.

Maintenance Guidelines

The filter cartridges contained in the DSF are easily removed and replaced during maintenance activities according to the following guidelines:

1. Establish a safe working area as per typical catch basin service activity.
2. Remove lid.
3. Turn cartridge(s) counter-clockwise to disconnect from pipe manifold.
4. Remove 4" center cap from cartridge and replace with lifting cap.
5. Remove cartridge(s) from cartridge chamber by hand or with vactor truck boom.
6. Remove accumulated sediment via vactor truck (min. clearance 13" x 24").
7. Rinse interior of chamber and vactor remaining water and sediment.
8. Install fresh cartridge(s) threading clockwise to pipe manifold.
9. Replace lid.
10. Return original cartridges to CONTECH Stormwater Solutions for cleaning and media disposal.

Media may be removed from the filter cartridges using the vactor truck before the cartridges are removed from the catch basin structure. Empty cartridges can be easily removed from the catch basin structure by hand. Empty cartridges should be reassembled and returned to CONTECH Stormwater Solutions, as appropriate.

Note: Customer is responsible for disposing of media in accordance with applicable regulations.

Materials required include a lifting cap, vactor truck, and fresh filter cartridges. Contact CONTECH Stormwater Solutions for specifications and availability of the lifting cap. The owner may refresh spent cartridges. Refreshed cartridges are also available from CONTECH Stormwater Solutions on an exchange basis. Contact the maintenance department of CONTECH Stormwater Solutions at (800) 548-4667 for more information.

Maintenance is estimated at 24 minutes of site time. For units with more than one cartridge, add approximately 5 minutes for each additional cartridge. Add travel time as required.

Attachment G
Inspection Forms

Pepco – Benning Road Facility
Substation Monthly Inspection Report – Elect. Maint. Substation

Inspection Date: _____

Inspection Time: _____

Inspector: _____

Inspector's Signature: _____



	Substation 7		Substation 41		Substation 45		Comments
	Yes	No	Yes	No	Yes	No	
Good Housekeeping Procedures							
Is the area free of potential discharges of leaks and spills?							
Are containment areas in good condition, with valves closed?							
Are work areas clean, dry, and free of litter and debris?							
Are catch basins and other inlets in the area to the storm drain system free from debris?							
Are booms in place and in good condition at catch basins and other inlets to the storm drain system?							
Are witch hats in place, in good condition and free of debris at catch basins and other inlets to the storm drain system?							
Are there signs of drainage issue or overflow at any storm drain inlet?							
Spill Prevention & Response							
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?							
Do spill kits contain the proper tools and equipment?							
Have all spills been properly cleaned up and disposed of properly in the respective area?							
Other Indicators of Illicit Discharges							
Is the area clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?							

Pepco – Benning Road Facility

Transformer Storage Monthly Inspection Report

Inspection Date: _____

Inspection Time: _____

Inspector: _____

Inspector's Signature: _____



	Transformer Yard		Transformer Lay Down Area (Bldg. 56)		Comments
	Yes	No	Yes	No	
Good Housekeeping Procedures					
Are outside work areas clean, dry, and free of litter and debris?					
Is the area free of potential discharges of leaks and spills?					
Are scrap metal bins free of rust?					
Are catch basins and other inlets in the area to the storm drain system free from debris?					
Are booms in place and in good condition at catch basins and other inlets to the storm drain system?					
Are witch hats in place, in good condition and free of debris at catch basins and other inlets to the storm drain system?					
Are there signs of drainage issue or overflow at any storm drain inlet?					
Materials Handling and Storage					
Is there adequate aisle space and organization in all storage areas so that any corrosion or leaks can be detected early?					
Are all containers labeled with contents on the appropriate label?					
Are Safety Data Sheets available for all chemical substances?					
Are transformers protected from vehicular traffic?					
Have all transformers been inspected and are they generally in good condition?					
If transformers are not in good condition (rusted or leaking) have they been moved indoors or into containment protected from precipitation?					
Spill Prevention & Response					
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?					
Do spill kits contain the proper tools and equipment?					
Have all spills been properly cleaned up and disposed of properly in the respective area?					
Other Indicators of Illicit Discharges					
Is the area clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?					

Pepco – Benning Road Facility
Transformer Storage Monthly Inspection Report

	Transformer Yard		Transformer Lay Down Area (Bldg. 56)		Comments
	Yes	No	Yes	No	
Personnel Training and Record Keeping					
Is a program in place to train employees on pollution prevention and good housekeeping procedures?					
Are employees trained on proper spill prevention and response for the materials that they handle?					

Pepco – Benning Road Facility

Transformer Storage Monthly Inspection Report

Inspection Date: _____

Inspection Time: _____

Inspector: _____

Inspector's Signature: _____



	Transformer Test Shop		Miscellaneous Storage		Comments
	Yes	No	Yes	No	
Good Housekeeping Procedures					
Are outside work areas clean, dry, and free of litter and debris?					
Is the area free of potential discharges of leaks and spills?					
Are catch basins and other inlets in the area to the storm drain system free from debris?					
Are booms in place and in good condition at catch basins and other inlets to the storm drain system?					
Are witch hats in place, in good condition and free of debris at catch basins and other inlets to the storm drain system?					
Are there signs of drainage issue or overflow at any storm drain inlet?					
Materials Handling and Storage					
Is there adequate aisle space and organization in all storage areas so that any corrosion or leaks can be detected early?					
Are all containers labeled with contents on the appropriate label?					
Are Safety Data Sheets available for all chemical substances?					
Are transformers protected from vehicular traffic?					
Have all transformers been inspected and are they generally in good condition?					
If transformers are not in good condition (rusted or leaking) have they been moved indoors or into containment protected from precipitation?					
Spill Prevention & Response					
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?					
Do spill kits contain the proper tools and equipment?					
Have all spills been properly cleaned up and disposed of properly in the respective area?					
Other Indicators of Illicit Discharges					
Is the area clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?					

Pepco – Benning Road Facility
Transformer Storage Monthly Inspection Report



	Transformer Test Shop		Miscellaneous Storage		Comments
	Yes	No	Yes	No	
Personnel Training and Record Keeping					
Is a program in place to train employees on pollution prevention and good housekeeping procedures?					
Are employees trained on proper spill prevention and response for the materials that they handle?					

Pepco – Benning Road Facility
Bulk Storage Monthly Inspection Report

Inspection Date: _____

Inspection Time: _____

Inspector: _____

Inspector's Signature: _____



	Salt Shed		Soil Storage		Comments
	Yes	No	Yes	No	
Good Housekeeping Procedures					
Is the area free of potential discharges of leaks and spills?					
Is the site free of litter and debris?					
Are catch basins and other inlets in the area to the storm drain system free from debris?					
Are booms in place and in good condition at catch basins and other inlets to the storm drain system?					
Are witch hats in place, in good condition and free of debris at catch basins and other inlets to the storm drain system?					
Are there signs of drainage issue or overflow at any storm drain inlet?					
Bulk Storage Controls					
Are bulk storage areas covered and protected from precipitation?					
Is the storage area protected from run-on of stormwater?					
Is the area around the bulk storage area swept after each use and free of material that could mingle with stormwater?					
Stored materials do not have an odor or any other indicators of contamination?					
Is adequate storage space for bulk materials available? If no, disposal of excess materials must be arranged.					
Spill Prevention & Response					
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?					
Do spill kits contain the proper tools and equipment?					
Have all spills been properly cleaned up and disposed of properly in the respective area?					
Other Indicators of Illicit Discharges					
Is the area clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?					

Pepco – Benning Road Facility Metals Recycling Monthly Inspection Report

Inspection Date: _____ Inspection Time: _____
 Inspector: _____ Inspector's Signature: _____



	Salvage Yard (Bldg. 88)		Scrap Metal Storage (Bldg. 65)		Comments
	Yes	No	Yes	No	
Good Housekeeping Procedures					
Is the area free of potential discharges of leaks and spills?					
Is the site free of litter and debris?					
Are catch basins and other inlets in the area to the storm drain system free from debris?					
Are booms in place and in good condition at catch basins and other inlets to the storm drain system?					
Are witch hats in place, in good condition and free of debris at catch basins and other inlets to the storm drain system?					
Are there signs of drainage issue or overflow at any storm drain inlet?					
Scrap Metal Storage					
Is there adequate aisle space and organization in all storage areas so that any corrosion or leaks can be detected early?					
Are all containers labeled with contents on the appropriate label?					
Are all containers that are not in use closed/covered?					
Are containers protected from precipitation and runoff whenever practical?					
Are containers protected from vehicular traffic?					
Have all containers been inspected and are they generally in good condition?					
Have scrap parts and empty drums no longer in use been removed from the property?					
Spill Prevention & Response					
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?					
Do spill kits contain the proper tools and equipment?					
Have all spills been properly cleaned up and disposed of properly in the respective area?					
Other Indicators of Illicit Discharges					
Is the area clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?					

Pepco – Benning Road Facility
Metals Recycling Monthly Inspection Report



	Salvage Yard (Bldg. 88)		Scrap Metal Storage (Bldg. 65)		Comments
	Yes	No	Yes	No	
Personnel Training and Record Keeping					
Is a program in place to train employees on pollution prevention and good housekeeping procedures?					
Are employees trained on proper spill prevention and response for the materials that they handle?					

Pepco – Benning Road Facility Vehicle Maintenance Monthly Inspection Report

Inspection Date: _____

Inspection Time: _____

Inspector: _____

Inspector's Signature: _____



	Truck Storage (Bldg. 59)		Fleet Services (Bldg. 75)		Vehicle Wash (Bldg. 32)		Comments
	Yes	No	Yes	No	Yes	No	
Good Housekeeping Procedures							
Are outside work areas clean, dry, and free of litter and debris?							
Are brooms, dust pans, and mops on hand for easy access?							
Is the area free of potential discharges of leaks and spills?							
Are containment areas in good condition, with valves closed?							
Are trash dumpsters empty and closed?							
Are catch basins and other inlets in the area to the storm drain system free from debris?							
Are booms in place and in good condition at catch basins and other inlets to the storm drain system?							
Are witch hats in place, in good condition and free of debris at catch basins and other inlets to the storm drain system?							
Are there signs of drainage issue or overflow at any storm drain inlet?							
Materials Handling and Storage							
Is there adequate aisle space and organization in all storage areas so that any corrosion or leaks can be detected early?							
Are all containers labeled with contents on the appropriate label?							
Are Safety Data Sheets available for all chemical substances?							
Are all containers that are not in use closed?							
Are containers stored indoors and away from entrances whenever practical?							

Pepco – Benning Road Facility
Vehicle Maintenance Monthly Inspection Report



	Truck Storage (Bldg. 59)		Fleet Services (Bldg. 75)		Vehicle Wash (Bldg. 32)		Comments
	Yes	No	Yes	No	Yes	No	
Are maintenance activities conducted indoors whenever practical?							
If outdoors, are containers protected from precipitation and runoff whenever practical?							
Are containers protected from vehicular traffic?							
Have all containers been inspected and are they generally in good condition?							
Do all containers have secondary containment?							
Spill Prevention & Response							
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?							
Do spill kits contain the proper tools and equipment?							
Have all spills been properly cleaned up and disposed of properly in the respective area?							
Mobile Equipment							
Has mobile equipment been inspected for potential leaking fluids?							
Is equipment that is no longer needed removed from the site?							
Vehicle Wash							
Has the vehicle wash catch basin been inspected for sediment build-up?							
Is wash water contained or otherwise kept out of the storm drainage system?							
Vehicles and Equipment Maintenance							
Are vehicles and equipment checked for leaking fluids?							
Are drip pans and spill kits located within easy access of vehicle and equipment storage areas?							

Pepco – Benning Road Facility
Vehicle Maintenance Monthly Inspection Report



	Truck Storage (Bldg. 59)		Fleet Services (Bldg. 75)		Vehicle Wash (Bldg. 32)		Comments
	Yes	No	Yes	No	Yes	No	
Are maintenance activities performed indoors when practical?							
Is there any build-up of pollutants in vehicle parking areas, and if so, is there a plan for removal in accordance with the SWPPP?							
Other Indicators of Illicit Discharges							
Is the area clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?							
Personnel Training and Record Keeping							
Is a program in place to train employees on pollution prevention and good housekeeping procedures?							
Are employees trained on proper spill prevention and response for the materials that they handle?							

Pepco – Benning Road Facility

Oil Storage Monthly Inspection Report – VRM

Inspection Date: _____
 Inspector: _____

Inspection Time: _____
 Inspector's Signature: _____



	Pump Station (Diesel & Gas)		Comments
	Yes	No	
Good Housekeeping Procedures			
Is the area free of potential discharges of leaks and spills?			
Are containment areas in good condition, with valves closed?			
Is the site free of litter and debris?			
Are catch basins and other inlets in the area to the storm drain system free from debris?			
Are booms in place and in good condition at catch basins and other inlets to the storm drain system?			
Are witch hats in place, in good condition and free of debris at catch basins and other inlets to the storm drain system?			
Are there signs of drainage issue or overflow at any storm drain inlet?			
Materials Handling and Storage			
Is there adequate aisle space and organization in all storage areas so that any corrosion or leaks can be detected early?			
Are all containers labeled with contents on the appropriate label?			
Are Safety Data Sheets available for all chemical substances?			
Are all containers closed when not in use?			
Are containers protected from precipitation and runoff whenever practical?			
Are containers protected from vehicular traffic?			
Have all containers been inspected and are they generally in good condition?			
Do all containers have secondary containment?			

Pepco – Benning Road Facility
Oil Storage Monthly Inspection Report – VRM



	Pump Station (Diesel & Gas)		Comments
	Yes	No	
Spill Prevention & Response			
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?			
Do spill kits contain the proper tools and equipment?			
Have all spills been properly cleaned up and disposed of properly in the respective area?			
Mobile Equipment			
Has mobile equipment been inspected for potential leaking fluids?			
Is equipment that is no longer needed removed from the site?			
Fueling Operations			
Is the spill kit fully stocked at the fuel station and accessible for use?			
Is all signage in good, readable condition?			
Have fire extinguishers been tested and are they accessible for use?			
Other Indicators of Illicit Discharges			
Is the area clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?			
Personnel Training and Record Keeping			
Is a program in place to train employees on pollution prevention and good housekeeping procedures?			
Are employees trained on proper spill prevention and response for the materials that they handle?			

Pepco – Benning Road Facility
Oil Storage Monthly Inspection Report – Electrical Maintenance Substation



	PCB Storage (Bldg. 68)		Building 67		Comments
	Yes	No	Yes	No	
Good Housekeeping Procedures					
Is the area free of potential discharges of leaks and spills?					
Are containment areas in good condition, with valves closed?					
Is the site free of litter and debris?					
Are catch basins and other inlets in the area to the storm drain system free from debris?					
Are booms in place and in good condition at catch basins and other inlets to the storm drain system?					
Are witch hats in place, in good condition and free of debris at catch basins and other inlets to the storm drain system?					
Are there signs of drainage issue or overflow at any storm drain inlet?					
Materials Handling and Storage					
Is there adequate aisle space and organization in all storage areas so that any corrosion or leaks can be detected early?					
Are all containers labeled with contents on the appropriate label?					
Are Safety Data Sheets available for all chemical substances?					
Are all containers closed when not in use?					
Are containers protected from precipitation and runoff whenever practical?					
Are containers protected from vehicular traffic?					
Have all containers been inspected and are they generally in good condition?					
Is secondary containment available for containers?					

Pepco – Benning Road Facility
Oil Storage Monthly Inspection Report – Waste Management



	PCB Storage (Bldg. 68)		Building 67		Comments
	Yes	No	Yes	No	
Spill Prevention & Response					
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?					
Do spill kits contain the proper tools and					
Have all spills been properly cleaned up and disposed of properly in the respective					
Mobile Equipment					
Has mobile equipment been inspected for potential leaking fluids?					
Is equipment that is no longer needed removed from the site?					
Fueling Operations					
Is the spill kit fully stocked at the fuel station and accessible for use?					
Is all signage in good, readable condition?					
Have fire extinguishers been tested and are they accessible for use?					
Other Indicators of Illicit Discharges					
Is the area clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?					
Personnel Training and Record Keeping					
Is a program in place to train employees on pollution prevention and good					
Are employees trained on proper spill prevention and response for the materials that they handle?					

Pepco – Benning Road Facility – Electrical Maintenance Substation
Oil Storage Monthly Inspection Report – Waste Management



	Portable ASTs (Bldg. 57)		PCB Storage (Bldg. 68)		Comments
	Yes	No	Yes	No	
Good Housekeeping Procedures					
Is the area free of potential discharges of leaks and spills?					
Are containment areas in good condition, with valves closed?					
Is the site free of litter and debris?					
Are catch basins and other inlets in the area to the storm drain system free from debris?					
Are booms in place and in good condition at catch basins and other inlets to the storm drain system?					
Are witch hats in place, in good condition and free of debris at catch basins and other inlets to the storm drain system?					
Are there signs of drainage issue or overflow at any storm drain inlet?					
Materials Handling and Storage					
Is there adequate aisle space and organization in all storage areas so that any corrosion or leaks can be detected early?					
Are all containers labeled with contents on the appropriate label?					
Are Safety Data Sheets available for all chemical substances?					
Are all containers closed when not in use?					
Are containers protected from precipitation and runoff whenever practical?					
Are containers protected from vehicular traffic?					
Have all containers been inspected and are they generally in good condition?					
Is secondary containment available for containers?					

Pepco – Benning Road Facility – Electrical Maintenance Substation
Oil Storage Monthly Inspection Report – Waste Management



	Portable ASTs (Bldg. 57)		PCB Storage		Comments
	Yes	No	Yes	No	
Spill Prevention & Response					
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?					
Do spill kits contain the proper tools and					
Have all spills been properly cleaned up and disposed of properly in the respective area?					
Mobile Equipment					
Has mobile equipment been inspected for potential leaking fluids?					
Is equipment that is no longer needed removed from the site?					
Fueling Operations					
Is the spill kit fully stocked at the fuel station and accessible for use?					
Is all signage in good, readable condition?					
Have fire extinguishers been tested and are they accessible for use?					
Other Indicators of Illicit Discharges					
Is the area clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?					
Personnel Training and Record Keeping					
Is a program in place to train employees on pollution prevention and good					
Are employees trained on proper spill prevention and response for the materials that they handle?					

Paragraph 68.a.(8) of the Consent Decree

Change in Management Responsibilities

Mr. Michael S. Poncia has replaced Mr. Mr. Michael W. Maxwell as Vice President of Support Services. Mr. Poncia has signed this quarter's report certification statement.

Paragraph 68.a.(9) of the Consent Decree

Status of Completion of Transformer Storage Shed

The construction of Transformer Storage Shed was completed by December 31, 2016 and the facility was placed in operation. The storage shed has been operating as designed for temporary storage of off-line and removed from service transformers and other electrical equipment while awaiting recycling or disposal.

Paragraph 68.a.(11) of the Consent Decree

Description of Non-Compliance

Pepco collected samples from Outfall 013 during a qualifying storm event on September 30, 2019. Pepco also collected samples from internal monitoring point 201 (MP 201) during the same storm event.

The Outfall 013 analytical results from the samples collected on September 30, 2019 showed exceedances of the Monthly Average permit limits for two metals (Copper and Iron) and one Daily Maximum permit limit exceedance for iron (Table 1).

Table 1 - Outfall 013 Sampling Results

Analyte	Units	Permit Daily Maximum Limit	Permit Monthly Average Limit	Sept 30, 2019 Sample (Grab)	Monthly Average
Copper	mg/L	0.0134	0.00524	0.0107	0.0107
Lead	mg/L	0.06458	0.0566	0.0030	0.0030
Zinc	mg/L	0.117	0.073	0.043	0.043
Iron	mg/L	1	0.69	3.64	3.64
TSS	mg/L	100	30	10	10

At the same time that the manual grab sample was collected on September 30, 2019, Pepco also collected a sample of the stormwater discharge using an ISCO auto sampler that had been installed within Manhole 33 (which is the compliance sampling point for Outfall 013 and the same location from which the manual sample was collected). The ISCO unit was set to “grab” mode in which collection commences with the initial flow and continues until the sample bottle is full, a process that takes less than 15 minutes. This additional sample was analyzed for metals and TSS. The results of these analyses (Table 2) showed compliance with the Outfall 013 limits. We believe that the automatic grab sampler setup is a more reliable methodology for sampling since it allows the sample to be collected from a fixed point in the discharge stream and thus avoids the potential variability of sampling location and technique that can occur with the manual sampling method.

Also, during this quarter due to the late summer drought conditions in the area, PEPCO proactively sampled a non-qualifying storm event on September 11, 2019 to ensure a sample

would be obtained even if no qualifying storm event occurred later in the quarter. Results from this event are shown in Table 2 below. These results also showed compliance with the Outfall 013 permit limits. If the results of both this non-qualifying event and the automatic grab sample were averaged with the September 30, 2019 storm event manual sample results, there would have been no exceedance of the Copper Monthly Average permit limit.

Table 2 - Outfall 013 Results with Non-qualifying Event and Automatic Grab Samples

Analyte	Units	Permit Daily Maximum Limit	Permit Monthly Average Limit	Sept 11, 2019 (Grab) Sample	Sept 30, 2019 (Grab) Sample	Sept 30, 2019 ISCO (Grab) Sample	Monthly Average
Copper	mg/L	0.0134	0.00524	<0.0010	0.0107	<0.0010	0.0042
Lead	mg/L	0.06458	0.0566	<0.0010	0.0030	<0.0010	0.0017
Zinc	mg/L	0.117	0.073	0.0063	0.043	0.0104	0.0199
Iron	mg/L	1	0.69	0.425	3.64	0.821	1.623
TSS	mg/L	100	30	< 4	10	9	7.7

Despite the exceedances experienced during the third quarter of 2019, we have continued to make overall progress in reducing the magnitude of any exceedances. As described in Paragraph 68.a.5 - Status of Stormwater Treatment System, the updated SWPPP, Phase III TMDL Implementation plan and Consent Decree requirements, Pepco continues to expend considerable time and resources working with AECOM and our O&M stormwater contractor in an effort to ensure that the treatment system, storm drain inlet maintenance procedures, metals management, and good housekeeping practices are effective to reduce sources of metals and solids to stormwater discharged from the site and achieve consistent compliance with permit limits.



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

19J0399

Project Description

Benning Storm Water

For:

Hiedi Sturm

PEPCO-Benning Rd - G0055

3400 Benning Rd. N.E, Chem-Bldg 56

Washington, DC 20019



Customer Relationship Coordinator

Evelyn Shinas

Tuesday, October 15, 2019

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories. Review and compilation of your report was completed by Microbac Laboratories, Inc. - Baltimore. If you have any questions, comments, or require further assistance regarding this report, please contact your service representative listed above.

I certify that all test results meet all of the requirements of the accrediting authority listed within this report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories. The reported results are related only to the samples analyzed as received.

Microbac Laboratories, Inc.

2101 Van Deman Street | Baltimore, MD 21224 | 410.633.1800 p | www.microbac.com



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

19J0399

PEPCO-Benning Rd - G0055

Project Name: Benning Storm Water

Hiedi Sturm
3400 Benning Rd. N.E, Chem-Bldg 56
Washington, DC 20019

Project / PO Number: 90016472
Received: 10/02/2019
Reported: 10/15/2019

Sample Summary Report

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Client Matrix</u>	<u>Sample Type</u>	<u>Sample Begin</u>	<u>Sample Taken</u>	<u>Lab Received</u>
013Q	19J0399-01	Stormwater	Grab		09/30/19 11:05	10/02/19 15:27
013Q-ISCO	19J0399-02	Stormwater	Grab		09/30/19 11:15	10/02/19 15:27
201A-OWS	19J0399-03	Stormwater	Grab		09/30/19 08:00	10/02/19 15:27
101-Manhole "K"	19J0399-04	Stormwater	Grab		09/30/19 11:25	10/02/19 15:27



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

19J0399

Analytical Testing Parameters

Client Sample ID: 013Q	Collected By: James Dilts
Sample Matrix: Stormwater	Collection Date: 09/30/2019 11:05
Lab Sample ID: 19J0399-01	

Wet Chemistry	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
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SM 2540 D-11

Total Suspended Solids	10	5.0	mg/L	5		10/03/19 1534	10/04/19 1035	EIP
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Metals, Total by EPA 200 Series Methods	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
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EPA 200.2/EPA 200.8

Copper	0.0107	0.0010	mg/L	1		10/07/19 0927	10/08/19 1254	GHW
Lead	0.0030	0.0010	mg/L	1		10/07/19 0927	10/08/19 1254	GHW
Nickel	0.0022	0.0010	mg/L	1		10/07/19 0927	10/08/19 1254	GHW
Zinc	0.0430	0.0050	mg/L	1		10/07/19 0927	10/08/19 1254	GHW
Cadmium	<0.000250	0.000250	mg/L	1		10/07/19 0927	10/08/19 1254	GHW

Oil and Grease	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
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EPA 1664A

Oil & Grease, HEM	<5.43	5.43	mg/L	1		10/03/19 1458	10/04/19 1507	OCT
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Analyses Subcontracted to: Microbac Laboratories Inc., - Marietta, OH

Pesticides - GC/ECD	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
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EPA 608.3

Aroclor-1016 (PCB-1016)	<0.500	0.500	ug/L	1		10/07/19 0815	10/08/19 1803	ECL
Aroclor-1221 (PCB-1221)	<0.500	0.500	ug/L	1		10/07/19 0815	10/08/19 1803	ECL
Aroclor-1232 (PCB-1232)	<0.500	0.500	ug/L	1		10/07/19 0815	10/08/19 1803	ECL
Aroclor-1242 (PCB-1242)	<0.500	0.500	ug/L	1		10/07/19 0815	10/08/19 1803	ECL
Aroclor-1248 (PCB-1248)	<0.500	0.500	ug/L	1		10/07/19 0815	10/08/19 1803	ECL
Aroclor-1254 (PCB-1254)	<0.500	0.500	ug/L	1		10/07/19 0815	10/08/19 1803	ECL
Aroclor-1260 (PCB-1260)	<0.500	0.500	ug/L	1		10/07/19 0815	10/08/19 1803	ECL
Surrogate: Decachlorobiphenyl (BZ-209)	8.33	Limit: 20-140	% Rec	1	S4	10/07/19 0815	10/08/19 1803	ECL
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	50.8	Limit: 20-180	% Rec	1		10/07/19 0815	10/08/19 1803	ECL

Total Metals - ICP	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
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EPA 200.7, Rv. 4.4

Iron	3.64	0.0800	mg/L	1		10/07/19 0614	10/07/19 1833	LSJ
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Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

19J0399

Client Sample ID: 013Q-ISCO	Collected By: James Dilts
Sample Matrix: Stormwater	Collection Date: 09/30/2019 11:15
Lab Sample ID: 19J0399-02	

Wet Chemistry	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
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SM 2540 D-11

Total Suspended Solids	9.0	5.0	mg/L	5		10/03/19 1534	10/04/19 1035	EIP
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Metals, Total by EPA 200 Series Methods	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
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EPA 200.2/EPA 200.8

Copper	<0.0010	0.0010	mg/L	1		10/07/19 0927	10/08/19 1257	GHW
Lead	<0.0010	0.0010	mg/L	1		10/07/19 0927	10/08/19 1257	GHW
Nickel	0.0023	0.0010	mg/L	1		10/07/19 0927	10/08/19 1257	GHW
Zinc	0.0104	0.0050	mg/L	1		10/07/19 0927	10/08/19 1257	GHW
Cadmium	<0.000250	0.000250	mg/L	1		10/07/19 0927	10/08/19 1257	GHW

Oil and Grease	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
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EPA 1664A

Oil & Grease, HEM	<5.62	5.62	mg/L	1		10/14/19 1206	10/14/19 1447	EWP
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Analyses Subcontracted to: Microbac Laboratories Inc., - Marietta, OH

Pesticides - GC/ECD	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
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EPA 608.3

Aroclor-1016 (PCB-1016)	<0.500	0.500	ug/L	1		10/07/19 0815	10/08/19 1855	ECL
Aroclor-1221 (PCB-1221)	<0.500	0.500	ug/L	1		10/07/19 0815	10/08/19 1855	ECL
Aroclor-1232 (PCB-1232)	<0.500	0.500	ug/L	1		10/07/19 0815	10/08/19 1855	ECL
Aroclor-1242 (PCB-1242)	<0.500	0.500	ug/L	1		10/07/19 0815	10/08/19 1855	ECL
Aroclor-1248 (PCB-1248)	<0.500	0.500	ug/L	1		10/07/19 0815	10/08/19 1855	ECL
Aroclor-1254 (PCB-1254)	<0.500	0.500	ug/L	1		10/07/19 0815	10/08/19 1855	ECL
Aroclor-1260 (PCB-1260)	<0.500	0.500	ug/L	1		10/07/19 0815	10/08/19 1855	ECL
Surrogate: Decachlorobiphenyl (BZ-209)	22.3	Limit: 20-140	% Rec	1	AC	10/07/19 0815	10/08/19 1855	ECL
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	44.2	Limit: 20-180	% Rec	1	AC	10/07/19 0815	10/08/19 1855	ECL

Total Metals - ICP	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
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EPA 200.7, Rv. 4.4

Iron	0.821	0.0800	mg/L	1		10/07/19 0614	10/07/19 1836	LSJ
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Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

19J0399

Client Sample ID: 201A-OWS	Collected By: James Dilts
Sample Matrix: Stormwater	Collection Date: 09/30/2019 8:00
Lab Sample ID: 19J0399-03	

Wet Chemistry	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
SM 2540 D-11								
Total Suspended Solids	<1.0	1.0	mg/L	1		10/03/19 1534	10/04/19 1035	EIP

Oil and Grease	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
EPA 1664A								
Oil & Grease, HEM	<5.62	5.62	mg/L	1		10/14/19 1206	10/14/19 1447	EWP

Analyses Subcontracted to: Microbac Laboratories Inc., - Marietta, OH

Pesticides - GC/ECD	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
EPA 608.3								
Aroclor-1016 (PCB-1016)	<0.500	0.500	ug/L	1		10/07/19 0815	10/08/19 2004	ECL
Aroclor-1221 (PCB-1221)	<0.500	0.500	ug/L	1		10/07/19 0815	10/08/19 2004	ECL
Aroclor-1232 (PCB-1232)	<0.500	0.500	ug/L	1		10/07/19 0815	10/08/19 2004	ECL
Aroclor-1242 (PCB-1242)	<0.500	0.500	ug/L	1		10/07/19 0815	10/08/19 2004	ECL
Aroclor-1248 (PCB-1248)	<0.500	0.500	ug/L	1		10/07/19 0815	10/08/19 2004	ECL
Aroclor-1254 (PCB-1254)	<0.500	0.500	ug/L	1		10/07/19 0815	10/08/19 2004	ECL
Aroclor-1260 (PCB-1260)	<0.500	0.500	ug/L	1		10/07/19 0815	10/08/19 2004	ECL
Surrogate: Decachlorobiphenyl (BZ-209)	0	Limit: 20-140	% Rec	1	ACa, S2	10/07/19 0815	10/08/19 2004	ECL
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0	Limit: 20-180	% Rec	1	ACa, S2	10/07/19 0815	10/08/19 2004	ECL



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

19J0399

Batch Quality Control Summary: Microbac Laboratories, Inc. - Baltimore

Wet Chemistry	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1940290 - WetChem_Water_Prep - SM 2540 D-11										
Blank (1940290-BLK1)				Prepared: 10/03/2019 Analyzed: 10/04/2019						
Total Suspended Solids	<1.0	1.0	mg/L							
LCS (1940290-BS1)				Prepared: 10/03/2019 Analyzed: 10/04/2019						
Total Suspended Solids	100	10	mg/L	100	102		90-110			
Duplicate (1940290-DUP1)				Source: 19I0112-01 Prepared: 10/03/2019 Analyzed: 10/04/2019						
Total Suspended Solids	170	40	mg/L		180			4.65	10	
Duplicate (1940290-DUP2)				Source: 19J0342-01 Prepared: 10/03/2019 Analyzed: 10/04/2019						
Total Suspended Solids	76	20	mg/L		76			0.00	10	
Metals, Total by EPA 200 Series Methods	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1941008 - EPA 200.2 ICPMS_W - EPA 200.8										
Blank (1941008-BLK1)				Prepared: 10/07/2019 Analyzed: 10/08/2019						
Copper	<0.0010	0.0010	mg/L							
Nickel	<0.0010	0.0010	mg/L							
Lead	<0.0010	0.0010	mg/L							
Zinc	<0.0050	0.0050	mg/L							
Cadmium	<0.000250	0.000250	mg/L							
Blank (1941008-BLK2)				Prepared: 10/07/2019 Analyzed: 10/08/2019						
Copper	<0.0010	0.0010	mg/L							
Nickel	<0.0010	0.0010	mg/L							
Lead	<0.0010	0.0010	mg/L							
Cadmium	<0.000250	0.000250	mg/L							
Blank (1941008-BLK3)				Prepared: 10/07/2019 Analyzed: 10/09/2019						
Zinc	<0.0050	0.0050	mg/L							
Blank (1941008-BLK4)				Prepared: 10/07/2019 Analyzed: 10/09/2019						
Zinc	<0.0050	0.0050	mg/L							
LCS (1941008-BS1)				Prepared: 10/07/2019 Analyzed: 10/08/2019						
Copper	0.197	0.0010	mg/L	0.200		98.6	85-115			
Nickel	0.201	0.0010	mg/L	0.200		100	85-115			
Lead	0.201	0.0010	mg/L	0.200		100	85-115			
Zinc	0.199	0.0050	mg/L	0.200		99.4	85-115			
Cadmium	0.202	0.000250	mg/L	0.200		101	85-115			
LCS (1941008-BS2)				Prepared: 10/07/2019 Analyzed: 10/08/2019						
Copper	0.203	0.0010	mg/L	0.200		101	85-115			
Nickel	0.209	0.0010	mg/L	0.200		105	85-115			
Lead	0.193	0.0010	mg/L	0.200		96.5	85-115			
Zinc	0.198	0.0050	mg/L	0.200		99.2	85-115			
Cadmium	0.200	0.000250	mg/L	0.200		99.9	85-115			



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

19J0399

Metals, Total by EPA 200 Series Methods	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1941008 - EPA 200.2 ICPMS_W - EPA 200.8										
LCS (1941008-BS3)				Prepared: 10/07/2019 Analyzed: 10/09/2019						
Zinc	0.199	0.0050	mg/L	0.200		99.4	85-115			
LCS (1941008-BS4)				Prepared: 10/07/2019 Analyzed: 10/09/2019						
Zinc	0.198	0.0050	mg/L	0.200		99.1	85-115			
Duplicate (1941008-DUP1)				Source: 19J0156-01			Prepared: 10/07/2019 Analyzed: 10/08/2019			
Copper	0.153	0.0010	mg/L		0.154			0.643	20	
Nickel	0.0911	0.0010	mg/L		0.0917			0.684	20	
Zinc	0.0112	0.0050	mg/L		0.0106			5.11	20	
Lead	<0.0010	0.0010	mg/L		ND				20	
Cadmium	<0.000250	0.000250	mg/L		0.000219			2.26	20	
Duplicate (1941008-DUP2)				Source: 19J0276-01			Prepared: 10/07/2019 Analyzed: 10/08/2019			
Copper	0.00245	0.0010	mg/L		0.00336			31.1	20	R3
Nickel	0.00292	0.0010	mg/L		0.00350			18.0	20	
Zinc	0.0215	0.0050	mg/L		0.0235			8.71	20	
Lead	<0.0010	0.0010	mg/L		0.000201			56.1	20	R6
Cadmium	<0.000250	0.000250	mg/L		0.000159			18.6	20	
Duplicate (1941008-DUP3)				Source: 19J0440-01			Prepared: 10/07/2019 Analyzed: 10/08/2019			
Copper	0.298	0.0010	mg/L		0.295			0.968	20	
Nickel	0.00726	0.0010	mg/L		0.00706			2.84	20	
Lead	0.00931	0.0010	mg/L		0.00910			2.23	20	
Cadmium	0.00112	0.000250	mg/L		0.00113			1.07	20	
Duplicate (1941008-DUP4)				Source: 19J0156-01RE1			Prepared: 10/07/2019 Analyzed: 10/09/2019			
Zinc	0.0112	0.0050	mg/L		0.0105			6.63	20	
Duplicate (1941008-DUP5)				Source: 19J0276-01RE1			Prepared: 10/07/2019 Analyzed: 10/09/2019			
Zinc	0.0209	0.0050	mg/L		0.0239			13.2	20	
Duplicate (1941008-DUP6)				Source: 19J0440-01RE1			Prepared: 10/07/2019 Analyzed: 10/09/2019			
Zinc	8.18	0.0050	mg/L		8.19			0.108	20	
Matrix Spike (1941008-MS1)				Source: 19J0156-01			Prepared: 10/07/2019 Analyzed: 10/08/2019			
Copper	0.337	0.0010	mg/L	0.200	0.154	91.8	70-130			
Nickel	0.289	0.0010	mg/L	0.200	0.0917	98.6	70-130			
Lead	0.186	0.0010	mg/L	0.200	ND	92.9	70-130			
Zinc	0.202	0.0050	mg/L	0.200	0.0106	95.5	70-130			
Cadmium	0.203	0.000250	mg/L	0.200	0.000219	101	70-130			
Matrix Spike (1941008-MS2)				Source: 19J0276-01			Prepared: 10/07/2019 Analyzed: 10/08/2019			
Copper	0.206	0.0010	mg/L	0.200	0.00336	101	70-130			
Nickel	0.209	0.0010	mg/L	0.200	0.00350	103	70-130			
Lead	0.193	0.0010	mg/L	0.200	0.000201	96.5	70-130			
Zinc	0.224	0.0050	mg/L	0.200	0.0235	100	70-130			
Cadmium	0.205	0.000250	mg/L	0.200	0.000159	102	70-130			
Matrix Spike (1941008-MS3)				Source: 19J0440-01			Prepared: 10/07/2019 Analyzed: 10/08/2019			
Copper	0.498	0.0010	mg/L	0.200	0.295	101	70-130			
Nickel	0.216	0.0010	mg/L	0.200	0.00706	105	70-130			



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

19J0399

Metals, Total by EPA 200 Series Methods	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1941008 - EPA 200.2 ICPMS_W - EPA 200.8										
Matrix Spike (1941008-MS3)					Source: 19J0440-01		Prepared: 10/07/2019 Analyzed: 10/08/2019			
Lead	0.198	0.0010	mg/L	0.200	0.00910	94.6	70-130			
Cadmium	0.197	0.000250	mg/L	0.200	0.00113	98.1	70-130			
Matrix Spike (1941008-MS4)					Source: 19J0156-01RE1		Prepared: 10/07/2019 Analyzed: 10/09/2019			
Zinc	0.202	0.0050	mg/L	0.200	0.0105	95.9	70-130			
Matrix Spike (1941008-MS5)					Source: 19J0276-01RE1		Prepared: 10/07/2019 Analyzed: 10/09/2019			
Zinc	0.223	0.0050	mg/L	0.200	0.0239	99.6	70-130			
Matrix Spike (1941008-MS6)					Source: 19J0440-01RE1		Prepared: 10/07/2019 Analyzed: 10/09/2019			
Zinc	8.28	0.0050	mg/L	0.200	8.19	42.9	70-130			M6

Oil and Grease	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1940280 - EPA 1664A - EPA 1664A										
Blank (1940280-BLK1)							Prepared: 10/03/2019 Analyzed: 10/04/2019			
Oil & Grease, HEM	<5.00	5.00	mg/L							
LCS (1940280-BS1)							Prepared: 10/03/2019 Analyzed: 10/04/2019			
Oil & Grease, HEM	38.8	5.00	mg/L	40.0		97.0	78-114			
Matrix Spike (1940280-MS1)					Source: 19J0399-01		Prepared: 10/03/2019 Analyzed: 10/04/2019			
Oil & Grease, HEM	39.7	5.26	mg/L	42.1	ND	94.3	78-114			

Batch 1942009 - EPA 1664A - EPA 1664A										
Blank (1942009-BLK1)							Prepared & Analyzed: 10/14/2019			
Oil & Grease, HEM	<5.00	5.00	mg/L							
LCS (1942009-BS1)							Prepared & Analyzed: 10/14/2019			
Oil & Grease, HEM	36.4	5.00	mg/L	40.0		91.0	78-114			
Matrix Spike (1942009-MS1)					Source: 19J0399-03		Prepared & Analyzed: 10/14/2019			
Oil & Grease, HEM	37.4	5.32	mg/L	42.6	5.28	75.6	78-114			M10

Batch Quality Control Summary: Microbac Laboratories Inc., - Marietta, OH

Pesticides - GC/ECD	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9J0364 - 3510C_8082 - EPA 608.3										
Blank (B9J0364-BLK1)							Prepared: 10/07/2019 Analyzed: 10/08/2019			
Aroclor-1016 (PCB-1016)	<0.500	0.500	ug/L							
Aroclor-1016 (PCB-1016) [2C]	<0.500	0.500	ug/L							
Aroclor-1221 (PCB-1221)	<0.500	0.500	ug/L							
Aroclor-1221 (PCB-1221) [2C]	<0.500	0.500	ug/L							
Aroclor-1232 (PCB-1232)	<0.500	0.500	ug/L							



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

19J0399

Pesticides - GC/ECD	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9J0364 - 3510C_8082 - EPA 608.3										
Blank (B9J0364-BLK1)				Prepared: 10/07/2019 Analyzed: 10/08/2019						
Aroclor-1232 (PCB-1232) [2C]	<0.500	0.500	ug/L							
Aroclor-1242 (PCB-1242)	<0.500	0.500	ug/L							
Aroclor-1242 (PCB-1242) [2C]	<0.500	0.500	ug/L							
Aroclor-1248 (PCB-1248)	<0.500	0.500	ug/L							
Aroclor-1248 (PCB-1248) [2C]	<0.500	0.500	ug/L							
Aroclor-1254 (PCB-1254)	<0.500	0.500	ug/L							
Aroclor-1254 (PCB-1254) [2C]	<0.500	0.500	ug/L							
Aroclor-1260 (PCB-1260)	<0.500	0.500	ug/L							
Aroclor-1260 (PCB-1260) [2C]	<0.500	0.500	ug/L							
Surrogate: Decachlorobiphenyl (BZ-209)	0.0736		ug/L	0.200		36.8	20-140			
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.00		ug/L	0.200			20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.137		ug/L	0.200		68.3	20-180			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.00		ug/L	0.200			20-180			
LCS (B9J0364-BS1)				Prepared: 10/07/2019 Analyzed: 10/08/2019						
Aroclor-1016 (PCB-1016)	2.05	0.500	ug/L	2.50		81.9	50-140			
Aroclor-1016 (PCB-1016) [2C]	<0.500	0.500	ug/L	2.50			50-140			
Aroclor-1260 (PCB-1260)	2.19	0.500	ug/L	2.50		87.5	8-140			
Aroclor-1260 (PCB-1260) [2C]	<0.500	0.500	ug/L	2.50			8-140			
Surrogate: Decachlorobiphenyl (BZ-209)	0.105		ug/L	0.200		52.6	20-140			
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.00		ug/L	0.200			20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.150		ug/L	0.200		75.2	20-180			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.00		ug/L	0.200			20-180			
Matrix Spike (B9J0364-MS1)				Source: 19J0399-01		Prepared: 10/07/2019 Analyzed: 10/08/2019				
Aroclor-1016 (PCB-1016)	2.88	0.500	ug/L	2.50	ND	115	50-140			
Aroclor-1016 (PCB-1016) [2C]	<0.500	0.500	ug/L	2.50	ND		50-140			
Aroclor-1260 (PCB-1260)	1.42	0.500	ug/L	2.50	ND	56.6	8-140			
Aroclor-1260 (PCB-1260) [2C]	<0.500	0.500	ug/L	2.50	ND		8-140			
Surrogate: Decachlorobiphenyl (BZ-209)	0.0219		ug/L	0.200		10.9	20-140			S4
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.00		ug/L	0.200			20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.0898		ug/L	0.200		44.9	20-180			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.00		ug/L	0.200			20-180			
Matrix Spike (B9J0364-MS2)				Source: 19J0399-02		Prepared: 10/07/2019 Analyzed: 10/08/2019				
Aroclor-1016 (PCB-1016)	1.63	0.500	ug/L	2.50	ND	65.0	50-140			
Aroclor-1016 (PCB-1016) [2C]	<0.500	0.500	ug/L	2.50	ND		50-140			
Aroclor-1260 (PCB-1260)	1.80	0.500	ug/L	2.50	ND	71.9	8-140			
Aroclor-1260 (PCB-1260) [2C]	<0.500	0.500	ug/L	2.50	ND		8-140			
Surrogate: Decachlorobiphenyl (BZ-209)	0.00		ug/L	0.200			20-140			S2
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.00		ug/L	0.200			20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.00164		ug/L	0.200		0.819	20-180			S2
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.00		ug/L	0.200			20-180			
Matrix Spike (B9J0364-MS3)				Source: 19J0399-03		Prepared: 10/07/2019 Analyzed: 10/08/2019				
Aroclor-1016 (PCB-1016)	1.57	0.500	ug/L	2.50	ND	62.8	50-140			
Aroclor-1016 (PCB-1016) [2C]	<0.500	0.500	ug/L	2.50	ND		50-140			
Aroclor-1260 (PCB-1260)	1.66	0.500	ug/L	2.50	ND	66.3	8-140			



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CERTIFICATE OF ANALYSIS

19J0399

Pesticides - GC/ECD	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9J0364 - 3510C_8082 - EPA 608.3										
Matrix Spike (B9J0364-MS3)		Source: 19J0399-03			Prepared: 10/07/2019 Analyzed: 10/08/2019					
Aroclor-1260 (PCB-1260) [2C]	<0.500	0.500	ug/L	2.50	ND		8-140			
Surrogate: Decachlorobiphenyl (BZ-209)	0.00		ug/L	0.200			20-140			S2
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.00		ug/L	0.200			20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.00		ug/L	0.200			20-180			S2
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.00		ug/L	0.200			20-180			
Matrix Spike Dup (B9J0364-MSD1)		Source: 19J0399-01			Prepared: 10/07/2019 Analyzed: 10/08/2019					
Aroclor-1016 (PCB-1016)	2.55	0.500	ug/L	2.50	ND	102	50-140	12.2	36	
Aroclor-1016 (PCB-1016) [2C]	<0.500	0.500	ug/L	2.50	ND		50-140		36	
Aroclor-1260 (PCB-1260)	1.08	0.500	ug/L	2.50	ND	43.3	8-140	26.8	38	
Aroclor-1260 (PCB-1260) [2C]	<0.500	0.500	ug/L	2.50	ND		8-140		38	
Surrogate: Decachlorobiphenyl (BZ-209)	0.0201		ug/L	0.200		10.0	20-140			S4
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.00		ug/L	0.200			20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.0884		ug/L	0.200		44.2	20-180			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.00		ug/L	0.200			20-180			
Matrix Spike Dup (B9J0364-MSD2)		Source: 19J0399-02			Prepared: 10/07/2019 Analyzed: 10/08/2019					
Aroclor-1016 (PCB-1016)	1.73	0.500	ug/L	2.50	ND	69.1	50-140	6.16	36	
Aroclor-1016 (PCB-1016) [2C]	<0.500	0.500	ug/L	2.50	ND		50-140		36	
Aroclor-1260 (PCB-1260)	1.84	0.500	ug/L	2.50	ND	73.7	8-140	2.55	38	
Aroclor-1260 (PCB-1260) [2C]	<0.500	0.500	ug/L	2.50	ND		8-140		38	
Surrogate: Decachlorobiphenyl (BZ-209)	0.00		ug/L	0.200			20-140			S2
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.00		ug/L	0.200			20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.00260		ug/L	0.200		1.30	20-180			S2
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.00		ug/L	0.200			20-180			
Matrix Spike Dup (B9J0364-MSD3)		Source: 19J0399-03			Prepared: 10/07/2019 Analyzed: 10/08/2019					
Aroclor-1016 (PCB-1016)	1.61	0.500	ug/L	2.50	ND	64.4	50-140	2.57	36	
Aroclor-1016 (PCB-1016) [2C]	<0.500	0.500	ug/L	2.50	ND		50-140		36	
Aroclor-1260 (PCB-1260)	1.71	0.500	ug/L	2.50	ND	68.4	8-140	3.07	38	
Aroclor-1260 (PCB-1260) [2C]	<0.500	0.500	ug/L	2.50	ND		8-140		38	
Surrogate: Decachlorobiphenyl (BZ-209)	0.00		ug/L	0.200			20-140			S2
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.00		ug/L	0.200			20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.00		ug/L	0.200			20-180			S2
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.00		ug/L	0.200			20-180			

Batch B9J0584 - 3510C_8082 - EPA 608.3

Blank (B9J0584-BLK1)		Prepared: 10/10/2019 Analyzed: 10/11/2019								
Aroclor-1016 (PCB-1016)	<0.500	0.500	ug/L							
Aroclor-1016 (PCB-1016) [2C]	<0.500	0.500	ug/L							
Aroclor-1221 (PCB-1221)	<0.500	0.500	ug/L							
Aroclor-1221 (PCB-1221) [2C]	<0.500	0.500	ug/L							
Aroclor-1232 (PCB-1232)	<0.500	0.500	ug/L							
Aroclor-1232 (PCB-1232) [2C]	<0.500	0.500	ug/L							
Aroclor-1242 (PCB-1242)	<0.500	0.500	ug/L							
Aroclor-1242 (PCB-1242) [2C]	<0.500	0.500	ug/L							
Aroclor-1248 (PCB-1248)	<0.500	0.500	ug/L							

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2101 Van Deman Street | Baltimore, MD 21224 | 410.633.1800 p | www.microbac.com



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19J0399

Pesticides - GC/ECD	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B9J0584 - 3510C_8082 - EPA 608.3

Blank (B9J0584-BLK1)										
				Prepared: 10/10/2019 Analyzed: 10/11/2019						
Aroclor-1248 (PCB-1248) [2C]	<0.500	0.500	ug/L							
Aroclor-1254 (PCB-1254)	<0.500	0.500	ug/L							
Aroclor-1254 (PCB-1254) [2C]	<0.500	0.500	ug/L							
Aroclor-1260 (PCB-1260)	<0.500	0.500	ug/L							
Aroclor-1260 (PCB-1260) [2C]	<0.500	0.500	ug/L							
Surrogate: Decachlorobiphenyl (BZ-209)	0.176		ug/L	0.200		88.2	20-140			
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.00		ug/L	0.200			20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.180		ug/L	0.200		89.8	20-180			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.00		ug/L	0.200			20-180			

LCS (B9J0584-BS1)										
				Prepared: 10/10/2019 Analyzed: 10/11/2019						
Aroclor-1016 (PCB-1016)	3.01	0.500	ug/L	2.50		120	50-140			
Aroclor-1016 (PCB-1016) [2C]	<0.500	0.500	ug/L	2.50			50-140			
Aroclor-1260 (PCB-1260)	3.50	0.500	ug/L	2.50		140	8-140			
Aroclor-1260 (PCB-1260) [2C]	<0.500	0.500	ug/L	2.50			8-140			
Surrogate: Decachlorobiphenyl (BZ-209)	0.252		ug/L	0.200		126	20-140			
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.00		ug/L	0.200			20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.232		ug/L	0.200		116	20-180			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.00		ug/L	0.200			20-180			

LCS Dup (B9J0584-BSD1)										
				Prepared: 10/10/2019 Analyzed: 10/11/2019						
Aroclor-1016 (PCB-1016)	2.73	0.500	ug/L	2.50		109	50-140	9.86	36	
Aroclor-1016 (PCB-1016) [2C]	<0.500	0.500	ug/L	2.50			50-140		36	
Aroclor-1260 (PCB-1260)	3.14	0.500	ug/L	2.50		126	8-140	10.8	38	
Aroclor-1260 (PCB-1260) [2C]	<0.500	0.500	ug/L	2.50			8-140		38	
Surrogate: Decachlorobiphenyl (BZ-209)	0.209		ug/L	0.200		105	20-140			
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.00		ug/L	0.200			20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.198		ug/L	0.200		99.2	20-180			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.00		ug/L	0.200			20-180			

Total Metals - ICP	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B9J0352 - 200.7 - EPA 200.7, Rv. 4.4

Blank (B9J0352-BLK1)										
				Prepared & Analyzed: 10/07/2019						
Iron	<0.0800	0.0800	mg/L							
LCS (B9J0352-BS1)										
				Prepared & Analyzed: 10/07/2019						
Iron	1.98	0.0800	mg/L	2.00		99.2	85-115			
Duplicate (B9J0352-DUP1)										
				Source: M9J0300-01 Prepared & Analyzed: 10/07/2019						
Iron	0.316	0.0800	mg/L		0.330			4.21	20	
Matrix Spike (B9J0352-MS1)										
				Source: M9J0300-01 Prepared & Analyzed: 10/07/2019						
Iron	2.33	0.0800	mg/L	2.00	0.330	100	70-130			
Matrix Spike (B9J0352-MS2)										
				Source: M9J0334-05 Prepared & Analyzed: 10/07/2019						
Iron	2.04	0.0800	mg/L	2.00	0.114	96.0	70-130			
Post Spike (B9J0352-PS1)										
				Source: M9J0311-05 Prepared & Analyzed: 10/07/2019						
Iron	2.12		mg/L	2.00	0.194	96.1	75-125			

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CERTIFICATE OF ANALYSIS

19J0399



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CERTIFICATE OF ANALYSIS

19J0399

Definitions

- AC: No surrogate was present in the associated client requested MS/MSD. There was insufficient sample volume to re-extract the MS/MSD out of hold.
ACa: Sample was re-extracted out of hold and yielded acceptable surrogate recoveries. Only the in-hold sample results were reported.
M10: The Matrix Spike recovery was biased low.
M6: The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample is disproportionate to the spike level. The LCS recovery is acceptable.
R3: Sample Duplicate RPD was out of acceptance limits. The result concentration was within 5 times the reporting limit and the difference was less than the reporting limit.
R6: Sample Duplicate RPD is not applicable due to result less than reporting limit.
RL: Reporting Limit
RPD: Relative Percent Difference
S2: Surrogate recovery is below acceptance limits.
S4: Surrogate recovery can not be accurately measured due to matrix interference.
V13: Interferent check recovery was above acceptance limits. The sample(s) did not contain interferences that would affect the sample result.

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 6.2°C

Cooler Inspection Checklist

Table with 4 columns: Question, Yes, No, and Answer. Rows include: Ice Present or not required?, Custody seals intact or not required?, COC includes customer information?, Sample collector identified on COC?, Correct type of Containers Received, Containers Intact?, Enough sample volume for indicated tests received?, Samples arrived within hold time?, Chemical preservations checked or not required?, VOA vials have zero headspace, or not recd.?, Shipping containers sealed or not required?, Chain of Custody (COC) Present?, Relinquished and received signature on COC?, Sample type identified on COC?, Correct number of containers listed on COC?, COC includes requested analyses?, Sample labels match COC (Name, Date & Time)?, Correct preservatives on COC or not required?, Preservation checks meet method requirements?.

Project Requested Certification(s)

Microbac Laboratories Inc., - Marietta, OH 460187
Microbac Laboratories, Inc. - Baltimore E871126
Virginia Department of General Services
Florida - NELAC

Report Comments

Samples were received in proper condition and the reported results conform to applicable accreditation standard unless otherwise noted.

The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included.

Reviewed and Approved By:

[Signature]

Evelyn Shinas
Customer Relationship Coordinator
Reported: 10/15/2019 11:19

Chain of Custody Record

Client Name: POTOMAC ELECTRIC POWER CO
 Address: 3400 BENNING RD. NE
 City, State, Zip: WASHINGTON DC 20019
 Contact: HIEDI STURM
 Telephone #: 410-206-2085

Project: BENNING STORM WATER
 Location: BENNING SERVICE CTR
 PO #: 90016A72

Compliance Monitoring? Yes No
 (1) Agency/Program: NPDES

Sampler Signature: James Dubs
 Sampler Phone #: 202-359-8107
 Sampler (DW) Cert#: _____

Send Report via e-mail (address) JNDILTS@PEPCO / HIEDI.E.STURM@CONSISTENTMAYMAIL.COM
 Telephone Fax (fax #)

*** Matrix Types: Air(A), Childrens Product(CP), Food(F), Paint(P), Soil/Solid (S), Oil(O), Wipe(WI), Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify) SS= STORM WATER

Client Sample ID	Matrix***	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analysis	Comments
013Q	SS	✓	-	N	9-30-19	11:05	11	PCB (**), OIL & GREASE, TOT. SUSPENDED SOLIDS, TOT. REMOVABLE Fe, Cd, Pb, Ni, Zn	(*) QUANTIFY AROCHEANS 124Z, 125A, 1260 MDL ≤ 1 ug/L Method 608 (**) QUANTIFY 209 CONGENERS METHOD 1668B
013Q-15C0	SS	✓	-	N	9-30-19	11:15	11		
201A-OWS	SS	✓	-	N	9-30-19	0800	9		
101-MANHOLE "K"	SS	✓	-	N	9-30-19	11:25	11		

Possible Hazard Identification: Hazardous Non-Hazardous

Number of Containers: _____

Cooler Number: 62
 Temp upon receipt(°C): _____

Sample Received on Ice or Refrigerated from Client: Yes / No

Relinquished By (signature): James Dubs
 Relinquished By (signature): James Dubs
 Relinquished By (signature): James Dubs

Sample Disposition: Dispose as appropriate Return Archive

Date/Time: 10/2/19 1405
 Received By (signature): James Dubs

Date/Time: 10/2/19 1520
 Received By (signature): HIEDI STURM

Date/Time: _____
 Received for Lab By (signature): _____

Printed Name/Affiliation: JAMES DUBS JR FOR PEPCO
 Printed Name/Affiliation: HIEDI STURM
 Printed Name/Affiliation: _____

Barcode: 19J0399

Cooler Receipt Form / Sample Acceptance & Noncompliance Form

Microbac Laboratories, Inc., Baltimore Division
 Control # 606-03
 Effective Date: 11/30/2016
 Page 1 of 1

Number of Coolers Received: 1
 Client: Pepe o - Benning
 Form Completed By: Amanda
 Shipper:
 Custody Tape Intact:
 Containers Intact:
 Sample Received on Ice or refrigerated:

 Chain of Custody Present with shipment:
 Sample Bottle IDs agree with COC:
 Preservation requirements met:
 Correct Number of Containers / Sample Volume:
 Headspace in container:
 Type of Sample:

Receipt Date / Time: 12/19 1527
 Work Order # 1450399 / 1450400

Microbac Client UPS FedEx
 YES / NO / NA
 YES / NO
 YES / NO / NA
 Infrared (IR) Temperature: 6.2 °C
 YES / NO
 YES / NO
 YES / NO / Not Checked
 YES / NO (If No, contact client immediately)
 YES / NO NA
 Water Soil Wipes Oil Filter Solid
 Sludge Food Swab Other

Container Type / Quantity:

A -	Unpreserved	H2SO4	<u>6</u> HNO3	HCl	NaOH	NaOH/Ascorbic Acid:	If preserved pH <2 <u>Yes All</u> , pH >10
B -	<u>4</u> Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2, pH >10
C -	Unpreserved	H2SO4	HNO3	<u>8</u> HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2, pH >10 <u>not</u>
D -	<u>24</u> Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2, pH >10 <u>checked</u>
E -	Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2, pH >10
H -	Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2, pH >10
K -	Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2, pH >10
L -	Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2, pH >10
M -	Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2, pH >10
P -	Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2, pH >10
W -	Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2, pH >10
V -	Unpreserved	HCl	HCl / Ascorbic Acid	HCl / NaTHIO	(Checked at time of Analysis)		
F -	Unpreserved	NaTHIO (Checked at time of Analysis)					
S -	Unpreserved	NaTHIO (Checked at time of Analysis)					
SN -	Unpreserved	NaTHIO / EDTA (Checked at time of Analysis)					
	Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2, pH >10
	Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2, pH >10
	Unpreserved	H2SO4	HNO3	HCl	NaOH	NaOH/Ascorbic Acid	If preserved pH <2, pH >10

Describe preservation requirements not met:

All Acid preserved <2 pH NaOH preserved >12 pH All others >2 and <10 (usually 4-8)

Sample ID: _____ H₂SO₄ HNO₃ NaOH _____ mls added
 Sample ID: _____ H₂SO₄ HNO₃ NaOH _____ mls added
 Sample ID: _____ H₂SO₄ HNO₃ NaOH _____ mls added
 Sample ID: _____ H₂SO₄ HNO₃ NaOH _____ mls added

H₂SO₄ – Sulfuric Acid, HNO₃ – Nitric Acid, NaOH – Sodium Hydroxide, ASC – Ascorbic Acid, NaTHIO – Sodium Thiosulfate

Describe Anomalies: Split Per Sub out - #10/2/19

Contact information / Summary of Actions:

Date / Time: _____ Contact: _____ Contact By: _____

Comments: _____



**SUBCONTRACT ORDER
19J0399**

RUSH

SENDING LABORATORY:

Microbac Laboratories, Inc. - Baltimore
2101 Van Deman Street
Baltimore, MD 21224
Phone: 410.633.1800
Lab Manager: Evelyn Shinas
Email: evelyn.shinas@microbac.com

RECEIVING LABORATORY:

Microbac - OVD
158 Starlite Dr
Marietta, OH 45750
Phone: (800) 373-4071

*Results needed
10/09 for file.
File 10/03/19*

Project Info:

Project Name: Benning Rd. Gen Station - P Client: PEPCO-Benning Rd - G0055
Project No: Benning Rd. Gen Station Project Type: ENV-WasteWater Report TAT: 10
Project Location: Washington, DC Due: 10/17/2019 17:00

Sample ID: 19J0399-01

Sampled: 09/30/2019 11:05

Matrix: Stormwater

Sampler: James Dilts

Analysis	Method	Analysis Due	Expires	Network \$
608 PCB	EPA 608	10/16/2019 15:00	10/07/2019 11:05	\$ 72.00
Aroclor 1016	0.1 µg/L Aroclor 1221		0.1 µg/L	
Aroclor 1232	0.1 µg/L Aroclor 1242		0.1 µg/L	
Aroclor 1248	0.1 µg/L Aroclor 1254		0.1 µg/L	
Aroclor 1260	0.1 µg/L Total PCBs		0.1 µg/L	
<i>Decachlorobiphenyl(Surr)</i>	<i>Tetrachloro-m-xylene(Surr)</i>			

Run MS/MSD on these samples

M Fe ICP	EPA 200.7	10/16/2019 15:00	03/28/2020 11:05	\$ 8.00
Iron	0.02 mg/L			

Containers Supplied:
B: A- 500ml Plastic HNO3 to pH <2
E: D-1000ml Amber Glass NM Neat
G: D-1000ml Amber Glass NM Neat

D: D-1000ml Amber Glass NM Neat
F: D-1000ml Amber Glass NM Neat

Sample ID: 19J0399-02

Sampled: 09/30/2019 11:15

Matrix: Stormwater

Sampler: James Dilts

Analysis	Method	Analysis Due	Expires	Network \$
608 PCB	EPA 608	10/16/2019 15:00	10/07/2019 11:15	\$ 72.00
Aroclor 1016	0.1 µg/L Aroclor 1221		0.1 µg/L	
Aroclor 1232	0.1 µg/L Aroclor 1242		0.1 µg/L	
Aroclor 1248	0.1 µg/L Aroclor 1254		0.1 µg/L	
Aroclor 1260	0.1 µg/L Total PCBs		0.1 µg/L	
<i>Decachlorobiphenyl(Surr)</i>	<i>Tetrachloro-m-xylene(Surr)</i>			

Run MS/MSD on these samples

M Fe ICP	EPA 200.7	10/16/2019 15:00	03/28/2020 11:15	\$ 8.00
Iron	0.02 mg/L			

Containers Supplied:
A: A- 500ml Plastic HNO3 to pH <2
E: D-1000ml Amber Glass NM Neat
G: D-1000ml Amber Glass NM Neat

D: D-1000ml Amber Glass NM Neat
F: D-1000ml Amber Glass NM Neat



**SUBCONTRACT ORDER
19J0399**

Sample ID: 19J0399-03

Sampled: 09/30/2019 08:00

Matrix: Stormwater

Sampler: James Dilts

Analysis	Method	Analysis Due	Expires	Network \$
608 PCB	EPA 608	10/16/2019 15:00	10/07/2019 08:00	\$ 72.00
Aroclor 1016	0.1 µg/L	Aroclor 1221	0.1 µg/L	
Aroclor 1232	0.1 µg/L	Aroclor 1242	0.1 µg/L	
Aroclor 1248	0.1 µg/L	Aroclor 1254	0.1 µg/L	
Aroclor 1260	0.1 µg/L	Total PCBs	0.1 µg/L	
<i>Decachlorobiphenyl(Surr)</i>		<i>Tetrachloro-m-xylene(Surr)</i>		

Run MS/MSD on these samples

Containers Supplied:

B: D-1000ml Amber Glass NM Neat

D: D-1000ml Amber Glass NM Neat

E: D-1000ml Amber Glass NM Neat

Sample ID: 19J0399-04

Sampled: 09/30/2019 11:25

Matrix: Stormwater

Sampler: James Dilts

Analysis	Method	Analysis Due	Expires	Network \$
608 PCB	EPA 608	10/16/2019 15:00	10/07/2019 11:25	\$ 72.00
Aroclor 1016	0.1 µg/L	Aroclor 1221	0.1 µg/L	
Aroclor 1232	0.1 µg/L	Aroclor 1242	0.1 µg/L	
Aroclor 1248	0.1 µg/L	Aroclor 1254	0.1 µg/L	
Aroclor 1260	0.1 µg/L	Total PCBs	0.1 µg/L	
<i>Decachlorobiphenyl(Surr)</i>		<i>Tetrachloro-m-xylene(Surr)</i>		

Run MS/MSD on these samples

M Fe ICP

Iron

EPA 200.7

0.02 mg/L

10/16/2019 15:00

03/28/2020 11:25

\$ 8.00

Containers Supplied:

B: A- 500ml Plastic HNO3 to pH <2

D: D-1000ml Amber Glass NM Neat

E: D-1000ml Amber Glass NM Neat

F: D-1000ml Amber Glass NM Neat

G: D-1000ml Amber Glass NM Neat

Released By _____ Date _____ Received By _____ Date _____

Released By _____ Date _____ Received By _____ Date _____