

Permit No. DC0021199

Effective Date: June 4, 2007  
Expiration Date: February 28, 2008

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT  
DISCHARGE ELIMINATION SYSTEM

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

District of Columbia Water and Sewer Authority

is authorized to discharge from the wastewater system and the facility located at

5000 Overlook Avenue, SW  
Washington, D.C. 20372

to receiving waters named Potomac and Anacostia Rivers, Rock Creek, and tributary waters in accordance with effluent limitations, monitoring requirements and other conditions set forth in parts I, II and III, herein.

Signed this 5th day of April 2007.

*signed*

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

PART I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

**SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS OUTFALL 001**

Outfall 001 is the treatment plant excess flow outfall and is authorized as a CSO-related Bypass. Treatment includes primary, chlorination, and dechlorination. During the period beginning from effective date and lasting through the expiration date of this permit, permittee is authorized to discharge from Outfall 001 to the Potomac River. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	lb/day		Other units (specify)		Measurement	Sample (6)
	Ave Monthly	Ave Weekly	Ave Monthly	Ave Weekly	Frequency	Type
Flow/discharge(mgd)	N/A (1)	N/A (2)	N/L (3)	N/L	Continuous	Measured
Carbonaceous Biochemical Oxygen Demand (5 day)	N/A	N/A	N/L	N/L	Per discharge	Composite (4)
Total Suspended Solids	N/A	N/A	N/L	N/L	Per discharge	Composite (4)
pH (s.u.)	N/A	N/A	N/L	N/L	Every 8 hours not less than one sample per discharge	Grab
Fecal Coliform (cfu/100 ml) - 30 day geometric mean for 5 samples minimum  Enterococci (cfu/100 ml)- 30 day geometric mean for 5 samples minimum	N/A	N/A	N/L	N/L	Every 8 hours, one sample within 2 hours of beginning of the discharge	Grab

SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS OUTFALL 001 (Continued)

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	lb/day		Other units (specify)		Measurement	Sample (6)
	Ave Monthly	Ave Weekly	Ave Monthly	Ave Weekly	Frequency	Type
Total Residual Chlorine (mg/l) (5)	Non-detectable		Non-detectable		Every 2 hours Not less than one sample/ discharge	Grab
Total Nitrogen	N/A	N/A	N/L	N/L	Per discharge	Composite (4)
Total Phosphorus	N/A	N/A	N/L	N/L	Per discharge	Composite (4)

- (1) Plant influent flow of 336 mgd or less, above the rates to receive complete treatment under Part I.B. Outfall 002, shall receive at least primary treatment, disinfection and dechlorination and may be discharged after such treatment from Outfall 001 subject to the listed monitoring requirements.
- (2) N/A Not applicable.
- (3) N/L No Limit, monitoring only.
- (4) Collect one grab sample every two (2) hours and flow composite samples up to a minimum of 24 hours. Analyze the single composited sample. The monthly average shall be determined by dividing the daily average event or events concentration by the total number of days the events occurred each month.
- (5) See Part IV, Section C for additional Chlorination/Dechlorination monitoring requirements.
- (6) All pollutant sampling shall commence no later than two (2) hours after a discharge has begun to occur at Outfall 001. Samples are not required for discharges lasting less than two (2) hours. The two hour delay does not apply to flow monitoring.

- (7) Authorization of CSO-related bypasses under this provision may be modified or terminated when there is a substantial increase in the volume or character of pollutants being introduced into the POTW.
- (8) Permittee shall provide notice to the permitting authority of the discharges for Outfall 001 within 24 hours of the commencement of the discharge.

**SECTION B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS OUTFALL 002**

Loading limitations are based upon the capacity of 370 mgd for complete treatment during the period beginning on the effective date of the permit and lasting through the expiration date. During this period, the permittee is authorized to discharge from Outfall 002 to the Potomac River, subject to the following discharge limitations and monitoring requirements:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	(lb/day)		Other units (specify)		Measurement Frequency	Sample Type
	Ave. Monthly	Ave. Weekly	Ave. Monthly	Ave. Weekly		
Flow/day (mgd) (1, 1a, 1b and 1c)	N/A (2)	N/A	N/L (3)	N/L	Continuous	Measured
Carbonaceous Biochemical Oxygen Demand (5 day) **	15,429	23,143	5.0 mg/l	7.5 mg/l	Daily	24-hour Composite
TSS **	21,600	32,400	7.0 mg/l	10.5 mg/l	Daily	24-hr.Comp.
Total Phosphorus	555 (4)	1,080	0.18 mg/l (4)	0.35 mg/l	Daily	24-hour Composite
Ammonia Nitrogen: Summer (5/1-10/31)	12,960	18,823	4.2 mg/l	6.1 mg/l	Daily	24-hour Composite
Winter 1 (11/1-2/14)	34,253	45,670	11.1 mg/l	14.8 mg/l	Daily	24-hr.Comp.
Winter 2 (2/15-4/30)	39,500	52,460	12.8 mg/l	17.0 mg/l	Daily	24-hr.Comp.
Dissolved Oxygen	5.0 mg/l minimum daily ave Not less than 4.0 mg/l at any time				Every 2 hours	Grab (5)
Total Nitrogen (10)					daily	24-hour Composite
Total Residual Chlorine (mg/l)(6)	Non-detectable		Non-detectable		Every 2 hours	Grab
pH (s.u.) (7)	Within limits of 6.0 to 8.5 standard units				Continuous in-situ monitoring and recording	

SECTION B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS OUTFALL 002 (Continued)

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	(lb/day)		Other units (specify)		Measurement Frequency	Sample Type
	Average Monthly	Average Weekly	Average Monthly	Average Weekly		
Total Ortho-phosphate (mg/l)	N/A	N/A	N/L	N/L	Daily	24-hr comp.
Alkalinity, total (CaCO <sub>3</sub> ) (mg/l)	N/A	N/A	N/L	N/L	Daily	24-hr comp.
Hardness, total (CaCO <sub>3</sub> ) (mg/l)	N/A	N/A	N/L	N/L	Daily	24-hr comp.
Nitrite (NO <sub>2</sub> ) (mg/l)	N/A	N/A	N/L	N/L	Daily	24-hr comp.
Nitrate (NO <sub>3</sub> ) Total Kjeldahl Nitrogen (mg/l)	N/A	N/A	N/L	N/L	Daily	24-hr comp.
Cadmium (9) (dissolved)	N/A	N/A	N/L	N/L	Bimonthly	4 grabs/24 hrs
Copper (9) (dissolved)	N/A	N/A	N/L	N/L	Bimonthly	4 grabs/24 hrs
Iron (9) (dissolved)	N/A	N/A	N/L	N/L	Bimonthly	4 grabs/24 hrs
Mercury (8) (total recoverable)	N/A	N/A	N/L	N/L	Bimonthly	4 grabs/24 hrs
Lead (9) (dissolved)	N/A	N/A	N/L	N/L	Bimonthly	4 grabs/24 hrs
Nickel (9) (dissolved)	N/A	N/A	N/L	N/L	Bimonthly	4 grabs/24 hrs
Zinc (9) (dissolved)	N/A	N/A	N/L	N/L	Bimonthly	4 grabs/24 hrs
Fecal coliform	N/A	N/A	200 cfu/100 ml geometric mean	400 cfu/100ml geometric mean	Every 8 hrs.	Grab
Enterococci cfu/100ml geometric mean	N/A	N/A	N/L	N/L	1/day	Grab

SECTION B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS OUTFALL 002 (Continued)

(1) Treatment for flows received at the plant shall be as follows:

- a. Initial Treatment means providing plant influent flows with screening, grit removal and primary treatment.
- b. Excess Flow Treatment means treatment of plant influent flows in the east primary treatment facilities followed by chlorination and dechlorination with discharge from Outfall 001. Plant influent flows shall receive Initial Treatment prior to receiving excess flow treatment.
- c. Complete Treatment means passage of plant influent and recycle flows through any combination of conveyance and treatment facilities downstream of primary sedimentation that ultimately discharges effluent from Outfall 002, in accordance with the limitations set forth for Outfall 002 found at Part I.B. of this permit.

(1a) Treatment conditions for flows received at the plant shall be as follows:

- a. Dry Weather Flow (DWF) conditions exist when plant influent flows are equal to or less than a rate of 511 mgd.
- b. Combined Sewer System Flow (CSSF) conditions exist and shall be deemed to start when plant influent flow is greater than a rate of 511 mgd. The CSSF conditions shall be deemed to stop 4 hours after plant influent flow drops to a rate less than 511 mgd or a period of a 4 hours has elapsed since the start of CSSF conditions, whichever occurs last.

(1b) Flows discharged from Outfall 002 shall receive treatment as follows:

- a. When DWF conditions exist, plant influent flow shall receive Initial Treatment and Complete Treatment.

SECTION B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS OUTFALL 002 (Continued)

- b. When CSSF conditions exist, plant influent flow shall receive treatment as follows:
  - i. Plant influent flow less than or equal to 740 mgd occurring for a period of less than or equal to 4 hours shall receive Initial Treatment and Complete Treatment.
  - ii. Plant influent flow up to 511 mgd occurring for a period greater than 4 hours shall receive Initial Treatment and Complete Treatment.
- c. The provisions of subparagraph I.B.(1c).b shall expire June 28, 2007, unless, within 90 days prior to that date, the permittee submits a written demonstration to EPA's satisfaction that completion of construction under Phases 1 through 7 of the Blue Plains Liquid Process Improvement Program has been delayed due to circumstances beyond permittee's control. If the permittee makes the forgoing demonstration, then the provision of subparagraph I.B.(1c).b shall remain in effect until such later date determined by EPA, which shall in no event be later than justified by the circumstances beyond the permittee's control.

(1c) When CSSF conditions exist, plant influent flow greater than the 740 mgd or 511 mgd rates receiving Initial Treatment and Complete Treatment, up to a maximum rate of 336 mgd, shall receive Excess Flow Treatment and be discharged from Outfall 001.

- a. When CSSF conditions exist, and until completion of the Excess Flow Treatment controls under the Blue Plains Liquid Process Improvement Program, monitoring, reporting and compliance shall be as follows:
  - i. When plant influent flow exceeds a rate of 511 mgd, the permittee shall commence hourly readings and recording of the plant influent flow rate and the flow rates being conveyed through Excess Flow Treatment and Complete Treatment.
  - ii. The average flow rate conveyed to Complete Treatment shall be the maximum that can practicably be achieved, but in no event less than 90% of the flow rate required to be conveyed to Complete Treatment which is:



- Up to 740 mgd during the first 4 hours of CSSF conditions when the plant influent flow exceeds a rate of 511 mgd.
  - Up to 511 mgd at all times during CSSF conditions when plant influent flow exceeds a rate of 511 mgd.
- iii. The hourly flow rate conveyed through Excess Flow Treatment shall not exceed 336 mgd.

SECTION B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS OUTFALL 002 (Continued)

- b. During construction under Phases 1 through 7 of the Blue Plains Liquid Process Improvement Program, to the extent such construction occurs during the life of this permit, plant influent flows shall receive treatment as follows:
  - i. Plant influent flow less than or equal to 511 mgd occurring for a period of less than or equal to 4 hours shall receive Initial Treatment and Complete Treatment and be discharged through Outfall 002.
  - ii. HPlant influent flow less than or equal to 450 mgd occurring for a period greater than 4 hours shall also receive Initial Treatment and Complete Treatment and be discharged through Outfall 002.
  - iii. Plant influent flow greater than the 511 mgd or 450 mgd rates, up to a maximum rate of 336 mgd, shall receive Excess Flow Treatment.
  - iv. The construction phase treatment conditions shall be deemed to start when plant influent flow exceeds a rate of 511 mgd.
  - v. The construction phase treatment conditions shall be deemed to stop 4 hours after plant influent flow drops to a rate of less than 450 mgd or a period of 4 hours has elapsed since the start of the construction phase treatment condition, whichever occurs last.
  - vi. When construction phase treatment conditions are in effect, treatment shall comprise a combination of Initial Treatment, Complete Treatment and Excess Flow Treatment.
  - vii. When plant influent flow exceeds a rate of 511 mgd, the permittee shall commence hourly readings and recording of the plant influent rate and flow rates being conveyed through Excess Flow Treatment and Complete Treatment.

SECTION B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS OUTFALL 002 (Continued)

viii. The average of all hourly readings shall be calculated and evaluated as follows:

- The calculated average flow rate conveyed to complete treatment shall be not less than 90% of the rate required to be conveyed to complete treatment which is:
  - Up to 511 mgd during the first 4 hours of construction phase treatment conditions when the plant influent flow exceeds a rate of 511 mgd.
  - Up to 450 mgd at all times during the construction phase treatment condition when plant influent flow exceeds a rate of 450 mgd.
- The hourly flow rate conveyed through the Excess Flow Treatment facilities shall not exceed 336 mgd.

(2) N/A Not Applicable

(3) N/L No Limit, monitoring only

(4) The phosphorus limitation of 0.18 mg/l is based on the Potomac Strategy Management Commission Agreement and the best technical information available at the time of permit issuance. In addition, based upon available data of full plant BNR process operation, the monthly average is expressed as a 12 month rolling average and in any 12 month period no one month may exceed a mass of 1080 lbs/day and 0.35 mg/l. When full plant BNR process is in operation, the 12 month rolling average mass for a month shall be the total mass for the month plus the total mass for the previous eleven (11) months divided by the total number of days in the 12 month period. The 12 month rolling average concentration for a month shall be the total mass for the 12 month period divided by the average daily flow (in mgd) for the 12 month period times 8.34. No single month in any 12 month period used to calculate a 12 month rolling average shall exceed a monthly average limit of 490 kg/day (1080 lb/day) and 0.35 mg/l.

SECTION B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS OUTFALL 002 (Continued)

- (5) Continuous in situ monitoring and recording of dissolved oxygen shall continue. The monitoring requirements shall be understood to require twelve (12) readings from the continuous recording per day.
- (6) When the total residual chlorine (TRC) analysis of the final effluent at Outfall 002 results in a detectable measurement, the permittee shall take steps to achieve a non-detectable TRC concentration. See Special Condition Part IV Section C.
- (7) The permittee is required to be in compliance with the pH limitations specified above for 99% of the time for any calendar month. The total excursion time allowed for any calendar month is 7 hours, 26 minutes and no individual excursion shall exceed 60 minutes.
- (8) The permittee shall sample the effluent for mercury using the most sensitive test method 245.1 or 245.2 Cold Vapor Technique. The method detection limit, and the method used to perform the mercury analysis shall be submitted with the discharge monitoring reports. See Part IV, Special Conditions, Section D.
- (9) The permittee shall monitor the effluent at Outfall 002 for the metals listed above in accordance with the conditions set forth below. Report results in micrograms per liter.
  - a. The permittee shall test for additional metals, and priority pollutants twice in five (5) years during the term of this permit. One such testing shall be in the third year of the permit and the second shall be in the last year of the permit.

SECTION B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS OUTFALL 002 (Continued)

- b. All analytical methods will be EPA approved methodologies found in 40 C.F.R. Part 136.
  - c. The quantification level (QL) shall be the lowest concentration used for the calibration of a measurement system when the calibration is in accordance with the procedures published for the required method. Usually, units for the QL are in micrograms per liter.
  - d. Permittee shall analyze each grab sample and report the average of the four samples. Alternatively, the permittee may prepare a composite of the grab samples in the laboratory by proportioning to flow and analyze the laboratory composite sample.
- (10) As provided in Part IV Section E of this permit, the permittee shall operate the plant, including the Biological Nitrogen Removal (BNR) process to meet the Chesapeake Bay based total nitrogen effluent limit of not more than 4,689,000 pounds per year.

Total nitrogen concentration shall be the sum of organic nitrogen, ammonia nitrogen and (NO<sub>2</sub> +NO<sub>3</sub>) - N concentrations (e.g., Total Nitrogen = Total Kjeldahl nitrogen + No<sub>2</sub> as N + No<sub>3</sub> as N).

- (11) Permittee shall report any substantial changes in the volume or character of pollutants being introduced into the POTW.

\*\* - See Part IV, Special Conditions, Section G for 85% BOD and TSS reduction requirements.

**SECTION C. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS OUTFALL 019<sup>(1)</sup>**

Outfall 019 is the discharge from the Northeast Boundary Swirl Concentrator Facility to the Anacostia River. Treatment includes: screening, swirl concentration, chlorination and dechlorination. These effluent limitations and monitoring requirements become effective from issuance date through the expiration date of this permit.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Kg/day (lb/day)		Discharge Limitations		Monitoring Requirements	
	Other units (specify)		Measurement Frequency	Sample Type (6)		
	Ave Monthly	Ave Weekly			Ave Monthly	Ave Weekly
Flow/day (mgd)	N/A (2)	N/A	N/L (3)	N/L	Continuous	Measured
Total Suspended Solids (mg/L)	N/A	N/A	N/L	N/L	Per discharge	Composite (4)
Fecal Coliform (cfu/100 ml) - 30 day geometric mean for 5 samples minimum	N/A	N/A	N/L	N/L	Every 8 hours, first sample within 2 hours of beginning of discharge	Grab
Enterococci (cfu/100 ml) - 30 day geometric mean for 5 samples minimum	N/A	N/A	N/L	N/L	Every 8 hours, first sample within 2 hours of beginning of discharge	Grab
Total Residual Chlorine (mg/l) (5)	N/A	N/A	N/L	N/L	Every 2 hours	Grab
Nitrate(NO3) Total Kjeldahl Nitrogen (7)	N/A	N/A	N/L	N/L	per discharge	24-hr. Composite (4)
Total Nitrogen	N/A	N/A	N/L	N/L	per discharge	24-hr. Composite (4)
Total Phosphorus	N/A	N/A	N/L	N/L	per discharge	24-hr. Composite (4)
Carbonaceous Biological Oxygen Demand	N/A	N/A	N/L	N/L	Per Discharge	Composite (4)

SECTION C. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS OUTFALL 019 (Continued)

- (1) The Northeast Boundary Swirl Facility operates during wet weather events that produce flows which exceed the capacity of the upstream Eastside Interceptor. The facility provides treatment for up to 400 mgd of combined sewer overflow. The facility provides screening of influent combined sewage, concentration of solids in the swirl tanks, and disinfection and dechlorination of effluent. The concentrated, solids-bearing underflow from the swirl is pumped by the Eastside Pumping Station to the Blue Plains Wastewater Treatment Plant.
- (2) N/A Not Applicable
- (3) N/L No Limit, monitoring only
- (4) Collect one grab sample every two (2) hours beginning within 2 hours of the start of the discharge, composite samples up to a maximum of 24 hours. Permittee shall analyze the composited sample. If the permittee is unable to collect the first sample within 2 hours of the start of the discharge permittee shall explain in writing why it was unable to collect the required sample.

The Monthly average shall be determined by dividing the daily average event or events concentration by the total number of days the event(s) occurred per month.

- (5) See Part IV, Sec. C for additional Chlorination/Dechlorination monitoring requirements.
- (6) All sampling shall commence no later than two (2) hours after a discharge has begun to occur at Outfall 019. Samples are not required for discharges lasting less than (2) two hours. The two hour delay does not apply to flow monitoring, which is required to be continuous.
- (7) The permittee may either monitor for TKN or Ammonia, whichever sampling is currently being performed.

Note: The rate of flow necessary to trigger the Northeast Boundary Swirl is 15 mgd. The purpose of this facility is to achieve maximum diversion of flow at the Structure 24

Dams on the Northeast Boundary Sewer, and to concentrate the pollutants in that flow to a smaller flow which can be handled by the available capacity of the Eastside Pump Station. The NEBSF has a total design flow rate of 400 mgd.



## **PART II. STANDARD CONDITIONS FOR NPDES PERMITS**

### **SECTION A. 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. 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 such 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 \$32,500 per day for each violation, and to an action for appropriate relief including a permanent or temporary injunction.

Any person who negligently violates Sections 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 \$25,000 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 Sections 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 Sections 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 of not more than \$250,000, or by imprisonment of not more than 15 years, or by both.

#### **3. 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.

#### 4. 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, and which was unavailable at the time of reissuance, and would have justified the application of different permit conditions at the time of issuance, including but not limited to the results of the 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; or
- 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.

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.

#### 5. Toxic Pollutants

Notwithstanding Section A.4 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, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the permittee so notified.

The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic standards within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

6. Civil and Criminal Liability

Except as provided in permit conditions on "Bypassing" (Section B.2) and "Upsets" (Section B.3), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

7. 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.

8. State 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.

9. 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.

10. 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, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

11. 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.

12. 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.

13. Reopener Provision

This permit may be modified or revoked and reissued as provided pursuant to 40 CFR § 122.62 and Section 124.5 to:

- 1) include new or revised conditions developed to comply with any State or Federal law or regulation that addresses CSOs that is adopted or promulgated subsequent to the effective date of this permit. This includes, but is not limited to: Water Quality Standards and Total Maximum Daily Loads (TMDLs);
- 2) to include new or revised conditions if new information, not available at the time of permit issuance, indicates that CSO controls imposed under the permit have failed to ensure the attainment of State WQS;
- 3) include new or revised conditions based on new information resulting from implementation of the LTCP.

In addition, this permit may be modified or revoked and reissued for any reason specified in 40 C.F.R. §122.62.

14. Endangered Species

The United States Fish and Wildlife Service (FWS) has indicated that the bald eagle, a Federally listed threatened species, occurs downstream of the Blue Plains outfalls, in the vicinity of the Potomac River in the District of Columbia and Maryland. The National Marine Fisheries Service (NMFS) has indicated that the endangered shortnose sturgeon occurs in the Potomac River Drainage and may occur within the District of Columbia. Wastewater discharges, construction, or any other activity that adversely affects a Federally listed endangered or threatened species are not authorized under the terms of this permit.

The monitoring required by this permit will allow further evaluation of potential effects on these threatened and

endangered species once monitoring data has been collected and analyzed. EPA requires that the permittee submit to NMFS an annual compilation of the Discharge Monitoring Reports (DMRs), which may be used by NMFS to further assess effects on endangered or threatened species. If these data indicate it is appropriate, requirements of this NPDES permit may be modified to prevent adverse impacts on habitats or endangered and threatened species.

The set of DMRs for the calendar year are to be submitted by February 15 of the following year to:

The National Marine Fisheries Service  
Protected Resource Division  
1 Blackburn Drive  
Gloucester, MA 01930  
Attention: Ms Kim Damon-Randall

DC Department of Health  
Fisheries and Wildlife Division  
51 N Street, N.E. 5<sup>th</sup> floor  
Washington, DC 20002  
Attention: Ira Palmer

## **SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS**

### 1. Proper Operation and Maintenance

The permittee shall at all times properly operate, inspect and maintain all facilities and systems of treatment and control (and related appurtenances including sewers, intercepting chambers, interceptors, combined sewer overflows, pumping stations and emergency bypasses) 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 and maintenance of back-up or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit.

### 2. 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.

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 is 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 Section D.6 (24-hour notice).

d. Prohibition of bypass.

(i) Bypass is prohibited and the EPA may take enforcement action against a permittee for bypass, unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(b) 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 could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(c) The permittee submitted notices as required under Paragraph 2.c of this section.

(ii) The EPA may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraphs (a), (b) and (c) of this section.

3. 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 3.c of this section are met. Administrative determination by the Agency on upset claims of the permittee, made before commencement of an action for noncompliance, are not final administrative actions and therefore 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:
  - (i) An upset occurred and that the permittee can identify the cause(s) of the upset;
  - (ii) The permitted facility was at the time being properly operated;
  - (iii) The permittee submitted notice of the upset as required in Section D.6; and
  - (iv) The permittee complied with any remedial measures required under Section A.3.
- d. Burden of proof: In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

### **SECTION C. 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 as defined at Part II, Section C.11 of this permit. Monitoring points shall not be changed without notification to and the approval of the EPA.

#### **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 are consistent with the accepted capability of that type of device.

3. Monitoring Procedures

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. Monitoring data required by this permit shall be summarized on an average monthly or 7 consecutive day basis or as indicated for Mercury in Part I.B. Calculations shall be based on the average daily flow.

4. Reporting of Monitoring Results

Monitoring results must be reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1). DMRs shall be submitted to EPA on a monthly basis. Monitoring results obtained during the previous month shall be summarized and reported on a DMR form postmarked no later than the 28th day of the following month. Copies of DMR's signed and certified as required by Section D.10, and all other reports required by Part II, Section D, Reporting Requirements shall be submitted to the EPA and to the District of Columbia Department of Health at the following addresses:

U.S. Environmental Protection Agency, Region III  
NPDES Discharge Monitoring Reports (3WP31)  
1650 Arch Street  
Philadelphia, Pennsylvania 19103

and

DC Department of Health  
Environmental Health Administration  
Water Quality Division  
51 N Street, 5<sup>th</sup> Floor, NE  
Washington DC 20002

In addition, in accordance with Part II.A.14 above, by February 15 of the subsequent year, all DMRs for the previous year shall be sent to the NMFS.

5. Monitoring and Analytical Equipment Maintenance

The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals frequent enough to insure accuracy of measurements and shall insure that both calibration and maintenance activities will be conducted.

6. Analytical Quality Control

An adequate analytical quality control program, including the analyses of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results, shall be maintained by the permittee or designated commercial laboratory.

7. 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 results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR form. Such frequency shall also be indicated.

8. 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. Records for sewage sludge monitoring shall be retained in accordance with Part IV, Section B of this permit. These periods may be extended by request of the EPA at any time.

9. 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.

10. Inspection and Entry

The permittee shall allow the Director, 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 where a regulated facility activity is located or conducted, or where records must 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), practices, or operations regulated or required under

this permit;

- 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.

## 11. 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 that month.
- c. The "maximum daily discharge limitation" means the highest allowable "daily discharge."
- d. Grab Sample - An individual sample collected in less than 15 minutes.
- e. 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 month, or during the operating month if flows are of shorter duration.
- f. 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.
- g. "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.
- h. 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.
- i. "i-s" (immersion stabilization) - A calibrated device is immersed in the effluent stream until the reading is stabilized.

## SECTION D. REPORTING REQUIREMENTS

### 1. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. The permittee may submit to the permitting authority requests for modification of this provision in accordance with future promulgated regulations.

### 2. Anticipated Noncompliance

The permittee shall give advance notice to the Director 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 the Director as specified in Part II, Section A, Paragraph 11. The Director 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 Part II, Section C, Paragraph 4 (Reporting of Monitoring Results).

### 5. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance must include the cause of noncompliance, 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 noncompliance. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the noncompliance. 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; the steps taken or planned to reduce, eliminate, prevent recurrence of the noncompliance, and the steps taken to minimize any adverse impact to navigable waters. 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.

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

7. Other Noncompliance

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

8. Duty to Provide Information

The permittee shall furnish to the EPA, within a reasonable time, any information which the 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 the EPA, upon request, copies of records required to be kept by this permit.

9. 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. The Director 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 the Director 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.

10. Signatory Requirements

All applications, reports or information submitted to the Director shall be signed and certified as required by 40 C.F.R. 122.22. Knowingly making false statements, representations, or certifications is subject to penalty.

11. Availability of Reports

Unless a 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 Director. If a 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.

12. Penalties for Falsification of Reports

The Clean Water Act at Section 309 (c)(4), provides that any person who knowingly makes any false representation or certification in any record or other document filed or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, shall, upon a first conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or by both. For a conviction of a person for a violation committed after a first conviction of such person, punishment shall be by fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

13. Correction of Reports

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

**SECTION E. PUBLIC ACCOUNTABILITY**

The permittee shall undertake an overall program of public accountability, including quarterly summary reports to inform all users of the sanitary system and local government officials and the general public of the extent of actual compliance with permit requirements and conditions. To facilitate public information, the permittee shall use available means such as posting quarterly summary reports on its website, inserts with water and sewer bills or other means to distribute this information to the public. In addition, the permittee shall include in this report information on the efficacy of all (on and off site) operations used in the disposal of sludge from the Blue Plains WWTP. Reports shall be provided to at least the following:

Secretary, Maryland Department of the Environment  
Executive Director, Virginia Dept. of Environmental Quality  
Director, DC Department of Health  
Chief of Maintenance, National Park Service  
Director, Interstate Commission of the Potomac River Basin  
Director, Metropolitan Washington Council of Governments

**PART III. SEWER SYSTEM**

**SECTION A. COMBINED SEWER SYSTEM - GENERAL**

The permittee operates a Combined Sewer System (CSS). The CSS includes the combined sewer overflow (CSO) outfalls listed below and other outfalls as indicated by footnotes. During the period beginning with the permit effective date and lasting until the permit expiration date, the permittee is authorized to discharge from the CSOs listed below, except as otherwise noted. Such discharges shall be limited and conditioned by the permittee as specified in the following paragraphs and sections.

<b>Outfall (1)</b>	<b>Overflow Structure Location</b>	<b>Receiving Stream</b>	<b>Latitude and Longitude (approximate)</b>
003	Bolling AFB	Potomac River	N 38 49 51 W 77 01 32
004 (2)	Emergency relief for Poplar Point Sewage Pumping Station, SE	Anacostia River, East Side	N 38 51 57 W 77 00 18
005	Chicago Street and Railroad Station, SE	Anacostia River, East Side	N 38 52 08 W 76 59 36
006	Good Hope Road, West of Nichols Ave., SE	Anacostia River, East Side	N 38 52 16 W 76 59 28
007	13 <sup>th</sup> Street and Ridge Place, SE	Anacostia River, East Side	N 38 52 16 W 76 59 19
008 (2)	Anacostia Ave. west of Blaine St. NE - relief for Anacostia Main Interceptor	Anacostia River, East Side	N 38 53 29 W 76 57 46
009	2 <sup>nd</sup> Street, 300 feet North of N Place, SE	Anacostia River, West Side	N 38 52 21 W 77 00 15
010	O Street Sewage Pumping Station, SE	Anacostia River, West Side	N 38 52 23 W 77 00 14
011	South of Main Sewage Pumping Station, SE (pumped overflow)	Anacostia River, West Side	N 38 52 22 W 77 00 17
011a	South of Main Sewage Pumping Station, SE (gravity overflow)	Anacostia River, West Side	N 38 52 22 W 77 00 17
012	North of Main Sewage Pumping Station, SE	Anacostia River, West Side	N 38 52 22 W 77 00 09
013	4 <sup>th</sup> and N Streets, SE	Anacostia River, West Side	N 38 52 22 W 77 00 09
014	6 <sup>th</sup> and M Streets, SE	Anacostia River, West Side	N 38 52 23 W 76 59 09
015	9 <sup>th</sup> and M Streets, SE	Anacostia River	N 38 52 18 W 76 59 38
016	12 <sup>th</sup> and M Streets, SE	Anacostia River, West Side	N 38 52 20 W 76 59 28
017	14 <sup>th</sup> and M Streets, SE	Anacostia River	N 38 52 31 W 76 59 28
018	Barney Circle and Pennsylvania Ave, SE	Anacostia River	N 38 52 39 W 76 58 57
019	NE Boundary Trunk, Vic. Of 25 <sup>th</sup> and E Sts., SE	Anacostia River, West Side	N 38 52 21 W 77 00 09

020	23 <sup>rd</sup> Street, North of Constitution Ave, NW	Potomac River, East Side	N 38 53 10 W 77 03 03
021	Northeast of Roosevelt Bridge, NW	Potomac River, East Side	N 38 53 19 W 77 03 11
022	27 <sup>th</sup> and K Streets, NW	Potomac River, East Side	N 38 53 52 W 77 03 27
023	Abandoned (Formerly 29 <sup>th</sup> and K Streets, NW)	Potomac River, East Side	Not Available
024	30 <sup>th</sup> and K Streets, NW	Potomac River, East Side	N 38 54 05 W 77 03 31
025	31 <sup>st</sup> and K Streets, NW	Potomac River, East Side	N 38 54 03 W 77 03 44
026	Wisconsin Avenue and K St., NW	Potomac River, East Side	N 38 54 06 W 77 03 47
027	Water Street West of Street, NW	Potomac River, East Side	N 38 54 13 W 77 03 57
028	36 <sup>th</sup> and M Streets, NW	Potomac River, East Side	N 38 54 13 W 77 04 18
029	Canal Road 1000 feet east of Rock Creek, NW	Potomac River, East Side	N 38 49 00 W 77 01 40
030	Abandoned (Formerly Foxhall and Canal Roads, NW)	Potomac River, East Side	Not Available
031	Pennsylvania Avenue, East Rock Creek, NW	Rock Creek, East Side	N 38 54 23 W 77 03 22
032	26 <sup>th</sup> and M Streets, NW	Rock Creek, East Side	N 38 54 22 W 77 03 17
033	N Street extended west of 25 <sup>th</sup> Street, NW	Rock Creek, East Side	N 38 54 26 W 77 03 18
034	23 <sup>rd</sup> and O Streets, SW	Rock Creek, East Side	N 38 54 36 W 77 03 05
035	22 <sup>nd</sup> Street south of Q Street, NW	Rock Creek, East Side	N 38 54 33 W 77 03 00
036	22 <sup>nd</sup> Street South of Q Street, NW	Rock Creek, East Side	N 38 54 38 W 77 03 06
037	Northwest of Belmont and Rock Creek and Potomac Parkway	Rock Creek, East Side	N 38 55 02 W 77 03 04
038	North of Belmont Road, east of Kalorama Circle, NW	Rock Creek, East Side	N 38 55 08 W 77 03 05
039	Connecticut Avenue east of Creek, NW	Rock Creek, East Side	N 38 55 18 W 77 02 56
040	Biltmore Street extended east of Rock Creek, NW	Rock Creek, East Side	N 38 55 40 W 77 02 43
041	Ontario extended and Rock Creek Parkway	Rock Creek, East Side	N 38 55 40 W 77 02 43
042	Harvard Street and Rock Creek Parkway, NW	Rock Creek	N 38 55 42 W 77 02 43
043	Adams Mill Road South of Irving Street, NW	Rock Creek, East Side	N 38 55 42 W 77 02 42
044	Kenyon Street and Adams Mill Road, NW	Rock Creek, East Side	N 38 55 44 W 77 02 44
045	Adams Mill Road and Lamont Street, NW	Rock Creek, East Side	N 38 55 50 W 77 02 49
046	Park Road south of Piney Branch Parkway, NW	Rock Creek, East Side	N 38 56 06 W 77 02 45

047	Ingleside Terrace extended and Piney Branch Parkway	Rock Creek, East Side	N 38 56 10 W 77 02 36
048	Mt. Pleasant Street extended and Piney Branch Parkway	Rock Creek, East Side	N 38 56 15 W 77 02 23
049	Piney Branch and Lamont Street, NW	Rock Creek, East Side	N 38 56 12 W 77 02 19
050	28 <sup>th</sup> Street west of 16 <sup>th</sup> Street, NW	Rock Creek, East Side	N 38 54 14 W 77 03 23
051	Olive Street extended and Rock Creek Parkway, NW	Rock Creek, East Side	N 38 54 32 W 77 03 11
052	O Street extended and Rock Creek Parkway, NW	Rock Creek, West Side	N 38 54 31 W 77 03 16
053	O Street west of Rock Creek Parkway, NW	Rock Creek, West Side	N 38 55 18 W 77 01 40
054	West Side of Rock Creek 300 ft. south of Mass. Ave, NW	Rock Creek, West Side	N 38 54 34 W 77 03 02
055	Abandoned		
056	Normanstone Drive extended west of Rock Creek, NW	Rock Creek, West Side	N 38 55 02 W 77 03 04
057	28 <sup>th</sup> Street extended west of Rock Creek, NW	Rock Creek, West Side	N 38 55 18 W 77 03 09
058	Connecticut Avenue and Rock Creek Parkway, NW	Rock Creek, West Side	N 38 55 16 W 77 03 02
059	Abandoned (Formerly 16 <sup>th</sup> and Rittenhouse Streets, NW)	Rock Creek, West Side	N 38 57 54 W 77 02 13
060	P St and 26 <sup>th</sup> St, NW	Rock Creek, West Side	Not Available
061 (2)	Hayes St. & Anacostia Ave NE - Emergency relief for Upper Anacostia Sewage Pumping Station	Tributary to Anacostia - East Side	Not Available
062 (2)	Earl Place, NE - Emergency relief for Earl Place Sewage Pumping Station	Tributary to Anacostia - West Side	Not Available

- (1) All outfalls are CSO outfalls unless noted otherwise.
- (2) These outfalls are recognized in the permit as emergency relief locations. Report discharges in accordance with requirements for dry weather overflows. This permit does not authorize discharges from Outfalls 004, 008, 061 or 062. These are not CSO outfalls, rather they are emergency relief outfalls. Discharges are prohibited under Part III.B.1.e(i) and are reportable under Part III.B.1.e(iii) and Part II.D.2 and 7.



## **SECTION B. TECHNOLOGY-BASED CSS REQUIREMENTS**

The permittee is required to control combined sewer overflows in accordance with the CSO Policy (April 1994). The permittee shall comply with the nine minimum technology-based conditions set forth below.

### 1. Nine Minimum Controls (NMC) Program

- a. Operation and Maintenance - The permittee shall implement proper operation and maintenance programs for the sewer system and all CSO outfalls, in accordance with the program set forth below, with consideration given to the following: regular sewer inspections, sewer, catch basin and regulator cleaning; equipment and sewer collection system repair or replacement, where necessary; and disconnection of illegal connections.
  - (i) Maintain a CSS inventory. Prepare an inspection plan and submit updated inventory information with each annual report as follows:
    - (a) List of CSO outfalls and emergency relief locations from Part III, Section A, COMBINED SEWER SYSTEM - GENERAL of the permit.
    - (b) Combined Sewer Overflow Structures. Include designation, location, description of operation, capacity and diagram or drawing of each structure. Include similar information for each inflatable dam.
    - (c) Outfall Structures. Include designation, location and description of each structure. Include a diagram or drawing and a picture as available and practicable. Describe outfalls characteristic at high and low tide (e.g., submerged, partially submerged, not submerged). Identify whether or not each structure is equipped with a tide gate.
    - (d) Supervisory Control and Data Acquisition (SCADA) System. Include a functional description, and list of information provided by the SCADA system for the CSS.
    - (e) Rain Gages. List location and description of rain gauges installed within the CSS,
  - (ii) Inspect CSS control structures (regulator structures and tide gates) at least once per month.
  - (iii) Inspect pumping stations at least once per month.
  - (iv) Inspect Northeast Boundary Swirl Facility at least once per month.
  - (v) Inspect inflatable dams and CSS SCADA system at least once per month.
  - (vi) Develop an inspection program for the major combined sewers where each major combined sewer is inspected on a rotating schedule of

sufficient frequency to maintain capacity requirements.

- (vii) Inspect outfall structures annually.
  - (viii) Following rehabilitation operate and maintain the Main, “O” Street, Potomac and Poplar Point and Eastside Pumping stations to provide firm pumping capacities of 240 MGD, 45 MGD, 460 MGD 45 MGD and 45 MGD respectively.
- b. Use Collection System for Storage
- Operate and maintain inflatable dams to optimize storage in the CSS.
- c. Pretreatment Program
- (i) Use pretreatment regulations to control any industrial discharges that may be identified as impacting CSOs.
  - (ii) Use pretreatment regulations to require permitted significant industrial users (SIUs) discharging directly to the CSS to establish management practices to limit (e.g., use of control, detention or prohibition) batch discharges during wet weather conditions to the maximum extent feasible. Conduct an annual inspection of the above users to identify the existence of any batch discharges. Evaluate batch discharges identified to determine whether and to what extent limitations are appropriate during wet weather, taking into consideration volume, frequency, characteristics and the need to protect life and property.
- d. Maximize Flow to the Blue Plains WWTP (BPWWTP) for Treatment
- (i) During wet weather, operate the pumping stations and collection system to deliver the maximum flow possible to the BPWWTP within the constraints of the pumping stations, configuration and capacity of the collection system, and the capacity of the treatment plant. Develop a reporting system to show that operation of the pumping stations has been maximized during wet weather and that the maximum flow possible is being delivered to the BPWWTP for treatment within the constraints of the pumping stations, collection system and treatment plant. Report such operations for each wet weather event.
  - (ii) Maintain pumps to maximize flow to Blue Plains.
- e. Eliminate Dry Weather Overflows (DWOs)
- (i) Dry weather overflows from CSO outfalls are prohibited. When the permittee detects a dry weather overflow, the permittee shall begin corrective action immediately. The permittee shall inspect the dry weather overflow each subsequent day until the overflow has been eliminated.
  - (ii) Maintain a program to enlist public support for reporting DWOs.

- (iii) Receive reports of DWOs on a 24- hour basis. Each dry weather overflow confirmed by the Permittee shall be reported to District of Columbia Department of Health (DOH) and EPA Region III within 24 hours.

f. Control Solid and Floatable Materials in CSOs

- (i) Screen pumped overflows at the Main and O Street Pumping Stations.
- (ii) Screen flow into the Northeast Boundary Swirl Facility.
- (iii) Operate and maintain end of pipe solid and floatable BMP demonstration controls until termination of the demonstrations at locations as follows:

End of pipe netting system at CSO Outfall 018. Bar rack at CSO Outfall 041 at Structure Number 62.

Bar rack at CSO Outfall 040 at Structure 61. Inspect BMP demonstration controls at least once per month. Clean BMPs following wet weather events on a schedule that maintains capture functions.

- (iv) Clean 85 percent of the 8200 catch basins in the combined sewer area at least annually. Inspect catch basins in CSO areas tributary to the Anacostia River at least 2 times per year and clean more frequently as identified by inspections.

The Anacostia River CSO areas inspection schedule is an interim schedule until permanent solids and floatable control facilities are placed in operation as part of the Long Term Control Plan. As permanent facilities are placed in operation, in each combined sewer area, the permittee may petition EPA to reduce the cleaning frequency to once per year in that area.

- (v) Operate the Anacostia River Floatable Debris Removal Program. This program comprises pick up of debris by skimmer and support boats on a regular weekly schedule, weather and river conditions permitting.
- (vi) Work on a regular and ongoing basis with the D.C. Department of Public Works (DPW) and the National Park Service (NPS) to maximize litter control in the CSS, targeting neighborhoods that contribute disproportionate amounts of trash to the CSS. Document these efforts in quarterly CSO reports.
- (vii) Implement an ongoing, appropriate bi-lingual (English and Spanish) public education program aimed at reducing litter in the CSO sewershed, including public service announcements, public school presentations and stenciling programs.
- (viii) Hold at least four (4) public education workshop programs each year, two of which shall be held in the Anacostia River CSO areas, (e.g., at schools or to community groups) to inform the public on ways and means for the public to assist in reducing the amount of solid and floatable materials in CSOs. The workshop programs comprise a series of presentations four

times per year. The need to continue these workshop programs and the schedule will be re-evaluated every 2 years and the permittee may petition EPA to reduce the number of workshops for the following two year cycle.

g. Pollution Prevention

- (i) Conduct regular public education programs to advise citizens of proper disposal of substances (e.g., household wastes, plastics, paper products, oils, leaves and the use of fertilizer).
- (ii) Conduct tours of the BPWWTP to educate public on aspects of CSO control that can be enhanced with public assistance.
- (iii) Use the pretreatment program to encourage industrial waste reduction through recycling and improved housekeeping.
- (iv) Notify responsible agencies to enforce regulations that prohibit entrance into the CSS of any substance that may impair or damage the function and performance of collection and treatment systems.
- (v) Coordinate where feasible and practicable WASA's pollution prevention programs with those of D.C. government agencies such as the following partial list of pollutant prevention programs conducted by District of Columbia government agencies:

A. Department of Public Works Programs

- 1. Curbside recycling
- 2. Leaf pickup
- 3. Public trash receptacles
- 4. Household hazardous waste collection
- 5. Residential bulk refuse collection and self-service disposal
- 6. Campaign against rats
- 7. Support of community cleanup programs ("Helping Hand")
- 8. Enforcement of illegal dumping operations
- 9. Street cleaning and sweeping
- 10. Public education for DPW Solid Waste Education and Enforcement Program ("SWEEP")

B. Department of Health Programs

- 1. Public education and assistance
- 2. Enforcement of storm water and erosion/sedimentation control regulations

h. Public Notification

- (i) Install and operate a light on the Anacostia River and a light on the Potomac River to notify river users of CSO events. Locate the lights at or in view of major public access points subject to approval of owners or agencies having jurisdiction (e.g., private property owners, Coast Guard, NPS, DOH). Lights will be operated by a signal from a representative

CSO outfall on each river. A light (color A) will be illuminated during a CSO occurrence and a second light (color B) will be illuminated for 24 hours after a CSO has stopped. Final colors shall be subject to approval by the Coast Guard or other agency having jurisdiction.

- (ii) Maintain a website with information on: (a) nature of CSO discharges; (b) locations of CSOs; (c) potential health threats of CSOs; (d) record of CSO events by outfall with number, average duration and volume for the prior three month calendar quarter based on modeled results; (e) description of light system on the Anacostia River and Potomac River that advises river users of times that CSOs are actually occurring; and (f) nature and duration of conditions potentially harmful to users of receiving waters during and after a CSO event.
- (iii) Prepare and distribute semi-annually in sewer bills an informational pamphlet with information similar to that listed under h.ii above.
- (iv) Distribute a pamphlet semi-annually to locations (e.g., boathouses, marinas, water sports shops) frequented by receiving water users. The pamphlet shall include information similar to that listed under h.i above. Distribution will be to the extent permitted by owners of the locations.
- (v) Prepare and maintain an information bulletin to distribute to callers requesting information on the CSS and CSOs.
- (vi) Include updates and status of CSS and CSO plans and programs in information distributed under h. i, ii, iii, and iv above.
- (vii) Maintain warning signs at all CSOs. The wording, size, location and other aspects of such signs shall be as agreed to among WASA, EPA, the NPS and DOH.

i. Monitoring

- (i) Operate and maintain the SCADA system that monitors activation of selected CSO outfalls.
- (ii) Conduct visual wet weather surveys at the Main and O Street Pumping Stations CSO outfalls to assess the discharge of floatables.
- (iii) Monitor and record debris removed by the Anacostia River Floatable Debris Removal Program.
- (iv) Monitor and record flow, screenings removal and disinfection at the Northeast Boundary (NEB) Swirl Facility.
- (v) Monitor and record demonstration floatables removal; (a) at the end of pipe netting system at Outfall 018; (b) at bar rack at Outfall 041; and (c) at the bar rack at Outfall 040 for the duration of the demonstration project.
- (vi) Monitor and record rainfall at a minimum of four (4) locations in the CSS. Locate rain gages at sites which are different from those used in the

development of the LTCP. Report the number, volume and average duration of overflows for each active CSO outfall. The information shall be prepared using the latest model of the CSS, based on the measured storm event data and the operation of the inflatable dams for the previous calendar year.

### **SECTION C. LONG TERM CONTROL PLAN (LTCP)**

1. The LTCP for the District of Columbia CSS is intended to control CSO discharges to meet the District of Columbia water quality standards in the Anacostia River, Rock Creek and its Pine Branch tributary and the Potomac River.
2. The LTCP is the recommended plan included in the *Combined Sewer System Long Term Control Plan, Final Report, July 2002*, submitted by the permittee to EPA and the DOH.
  - A. Permittee shall implement and effectively operate and maintain the CSO controls identified in the LTCP.
    1. The LTCP for the District of Columbia CSS provides for the control of CSO discharges to the Anacostia River, Rock Creek and its Piney Branch tributary and the Potomac River. The LTCP facilities for controlling discharges to the above named receiving waters include, among other things, diversion structures, a system of underground storage tunnels, pumping stations and outfall structures. The facilities shall, within the capacities provided, divert combined sewer flows to the storage tunnels, store combined sewer flow and convey stored combined sewer flow to Blue Plains for treatment.
    2. The permittee shall effectively operate and maintain the LTCP CSO control facilities in accordance with the conditions set forth below.
    3. Discharges from CSO outfalls are prohibited except during wet weather events when one or more of the following conditions exist:
      - a. Combined Sewer System Flow (CSSF) conditions exist at Blue Plains, then discharges may occur at Outfall 003. CSSF conditions are those described at Part I.B.(1)(1a)(b) of this permit.
      - b. The associated storage tunnels serving individual CSO outfalls are filled to minimum capacity required.
      - c. Combined sewer flow is being transferred from individual CSO outfalls to the associated storage tunnel or interceptor at not less than minimum diversion rates listed below.
    4. Solids and floatables capture shall be provided for all overflows prior to discharge to receiving waters.
    5. All combined sewer flow stored in the Anacostia River, Rock Creek and the Potomac River storage tunnels shall be emptied within 59 hours of the

end of a wet weather event. If another wet weather event occurs before 59 hours has elapsed, the 59- hour period shall start from the end of the last wet weather event that occurred. A wet weather event occurs as a result of stormwater runoff, including snow melt, entering into or being conveyed in the CSS. All flow stored in the storage tunnels and appurtenant structures shall be conveyed to Blue Plains for treatment.

6. Storage tunnels shall have minimum capacities as follows:

- a. Anacostia Tunnel - 126 million gallons
- b. Piney Branch Tunnel - 9.5 million gallons
- c. Potomac Tunnel - 58 million gallons

7. Minimum diversion capacities from CSO outfalls to storage tunnels or interceptors and monitoring of diversions shall be as follows:

a. Anacostia CSO Control Systems

<i>CSO Outfall</i>	<i>Drainage Area</i>	<i>Minimum Diversion Capacity for CSO Control (mgd)</i>	<i>Diversion to Tunnel or Interceptor</i>	<i>Monitoring</i>
005	Fort Stanton	37	tunnel	(2)
006	Fort Stanton	to be separated	n/a	n/a
007	Fort Stanton	111	tunnel	(3)
009	Canal Street	36	tunnel	(2)
010	B St/NJ Ave	690	tunnel	(3)
011	B St/NJ Ave	460	tunnel	(3)
012	Tiber Creek	471	tunnel	(3)
013	Canal Street Sewer	18	tunnel	(2)
014	Navy Yard/M St.; 6 <sup>th</sup> St-7 <sup>th</sup> St	92	tunnel	(2)
015	Navy Yard/M St.; 9 <sup>th</sup> St	11	tunnel	(2)
016 <sup>(1)</sup>	Navy Yard/M St.; 12 <sup>th</sup> St - 9 <sup>th</sup> St.	86	tunnel	(2)
017 <sup>(1)</sup>	Navy Yard/M St.; 14 <sup>th</sup> St to Penn Ave	65	tunnel	(2)
018	Barney Circle	57	tunnel	(2)
019	Northeast Boundary	1,460	tunnel	(3)

b. Potomac CSO Control Systems

CSO Outfall	Drainage Area	Minimum Diversion Capacity for CSO Control (mgd)	Diversion to Tunnel or Interceptor	Monitoring
020	Easby Point	297	tunnel	(3)
021	Slash Run	530	tunnel	(3)
022	I St - 22 <sup>nd</sup> St. NW	333	tunnel	(3)
024 <sup>(1)</sup>	West of Rock Creek Diversion Sewer	66	tunnel	(2)
025 <sup>(1)</sup>	31 <sup>st</sup> & K St NW	3	tunnel	(2)
026 <sup>(1)</sup>	Water St Dist (WRC)	0	tunnel	(2)
027 <sup>(1)</sup>	Georgetown	92	tunnel	(2)
028 <sup>(1)</sup>	37 <sup>th</sup> St. Georgetown	9	tunnel	(2)
029	College Pond	133	tunnel	(3)

c. Rock Creek CSO Control Systems

CSO Outfall	Drainage Area	Minimum Diversion Capacity for CSO Control (mgd)	Diversion to Tunnel or Interceptor	Monitoring
031	Penn Ave	to be separated	n/a	n/a
032	26 <sup>th</sup> St - M St	6	interceptor	(4)
033	N St - 25 <sup>th</sup>	5	interceptor	(3)
034	Slash Run	6	interceptor	(4)
035	NW Boundary	290	interceptor	(4)
036	Mass Ave & 24 <sup>th</sup> St	29	interceptor	(3)
037	Kalamora Circle West	to be separated	n/a	n/a
038	Kalamora Circle East	5	interceptor	(4)
039	Belmont Rd	28	interceptor	(4)
040	Biltmore Rd	12	interceptor	(4)
041	Ontario Rd	14	interceptor	(4)
042	Quarry Rd	19	interceptor	(4)



043	Irving St	35	interceptor	(4)
044	Kenyon St	4	interceptor	(4)
045	Lamont St	8	interceptor	(4)
046	Park Rd	9	interceptor	(4)
047	Ingleside Terr	10	interceptor	(3)
048	Oak St/Mt Pleasant	11	interceptor	(4)
049	Piney Branch	468	tunnel	(3)
050	M St - 27 <sup>th</sup> St	21	interceptor	(4)
051	Olive-29th St	4	interceptor	(4)
052	O St - 31 <sup>st</sup> St	56	interceptor	(4)
053	O St	to be separated	n/a	n/a
054	West Rock Cr Diversion Sewer	(5)	interceptor	(4)
055	Abandoned	n/a	n/a	n/a
056	Normanstone Dr	(5)	interceptor	(4)
057	Cleveland - 28 <sup>th</sup> St & Conn Ave	33	interceptor	(3)
058	Conn Ave	to be separated	n/a	n/a
059	16 <sup>th</sup> and Rittenhouse Sts, NW	to be separated	n/a	(4)

- (1) These outfalls have been consolidated. Diversion capacity listed is that required for CSO control.
- (2) Diversion capacity validated by construction performance test, no additional monitoring required.
- (3) Continuous flow measurement of diversion and outfall. Provision for temporary sampling on diversion and outfalls.
- (4) Diversion capacities from the referenced outfalls have been estimated based on computer modeling.
- (5) These CSOs are emergency reliefs for the West Rock Creek Diversion sewer. There is no tributary drainage area, and flow diversion does not occur at these CSOs. The performance of these CSOs will be validated by computer modeling, no additional monitoring required.

8. With each DMR, report operations of the monitored CSO control facilities by systems as follows:

- a. Volume into and out of storage tunnels;
- b. Diversion rates into storage tunnels;
- c. Discharge rates from outfalls;
- d. Start and end time of wet weather event;
- e. Time when storage tunnel became filled to minimum required capacity;
- f. All discharges from outfalls occurring prior to storage tunnel being filled to minimum required capacity and at less than minimum required diversion rates;

- g. Volume of overflows from outfalls;
  - h. Dewatering time for tunnel following end of wet weather event;
  - i. Results of any overflow or diversion sampling.
9. Permittee shall be deemed to be in compliance with each of the following CSO control performance standards when:
- a. No overflows are recorded at monitored CSO outfalls prior to storage tunnels being filled to minimum required capacities;
  - b. No overflows are recorded at monitored CSO outfalls when diversion rates are less than or equal to minimum diversion capacity and associated storage tunnel is not filled to minimum required capacity;
  - c. No overflow is recorded at Outfall 003 unless CSSF conditions exist at Blue Plains;
  - d. Storage tunnels shall be emptied in a time period less than or equal to 59 hours following the end of a wet weather event.

**SECTION D. POST CONSTRUCTION MONITORING**

The permittee shall implement a phased post-construction monitoring program to obtain information on rainfall, the volume and character of overflows and receiving waters characteristics. The monitoring phases shall be as follows:

Phase	Post-Construction Condition
1	Following the placement in operation of the inflatable dams and pumping stations rehabilitation.
2	Following the placement in operation of the Anacostia, Rock Creek and Potomac storage tunnels, respectively, as each tunnel is placed in operation.
3	Following the placement in operation of the complete CSO tunnels storage system

1. Phase I monitoring shall be in accordance with the following:

CSO Systems

<i>Monitoring Type</i>	<i>Anacostia River</i>	<i>Potomac River</i>	<i>Frequency (3)</i>
Rainfall Monitoring (1)	1 gauge in Northeast Boundary  1 gauge in Tiber Creek	1 gauge in Slash Run	continuous
CSO Overflow (flow and volume) (1)	Northeast Boundary CSO 019  B ST/NJ Ave pumped overflow CSO 010	Potomac Pumping Station CSO 021 College Pond CSO 024	continuous

CSO Overflow Sampling (2)	1 sampling station at Northeast Boundary	n/a	4 storms minimum approximately 1 hr sample interval for each storm.
Receiving Water Monitoring - Dissolved Oxygen (4)	Continuous DO Monitors	Continuous DO Monitors	approximately 30 minute intervals
Receiving Water Monitoring - Bacteria, Field Parameters (2) (4)	Bacteria Samples	Bacteria Samples	4 storms minimum

- (1) Temporary gauges, meters and samplers to be installed.
- (2) Samples shall be analyzed for fecal coliform, enterococci, CBOD5 and TSS.
- (3) Monitoring shall be conducted for a continuous period of 12 months.
- (4) The permittee is responsible for submitting all data, however, it is acceptable to use data developed by other sources.

2. Phase 2 monitoring shall be in accordance with the following:

CSO Systems

<b><i>Monitoring Type</i></b>	<b><i>Anacostia</i></b>	<b><i>Potomac</i></b>	<b><i>Rock Creek</i></b>	<b><i>Frequency</i></b>
Rainfall Monitoring (1)	1 gauge in Northeast Boundary  1 gauge in Tiber Creek	1 gauge in Slash Run  1 gauge in College Pond	1 gauge in Piney Branch	continuous
CSO Overflow Monitoring and Diversion to Storage Monitoring (2)	Northeast Boundary CSO 019  Fort Stanton CSO 007  B ST/NJ Ave Pumped Overflow CSO 010	Potomac Pumping Station CSO 021  College Pond CSO 029	Piney Branch CSO 049	continuous
Tunnel Storage Level Monitoring (2)	1 sensor in tunnel	1 sensor in tunnel	1 sensor in tunnel	continuous
CSO Overflow Sampling (2) (3)	Sampling stations at Northeast Boundary CSO 019 and CSO 10	Sampling stations at CSO 020 and CSO 021	1 sampling station at CSO 049	4 storms minimum approximately 1 hour sample interval for each storm

Receiving Water Monitoring - Dissolved Oxygen (5)	Continuous DO monitors (5)	Continuous DO monitors (5)	n/a	approximately 30 minute intervals (5)
Receiving Water Monitoring - Bacteria, Field Parameters (3)	Use data from existing monitors and establish at least 6 other locations	Use data from existing monitors and establish at least 3 other locations	Use data from existing monitors and establish at least 7 other locations	once per week for bacteria and once per quarter for all other substances

- (1) Temporary gauges to be installed.
- (2) Shall use facilities and equipment installed as part of CSO control systems.
- (3) Sampling shall be analyzed for fecal coliform, mercury, arsenic, cadmium, total chromium, copper, lead, nickel, selenium, silver, zinc, chromium VI, hardness, cyanide, pesticides, PCBs, volatiles and semivolatiles, DO, ammonia as N, TKN, total phosphorus, and ortho-phosphorus. Metals shall be analyzed as dissolved and total recoverable.
- (4) Monitoring shall be conducted for a continuous period of 12 months, in each CSO system after appropriate facilities are placed in operation.
- (5) Permittee is responsible for submitting all data, however, it is acceptable to submit data provided by other sources.

3. Phase 3 monitoring shall be in accordance with the following:

CSO Systems

<i>Monitoring Type</i>	<i>Anacostia River</i>	<i>Potomac River</i>	<i>Rock Creek</i>	<i>Frequency (4)</i>
Rainfall Monitoring (1)	1 gauge in Northwest Boundary  1 gauge in Tiber Creek	1 gauge in Slash Run  1 gauge in College Pond	1 gauge in Piney Branch	continuous
CSO Monitoring and Diversion to Storage Monitoring (2)	Northeast Boundary CSO 019  Fort Stanton CSO 007  B St/NJ Ave Pumped Overflow CSO 010	Potomac Pumping Station CSO 021  College Pond CSO 029	Piney Branch CSO 049	continuous
Tunnel Storage Level Monitoring (2)	1 sensor in tunnel	1 sensor in tunnel	1 sensor in tunnel	continuous

CSO Overflow Sampling (2) (3)	Sampling stations at CSO 019 and CSO 010	Sampling stations at CSO 021 and 020	1 sampling station at CSO 049	4 storms maximum  approx. 1 hour sample interval for each storm
Receiving water Monitoring - Dissolved Oxygen (5)	continuous DO monitors	continuous DO monitors	n/a	approx 30 minute intervals
Receiving water monitoring-bacteria, field parameters (3) (5)	establish at least 6 locations	establish at least 6 locations	7 other locations	once per week for bacteria and once per quarter for all other parameters

- (1) Temporary gauges will be installed.
  - (2) Shall use facilities and equipment installed as part of CSO control systems.
  - (3) Sampling shall be analyzed for fecal coliform, Enterococci, CBOD5, TSS, 127 priority pollutants, mercury, arsenic, cadmium, total chromium, copper, lead, nickel, selenium, silver, zinc, chromium VI, hardness, cyanide, pesticides, PCBs, volatiles, semi-volatiles, DO, ammonia as N, TKN, total phosphorus and ortho-phosphorus. Metals shall be analyzed as dissolved and total recoverable.
  - (4) Monitoring shall be conducted for a continuous period of 12 months.
  - (5) The permittee is responsible for submitting all monitoring data.
4. Results from the monitoring phases shall be used to assess the performance of CSO controls against predictions established as part of LTCP development. In general, the assessments shall include:
1. Comparison of monitored overflow magnitude and duration with the LTCP predictions;
  2. Comparison of monitored water quality in receiving waters with LTCP predictions;
  3. Comparison of monitored CSO reductions with LTCP reductions; and
  4. Overall evaluation as to whether or not CSO controls are providing degree of control predicted for LTCP conditions and whether or not modifications or additions to the LTCP are required.

**SECTION E. WATER QUALITY-BASED REQUIREMENTS FOR CSOs**

1. The Long Term Control Plan (LTCP) performance standards contained in Part III. Section C.2.3. through 9. are the water quality-based effluent limits for CSO discharges.

**SECTION F. CSO STATUS REPORTS AND SCHEDULES**

1. Progress reports are to be provided to EPA for all activities scheduled or completed in accordance with the terms of this permit. Such reports shall be submitted in quarterly and annual reports which summarize actions and activities undertaken to comply with Part III, Section B.1. and Part III, Section C of this permit (Nine Minimum Controls Program and the LTCP). Reports shall be submitted to EPA and DOH as follows:
  - a. Submit quarterly reports on the 28<sup>th</sup> day of April, the 28<sup>th</sup> day of July, the 28<sup>th</sup> day of October and the 28<sup>th</sup> day of January. Reports shall summarize information through the last day of the month prior to the month in which the report is due. The first quarterly report shall be submitted for the first full quarter following the effective date of the permit.
  - b. Submit annual reports by March 31 of each year summarizing information for the previous calendar year. The first annual report shall be submitted for the first full year following the effective date of the permit.
2. Information submitted in reports shall, in general, be prepared in a tabular format giving dates, times and locations as applicable. The information to be reported of the Nine Minimum Controls Program shall include the following:
  - a. CSS Control Structures - Number of inspections conducted, conditions observed (e.g., function normal, blockages, malfunctions, repairs needed) and maintenance and repairs performed. For blockages observed provide: the location of blockage, date and time that the blockage was discovered, date and time blockage was corrected, and whether or not a discharge from the outfall to the receiving water was observed. If a discharge was observed, provide an estimate of discharge volume.
  - b. Pumping Stations - Number of inspections conducted, numbers of screens and pumps installed and numbers available for service; and preventative maintenance performed. For pumps found not to be available for service, permittee shall report the cause of unavailability, schedule for and status of repairs. For the Main and O Street pumping stations, report the results of visual wet weather surveys and record of overflow screenings.
  - c. Northeast Boundary Swirl Facility - Number of inspections conducted, number of screens and swirls installed and numbers available for service; and preventative maintenance performed. Report record of flow treated and screenings removed.
  - d. Inflatable Dams and SCADA System - Number of inspections conducted. Number of dams installed and number of dams operational. Occurrence of an overflow and approximate duration of overflow based on dams inflation status.
  - e. Major Combined Sewers - Upon development of inspection program. Inspections planned, inspections conducted, results of inspections and description and schedule for maintenance and repairs planned and performed.

- f. Wet Weather Overflows - Report the modeled results of the number, volume and average duration of overflows for each active CSO outfall due to wet weather events.
  - g. Dry Weather Overflows - Are prohibited, however, in the event that they do occur, report their location, cause, date and time discovered, action taken, date and time discharge confirmed ceased and actions taken to prevent reoccurrence of the condition causing the overflow. Include an estimate of the overflow volume.
  - h. Catch Basin Cleaning - Number and location of catch basins required to be cleaned plus the number and location of catch basins actually cleaned.
  - i. Anacostia River Floatable Debris Removal Program - Number of boats available for service, number of cleaning trips, record of amount and nature of material removed.
  - j. BMP Demonstration for Solid and Floatable Control - Number of inspections conducted and conditions observed record of material removed at CSO outfalls 018, 040 and 041.
  - k. Other - Summarize actions and activities under programs for Pollution Prevention, Public Notification and Pretreatment.
  - l. Wet Weather Flows to Blue Plains WWTP - Upon development of a reporting system, report operations for each wet weather event.
  - m. CSS Litter Control - Number of meetings or conferences with DPW and NPS. Summary of topics discussed and actions adopted.
3. Report on the following quarterly:
- a. Northeast Boundary Swirl Facility
  - b. Inflatable Dams and SCADA System
  - c. Dry Weather Overflows
  - d. CSS Control Structures
  - e. Pumping Stations
  - f. Wet Weather Flows to Blue Plains
  - g. Wet Weather Overflows
  - h. CSS Litter Control
4. Report on the following annually:
- a. CSS Inventory
  - b. Major Combined Sewers
  - c. Catch Basin Cleaning
  - d. BMP Demonstration for Solid and Floatable Control
  - e. Anacostia River Floatable Debris Removal Program
  - f. Other

**PART IV. SPECIAL CONDITIONS**

## **SECTION A. PRETREATMENT**

### 1. Permit Conditions for Pretreatment

- a. General Requirements - the permittee shall operate and implement an industrial pretreatment program in accordance with the Federal Clean Water Act General Pretreatment Regulations found at 40 C.F.R. 403. The program shall be implemented in accordance with the pretreatment program and any modifications made thereto shall be submitted by the permittee and approved by EPA.
- b. Annual Report and Other Requirements - The permittee shall submit an Annual Report by February 28<sup>th</sup> of each year to EPA which describes the pretreatment activities for the previous calendar year. The Annual Report shall include a description of pretreatment activities in all municipalities from which waste water is received at the permittee's POTW. At a minimum, the Annual Report shall include the following:
  - (i) Industrial Listing - The Annual Report shall contain an updated industrial listing showing all current Significant Industrial Users (SIUs) and the categorical standards, if any are applicable, to each. In addition, the report shall include a summary of any trucked or hauled wastewater accepted at the POTW including the source of the wastewater (domestic or industrial), the amount of the wastewater received on a monthly basis, any controls imposed on the users and the discharge point designated by the POTW for acceptance of such waste.
  - (ii) Control Mechanism Issuance - The Annual Report shall contain a summary of SIU control mechanism issuance, including a list of issuance and expiration dates for each SIU.
  - (iii) Sampling and Inspection - The Annual Report shall contain a summary of the number and type of inspections and sampling of SIUs by the permittee, including a list of all SIUs either not sampled or not inspected, and the reason that the sampling and/or inspection was not conducted. The Annual Report shall also contain a summary of the number of self-monitoring events reported by each SIU and a list of all SIUs that did not conduct at least two self-monitoring events and the reason why at least two self-monitoring events were not conducted.
  - (iv) SIU Compliance and POTW Enforcement - The Annual Report shall contain a summary of the number and type of violations of pretreatment standards and requirements, including local limits, and the actions taken by the permittee to obtain compliance, including civil penalty assessments and actions for injunctive relief. The report shall state whether each SIU was in significant noncompliance, as that term is defined in 40 C.F.R. §403.8(f)(2)(vii).



- (v) Summary of POTW Operations - The Annual Report shall contain a summary of any interference, pass through, or permit violations by the POTW which may be attributed to industrial users, and actions taken to address those events. The summary shall also include sampling and analysis of treatment plant influent, effluent, and sludge for toxic and incompatible pollutants, and an assessment of the need for changes to the pretreatment program based on this data.
  - (vi) Pretreatment Program Changes - The Annual Report shall contain a summary of any changes to the approved program and the date of submission to the Approval Authority.
  - (vii) As part of the annual pretreatment report and updates, include results of inspections, and identification and evaluation of batch discharges directly to the CSS. Include a list of permitted users with batch discharge control conditions during wet weather.
- c. Pretreatment Monitoring - The permittee shall conduct monitoring at its pretreatment plant that, at a minimum, includes quarterly influent, effluent and sludge analysis for all pollutants for which a local limit exists, as well as an annual priority pollutant scan on the influent and sludge. This monitoring data shall be included in the Annual Report.
- d. Notification of Pass-Through or Interferences - The permittee shall notify EPA and DOH, in writing, of any instance of pass-through or interference related to an industrial discharge from an IU into the POTW. The notification shall be attached to the DMR submitted to EPA and shall describe the incident, including the date, time, length, cause (including responsible user if known), and the steps taken by the permittee and the IU (if identified) to address the incident. A copy of the notification shall also be sent to the EPA at the address provided below.
- e. Headworks Analysis - The permittee shall submit to EPA a reevaluation of its local limits based on a headworks analysis of its treatment plant within one year of permit issuance. The list of pollutants to be evaluated, as well as a sampling plan for the collection of necessary data, shall be submitted to EPA within 3 months of issuance. Within 4 months of acceptance of the headworks analysis by EPA, the permittee shall adopt the revised local limits and notify all contributing municipalities of the need to adopt the revised local limits.
- f. Changes to Pretreatment Program - EPA may require the permittee to submit for approval changes to its pretreatment program if any one or more of the following conditions is present:
  - (i) The program is not implemented in accordance with 40 C.F.R. Part 402;
  - (ii) Problems such as interference, pass-through, or sludge contamination develop or continue;

- (iii) Federal, State or local requirements change.
- g. Correspondence - Pretreatment correspondence shall be submitted to EPA at the following address:

Pretreatment Coordinator (3WP24)  
U. S. Environmental Protection Agency  
1650 Arch Street  
Philadelphia, PA 19103 - 2029

#### **SECTION B. STANDARD SLUDGE CONDITIONS**

1. The permittee shall comply with all existing federal and state laws and regulations that apply to sewage sludge use and disposal practices, including 40 C.F.R. 503 and 40 C.F.R. 258 which are hereby incorporated as part of the permit by reference, and the Clean Water Act (CWA) Part 405(d) technical standards.

If an applicable management or practice or numerical limitation for pollutants in sewage sludge more stringent than existing federal and state regulations is promulgated under Part 405(d) of the CWA, this permit shall be modified to conform to the promulgated regulations.

2. The permittee shall give notice to the Director of any change(s) planned or in the permittee's sludge use or disposal practice.
3. A change in the permittee's sludge use or disposal practice is a cause for modification of the permit. It is a cause for revocation and reissuance of the permit if the permittee requests or agrees.
4. The permittee shall submit an annual sludge report containing the information required in 40 C.F.R. 503 by February 19 each year. The report shall cover the previous calendar year. The sludge report shall be submitted to"

U.S. EPA, Region III  
Water Protection Division  
Office of Compliance and Enforcement (3WP30)  
1650 Arch Street  
Philadelphia, PA 19103 - 2029

#### **SECTION C. CHLORINATION/DECHLORINATION**

1. The permittee shall report chlorine dosage (on a pound basis) per discharge event on Outfall 001. Dosage figures shall be submitted with the DMR for the month of the discharge event.
2. The concentration of Total Residual Chlorine (TRC) in the final effluent after dechlorination shall not exceed not-detectable. The permittee is required to achieve non-detectable for TRC as measured by 0.10 mg/l.

When the TRC concentration in the final effluent results in a detectable

measurement (above 0.10 m/l) the permittee shall take immediate steps to achieve a non-detectable concentration.

The permittee shall resample TRC within one hour after the original grab sample measurement. If this grab sample shows a non-detectable amount as measured by 0.10 mg/l or less, then the original sample shall be considered in compliance. If this grab sample shows a detectable amount, above 0.10 mg/l, then the permittee shall retest in the second hour after the original non-compliance. If this grab sample in the second hour after the original non-compliance shows a not detectable amount as measured by 0.10 mg/l or less, then the sample shall be considered in compliance, but if the grab sample is above 0.10 mg/l then it will be considered a violation and recorded on the DMR. Each subsequent hourly sample above 0.10 mg/l shall be enumerated on the DMR until the effluent returns to compliance.

Whenever there is an initial detectable TRC concentration, all subsequent sampling results shall be tabulated and reported with the DMRs and the time required to achieve the TRC of 0.10 mg/l. The analytical method used and the detection limit for each sample should be included on the data tabulation.

For purposes of reporting on the DMR form, a non-detectable result shall be reported as zero. For a violation(s) of the limit, the maximum chlorine residual for the month and the total number of excursions in that month should be recorded in the appropriate column on the DMR form. The permittee shall operate the dechlorination facilities in a manner which will ensure continuous compliance with the TRC non-detectable limit.

All analytical testing for TRC shall be in accordance with 40 C.F.R. Part 136, Amperometric Titration or DPD Ferrous Tririthimetric Method.

#### **SECTION D. MERCURY - OUTFALL 002**

Based upon mercury levels measured during 1997, 1998 and 1999 in Blue Plains effluent and the results of two edible fish tissues studies, the requirement for annual fish tissue studies is suspended.

#### **SECTION E. TOTAL NITROGEN**

1. The District of Columbia, as a signatory to the 1987 Chesapeake Bay Agreement, the 1992 Amendments to the Chesapeake Bay Agreement and the Chesapeake 2000 Agreement, supports the goal of reducing the discharge of nutrients to the Chesapeake Bay. Since 1997, WASA has employed nitrogen removal at its Blue Plains AWWTP. Under the permit issued January 24, 2003, WASA has been operating under the voluntary goal of meeting an annual total nitrogen mass load of 8,467,2000 pounds per year.
2. Effective upon permit issuance, the total nitrogen discharge limit from the facility shall be 4,689,000 pounds per year.

Total nitrogen shall be calculated as follows:

Total nitrogen = Total Kjeldahl nitrogen + NO<sub>2</sub> as N + NO<sub>3</sub> as N

## **SECTION F. STORM WATER MANAGEMENT**

### A. Storm Water Pollution Prevention Plan

#### 1. General

A Storm Water Pollution Prevention Plan ( SWPPP) shall be developed for this facility. The SWPPP shall be prepared in accordance with good engineering practices, and in accordance with the factors outlined in 40 C.F.R. 125.3(d)(2) or (3), as appropriate. The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with sludge handling operations or other portions of the waste water treatment plant as appropriate.

In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with sludge handling or other activity at the facility and to assure compliance with the terms and conditions of this permit. The permittee must implement the provisions of the storm water prevention plan required under this part as a condition of this permit.

#### 2. Deadline for Plan Preparation and Compliance

The SWPPP shall be prepared, implemented and submitted to EPA Region III within 90 days after the effective date of this permit. If construction is necessary to implement measures required by the plan, the plan shall contain a schedule that provides compliance with the plan as expeditiously as possible, but no later than 3 years after the effective date of the permit. Upon a showing of good faith, EPA may establish a later date, in writing, for preparing and complying with the review.

#### 3. Plan Review

The plan shall be retained on site at the facility. The permittee shall make plans available upon request to the EPA. The EPA may notify the permittee at the time that the plan does not meet one or more of the requirements of this Part. Such notification shall identify those provisions of the permit that are not being met by the plan, and identify which provisions of the plan require modification in order to meet the minimum requirements of this Part. Within 30 days of such notification, the permittee shall make the required changes to the plan and shall submit to EPA a written certification that the requested changes have been made.

#### 4. Plan Modification

The permittee shall amend the plan whenever;

- a. There is a change in design, construction, operation or maintenance which

has a significant effect on the potential for the discharge of pollutants to the waters of the United States; or

- b. EPA notifies the permittee of its finding that the SWPPP is inadequate in eliminating or minimizing pollutants from identified sources, or that the SWPPP is inadequate to prevent the facility from causing, or having a reasonable potential to cause or contribute to a violation of the D.C. Water Quality Standards.

5. Contents of the Plan

The plan, at a minimum, shall include the following items;

- a. Pollution Prevention Team - the plan shall identify a specific individual or individuals within the facility organization as members of a storm water pollution prevention team that is responsible for developing the plan and assisting the facility or plant manager in its implementation, maintenance and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.
- b. Description of Potential Pollutant Sources - the plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. The plan shall identify all activities and significant materials which may potentially be significant pollutant sources. The plan shall include at a minimum:

- (i) Drainage - a site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce the pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spill or leaks may occur or did occur and locations of the following activities: fueling stations, vehicles and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage, or disposal of wastes liquid storage tanks, processing areas and storage areas.

Identify the direction of flow of storm water and type of pollutants which are likely to be present in the storm water. Flows with a significant potential for causing erosion shall also be identified.

- (ii) Inventory of Exposed Materials - an inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water; method and location of on-site storage or disposal; materials management practices employed to minimize contact of materials with storm

water runoff; the location and a description of existing structural and non-structural control measures to reduce pollutants in storm water runoff; and a description of any storm water treatment.

- (iii) Spills and Leaks - a list of significant spills and leaks of toxic or hazardous pollutants within the past three years that have occurred at areas exposed to precipitation.
  - (iv) A summary of all existing sampling data describing pollutants in storm water discharges.
- c. Measures and Controls - the permittee shall develop a description of storm water management controls appropriate for this facility, and implement such controls. The controls shall address the following minimum components, including a schedule for implementing such controls. The implementation schedule shall be as expeditious as possible, but not later than five (5) months after permit issuance.
- (i) Good Housekeeping - good housekeeping that requires the maintenance of a clean, orderly facility.
  - (ii) Preventive Maintenance - a preventive maintenance program shall involve timely inspection and maintenance of storm water management devices, as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters and ensuring appropriate maintenance of such equipment and systems.
  - (iii) Spill Prevention and Response Procedures - if spills have a potential to occur, procedures for cleaning up spills shall be identified in the plans and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available.
  - (iv) Inspections - qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan.

Qualified personnel shall have the training and experience in mechanics, engineering, electric circuitry, electronics or related disciplines (which may be demonstrated by state registration, professional certification or the satisfactory completion of accredited training programs) that is necessary to make sound judgments regarding the safe operation and maintenance of plant equipment.

A set of follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

- (v) Employee Training - facility personnel responsible for implementing the activities identified in the SWPPP shall complete a program of classroom instruction or on-the-job training on the storm water system. At a minimum, the training program shall provide adequate instruction on procedures for using, inspecting, repairing, cleaning and replacing storm water sewers and related equipment; and emergency conditions.
- (vi) Record Keeping and Internal Reporting Procedures - incidents such as spills, along with other information describing the quality and quantity of storm water discharges, shall be included in the records. Inspections and maintenance activities shall be documented and recorded.
- (vii) Non-storm Water Discharges - the plan shall include a certification that the storm water discharge and the storm drainage system has been tested or evaluated for the presence of non-storm water discharges.
- (viii) Sediment and Erosion Control - the plan shall identify areas which due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.
- (ix) Management of Runoff - the plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices used to divert, infiltrate, reuse or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures determined to be reasonable and appropriate shall be implemented and maintained.

#### **SECTION G. 85% BOD REDUCTION**

1. At least once during the term of this permit, the permittee shall demonstrate the sewage treatment plant's percent (%) removal efficiency for CBOD5 and TSS contained in Part I of this permit.
2. The demonstration shall be made as follows:
  - a. Percent removal shall be defined as a percentage expression of the removal efficiency across the wastewater treatment plant for CBOD5 and TSS, as determined from the thirty-day average values of the influent concentrations to the facility and the thirty-day average effluent pollutant concentrations. The percent removal shall be calculated for Outfall 002 only.
  - b. Wet weather shall be defined for this specific requirement as a day in which the plant influent flow rate equals 511 mgd or greater at some time during the day.

- c. Influent CBOD5 and TSS samples shall be collected using the same sample type and in accordance with the provisions found in Part I of this permit. The data collected in accordance with Part I of the permit may be used to demonstrate the percent removal efficiency. The permittee shall select a 30-day period which includes both dry weather and wet weather conditions.
  
- d. Influent CBOD5 and TSS sampling shall be performed over the same time period as effluent CBOD5 and TSS sampling.