# NPDES PERMIT REISSUANCE DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY WASTE WATER TREATMENT PLANT AT BLUE PLAINS WASHINGTON, DC

NPDES Permit Number: DC0021199

RESPONSE TO COMMENTS May 7, 2009 Joint Public Notice August 31, 2010 Issued Permit

#### I. General

In accordance with 40 C.F.R. 124.10, the U.S. Environmental Protection Agency (EPA) issued a public notice of the proposed draft National Pollutant Discharge Elimination System (NPDES) permit to be issued to the District of Columbia Water and Sewer Authority for the Blue Plains wastewater treatment plant, located at 5000 Overlook Avenue, SW, Washington, DC. Publication of this notice which appeared in the *Washington Times* on May 7, 2009, commenced a 30-day public comment period for the draft permit.

During the 30-day public comment period, EPA received comments from four entities, including Friends of the Earth by Earthjustice, the Commonwealth of Virginia, the State of Maryland, and the permittee.

The following is a summary of the comments that EPA received during the public comment period and EPA's responses thereto. The responses may refer to the administrative record for the permit, which provides additional information and detail.

## II. Comments and Responses

A. Comments Received from the Permittee, District of Columbia Water and Sewer Authority (WASA). The following comments were received from Walter F. Bailey, Director, Department of Wastewater Treatment, by letter dated June 5, 2009.

#### **Proposed Permit:**

1. Comment: Part I. Section A. Definitions, number 6. For consistency, the word "Disinfection" should be in bold type, as should the defined terms numbers 16 through 24.

Response: EPA has made these suggested changes. In addition, the following definitions have been deleted, as those terms are defined in 40 C.F.R § 122.2: "daily discharge", "average monthly discharge limitation", "maximum daily discharge limitation" and "average weekly [discharge] limitation". Numbering has been adjusted accordingly

2. Comment: Part I. Sections B, C and D. The discharge limitations tables for Outfalls 002, 002 and 019 include fecal coliform. This contradicts the fact sheet which states that the District no longer has a water quality standard for fecal coliform. The permittee requests that this limitation be deleted.

**Response**: The permittee's comment is correct. The District's water quality standard for fecal coliform expired on December 31, 2007. The requirements regarding fecal coliform have been removed.

3. Comment: Part I. Section B. The discharge limitations table for Outfall 002 lists <u>E.</u> coli "126 MPN/100 ml Geometric Mean" under other units, Ave. Monthly maximum geometric mean for 5 samples. The fact sheet states that this pollutant be reported at 126 cfu/100, which is the same as in the existing permit. The permittee requests that this limit be expressed as 126 cfu/100 ml and that N/L be listed under other units, ave. weekly. (Emphasis added)

Response: Pursuant to 40 C.F.R. 136.3, Table A, EPA recognizes two standard tests for evaluating the concentration of bacteria in waste water. The first is Most Probable Number (MPN) tube dilution and the second employs a membrane filter which provides a colony forming unit (CFU) number to demonstrate the amount of bacteria in the sample. The permittee may use either test. At Blue Plains, the membrane filter test has been used in past permit cycles and is contemplated to be used under this reissued permit. However, the bacteriological standard in District of Columbia Water Quality Standard is stated as MPM/100 ml. EPA has determined that the results from either technique are comparable, as long as the analyzed volume is equivalent. Therefore, EPA agrees to effluent limitation for *E*.coli with reference to the membrane filter test (CFU) as requested, rather than as MPN.

EPA has made the requested change and wrote N/L under other units, ave. weekly.

**4. Comment: Part I. Section C and D.** The permittee requests that the listing for *E*.coli under Effluent Characteristic for Outfalls 001 and 019 be stated as *E*. coli (cfu/100 ml) rather than "30 day geometric mean for 5 samples minimum" as there are no limits for these outfalls.

**Response:** Respondent is correct that "monitoring only" for bacteria is required at Outfalls 001 and 019. EPA has removed the "30 day geometric mean for 5 samples minimum" language for these outfalls.

**5. Comment: Part I. Section C**. The permittee requests that the listing for total nitrogen for Outfall 001 be stated as N/A for kg/day(lb/day) ave. monthly and ave. weekly. Also under other units N/A should be changed to N/L.

**Response**: Since the permit only requires monitoring for nitrogen at Outfall 001, these changes have been made.

6. Comment: Part II.2.A. The permittee supports the second paragraph at Part II.A.2 of the draft permit which it states "exempts" combined sewer system (CSS)-related discharges from the standards compliance requirement in the first paragraph of that section as long as those discharges are in compliance with the CSS performance standards in Part III.C. of the permit. The permittee's comment is lengthy, consisting of the permittee's own rationale and basis for its support of the provision, and the approach followed by EPA with respect to WQS for the CSO controls.

Response: In the Draft Fact Sheet, EPA specifically requested comment on whether to include in the final permit only the specific WQBELs based on LTCP controls, or to also include the narrative provision. The permittee's comment supports including both the general narrative WQS compliance provision and the specific WQBELs for the CSS. EPA wishes to clarify however, that it is not entirely accurate to state that the specific WQBELS "exempt" the permittee from the general WQS compliance provision "so long as those discharges are in compliance with the CSS performance standards in Part III.C of the permit." The narrative provision and the specific WQBELs for the LTCP controls are immediately effective, requiring immediate compliance. However, because the LTCP will not be fully implemented until 2025, and because WASA cannot comply with the specific WQBELs in Part III.C of the permit until the LTCP is implemented, the permittee will not be in compliance with either the narrative provision or the specific WQBELs during the interim period when the LTCP is being implemented. As discussed in footnote 2 and in Section D. of the Fact Sheet, a Consent Decree between EPA and the permittee addresses these violations, establishing a compliance schedule for implementing the LTCP and specific enforceable milestones during the interim period. Therefore, provided that the permittee meets those milestones and implements the LTCP as set forth in the permit and the Consent Decree, there will be no basis upon which to enforce the narrative provision during implementation of the LTCP, as to violations of WQS being addressed by the LTCP. Pursuant to the 1994 CSO Policy, the permit includes a reopener provision so that the permit may be reopened and modified to include additional controls, based on a plan developed by the permittee upon determination that the CSO controls fail to meet WQS or protect designated uses.

7. Comment: Part III. LTCP Implementation Schedule. The permittee states that EPA's reasoning for not including a LTCP implementation schedule in the permit is flawed and inconsistent with the Environmental Appeals Board (EAB) ruling which the permittee states requires EPA to include an implementation schedule in the permit. The Permittee further states that because the District's narrative standards have been modified since July 1, 1977, they are not the same as the pre-July 1, 1977 standards. The permittee further states that EPA is obligated to place an LTCP implementation schedule in the permit based on the dissolved oxygen and bacteriological standards which were in effect at the time the LTCP was adopted.

Response: As acknowledged by the Permittee, when the EAB remanded the permit to EPA with respect to the compliance schedule for the LTCP, the EAB was clear that a compliance schedule could only be included in WASA's permit if to do so is consistent with the CWA. The EAB noted that "schedules for compliance with water quality standards that were promulgated prior to July 1, 1977, are not appropriate," and stated, "[t]o the extent that any of the relevant

water quality standards were promulgated prior to July 1, 1977, the Region should not include in the compliance schedule in the Final Permit the related LTCP requirements." Id., FN 42. Further, the EAB instructed the Region to "clearly document" its decision-making regarding whether compliance schedules are not included in the final permit because they are based on pre-1977 water quality standards. The Fact Sheet sets forth with specificity the portions of the EAB decision relevant to this issue. The Fact Sheet traces the history of the WQS with which the LTCP is designed to comply. A key WQS is the narrative standard, which, although the language has been slightly modified over the years, has not been changed substantively since before July 1, 1977. While the Permittee stated that the narrative standards have been changed, it did not provide any examples to support that assertion. The Fact Sheet provides a complete discussion of EPA's rationale for not including a compliance schedule for the LTCP in the permit.

- 8. Comment. Part IV. Section G. Whole Effluent Toxicity (WET) Testing. The permittee makes the following requests based upon an analysis performed by its consultant, EA Engineering, Science, and Technology, Inc.
- a. Comments. Regarding Outfalls 001 and 002. Part IV. Section G.2. requires a 24-hour composite sample. This procedure is not necessarily applicable or required to obtain samples needed to conduct the toxicity tests. Methods for obtaining samples should be as required by the testing protocols. EPA should recognize that discharges from Outfall 001 are episodic and of variable duration.

**Response:** EPA recognizes that Outfall 001 is episodic in nature; accordingly, the final permit requires samples to be collected as grab. Sampling for Outfall 002 is to continue as 24-hour composite.

## b. Comments Regarding Outfall 001, EPA should consider the following:

i. Delete chronic toxicity testing because of the short duration of the discharge. Under most circumstances, the CSO discharges will not be present long enough to allow the second and third effluent sample collections required by the standard methodology.

Response: EPA recognizes that Outfall 001 is episodic and short in duration. Therefore, initially in this permit, acute toxicity will be accessed. EPA may, in a future permit or modification to this permit, based on new information, assess whether the discharges from these outfalls meet both acute and chronic WET standards. In the event the duration of the discharge from Outfall 001 is so short that it is not possible for the permittee to retrieve a grab sample, it may explain in writing the conditions which existed at the time of the discharge which made retrieval of the sample not possible.

ii. Use an LC50 as the end point for acute toxicity testing rather than using a single effluent concentration and comparing the result to the control using a Student's t-

test.

**Response**: A single concentration is typically compared to a control to determine the effect in 100% discharge as a first tier to assess discharge with a standard t-test approach as described in the test methods manual (see US EPA 2002a, page 86). A multiple concentration test could be considered for the next sampling event if toxicity is of significant magnitude in the 100% discharge (e.g., 100% mortality within 24 to 48 hours).

iii. Provide for the acute testing to be performed on a typical effluent concentration series. A typical acute toxicity test would be conducted using a concentration series (e.g., 100, 75, 50, 25 and 12.5 percent effluent) plus a control enabling the calculation of an LC50 value and quantification of toxicity. It is also noted that Blue Plains discharges into "Maryland waters" and Maryland uses the LC50 value as does Massachusetts.

**Response:** See response at 8.b.ii above.

iv. Allow acute toxicity testing to be conducted using a 48-hour static renewal test. The draft permit specifies a 96-hour static renewal toxicity test using fathead minnows and a daphnid species. US EPA guidance (EPA-821-R-02-012) and standard practice for acute testing is typically conducted as a 48-hour test using *Daphnia sp* or *Ceriodaphnia dubia*. Also, since the discharge from 001 is short duration, it is recommended that the fathead minnow acute testing is reduced from a 96-hour duration to a 48-hour static renewal test to better reflect the expected exposure in the receiving stream

Response: The permit specifies using a 96-hour duration with a required renewal at 48-hours using the original sample. The duration of the test is independent of the duration of the sampling event. The 96-hour duration is important to elicit and access all potential lethal effects to the tested species.

For Outfall 001, the permit has been modified to allow for testing using multiple species during the first year of WET testing. After the completion of the first year of studies, the permittee may reduce the testing using only the most sensitive species.

v. Allow an acute mixing zone as provided by DC Water Quality Standards (WQS) and accepted previously by EPA for metals analyses. Guidance on the size of mixing zones in the tidal estuary are provided at DCMR Title 21 Section 1505.5 which specifies that acute mixing zones (CMC) must have a smaller size than the chronic mixing zone footprint, and complete mixing is assumed within the mixing zone (subsection (i)). Using this concept the compliance value for acute toxicity testing may be larger than the 1.0 TUa (defined as 100/LC50). The dilution factor used to determine this acceptable acute toxicity value would be based on an effluent-specific assessment of a short-duration discharge from Outfall 001 to the Potomac River under high river flows (Title 21, Section 1105.4). Also, EPA has approved mixing zones in the past for Blue Plains discharges (e.g., metals).

Response: Commenter is correct that the District of Columbia Water Quality Standards

(WQS) (Title 21 DMR Chapter 11) allow for mixing zones for point sources on a case-by-case basis. Section 1105.5 describes the design flows to be used for establishing permit limitations; Section 1105.6(a) describes high flow conditions for the Potomac River; and 1105.7 describes the conditions which must exist for the allowance of a mixing zone. The permit provides that if the permittee would like EPA to designate a mixing zone, it may make such a request in writing. This request must demonstrate how the discharge meets the requirements outlined in the DC WQS.

# c. Regarding Outfall 002 EPA should consider the following:

i. Allow acute toxicity testing to be a 48-hour static renewal test using a typical effluent concentration series. As for Outfall 001, EPA guidance found at EPA-821-R-02-012 and standard state practice requires a 48-hour test using either *Daphnia sp.* or *Ceriodaphnia dubia*.

**Response:** The permit specifies using a 96-hour duration toxicity test with a required renewal at 48- hours using the original sample. The duration of the test is independent of the duration of the sampling event. The 96-hour duration test is important to elicit and access all potential lethality effects to the tested species.

ii. EPA should use an IC25 as the end point for chronic toxicity testing. Permittee states that the 25 percent inhibition concentration (IC25) value rather than the No Observed Effect Concentration (NOEC) should be used to calculate the TUc (i.e., TUc=100/IC25 versus TUc=100/NOEC). This is a more broadly used approach, which is supported by EPA protocol EPA-821-R-02-013 and provides a better quantitative approach for chronic toxicity than the NOEC approach. This would also resolve problems using the 1.6 TUc to interpret chronic toxicity (see comment iii. Following).

**Response**: EPA allows state permitting authorities the choice of either hypothesis testing or point-estimation techniques for developing permit conditions and determining compliance. EPA is using the hypothesis testing approach because it is consistent with the approach used by the state of Maryland. DC and Maryland share several important surface waters which contribute to the water quality of the Chesapeake Bay.

iii. Interpretation of Chronic Toxicity Results. The text suggests that the chronic WET permit triggers are "any one test result greater than 1.6 TUc", or "any one or more tests results with a calculated median value greater than 1.0 TUc." The consultant for the permittee states that EPA does not understand the technical basis of the 1.6 TUc value, unless it is based upon an outfall-specific mixing zone dilution factor. It is further noted that 1.0 TUc is the best result attainable from a chronic toxicity test using the NOEC approach. It is impossible to have a calculated median value of 1.0 TUc if any measured value is greater than 1.0 TUc (even if that value is below the 1.6 TUc trigger value).

Response: There is no dilution of the discharges at the point it enters the river. Accordingly, it is EPA's position that the chronic TU values will be 1.0 as a monthly median and

1.6 as a daily max.

# iv. LC50 should be the end point for acute toxicity testing.

**Response:** EPA does not believe this is the case as that would allow for a 3:1 dilution, which is not appropriate for a WET test. The toxicity test for Outfall 002 is chronic, not acute. LC50 is not an appropriate end point in this case because EPA has calculated an in-stream waste concentration of 52%.

v. EPA should allow a chronic and acute mixing zone as provided by DC WQS and accepted previously by EPA for metals analysis. Mixing zones are allowed in DC and guidance on the size of the mixing zone are provided in Section 1505(f) – (i). Acute mixing zones (CMC) must have a smaller size than the chronic mixing zone footprint, and complete mixing is assumed within the mixing zone (Subsection (j)). Using this concept, the acceptable values for acute and chronic toxicity testing may be somewhat larger than 1.0 TUa (defined as 100/LC50) or 1.6 TUc (defined as 100/IC25). The dilution factor used to determine these acceptable acute and chronic values would be based on an effluent-specific assessment of discharges from Outfall 002 to the Potomac River.

**Response:** For the performance of WET testing for this permit, EPA is willing to consider a mixing zone provided the conditions specified by the DC WQS can be met. See the response at 8.b.v above.

#### 9. Comments Related to the Draft Fact Sheet:

a. Page 12. Scetion 8.B(1)C. The last sentence states; "The average weekly limit is 410 cfu/100 ml geometric mean". It appears that the 410 cfu/100 ml refers to Section 1104.8 of the District WQS for bacteria. This is a single sample maximum to be used for water quality trends only. The value, 410 cfu/100 ml, does not appear in the permit and is not applicable as a WQS. It should be deleted from the fact sheet.

**Response:** EPA agrees with this comment and has removed the language from the fact sheet.

**b. Page 12. Section 8.B(1)d.** This part of the fact sheet discusses the development of the Total Nitrogen (TN) allocation for Outfall 001. The second paragraph states: "The permit includes a requirement to monitor nitrogen discharges from Outfall 001 to determine total annual discharges. In the event that discharges from that outfall exceed 311,429 pounds per year, EPA will adjust the permit requirement to assure compliance with the total nitrogen allocations for Blue Plains."

The permit only requires monitoring of nitrogen discharges from Outfall 001, it also requires the permitee to evaluate performance as required at Part I.C. footnote (10) and Part

#### III.D.4.

The allocation of 311,420 pounds per year TN to Outfall 001 is based on the wettest year in the period used by the Bay Program to set the Bay-wide allocations. Therefore, an exceedance of the 311,420 pounds per year allocation in a year with more rainfall would not by itself justify an adjustment of the 311,420 pounds per year Outfall allocation.

Since the permit already provides specific provisions for monitoring and evaluation of the performance at Outfall 001, the fact sheet should not include language that could prejudge or contradict the permit provisions. Therefore, the permittee requests that the second paragraph at p.12. Section 8.B(1)d be deleted.

Response: The Region agrees that an exceedance, in and of itself, may not necessarily warrant an adjustment of the allocation of the nitrogen discharge to Outfall 001. Therefore, we have modified the Fact Sheet language to reflect that in the event that the annual allocation is exceeded, EPA will evaluate whether any adjustment to the allocation should be made, taking into consideration such factors as annual rainfall, temperatures, the level of discharges from Outfall 002, and other appropriate factors. Any adjustment of the allocation assigned to Outfall 001 would affect the limit on Outfall 002 as well. Any such adjustment would be a permit modification and is covered by the permit reopener provision.

c. Comment: The fact sheet does not include a discussion for allocations of total phosphorus (TP) to Blue Plains. The permittee has provided EPA with a reasonable potential analysis that shows that it is not necessary to include a TP allocation for Outfall 001. This analysis can be found in an April 22, 2009 email from Walt Bailey to Mary Letzkus.

**Response:** Neither the draft permit nor the final permit include a phosphorous allocation for Outfall 001. The effluent limit carried forward since the issuance of the 2003 permit applies only to Outfall 002. Monitoring for phosphorous is required for Outfall 001.

d. Page 15. Section 8.C(1)a. paragraph 2. In the first line of paragraph 2 the reference to "Part II.C" should be to "Part III.C." This reference is important because it is intended to refer to the WOBELs for the combined sewer system.

Response: EPA has made this change.

- B. <u>Comments Received from the Earth Justice Legal Defense Fund.</u> The following comments were received from Jennifer C. Chavez, Attorney, by letter dated June 8, 2009, and submitted on behalf of Friends of the Earth.
- 1. Comments relating to Water Quality Standards. Commenter generally supports the language found at Part II.A.2 of the draft permit, "discharge in excess of any limitation

necessary to meet applicable water quality standards..." However, Commenter states that the following language must be modified:

a. The second paragraph should be modified as follows:

"the limitations and conditions in this permit are the limitations that are necessary to meet the applicable water quality standards."

The Commenter states that the proposed language makes a finding that the permit measures are all that is needed to meet WQS. This is not a finding that is necessary to make at this time, is not supported by the record and may need to be changed.

**Response:** See response to Comment A.6. from the Permittee, above.

EPA agrees that the second paragraph should be modified as suggested by the Commenter. The language in the draft permit does – as the Commenter suggests- make a finding that the measures in the Long Term Control Plan (LTCP) submitted by the permittee are adequate to attain WQS. EPA has found that the LTCP, using the "demonstration" approach, meets the criteria for that approach under the 1994 CSO Control Policy, and that therefore the performance standards of the LTCP constitute appropriate WQBELs for CSOs in the permit. However, until such time as the LTCP is completed and post-construction monitoring conducted, EPA will not know what, if any, additional WQS-based limitations may be needed in the Permit. Therefore, EPA is removing the word "the" as indicated in the comment. EPA has also included in the permit a general narrative WQS compliance provision to ensure that the permit contains limits as stringent as necessary to meet standards. EPA, notes, however, that this narrative provision is not independently enforceable during the LTCP implementation period covered by the Consent Decree as to violations of WQS being addressed by the LTCP.

b. Commenter requests that the following language be deleted from page 13 of the fact sheet:

"EPA has also made a technical determination that the LTCP is expected to achieve WQS compliance, based on the predicted performance of the LTCP controls.

This determination does not need to be made at this time and there is no need to open the permit to a challenge based on this determination.

**Response:** EPA agrees that this sentence is not necessary to the Fact Sheet and it has been removed.

2. Comments Based on Numeric Effluent Limitations and Monitoring Requirements. The Commenter supports the effluent limitations and monitoring requirements in the draft permit but suggests the following modifications:

a. In the second table under Part I.B. include an outer date and limiting language which is based on the ENR facility completion date of 2014. Suggested language is as follows:

During construction of improvements to existing nitrogen removal facilities, period(s) to be determined by the permittee and EPA from completion of design and construction schedules, for the minimum length of time required for such construction, but no later than 2014.

**Response:** EPA has made the suggested change, by inserting the date, July 14, 2014, by which construction is to be completed.

b. If there is a known date for completion of ECF, the outer date for completion should be added to item 4 in table under Part I.B

During construction of the ECF and tie-ins to the existing facilities. Periods to be determined by permittee and EPA from completion of design and construction schedules, for the minimum length of time required for such construction, but no later than 20XX.

**Response:** The completion date for ECF is 2018, well beyond the life of this permit. As the construction of ECF differs from the requirement in the LTCP to install four additional primary clarifiers, EPA is working with WASA to modify the LTCP Consent Decree to make this change, including a completion date for the ECF.

c. The proposed fact sheet does not explain why the required treatment capacity for Outfall 001 drops following ECF from 336 mgd to 225 mgd. It is Commenter's understanding that the ECF system will produce much cleaner effluent discharges than the current system, and the net effect will be as good as if Outfall 001 were discharging higher volumes with less efficient treatment. Based on that understanding, the Commenter does not understand why there is less volume in the proposed plan. Commenter reserves the right to raise objections if the fact sheet fails to adequately address the lower volume.

Response: The Commenter is correct that once the ECF is installed, treatment capacity and therefore the maximum daily volume of flow discharge from Outfall 001 will be reduced from 336 to 225 mgd, which is a reduction of the current discharge capacity of Outfall 001. As explained by WASA in its public presentation on the proposed TN/WW Plan and in the final plan, the ECF facility will have the capacity to treat 225/mgd. Under the TN/WW Plan, and the LTCP, flow discharged from Outfall 001 will increase in that there will be more days when it discharges. This is due to the fact that when the LTCP is completed, flow volume to Blue Plains will increase substantially – since flows will be diverted from CSO outfalls. These increased flows will then also go through the new nitrogen removal facilities. To accommodate both the increased volume of flow to the plant and the increased treatment requirements, flows may be diverted to Outfall 001 more often during wet weather. However, due to the ability of the ECF to remove greater amounts of total suspended solids, biochemical oxygen demand, as well as nutrients, the pollutant loadings to the Potomac River are predicted to be the same or less than the loadings under the existing flow and treatment scenario. The permit requires monitoring to determine if these predictions are correct.

EPA has revised the Fact Sheet to explain in greater detail the flows to be discharged from Outfall 001 under the various flow discharge scenarios.

3. Comment – The title of this comment is "Consistency with TMDL Wasteload Allocations". The comment itself reads: "It is not clear whether the CSO outfalls other than 001 and 002 at Blue Plains are included in the cap load allocations for Blue Plains. If not, then the permit must address those outfalls during the period prior to implementation of the LTCP, and the fact sheet must explain how those outfalls are covered by the permit's effluent limits."

Response: Discharges from the CSO Outfalls identified in the permit are governed by the conditions and limitations set forth in Part III of the permit, which include the nine-minimum technology-based controls program and the water quality-based combined sewer system requirements. The permit limits are consistent with the assumptions and requirements of any applicable WLA, including any for the CSO outfalls, as required by 40 C.F.R. § 122.44(d)(vii)(B). TMDLs for total suspended solids, biochemical oxygen demand and bacteria for District waters into which the CSOs discharge include allocations for the CSO outfalls. Some, but not all, of these TMDLs have been challenged in two lawsuits filed in the U. S. District Court for the District of Columbia. In *Anacostia Riverkeeper, Inc. v. Jackson*, Civ. Action No. 09-0098(JDB), the District Court issued an order dated May 25, 2010, vacating some of these TMDLs; however, that order also stays vacatur for various periods of time. Therefore all TMDLs subject to that lawsuit remain effective until vacated by operation of the May 25, 2010 order. The lawsuit related to the TSS TMDL remains pending, and that TMDL remains in effect during the pendency of that lawsuit.

The Commenter submitted virtually the same comment on the August 18, 2006 proposed permit modification (April 5, 2007 final permit modification). As the relevant permit provisions have not changed, EPA references its prior response, which is included in the administrative record for this permit action. See Response to Comments, Final Modified Permit April 5, 2007, page 11.

In addition to the above response, EPA notes that the Commenter is incorrect in referring to Outfalls 001 and 002 as CSO outfalls, as they are located at the Blue Plains wastewater treatment plant. CSO Outfalls are discharge points from the combined sewer system prior to the treatment plant. (See 59 FR 18688, 18689 (April 19, 1994)).

3. Comments Relating to the Requirements for Combined Sewer Overflows. Commenter states that several of the draft permit's CSO requirements could be seen as less stringent than those required in the Anacostia Watershed Society Consent Decree, with regard to requirements for the nine minimum controls (U.S. Dist. Ct. D.C., Civ. Action No. 02-2511).

Commenter cites as an example of less stringent conditions the requirement for operating floating dams. Conversely, the Commenter suggests that other requirements are more stringent, e.g., the permit's prohibition of dry weather flows.

Commenter suggests the following language:

"Where requirements in the permit conflict with the requirements in either the consent decree in Anacostia Watershed Soc'y v. D.C. WASA, No. 02-2511 or the consent decree in Consolidated Case No. 1:00CV00183 (filed October 10, 2003), the more stringent provision controls."

Commenter states that if this language is not added to the permit, then all relevant requirements in the permit must be written to be at least as stringent as the language of the consent decrees.

Response: EPA does not agree with this comment. There is no conflict between the requirements of the partial Consent Decree entered on October 10, 2003 addressing the technology-based requirements for CSOs - the nine minimum controls - and the requirements of the permit. The Consent Decree requires WASA to implement specified projects in order to come into compliance with the nine minimum controls. The permit, on the other hand, sets forth ongoing requirements for compliance with the nine minimum controls. Using the Commenter's example of floating dams, the Consent Decree requires inflatable dam replacement and modification of control vaults for proper functioning of the dams and interface with the SCADA system by March 31, 2004. The Consent Decree also requires WASA to ensure that the inflatable dams are maintained to fully perform their function to reduce the frequency and severity of overflows. (Consent Decree, Section V.10.a.) The permit, on the other hand, requires the permittee "to comply with the nine minimum technology-based conditions", including, where necessary "equipment and sewer collection system repair or replacement", and at a minimum, monthly inspection of inflatable dams and CSS SCADA system. (Permit Part III, Section B.1. a.). Similarly, regarding the dry weather overflows example, the October 2003 Consent Decree requires the Permittee to take specific actions with the objective of preventing dry weather overflows, including a number of actions that had to be completed by December 31, 2003. The permit, on the other hand prohibits dry weather overflow discharges from the CSO outfalls. The permit and the Consent Decree are not equivalent documents.

C. <u>Comments Received from the State of Maryland</u>. The following comments were received from Edwal Stone, Program Manager, Wastewater Permit Programs, Water Management Administration, Maryland Department of the Environment by letter dated August 3, 2009.

Comment: Commenter welcomes the reduction of the total nitrogen limit for Outfall 002 to 4,377,850 lbs/yr. This predicts an estimated discharge of 311,420 lbs/yr from Outfall 001 during a wet year. Commenter requests EPA consider using the annual rain fall data from the year 2003 which was 60.83" at Reagan National Airport rather than the 1989 annual rainfall data which was 50.32" at Reagan National airport. Commenter states that using the 2003 average would further reduce the allowable TN for Outfall 002 to keep the total for Outfall for Outfalls 001 + 002 at 4,689,000 lbs/yr.

Response: In order to comply with the total nitrogen limit required by the permit, the TN/WW

Plan takes into consideration the rainfall data from 2003 (see TN/WW Plan Section 2.2.2 to 2.2.4). The maximum monthly plant influent occurs simultaneously to periods of above average rainfall and high groundwater levels in the sewershed. Daily influent flows were analyzed for patterns of sustained high flows, i.e., maximum monthly plant influent. The years 2000, 2002 and 2003 were selected as they provided the following range of hydraulic conditions:

Average – the year 2000 data indicates slightly above average rainfall (approximately 70<sup>th</sup> percentile) and average groundwater levels for the year (approximately 50<sup>th</sup> percentile).

Dry – the year 2002 had significantly below average rainfall (approximately 20<sup>th</sup> percentile) and significantly below average groundwater levels for the year (less than 10<sup>th</sup> percentile).

Wet – the year 2003 had significantly above average rainfall (greater than 90<sup>th</sup> percentile) and significantly above average groundwater levels for the year (approximately 90<sup>th</sup> percentile).

In summary, in the TN/WW Plan, for the purposes of evaluating plant influent flow, and pollutant load to the plant, the years 2000, 2002 and 2003 were evaluated.

D. <u>Comments Received from the Commonwealth of Virginia</u>. The following comments were received from Frederick K. Cunningham, Manager, Office of Water Permits and Compliance Assistance, Department of Environmental Quality, by letter dated June 29, 2009.

The Department has reviewed the draft permit and fact sheet and does not object to the issuance of the permit. The following is a list of comments for EPA to consider:

1. The phrase "average weekly limitation" should be defined.

Response See response to A.1., above. EPA has removed any terms for which there are definitions in 40 C.F.R. § 122.2.

2. The Commonwealth of Virginia defines the seasons beginning with the first of the month rather than the middle or 15<sup>th</sup> of the month as EPA has done for the ammonia as N seasonal limits. The Commonwealth believes its practice is a more conservative approach.

**Response:** This language is carried over from the existing permit and is consistent with other permits written for the District. At issue is temperature of the water, rather than the date of the month. EPA believes that the middle of the month is sufficiently protective for this requirement.

3. Page 10, the "e" of E. coli should be capitalized.

**Response:** EPA has made the suggested change.

4. Page 10, Commenter asks whether the Nitrate and TKN should be on separate lines in

the effluent table as they are analyzed separately and by different methods.

**Response:** EPA has made this change.

5. Page 65, titrimetric is incorrectly spelled.

**Response**: EPA has corrected this spelling.

6. Page 65, Commenter questions whether the compliance schedule dates should be adjusted as June 1 has passed.

**Response**: EPA has been apprised by the permittee that the date in question, which is for the award of the contract for detailed design, was executed on March 25, 2009. The contractor met the milestone and has begun design. The project is ahead of schedule. The requirement to award the detailed design contract by June 1, 2009 has been removed from the permit.

# III. Clean Water Act Section 401 Certification - Government of the District of Columbia, Department of the Environment (DDOE).

By letter dated May 6, 2009, EPA requested certification of the draft permit according to the requirements of the Clean Water Act. In response, by letter received July 13, 2009, the DDOE certified that the draft permit meets District of Columbia Water Quality Standards. Because the DDOE added a condition that its certification was not valid beyond a 90-day limit, in August of 2010, EPA requested that DDOE recertify the May 7, 2009 draft permit. By letter dated August 17, 2010, DDOE recertified the May 7, 2009 draft permit.