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
September 1, 2017 Public Notice

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 September 1, 2017 commenced a 30-day public comment period for the draft permit. Upon the request of interested parties, the public comment period was extended for an additional thirty (30) days, until November 1, 2017.

During the 30-day public comment period, EPA received comments from three entities: 1) Earthjustice – on behalf of itself, the Potomac Riverkeeper Network and the Anacostia Riverkeeper, Inc.; 2) the District of Columbia Water and Sewer Authority (DC Water), and 3) the District of Columbia Department of Energy and Environment (DCDOEE).

The following is a summary of the comments that EPA received during the public comment period and EPA's responses thereto.

II. Comments and Responses

A. Comments Received from Earthjustice

The following comments were received from Jennifer C. Chavez, Attorney, by letter dated November 1, 2017 submitted on behalf of Earthjustice, the Potomac Riverkeeper Network and the Anacostia Riverkeeper, Inc.

1. Legal Requirements:

Comment: Whether EPA relies on the single sample value or some other short-term measure, it is imperative that EPA include effluent limitations in the permit that protect river users who are exposed for a few minutes to a few hours, as that is typical of the actual use of District's waters for contact recreation.

Response: The permit is intended to assure compliance with the applicable water quality standards in the District. The District's water quality standards for bacteria are as follows:

Constituent	Criteria for Classes		
	A	B	C
E. Coli (1)			
Geometric Mean (maximum 30-day geometric mean for 5 samples)	126		
Single Sample Value	410		

Footnote 1

The geometric mean criterion shall be used for assessing water quality trends and for permitting. The single sample value criterion shall be used for assessing water quality trends only.

See, D.C. Mun. Regs Tit. 21, § 1104.8.

The water quality standards are clear: the single sample value is for assessing water quality trends and not for permitting. The geometric mean value is for permitting. The NPDES permit is therefore consistent with the standards since it provides for compliance with the geometric mean. By its own terms, the numeric criterion for bacteria is designed to achieve the Class A designated use, which includes primary contact recreation. See also the response to Comment 2b.

EPA, as part of CWA responsibilities, publishes recommended water quality criteria to protect and restore the nations waterways. The criteria strive to include the best available scientific research and experience to create protective criteria. Jurisdictions with delegated authority to operate standards programs review these recommendations and develop WQS they deem appropriate for their local waters. DC has developed EPA approved numeric and narrative criteria to produce the District's WQS.

A central component of all WQS regulations is the use of bacteria indicator species to assess the effectiveness of disinfection treatment train practices and monitor the condition of surface waters. The indicator species is used to assess overall disinfection, with reduction of the indicator species it is assumed that other disinfection occurs, reducing the overall output of pathologic components of treated sewage discharges. The indicator in surface waters is used to assess the overall concentration of warm blooded animals' wastes.

A statistical tool used in environmental management, monitoring, and modelling is the use of the log-normal distribution. The distribution uses the fact that many environmental contaminants vary greatly in concentration in air and water. When the logarithm of groups of individual concentration measurements are collected, the concentration logarithms are used in the development of a statistical normal curve. Normal statistics can then be used to estimate bacterial concentration in effluents and receiving streams. A geometric mean, the average of

the logarithm of measured concentrations, is used to monitor compliance with bacterial limits and evaluate process control practices.

Single sample maximum bacteria limits appear in many states water quality standards. Single sample maximums are generally used in a grab sampling format to assess waters for restricting swimming and for the protection of shellfish beds. Single sample maximums are not normally taken to evaluate continuous municipal discharges. No changes has been made as a result of this comment.

2. Bacteria Limits for Outfall 002

a. Comment: Because the receiving waters are designated and currently used for human contact recreation, the permit should include health-protective bacteria limits.

Response: The Blue Plains Outfall 002 is the continuously operated full treatment outfall discharging at the Blue Plains Facility. It is standard permitting practice to place bacteria limitations on these types of processes with the geometric mean limitation. Modern disinfection practices result in very low bacteria outputs. The risk of high level bacteria discharges from this outfall is extremely low. See also responses to Comments 1. and 2. b.

No changes have been made as a result of this comment.

b. Comment: The draft permit lacks effluent limits needed to address short-term spikes in bacteria concentrations in the discharge from Outfall 002. The comment references the TMDL for Bacteria (Decision Rationale 2014 E. coli Bacteria Allocations and Daily Loads for the Potomac River and Tributaries, TMDL Revision, January 13, 2017). The comments indicate that since maximum daily wasteload allocations (WLAs) were established for Outfall 002, these WLAs should be effluent limits in the permit.

Response: A separate process exists to review and revise the water quality standards, if appropriate. That process is the triennial review of the water quality standards.

While EPA's regulations at 40 C.F.R. § 122.44(d)(1)(vii) require that water quality-based effluent limitations be "consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by the State and approved by EPA pursuant to 40 C.F.R. 130.7," that provision does not require that effluent limitations in NPDES permits be expressed identically to the way the wasteload allocation is expressed in a TMDL. Nor is there any express or implied statutory requirement that effluent limitations in NPDES permits necessarily be expressed in daily terms. The assumptions regarding implementation of the TMDL's maximum daily loads in NPDES permits were specifically addressed in EPA's Decision Rationale as follows:

EPA Decision Rationale, Section C, page 10: "However, EPA does not understand the "Max daily" and "Avg daily" expressions to be "never-to-be-exceeded-on-a-daily-basis" targets or values. Instead, because compliance with the applicable water quality standard is

measured as an average value based on at least five samples calculated over 30 days, these TMDL allocations express on a "daily" basis the modeled loads of E. coli predicted to meet WQS, i.e., a geometric mean of 126 MPN/100 ml achieved over a 30-day period…

For the reasons discussed above, decisions about implementing these TMDLs in NPDES permits and assessment of progress toward achieving the applicable water quality standard should be based on the TMDLs' WLAs and LAs as properly understood in light of the applicable numeric water quality criterion (126 MPN E. coli/100 ml geometric mean over a 30-day period) rather than on the assumption that the TMDLs' WLAs and LAs set a maximum or ceiling on E. coli loads during any given 24-hour period."

No changes have been made as a result of this comment.

3. Bacteria Limits for Outfall 001

Comment: The permit should establish effluent limits for Outfall 001 and the rationale for no limits is not clear.

Response: The concept underlying the development of surrogate sampling methodologies to measure bacterial output for the wet weather treatment facility is based on the operational uncertainties present during the start-up of the facility and limitations of the sampling methods. The measurement of the bacterial indicator itself is best accomplished with continuous monitoring due the lag times inherent in the method, the start and stop nature of the operation may not lend itself to this form of sampling. The start-up of the treatment facility will involve the development of a procedure to accurately measure bacteria output, possibly using parameters other than bacteria to assess the discharge. Once a method has been submitted to the EPA and approved it will be incorporated into the LTCP as a post construction monitoring requirement.

As set forth in more detail below, EPA has determined that numeric effluent limitations for Outfall 001 would be infeasible and therefore is imposing LTCP-based measures. *See*, 40 C.F.R. § 144(k). EPA's approach is consistent with the assumptions and requirements of the bacteria TMDL. Like the LTCP-based measures set forth in the Permit, the wasteload allocations derived in the TMDL are based upon the LTCP model output upon full implementation. Therefore, the Permit is consistent with the assumptions and requirements of the WLAs in the TMDL.

The rationale for the requirement to conduct performance monitoring is presented in the draft Fact Sheet on page 15 as follows:

"A bacteria Total Maximum Daily Load (TMDL) for the Potomac River and its Tributaries was established in 2004 and revised in 2014 (superseding approval Jan. 2017). The revised TMDL assigns an annual E. coli waste load allocation (WLA) of 5.99 E+ 15 MPN and a maximum daily WLA of 4.37 E+14 MPN for Outfall 001 on days when flows exceed dry weather flows. Both the annual and daily WLAs in the TMDL for Outfall 001 are based on the

predicted bacteria loading upon full implementation of the Long-Term Control Plan (LTCP) for Blue Plains using the LTPC model output. EPA and the District have agreed that the management option chosen in the LTCP predicted that attainment of the District's WQS would not be precluded, provided the LTCP controls are properly designed, constructed, and operated. As the TMDL was based upon the predicted bacteria loading upon full implementation of using the LTCP output, proper design, construction, and operation of the controls is consistent with the assumptions and requirements of the WLA. This will be verified through post-construction monitoring. This permit establishes post-construction monitoring requirements (see Part III, Section D, paragraph 2) to ensure that the installed controls result in discharges that will not cause or contribute to an excursion from any applicable WQS and are consistent with the assumptions and requirements of any applicable WLA."

Under the updated LTCP, CSO flows that would have discharged into the Potomac and Anacostia Rivers are captured and stored in a system of inter-related tunnels. This wastewater is then conveyed to Blue Plains through the Blue Plains Tunnel. The contents of the Blue Plains Tunnel are emptied via a tunnel dewatering treatment train that includes grit removal and pumps, after which it is directed to enhanced or high-rate clarification. After leaving enhanced clarification, the flow is preferentially directed to the BPAWWTP's secondary treatment provided that it does not surpass the capacity of secondary treatment. If a portion of the flow cannot be treated by secondary treatment due to flow restrictions, it is treated by the WWTF using enhanced clarification followed by disinfection and dechlorination and is then discharged at Outfall 001. As Outfall 001 is a CSO-related bypass, there is significant variability in the influent quality and quantity, and its discharge frequency. This, when coupled with sample analysis lag time does not allow real time analysis of the facility's compliance status. Consequently, EPA has concluded that numeric effluent limitations are infeasible for Outfall 001. Therefore, pursuant to 40 CFR 122.44(k), EPA intends to require best management practices in the form of parametric operation and monitoring requirements to control discharges from Outfall 001. However, since the WWTF was not operational until March 2018, EPA lacks the data needed to establish the parametric monitoring and operation requirements for Outfall 001 in this permit. Therefore, in order to collect the data needed to establish the parametric operation and monitoring requirements for Outfall 001, this permit establishes a requirement in Part III.D.2 requiring the permittee to conduct a monitoring and operation analysis to correlate pollutant loads of *E*. coli and other pollutants of concern, with key process operating parameters for the Enhanced Clarification Facility (ECF) and the disinfection process units of the WWTF after it is placed in operation. The results of this analysis will be used in the establishment of parametric limits to ensure consistency with the assumptions and requirements of available WLAs."

For this outfall, the NPDES Permit includes the following:

Flow limits established for the outfall, including the requirement that the Wet Weather Treatment Facility only discharge from Outfall 001 when flow through complete treatment is maximized (Part I, Section C).

Requirements to empty flows stored in the tunnels in such a manner as to maximize treatment of the stored flows through complete treatment at Blue Plains and to optimize conditions for maintaining the availability of storage volume in the tunnels system (Part III.C.6).

Requirements to perform Phase 2 Post Construction Monitoring, which includes submittal of a monitoring plan for EPA approval, conducting the monitoring for 18 months and submittal of a performance assessment within 180 days after completion of the monitoring. The performance assessment is to include correlation of process operational parameters including flow management routines to effluent quality and to propose process unit operational parameters to be continuously monitored to ensure compliance with water quality requirements for EPA review and approval (Part III.D.2.).

No changes have been made as a result of this comment.

4. Mixing Zone

a. Comment: The draft permit and fact sheet are inconsistent regarding the allowance of a mixing zone for Outfall 001

Response: The references to a mixing zone in both the draft permit and the draft fact sheet in relation to whole effluent toxicity (WET) testing (the only place where mixing zones were referenced) is actually the application of an instream waste concentration (IWC) to determine what is the appropriate dilution to determine acute or chronic WET. This is a dilution midpoint in a dilution series used to determine toxicity, not a regulatory allowed mixing zone based on receiving stream characteristics used to determine the proportion of the stream that is available for dilution, and that proportion used to calculate the permit limit. The terminology of calling the IWC a mixing zone has been corrected in the permit and fact sheet.

b. Comment: The draft permit's description of the mixing zones for Outfalls 001 and 002 is confusing and overly vague, and does not provide sufficient detail to determine whether the proposed mixing zones comply with D.C.'s mixing zone regulation

Response: See response to Comment 4a. above. The discussion is not about a regulatory applied mixing zone, but the development of an IWC to guide toxicity testing. The incorrect terminology of calling the IWC a mixing zone has been corrected in the permit and fact sheet.

c. Comment: The proposed mixing zones are not consistent with EPA requirements for the development of mixing zones in water quality standards

Response: See responses 4a and 4b above.

5. Ammonia Limits

Comment: Neither the Draft Permit nor the Draft Fact Sheet contain any discussion of why these weakened effluent limits may qualify as exceptions to the prohibition on backsliding. As a result, we request that EPA either revise the limits to be at least as stringent as the previous permit, or revise the Draft Permit and Fact Sheet to include an explanation as to why the new, less stringent limits should be allowed in the context of an exception to the backsliding prohibition.

Response: The recalculated ammonia limits do not constitute backsliding due to the new information used for the analysis. New process flows from the plant reconfiguration, current background concentrations in the receiving water, and effluent pH were used to calculate the new limits. The ammonia limits in the 2010 permit were originally developed in 2001 as part of the reapplication process for the renewal of DC Water's permit issued on January 22, 1997 with an expiration date of July 1, 1999. In 1999, EPA published and the District water quality standards incorporated new toxicity criteria for ammonia. Based on these new criteria, DC Water's consultant developed a wasteload allocation for ammonia using the new toxicity criteria as well as data on background flows and concentration in the Potomac and the pH of the Blue Plains effluent. The new NPDES permit was ultimately issued in 2003. The table below compares the ammonia limits in the 1997 permit to those in the 2003 permit

In the 2010 permit, the ammonia limits were unchanged. In the draft 2017 permit, EPA used the same analysis approach used in 2001 for the 2003 permit. The same ammonia toxicity criteria set forth in the WQS were used. However, the approach incorporated better information on the background concentration in the Potomac River, on the pH of Blue Plains effluent and the updated flow for Outfall 002 (384 mgd instead of 370 mgd). The approach resulted in slight reductions in allowable concentrations for some periods and slight increases for other periods.

Based on the above, it is clear that the new ammonia limits qualify for the CWA section 303(d)(4)(B) exception to antibacksliding referenced in CWA section 402(o)(1). Section 303(d)(4)(B) provides that for receiving waters that meet water quality standards, permit limitations based on a WLA may be relaxed if the state's antidegradation policy requirements are met. In this case, the receiving waters meet the water quality standard for ammonia, and the limits are based on a revised WLA. The new limits also meet the District's antidegradation policy at DCMR section 1102 because the receiving waters are Tier I for ammonia and the new limits will comply with the ambient ammonia criteria established to maintain and protect the aquatic life use designation.

	1997 Permit (mg/L)		2003 Permit (mg/L)		2010 Permit (mg/L)		2017 Draft Permit (mg/L)	
Ammonia Nitrogen	Avg Monthly	Avg Weekly	Avg Monthly	Avg Weekly	Avg Monthly	Avg Weekly	Avg Monthly	Avg Weekly
Summer (5/1-10/31)	1.0	1.5	4.2	6.1	4.2	6.1	4.1	6.1

Winter 1 (11/1–2/14)	6.5	9.8	11.1	4.8	11.1	14.8	12.8	19.3
Winter 2 (2/15–4/30)	6.5	9.8	12.8	17.0	12.8	17.0	10.3	15.4

No changes has been made as a result of this comment.

6. Public Notification of CSOs

a. Comment: The permit should include a schedule for installation of additional CSO warning lights on the Potomac and Anacostia Rivers and Rock Creek, as required by the Consent Decree.

Response: The Draft Permit requirement requires immediate compliance, and is consistent with Part VI.E of the Amended LTCP Consent Decree requiring DC Water to install three warning lights on each receiving water as part of the construction of tunnel storage projects for the Anacostia River, Potomac River and Rock Creek. DC Water is required to finalize the details of the public notification system as part of facility planning and to submit the details to EPA for approval along with its facility plan submission.

The light system for the Anacostia River was included in DC Water's facility plan submission to EPA in September 2008 and approved by EPA on July 27, 2010. The lights on the Anacostia Tunnel system from Blue Plains to RFK Stadium (CSO 019) were placed in operation in March 2018. The lights on the Anacostia River are at the following locations:

- West side of Anacostia River, at CSO 019 upstream of the railroad bridge
- West side of Anacostia River, between Pennsylvania Avenue Bridge and railroad bridge
- West side of Anacostia River, at DC Water Floatable Debris Program Facility, between 11th Street Bridge and Pennsylvania Avenue Bridge
- An additional light was previously installed under a separate Consent Decree among the United States, DC Water and Earthjustice. That light is located at Main Pumping Station which is between the South Capitol Street and 11th Street Bridges. The light was raised as part of the Anacostia tunnel construction to make it more visible from the water given the recent construction of the pedestrian bridge in front of Main Pumping Station.

For the Potomac River, the lighting details will be included in the Facility Plan due to EPA by December 31, 2018 as required by the Amended Consent Decree.

For Rock Creek, the light details were included in the Program Plan for Green Infrastructure submitted to EPA on July 29, 2016 and approved by EPA on February 3, 2017.

b. Comment: The permit should establish a deadline for DC Water to relocate the Anacostia River warning light.

Response: See response to Comment 6. a., above. The light has already been raised.

c. Comment: EPA should require DC Water to implement additional public notification measures, given the limited efficacy of the warning light system for notifying the public when and where CSOs are discharging untreated sewage.

Response: See Response to Comment 6. a. above. The Permit does continue to include additional public notification requirements, see Permit Part III. B. 1.h. – including 1) warning signs at all CSO outfalls, 2) maintaining a website containing detailed specific information regarding CSOs, 3) providing information pamphlets semi-annually in water wills and 4) notification lights at boating locations

- The DC Water website includes a Google-map based application showing drainage areas, outfall location, streets, homes and business that are searchable by address along with other features. The following is a link to DC Water's web site with this application: http://www.arcgis.com/apps/webappviewer/index.html?id=7796821c5b6a4166b4eae7f17d915a78&extent=-8601958.9805,4694391.6523,-8546924.3202,4724737.1525,102100

7. Endangered Species

Comment: We urge EPA to complete consultation and revise and reissue the Draft Permit for additional public comment prior to making a final decision on the permit. The public should be given an opportunity to review and comment on the completed Endangered Species Act consultation, given the importance of assessing whether Blue Plains' discharges of bacteria and other pollutants will negatively impact Critical Habitat for Atlantic Sturgeon in the future.

Response: The required Endangered Species Act (ESA) consultations, which were ongoing at the time that the permit was public noticed, have now concluded. By letter dated September 18, 2017 the Fish and Wildlife Service of the United States Department of the Interior concluded that the permit is "not likely to adversely affect" any listed endangered, threatened or candidate species in the area. By letter dated December 19, 2017, the National Marine Fisheries Service of the National Oceanic and Atmospheric Administration within the United States Department of Commerce concurred with EPA's conclusion that the permit is not likely to adversely affect any ESA-listed species or designated critical habitat under its jurisdiction (this includes Atlantic Sturgeon).
The Fact Sheet has been updated to reflect that the consultations have been completed.

8. Definitions

Comment: It is unclear why the definition of "Long Term Control Plan" refers to the "recommended plan" dated July 2002, and "any supplements thereto," rather than specifying the final approved plan that is now in effect and that DC Water is legally obligated to implement. Draft Permit § I.A.16. Instead, the definition should specify that "Long Term Control Plan" means the LTCP that was incorporated into a Consent Decree entered by order of the U.S. District Court for the District of Columbia on March 23, 2005, as amended in the First Amendment to Consent Decree entered by order of the court on January 14, 2016.

Response: The definition in the NPDES permit is intended to account for any additional modifications to the LTCP that may occur in the future.

B. Comments Received from District of Columbia Water and Sewer Authority (DCWater). The following comments were received from Leonard R. Benson, Chief Engineer, Department of Wastewater Treatment, by letter dated September 29, 2017.

NPDES Permit:

1. National Historic Preservation Act

Comment: Page 24, Part II, A.16 indicates that EPA and DC SHPO are continuing to consult. We suggest changing this section to language that is compliant with law and regulation, has been used by the EPA in other NPDES permits, and which more accurately reflect the scope of the impact assessment made and the authority granted under the NPDES permit. Permits for soil disturbing or construction related activities will be obtained from the appropriate agency when needed but are not authorized by this permit.

"Under 40 CFR 122.49(b), EPA is required to assess the impact of the discharge authorized by the permit on any properties listed or eligible for listing in the National Register of Historic Places (NRHP) and mitigate any adverse effects when necessary in accordance with the National Historic Preservation Act, 16 U.S.C. 470 et seq. EPA's analysis indicates that no soil disturbing or construction-related activities are being authorized by approval of this permit; accordingly, adverse effects to resources on or eligible for inclusion in the NHRP are not anticipated as part of this permitted action ."

Response: The EPA consultation with the DC SHPO is complete. By letter dated June 6, 2018, the SHPO stated that it does not object to EPA's finding that the Permit will "not adversely effect" any historic properties.

2. Monitoring Reports:

Comment: Page 30, Part 11, D.4 (Third paragraph). suggest changing " ... and reductions attributed to green infrastructure projects." to" ... and reductions in plant flow attributed to green infrastructure projects." This will clarify the nature of the data to be reported.

Response: This change has been made in the final permit.

3. NMC Program

Comment: Page 37, Part III.B. l. a. VII. Change " Inspect all outfall structures annually" to "Inspect all outfall structures which have not been abandoned or separated annually". This will help clarify requirements given that the list of outfalls in the permit is a running list of both active, inactive and demolished outfalls.

Response: EPA has changed the language in the final permit to reflect the Permittee's suggested language, clarifying that the requirement applies only to all operating outfalls.

4. Phase I Post Construction Monitoring

Comment: Page 45, Part III.D.l. Phase I Post Construction monitoring has been completed and was submitted to EPA on August 12, 2016. Please indicate this has been completed in the Permit.

Response: The final permit language has been changed to reflect that Phase I monitoring has been completed.

5. Phase 2 Post Construction Monitoring

Comment: Page 47, Part III. D. 2. (3) 1st sentence. Since the monitoring plan has already been submitted, please change the following: "The permittee shall submit for EPA review and approval a performance assessment within 180 days of completion of the monitoring plan." to "The permittee shall submit for EPA review and approval a performance assessment within 180 days of completion of the monitoring ~~plan~~."

Response: The final permit includes the requested change.

6. Quarterly and Annual Reporting

Comment: Page 51, Part III.E.3 and 4. Please correct the spacing of the words in Section 3.e. and Section 4.c

Response: This correction has been made in the final permit.

7. Storm Water Management

Comment: Page 57, Part IV.D.1.c.2 Section I .a. General, indicates that the Storm Water Pollution Prevention Plan (SWPPP) was developed for this facility (Blue Plains) and the sewer system facilities. We suggest adding sewer system facilities to Section l .c.2 to be consistent with the General section as follows: " 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 or the sewer system facilities s from causing, or having a reasonable potential to cause or contribute to a violation of DC Water Quality Standards."

Response: The additional language has been added in the permit.

Fact Sheet Comments

8. Description of this Action

Comment: Page 2, Section 6. The last sentence notes that there are 56 CSO outfalls. On page 3, Section 7, third full paragraph, the number of outfalls in the 2010 Permit is listed correctly as 58, along with an explanation of changes to the outfall number due to separation. For consistence, suggest deleting the number "56" from Section 6 as follows:

"The permit authorizes the discharge from two outfalls located at the treatment plant and combined sewer overflow (CSO) outfalls located throughout the collection system, including a discharge from the Northeast Boundary Swirl Concentrator facility."

Response: The suggested change has been made and it has been noted that the Northeast Boundary Swirl Concentrator Facility has been taken out of service as of March 2018.

9. Facility Description

Comment: Page 3, Section 7. In the third complete paragraph on the page, the permit describes CSO 059 (Luzon valley) as separate and indicates it is authorized by the District's MS4 permit. Other CSO outfalls have also been separated and are part of the MS4 permit. Suggest deleting the reference to this outfall and the MS4 permit (let the 2 permits stand on their own).

Response: The reference to the outfall and the MS4 permit has been deleted.

10. Relevant Background and Permit History

Comment: Page 9, Section 9, 4th paragraph. This section refers to "improvements to excess flow treatment". Given the configuration of the tunnel system, suggest changing this to read "construction of a wet weather treatment facility".

Response: This change has been made in the fact sheet.

11. Relevant Background and Permit History

Comment: Page 9, Section 9, Footnote 6. The last sentence of the footnote states that the loads indicated has been assigned to Outfall 002 and 001. Since the allocations are different,

suggest clarifying that the load allocations in the footnote are those in the 2010 permit and not the proposed permit.

Response: This clarification has been made, in the last sentence of Footnote 6.

12. Permit Conditions, Monitoring Only Requirements

Comment: Page 15, Section 10.A., 2nd complete paragraph on the page. This paragraph addresses when the Swirl facility may be taken out of service. Suggest revising this language so it matches the permit for clarity as follows: "All the monitoring only requirements for Outfall 019 are being carried through until the Northeast Boundary Swirl Facility is taken out of service ~~with the completion of the tunnel system and WWTF~~ after the permittee certifies the Blue Plains Tunnel and Anacostia River Tunnel have been placed in operation in accordance with the CSO Long Term Control Plan Consent Decree.

Response: The Fact Sheet has been changed to reflect that the Northeast Boundary Swirl Concentrator Facility has been taken out of service. See, February 6, 2018 letter to EPA from DC Water and February 27, 2018 letter from EPA to DC Water reflecting this.

13. Permit Conditions, Outfall 001

Comment: Page 16, Section 10.A. 1st complete paragraph, 10th line. The sentence reads "The condition further requires that following implementation of the Monitoring Plan, the permittee shall submit for EPA review and approval a Performance Assessment containing the results and findings of the Monitoring Plan." Suggest changing this sentence as follows "The condition further requires that following ~~implementation~~ completion of the Monitoring ~~Plan~~, the permittee shall submit for EPA review and approval a Performance Assessment containing the results and findings of the Monitoring Plan."

Response: The change has been made in the Fact Sheet.

14. Post construction monitoring

Comment: Page 19, Section 10. B. 2. There appears to be a typographical error. Suggest correcting this text to read: "CSO 025 and 026 have been noted as to be separated and CSO 027, 028, 029 and 049 have been noted as being controlled by green infrastructure. Section D. Post Construction Monitoring ~~section Post Construction monitoring~~ to measure the effectiveness of the GI has been added."

Response: This typographical error has been corrected in the Fact Sheet.

C. Comments received from Government of the District of Columbia Department of Energy and Environment (DCDOEE) in a letter dated October 13, 2017.

1. Comment:

a) Fact Sheet Page 2. Section 7. Facility Description. "..re-rated design capacity of 384 million gallons per day.. ". Permit Page 5.Part 1. Effluent Limitations and Monitoring Requirements. Section A. Definitions. Item 3. Design Capacity. "..the Design Capacity of 384 MGD.

b) The 40 C.F.R. 122.44 (d)(1)(vii)(B) requires that water quality based effluent limits in NPDES permits that are issued, reissued, or modified after the TMDL approval date must be consistent with all the assumptions and requirements of the waste load allocations (WLAs). By proposing to change the design capacity of Blue Plains from 370 MGD to 384 MGD, will any of the approved TMDLs (e.g., the revised E.coli TMDL of 2014) be impacted pursuant to 40 C.F.R. 122.44 (d)(1)(vii)(B)?

c) The 2004 Bacteria TMDL, which was revised in 2014, allowed a total maximum daily load of 4.37E+14 MPN to Outfall #001 and 2.47E+I2 MPN to Outfall #002. The total maximum daily load to Outfall #002 was based on a 370 MGD design capacity. The draft permit explains that loads through Outfall #001 will be verified through post-construction monitoring (See page 15 of factsheet). However, the draft permit does not explain how the proposed increase from 370 MGD to 384 MGD will impact the total maximum daily load coming out of Outfall #002.
Please explain the basis for increasing the design capacity, as proposed in the draft permit.

Response: The basis for the change in the design capacity is explained in the draft Fact Sheet at Section 10. Permit Conditions, on page 11:

As part of this permit renewal, the quantity of captured stormwater flow that is a component of the sources that make up the design capacity of the Complete Treatment facilities has been quantified. DC Water has used the LTCP Combined Sewer System (CSS) wet weather model to estimate captured stormwater flow resulting from changes in the CSO system. Based on predictions from the LTCP CSS wet weather model it is anticipated that an additional 21 MGD of wet weather stormwater will be captured by the system in an average year of rainfall. Modeling results anticipated that on an annual average 14 MGD will be discharged from Outfall 002 receiving full treatment and 7 MGD will receive wet weather treatment. Therefore, 14 MGD has been added to the dry weather design capacity of 370 MGD for a total 384 MGD and the proposed permit applies recalculated permit limitations for Outfall 002 based on the new design capacity of 384 MGD.

The *E*. Coli requirements remain consistent with the assumptions and requirements of the bacteria TMDL.

2. Comment: Permit Page 24, Part II, Standard Conditions for NPDES Permits. Section A General Conditions. 15. Endangered Species. DOEE requests the contact for the DMR

submittal be changed to the following:

Department of Energy and Environment
Fisheries and Wildlife Division
1200 First Street NE, 5th floor
Washington, DC 20002
Attention: Associate Director

Response: This has been changed in the final permit.

3. **Comment:** Permit Page 25, Part II. Standard Conditions for NPDES Permits. Section B. Operation and Maintenance of Pollution and Controls. 2. Bypass of Treatment Facilities, b. Bypass not exceeding limitations. Since the proposed permit language exempts bypasses and upsets which do not exceed effluent limits from notification requirements, the language also exempts bypasses and upsets that flow through outfalls with no established effluent limits. DOEE recommends the exemption of notification requirements only apply to those bypasses and upsets that do not exceed established effluent limits and occur through an outfall for which effluent limits have been established. Any bypass or upset through an outfall with no established effluent limit must report according to c & d.

Response: The outfalls with no numerical effluent limits are Outfall 001, CSOs, and emergency relief outfalls on the separate sanitary system. For these outfalls, notice is already required in other sections of the permit as follows:

- Outfall 001
  - Notice of discharges is required by Part I. C., note 8.
- CSOs
  - Dry weather discharges are prohibited and notice is required by Part III.B.1.e.
  - Wet weather discharges are allowed and notice is therefore not required.
- Emergency relief outfalls on the separate sanitary system
  - Notice of discharges is required by Part III.A., note (2) at the bottom of the outfall table.

Because notice is already required for the outfalls with no numerical effluent limits, no change to the permit is required.

Also, to clarify, the permit language regarding "Bypass" is taken directly from the NPDES regulations at 40 C.F.R.§ 122.41(m). Discharges that occur prior to the headworks are not bypasses. Likewise, the "Upset" language in the permit is that which is in 40 C.F.R. §122.41(n), and an "Upset" occurs within the treatment plant.

EPA does not agree that the permit language controlling bypasses on permitted outfalls with effluent limits exempts other system unpermitted discharges.

4. **Comment:** Permit Page 28, Part II. Standard Conditions For NPDES Permits. Section C Monitoring and Records. Item 4. Reporting of Monitoring Results, b. Electronic Submissions. DOEE requests the contact for the copies of all other reports required by Part II. Section D. Reporting Requirements be changed to the following:

   Department of Energy and Environment
   Inspection and Enforcement Division
   1200 First Street NE, 5th Floor
   Washington, DC 20002
   Attn.: Associate Director

   Response: This change has been made in the final permit.

5. **Comment:** Permit Page 30, Part II. Standard Conditions For NPDES Permits. Section I). Reporting Requirements. Item 6. Twenty-four Hour Reporting. DOEE requests that reporting be provided to both EPA and DOEE. Send reports to DOEE at the following address:

   Department of Energy and Environment
   Inspection and Enforcement Division
   1200 First Street NE, 5th Floor
   Washington, DC 20002
   Attn.: Associate Director

   Response: This change has been made in the final permit.

6. **Comment:** Permit Page 31, Part II. Standard Conditions for NPDES Permits. Section D. Reporting Requirements. Item 6. Twenty Four Hour Reporting, a.b. DOEE recommends revising the language in both a and b, by deleting "...which exceeds any effluent limitation in the permit."

   Response: The only effluent limitations are those listed in the permit. Therefore, the draft permit language is appropriate and no change is required.

7. **Comment:** Permit Page 33, Part III. Combined Sewer System. Section A. General. The table lists 60 CSO outfalls. The permit factsheet (page 3), however, mentions that the 2010 permit had a total of 58 CSO outfalls and since that time that number is reduced to 47. Please update table with current number and location of outfalls.

   Response: DC Water's September 29, 2017 written comments on the draft permit included comment #8 which addressed the number and categorization of outfalls. See the response

to that comment, above. Also, it appears that DOEE is suggested deleting from the outfall table those outfalls which have been separated or abandoned. Past practice has been to keep a record of all outfalls, whether active or abandoned or separated, to prevent misunderstandings or errors and to document changes between permit cycles.

8. **Comment:** Permit Page 36, Part III. Combined Sewer System. Section B. Technology-Based CSS Requirements. 1. Nine Minimum Controls (NMC) Program, a.i. There are currently no defined requirements for the inspection plan. DOEE recommends that the plan be required to define the criteria of each inspection, the frequency of each inspection, the standard operating procedure of each inspection, and the guidelines for documenting and reporting each inspection.

   Response: Part II. Standard Conditions for NPDES Permits, Section B. Operation and Maintenance of Pollution Controls. Item 1. Proper Operation and Maintenance provides:

   The permittee shall at all times properly operate, inspect and maintain all facilities and systems of treatment and control (and related appurtenances, including but not limited to, 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.

   In addition, the Permittee has an approved Operation and Maintenance Plan, which specifies all of the procedures. Therefore, no change to the draft permit is necessary.

9. **Comment:** Permit Page 39, Part III. Combined Sewer System. Section B. Technology-Based CSS Requirements, l.f.viii. DOEE requests that materials also be made available to DOEE and DC charter schools.

   Response: This change has been made in the final permit.

10. **Comment**: Permit Page 49, Part III. Combined Sewer System, Section E. CSO Status Reports and Schedules. The format of the reporting does not allow for detailed inspection information to be reported. In paragraph 2, except for sub-paragraph a., reporting of conditions, including faults, deficiencies, malfunctions, etc. is not required. The reported conditions should be qualitative and not binary, i.e., good or bad.

    Response: The reports include identification of deficiencies that affect the performance of the facilities and the plan and schedule for repair to restore to service. Reports have been prepared using these permit conditions in this manner for more than 10 years. The reports are posted on DC Water's website here:

https://dcwater.com/publications?field_document_type_tid=47&field_document_sub_type_tid=50

11. **Comment:** Permit Page 55, Part IV. Special Conditions, Section B. Standard Sludge Conditions, 4. DOEE requests that reporting must be done to both EPA and DOEE. The DOEE address for reporting is:

    Department of Energy and Environment
    Inspection and Enforcement Division
    1200 First Street NE, 5th Floor
    Washington, DC 20002
    Attn.: Associate Director

    Response: This change has been made in the final permit.