Comments Received and Responses



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III 1650 Arch Street Philadelphia, Pennsylvania 19103-2029

Mr. Jeffrey Seltzer, Associate Director Water Quality Division District Department of Energy and Environment Natural Resources Administration Water Quality Division 1200 First St NE, 5th Floor Washington, D.C. 20002

MAR 19 2018

Dear Mr. Seltzer:

Thank you for providing the U.S. Environmental Protection Agency (EPA) the opportunity to provide comments on the District of Columbia's (DC) *Draft 2018 Integrated Report to the US Environmental Protection Agency and Congress Pursuant to Sections 305(b) and 303(d) Clean Water Act (P.L. 97-117).* EPA comments are outlined below by section in the Integrated Report (IR).

Point Source Program

EPA has a few clarification points on this section to be more consistent with our NPDES program.

- The first sentence of this section reads "Currently, EPA has issued site-specific industrial permits to 10 facilities in the District..." It would be more accurate to characterize these permits as "individual permits" rather than "site-specific industrial." Please modify.
- On Table 2.2, footnote ¥ reads "EPA has administratively extended the permit because the facility applied for permit renewal within the required time." EPA recommends that this language be changed to "EPA has administratively extended the permit per 40 CFR 122.6(a)(1)."
- On Table 2.2, footnote § reads "The facility stopped discharging process or waste water but has not formally submitted a Notice of Termination." According to EPA's records, PEPCo has not stopped discharging. Discharge Monitoring Report (DMR) data indicates that there are periods of 'no discharge,' however it is inaccurate to describe the facility as having stopped discharging. We recommend DOEE remove this footnote.

Category 4a

As of the 2018 listing cycle, the District identified new impairments for total suspended sediment (TSS) in Nash Run, Popes Branch, and Hickey Run. These impairments were placed in category 4a because the *Anacostia River Watershed for Sediments/Total Suspended Solids Montgomery and Prince George's Counties Maryland TMDL* references the Anacostia River and its tributaries. That TMDL was designed to meet water quality standards in the tidal Anacostia River and the non-tidal tributaries, expressly Northeast Branch, Northwest Branch, Lower Beaverdam Creek, and Watts Branch. Given the general reference to non-tidal tributaries and the inclusion of Nash Run, Popes Branch, and Hickey Run

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Printed on 100% recycled/recyclable paper with 100% post-consumer fiber and process chlorine free. Customer Service Hotline: 1-800-438-2474 in some of the TMDL modeling, it may be that implementation of that TMDL will achieve water quality standards in those upstream segments. That is not clear, however. Unless DOEE can demonstrate that implementation of the TMDL will achieve water quality standards in those upstream segments, we recommend those waterbodies be moved to category 5. This comment would apply to any waterbody that is impaired and is not specifically addressed by a TMDL.

Additionally, EPA recommends that DOEE update the "TMDL Establishment Date" for toxics waterbody/pollutant combinations that were revised in 2016.

Category 5

Based on the "2013-2017 Statistical Summary Report for Total Summary Report," the Upper Potomac River and Upper Rock Creek segments violate the turbidity criterion 21.57% and 21.15% of the time, respectively. Why were these waterbodies not included in categories 5 or 4?

Appendix - Long Term Trend Analysis

In the 'Exceedance Analysis for Metals' section of this appendix, DOEE evaluated copper, lead, and zinc data against the criterion maximum concentration (CMC) for each pollutant. Please explain if any waters had more than one exceedance in any three-year period for the 2016 IR period of record. The District's water quality standards regulations define CMC as "the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time (one-hour (1-hour) average) without deleterious effects at a frequency that does not exceed more than once every three (3) years." D.C. Mun. Regs. tit. 21 § 1199.1.

EPA looks forward to DOEE's final IR submittal through EPA's Assessment TMDL Tracking and Implementation System (ATTAINS) database. If you have any questions related to these comments or the ATTAINS database, please feel free to contact me or have your staff contact Bill Richardson at 215-814-5675, or Michelle Peck at 215-814-5192.

Sincerely,

Evelyn S. MacKnight

Evelyn S. MacKnight, Associate Director Office of Standards, Assessment, and TMDLs

Response to Comments on the District of Columbia's draft 2018 Integrated Report

The Department of Energy and Environment Water Quality Division (WQD) solicited comments on the first draft 2018 Integrated Report (IR) (Sections 303(d) and 305(b)) from February 16, through March 19, 2018. Following is a listing of the author(s) of the comments received. Copies of the comments received are attached.

Author(s)	Affiliation	Date of Submission
Evelyn MacKnight	EPA, Region 3	March 19, 2018

Response to Comments

		Con	nment Details	
#	Commenter (including affiliation) and comment date)	Subject	Comment Summary	Response
1	Evelyn McKnight, EPA Region 3 March 19, 2018	General Comment	The first sentence of this section reads "Currently, EPA has issued site-specific industrial permits to 10 facilities in the District". It would be more accurate to characterize these permits as "individual permits" rather than "site-specific industrial." Please modify.	As requested in the comment, the sentence has been revised to "Currently, there are ten (10) facilities in the District that have individual permits issued by EPA under the National Pollutant Discharge Elimination System (NPDES) program."
2	Evelyn McKnight, EPA Region 3 March 19, 2018	General Comment	On Table 2.2, footnote ¥ reads "EPA has administratively extended the permit because the facility applied for permit renewal within the required time." EPA recommends that this language be changed to "EPA has administratively extended the permit per 40 CFR 122.6(a)(I)."	As recommended by the comment, the language has been changed to "EPA has administratively extended the permit under 40 CFR 122.6(a)(1)."
3	Evelyn McKnight, EPA Region 3 March 19, 2018	General Comment	On Table 2.2, footnote § reads "The facility stopped discharging process or waste water but has not formally submitted a Notice of Termination." According to EPA's records, PEPCO has not stopped discharging. Discharge Monitoring Report (DMR) data indicates that there are periods of 'no discharge,' however it is inaccurate to describe the facility as having stopped discharging. We recommend DOEE remove this footnote.	As recommended by the comment, the footnote has been removed.
4	Evelyn McKnight, EPA Region 3 March 19, 2018	Listing and Methodology	Category 4a- As of the 2018 listing cycle, the District identified new impairments for total suspended sediment (TSS) in Nash Run, Popes Branch, and Hickey Run. These impairments were placed in category 4a because the <i>Anacostia River Watershed for Sediments/Total</i> <i>Suspended Solids Montgomery and Prince</i> <i>George's Counties Maryland TMDL</i> references the Anacostia River and its tributaries. That	Additional information on how existing TMDLs will achieve water quality standards in the referenced segments is provided in the Appendix following this table.

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			TMDL was designed to meet water quality standards in the tidal Anacostia River and the non-tidal tributaries, expressly ortheast Branch, orthwest Branch, Lower Beaverdam Creek, and Wans Branch. Given the general reference to non-tidal tributaries and the inclusion of Nash Run, Popes Branch, and Hickey Run in some of the TMDL modeling, it may be that implementation of that TMDL will achieve water quality standards in those upstream segments. That is not clear, however. Unless DOEE can demonstrate that implementation of the TMDL will achieve water quality standards in those upstream segments, we recommend those waterbodies be moved to category 5. This comment would apply to any waterbody that is impaired and is not specifically addressed by a TMDL.	
5	Evelyn McKnight, EPA Region 3 March 19, 2018	Listing and Methodology	Category 4a- EPA recommends that DOEE update the "TMDL Establishment Date" for toxics waterbody/pollutant combinations that were revised in 2016.	The 303(d) list has been updated to include the establishment dates for the latest revised TMDLs.
6	Evelyn McKnight, EPA Region 3 March 19, 2018	Listing and Methodology	Based on the "2013-2017 Statistical Summary Report" the Upper Potomac River and Upper Rock Creek segments violate the turbidity criterion 21.57% and 21.15% of the time, respectively. Why were these waterbodies not included in categories 5 or 4?	Turbidity is not a pollutant. As TMDLs are written for a pollutant, DOEE decided to substitute total suspended solids (TSS) as the pollutant of concern for the identified segments in acknowledgment of the percent violations and the need for a TMDL to address the criterion violation. The Upper Potomac River had been listed for TSS since 1998. The Upper Rock Creek is now listed for TSS in Category 5, on the draft 2018 303(d) list.

		Con	nment Details		
#	Commenter (including affiliation) and comment date)	Subject	Comment Summary	Response	
7	Evelyn McKnight, EPA Region 3 March 19, 2018	Listing and Methodology	In the 'Exceedance Analysis for Metals' section of this appendix, DOEE evaluated copper, lead, and zinc data against the criterion maximum concentration (CMC) for each pollutant. Please explain if any waters had more than one exceedance in any three-year period for the 2016 IR period of record. The District's water quality standards regulations define CMC as "the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time (one-hour (I-hour) average) without deleterious effects at a frequency that does not exceed more than once every three (3) years." D.C. Mun. Regs. tit. 21 § 1199.1.	The analytical results used in the Long Term Trend Analysis were examined for the number of exceedances in a three-year period. No more than one exceedance of any of the metals took place in the three year-period between 2014 and 2016, as required in the District water quality standards. In summary, there is no evidence from the analytical results that these metals are causing impairments.	

Appendix

The listing of Popes Branch, Nash Run, Hickey Run, Potomac River –segment 1, Potomac River- segment 2, Rock Creek-segment 2 for TSS in Category 4a is appropriate as the waterbodies are addressed by TMDLs and TMDL implementation plans.

The December 2010, Chesapeake Bay (CB) TMDL was developed to address water clarity (TSS), DO, and Chlorophyll-*a*. The TMDL is a combination of 92 smaller TMDL segments. The 92 segments are shown in Figure 1 from the 2017 Chesapeake Bay Water Quality Addendum.



Figure 1: 2017 Map of the Chesapeake Bay 92-segment scheme assessed in the Multi-metric

Water Quality Standards Indicator analysis.

https://www.chesapeakebay.net/documents/2017_Nov_ChesBayWQ_Criteria_Addendum_Final. pdf (see page 41).

The District of Columbia segments are shown at a higher resolution in Figure 2 below taken from the 2010 District of Columbia CB TMDL watershed implementation plan.



Figure 2: Chesapeake Bay Segments that are specific to the District of Columbia

https://doee.dc.gov/sites/default/files/dc/sites/ddoe/publication/attachments/Final_District_of_Co luimbia_WIP_Bay_TMDL.pdf (see page 3).

Popes Branch, Nash Run, Hickey Run, Potomac River – segment 1, Potomac River- segment 2 and Rock Creek-segment 2 are covered by the CB 2010 TMDL.

Furthermore, Popes Branch, Nash Run, and Hickey Run are also covered by the 2007 Sediment/TSS TMDL for the Anacostia River Basin (pg. 15, Anacostia River Sediment TMDL, June 2007). The TMDL was subsequently revised in 2012.

The TSS TMDL developed to achieve the tidal (water quality standard) WQS in the tidal Anacostia waters is also established at a level necessary to achieve applicable WQSs in the non-tidal waters. Tidal waters in the Anacostia River must meet numeric water clarity criteria for Secchi depth, while the non-tidal waters must meet a numeric criterion of no more than 20 NTU (turbidity) above ambient levels. Using the most environmentally conservative assumption that ambient levels are zero (0), the endpoint must meet 20 NTU. Details of how the TMDL also achieves water quality standards in the newly listed Anacostia tributaries follow.

First, it is important to recognize that baseline loads from each of the newly listed segments were estimated in the TMDL TAM/WASP model and considered in the final TMDL (Table 3-3 and Table 3-4 of the TMDL modeling report). All sources from the newly listed segments are covered in the TMDL. The final sediment TMDLs for both MD and DC tidal and non-tidal waters of the Anacostia River watershed constitute an 85% overall reduction of sediment/TSS from the baseline loads.

Second, Appendix E (finalized in 2012) demonstrates that the Secchi depth criterion used to develop the TMDL is more stringent than the turbidity criterion applicable to all D.C. waters. More specifically, Figure E-1 shows an analysis of the relationship between the daily average Secchi depth values and turbidity (NTU) values in the tidal Anacostia, based on DC water quality monitoring data from 1995-2002. The results show that a numeric turbidity value of approximately 10 NTU corresponds to a Secchi depth measure of 0.8 meters. This means that the allocations in the existing TMDL for the tidal Anacostia are established at levels that will achieve a more stringent standard in downstream waters than the WQS applicable to non-tidal waters.

Lastly, although Maryland's non-tidal waters have different WQS, it's useful for us to recognize that a supplemental analysis presented in Appendix C demonstrates that the TMDL will achieve narrative WQS in Maryland's non-tidal waters. The TMDL main report in Section 4.3.3, as well as Appendix C, explains how the final TMDL was deemed protective of MD's non-tidal waters by comparing reductions required by the final TMDL with reductions determined using a reference watershed approach, which addresses non-tidal WQS. The reductions required throughout the sub-watersheds by the final TMDL were more stringent than those estimated using a reference watershed approach to achieve non-tidal WQS. Page C6 of Appendix C shows those later reductions in tabular format.

As the December 2010, Chesapeake Bay (CB) TMDL was developed to address water clarity (TSS), DO and Chlorophyll-*a* for the 92 smaller TMDLs. Kingman Lake is covered by the CB TMDL for DO.

The District of Columbia actively implements these TMDLs via the Chesapeake Bay TMDLbased Watershed Implementation Plans (WIP). Both WIP I and WIP II have been submitted to EPA Region 3 through the Chesapeake Bay TMDLs program. These WIPs, including additional reduction initiatives, form part of the broader District's *Consolidated TMDLs Implementation Plan.* <u>https://dcstormwaterplan.org/wp-content/uploads/0_TMDL_IP_080316_Draft_updated.pdf</u>

Waterbody ID	Waterbody Name	River Basin	Cause (Pollutant)	Removed (R) or Recategorized (C)	Good Cause Justification
	Middle Potomac River- segment 2	Potomac	Total Suspended Solids (TSS)	C	The first time listing of the Middle Potomac River – segment 2 for TSS in 2018 in Category 4a instead of Category 5 is appropriate as the approved December 2010 Chesapeake Bay Total Maximum Daily Load for Nitrogen, Phosphorus and Sediment references the tidal Potomac River. The tidal Potomac River includes the District of Columbia. The model used to develop the TMDL was a watershed model. The model used inputs and water quality standards relevant to the Middle Potomac River – segment 2, as it was a source of loads to the watershed.
Potomac River	Lower Potomac River- segment 1	Potomac	Total Suspended Solids	С	The first time listing of the Lower Potomac River – segment 1 for TSS in 2018 in Category 4a instead of Category 5 is appropriate as the approved December 2010 Chesapeake Bay Total Maximum Daily Load for Nitrogen, Phosphorus and Sediment references the tidal Potomac River. The tidal Potomac River includes the District of Columbia. The model used to develop the TMDL was a watershed model. The model used inputs and water quality standards relevant to the Lower Potomac River – segment 1, as it was a source of loads to the watershed.
Anacostia River Tributaries	Hickey Run	Anacostia	Total Suspended Solids	С	The first time listing of Hickey Run for TSS in 2018 in Category 4a instead of Category 5 is appropriate as the approved July 2012 approved Anacostia River Watershed for Sediments/Total Suspended Solids Montgomery and Prince George's Counties Maryland TMDL references the Anacostia River and its tributaries. Hickey Run is a tributary to the Anacostia River in the District of Columbia. The model used inputs and water quality standards relevant to Hickey Run, as it was a source of loads to the watershed.
	Nash Run	Anacostia	Total Suspended Solids	С	The first time listing of Nash Run for TSS in 2018 in Category 4a instead of Category 5 is appropriate as the approved July 2012 approved Anacostia River Watershed for Sediments/Total Suspended Solids Montgomery and Prince George's Counties Maryland TMDL references the

Waterbody ID	Waterbody Name	River Basin	Cause (Pollutant)	Removed (R) or Recategorized (C)	Good Cause Justification
					Anacostia River and its tributaries. Nash Run is a tributary to the Anacostia River in the District of Columbia. The model used inputs and water quality standards relevant to Nash Run, as it was a source of loads to the watershed.
	Popes Branch	Anacostia	Total Suspended Solids	С	The first time listing of Popes Branch for TSS in 2018 in Category 4a instead of Category 5 is appropriate as the approved July 2012 approved Anacostia River Watershed for Sediments/Total Suspended Solids Montgomery and Prince George's Counties Maryland TMDL references the Anacostia River and its tributaries. Popes Branch is a tributary to the Anacostia River in the District of Columbia. The model used inputs and water quality standards relevant to Popes Branch, as it was a source of loads to the watershed.
Anacostia River Tributary	Kingman Lake	Anacostia	Dissolved Oxygen	С	The first time listing of Kingman Lake for DO in 2018 in Category 4a instead of Category 5 is appropriate as the approved December 2010 approved Chesapeake Bay Total Maximum Daily Load for Nitrogen, Phosphorus and Sediment references the Anacostia River watershed. Kingman Lake is in the Anacostia River watershed, a tributary to the Potomac River and Chesapeake Bay watershed in the District of Columbia. The model used inputs and water quality standards relevant to Kingman Lake, as it was a source of loads to the watershed.