FACT SHEET

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
Four Penn Center
1600 John F. Kennedy Boulevard

NPDES Permit No. DC0000345

The United States Environmental Protection Agency (EPA) is Proposing the Reissuance of a National Pollutant Discharge Elimination System (NPDES) Permit to Discharge Pollutants Pursuant to the Provisions of the Clean Water Act (CWA) For:

National World War II Memorial
17th Street and Independence Avenue, S.W.
Washington, D.C. 20024

RECEIVING WATER:
Tidal Basin: An impoundment bordering the Middle Potomac River and the Washington Ship Channel

Notice of Permit Reissuance

The U.S. Environmental Protection Agency, Region 3 (EPA) has made a decision to reissue the NPDES permit to the National Parks Service for the World War II Memorial subject to certain effluent discharge limitations, monitoring requirements, and other terms and conditions identified in the permit. The permit requirements are based on Section 402 of the Clean Water Act (33 U.S.C. 1342), and NPDES regulations found at 40 CFR Parts 122, 124, 125, 127, and 131.

EPA published a draft permit for this facility for public notice and comment on September 29, 2023 and accepted comments until October 30, 2023, in accordance with 40 CFR § 124.20(c), because October 28, 2023 fell on a weekend. EPA also notified persons and organizations in the District of Columbia who are known to be interested in NPDES permitting matters. EPA received no public comments during or after the public comment period.

In accordance with Clean Water Act (CWA) Section 401(a)(1), EPA requested certification from the District of Columbia that the NPDES permit (DC0000345) will comply with applicable water quality standards. On July 05, 2023, the District of Columbia provided to EPA a CWA Section 401 Certification of NPDES Permit No. DC0000345 and is included in the permit's administrative record. The conditions contained in the District's 401 certification are incorporated into the permit in Part III Section D. Additionally, in accordance with CWA 401(a)(2), EPA notified both Maryland and Virginia of this NPDES permitted discharge, as the water quality of those states could potentially be impacted by this discharge. Neither Maryland nor Virginia responded to EPA's notification letters.

For additional information, please email the permit writer, Shana Stephens at shana.stephens@epa.gov or call 215-814-2771.

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1.0 Summary of Changes Made

This portion of the Fact Sheet for the Final Permit provides an overview of the changes from the prior permit. This list is not intended to be exhaustive. The reference in parentheses after each bullet is the subsection of the permit where the information can be found.

- Added language to clarify requirements for reporting non-detect data on discharge monitoring reports (DMRs) including the use of NODI codes (Part I.C.2)
- Included new *E. coli* and iron effluent limits as well as a special condition for a compliance schedule to meet these new limits. (Part III, section A).
- Included a special condition for the monitoring for arsenic and manganese (Part III, section B), since they are both anticipated to be in the discharge and were not monitored last permit term.
- The flow reported on the DMR was changed from Million Gallons per Day (mgd) to Gallons Per Day (gpd) to match the scale of the facility (Part I, Section B, endnote #4).
- Monthly monitoring for total nitrogen (TN) and total phosphorus (TP) was removed because the intent of this monitoring was to determine whether the facility has demonstrated their discharge is consistent with the Chesapeake Bay TMDL aggregate wasteload allocation for TN and TP. The data over the last permit term show that the discharges are consistent with the aggregate wasteload allocation of the Bay TMDL. A special condition was added in Part III Section C of the permit requiring the Permittee to submit sampling data for TN and TP with their next application to confirm consistency with the Bay TMDL assumptions for nonsignificant dischargers.

2.0 Facility Summary

2.1 Site Description

The World War II Memorial ("WWII Memorial" or "Memorial") was dedicated to the public in 2004 to commemorate and honor all who served in the armed forces in the United States during World War II. The site, currently managed by the National Mall and Memorial Parks, a unit of the U.S. National Park Service ("Permittee"), is approximately 8.5 acres in the National Mall area of Washington, D.C.

The main plaza area consists of two pools and their accompanying fountains. The Rainbow Pool is the larger of the two pools and holds approximately 320,000 gallons of water. The smaller Ceremonial Pool holds approximately 50,000 gallons of water and both are operated by a circulating pump housed underground in a concrete enclosed vault. The site also includes pedestrian walkways, vehicle parking, vehicular maintenance access areas, a comfort station, and an information center.

Stormwater collected on the site is diverted to an underground drainage system located beneath the Memorial. This drainage system also captures groundwater, pool flushings, and filter backwash. The pool waters are circulated through a filter chamber to capture solids and other constituents. Pool flushings and filter backwash is combined with groundwater and stormwater collected underground. The stormwater, groundwater, and pool flushings collected from the Memorial is then diverted to an

underground wet well located beneath the main plaza prior to discharging to Outfall 001. The WWII Memorial is emptied annually for winterization and maintenance.

There is a lower level of the main plaza where the water is collected and conveyed to the outfall. Since the lower level of the Main Plaza is built a few feet below the groundwater table an underground low-permeability wall was built to divert and collect groundwater beneath the Memorial to prevent groundwater intrusion.

2.2 Discharge Description and Outfall Location

The World War II Memorial discharge is composed of a mixture of stormwater, uncontaminated groundwater, and intermittent discharges of filter backwash and pool flushings. A pump station with a wet well located in the south vault of the underground drainage system will collect and convey the combined discharge to the receiving waters of the Tidal Basin through Outfall 001.

Stormwater that accumulates on the main plaza of the Memorial from rain events drains to an oil/grit separator and then to a three-chamber sedimentation basin where it is combined with any groundwater and pool flushings before discharging through Outfall 001. Pool water is circulated through a filter chamber to capture solids and other pollutants. The discharge and outfall location are unchanged since EPA issued the 2018 permit.

Table 1. Geographic location and description of outfalls

Outfall No.	**Latitude**			**Longitude**			**Basin Area (Acres)**	**Receiving Water**	**Description**
	Deg	Min	Sec	Deg	Min	Sec			
001	38	53	27	77	02	41	8.5	Tidal Basin	Drainage Basin 001 encompasses 8.5 acres the entire drainage of Installation.

Outfall 001 is depicted on the map in Figure 1 below.

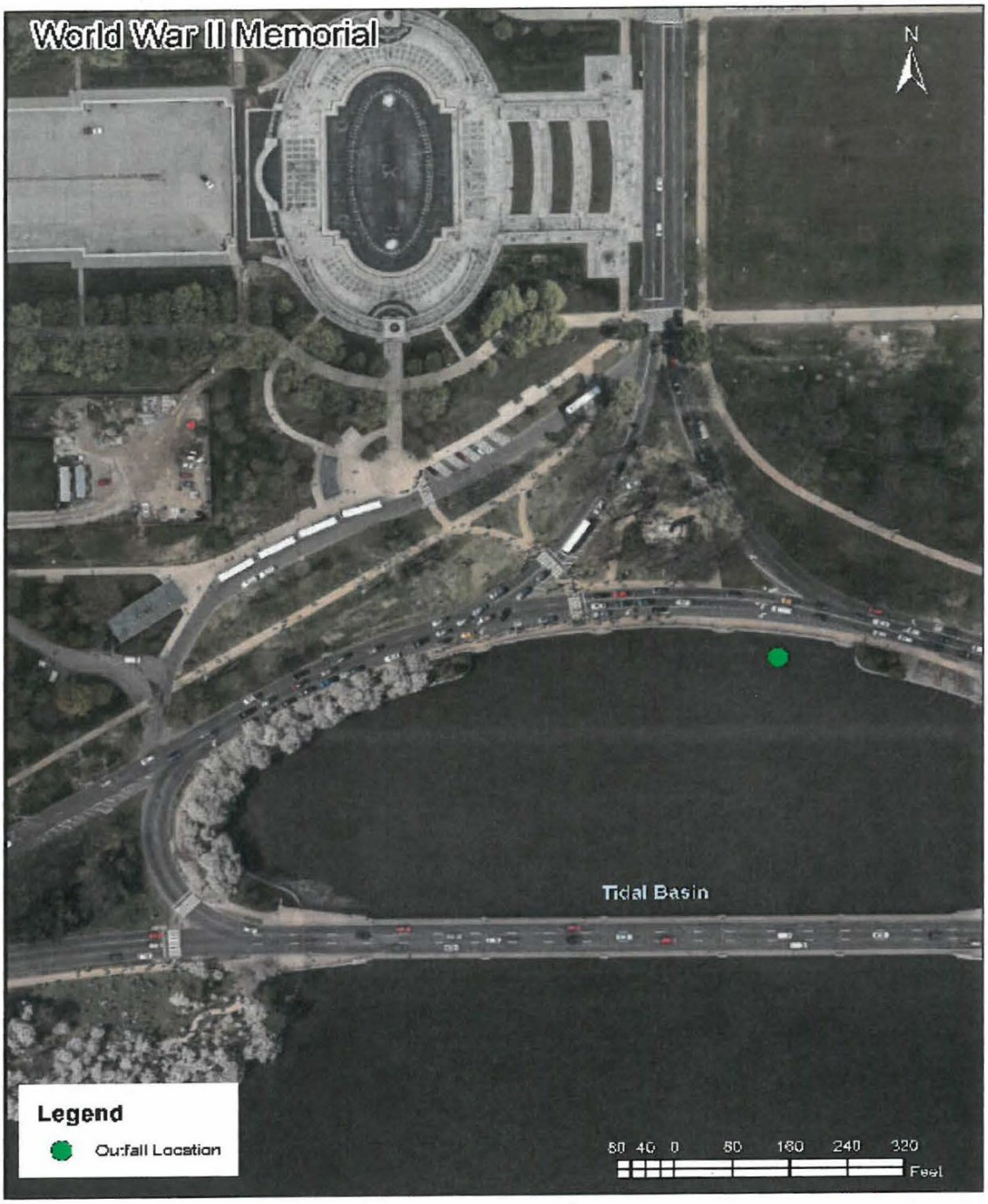

Figure 1. Location of World War II Memorial outfall. Figure borrowed from Form 1 of the revised Permit Application.

The permit contains new monitoring requirements and effluent limits for the outfall. These new requirements are based on the outcome of the reasonable potential (RP) analysis and the assumptions and requirements of applicable Total Maximum Daily Loads (TMDLs). The TMDLs and the RP analysis are discussed in more detail in Sections 3.0 and 4.0, respectively.

3.0 Receiving Water Characterization

The Permittee discharges to the Tidal Basin which mixes with to the Washington Ship Channel which then discharges to the Potomac River.

3.1 Designated Uses

Table 2 below describes the designated uses for the receiving water at the Outfall.

Table 2. Classification of Receiving Waterbody

OUTFALL NO.	RECEIVING WATER	DESIGNATED USES
001	**Tidal Basin**	**A, B, C, D, E**

Classifications of the District's Waters, Defined:
Class A – Primary Contact Recreation
Class B – Secondary Contact Recreation
Class C – Protection and propagation fish, shellfish and wildlife
Class D – Protection of human health related to consumption of fish and shellfish
Class E – Navigation

3.2 303(d) Status of the Tidal Basin

The Tidal Basin is impaired, *i.e.,* not achieving applicable water quality standards, for various pollutants. The District developed and EPA has approved Total Maximum Daily Loads (TMDLs) to address these pollutants. The applicable TMDLs are discussed in the next section.

3.3 Total Maximum Daily Loads (TMDLs)

According to 40 C.F.R. § 122.44 (d)(1)(vii)(B), the effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, must be consistent with the assumptions and requirements of any available wasteload allocation for the discharge in a TMDL established or approved by EPA pursuant to 40 C.F.R. § 130.7. The table below lists the applicable TMDLs for the Tidal Basin. Copies of these TMDLs may be found at: https://doee.dc.gov/service/total-maximum-daily-load-tmdl-documents.

Table 3. Applicable TMDLs at the WWII Memorial.

TMDL	Pollutants
Potomac Watershed TMDLs	• Fecal Coliform/*E. coli*, approved 2004, revised 2013 • Organics TMDLs (2004) • pH 2004
Chesapeake Bay TMDL (established 2010)	• Total Nitrogen (TN) • Total Phosphorus (TP) • TSS that address Dissolved Oxygen (DO), pH, Chlorophyll *a* impairments

The World War II Memorial discharges to the Tidal Basin, which eventually mixes with the Washington Ship Channel and ultimately the Potomac River. There are TMDLs for each of the three waterbodies affected by this discharge. Additionally, this discharge occurs within the Chesapeake Bay watershed and therefore affected by the Chesapeake Bay TMDL. The Bay TMDL is addressed separately below. In addition to the Bay TMDL, EPA has approved or established TMDLs for the following pollutants in the Tidal Basin which are discussed in more detail below:

- *E. coli* (approved December 2004, revised July 2014)
- Total PCBs (approved December 2004)
- Organics (approved 2004)
- pH (approved December 2010)

3.3.1 Bacteria in Tidal Basin and Washington Ship Channel TMDL (approved 2004, revised 2013)

According to the District's Clean Water Act Sections 305(b) and 303(d) Water Quality Assessment 2020 Integrated Report, the Tidal Basin is impaired for and has a TMDL for *E. coli*. The point sources considered in the bacteria TMDL are discharges from Municipal Separate Storm Sewer Systems (MS4) and Waterfowl. The Permittee is not considered a point source in the TMDL, however, there is a history of *E. coli* exceeding the District's water quality criteria and the reasonable potential analysis found there is a reasonable potential to cause or contribute to an exceedance of *E. coli* in the Tidal Basin. As a result, limits were imposed in the permit.

The Permittee conducted a preliminary investigation over the previous permit term and sampled various areas at the site during different times of the year. The sampling revealed that the outfall is impacted by fecal pollution to varying degrees. The Permittee's sampling data are provided in Attachment B, however, results from the sampling were never investigated further and mitigation practices were not fully established over the previous permit term.

3.3.2 TMDL for Organics in Tidal Basin and Washington Ship Channel (approved 2004)

The Tidal Basin and the Washington Ship Channel are listed on DC's 303(d) lists for organics[1] impairment. Sources include direct runoffs from parklands occurring along the Tidal Basin and Ship Channel flanking the water bodies as well as the MS4's discharge. Therefore, during wet weather events, there is a combination of direct storm water runoff and storm water being carried by pipes to the waterbodies. Organics are not pollutants of concern for this facility and therefore not believed to be present in the discharge.

3.3.3 Washington Ship Channel pH TMDL (established 2004)

Since the Tidal Basin flows to the Washington Ship Channel, the TMDL for pH in the Washington Ship Channel was considered for this discharge. Impairment is attributed to discharges from the combined sewer system and the separate storm sewer system. Page 6 of the TMDL states "the goal of the TMDL is to achieve a pH concentration that allows for meeting of water quality standards." Monitoring requirements for pH are included in this permit renewal to maintain consistency with the District's water quality standard and to ensure the discharge does not contribute to the existing pH impairment in the Tidal Basin.

3.3.4 PCBs TMDL

There is no wasteload allocation assigned to this facility. Additionally, PCB is not a parameter of concern for the WWII Memorial, therefore, monitoring for PCBs will not be required in this permit.

3.3.5 pH

In the Tidal Basin and Middle Potomac River TMDL, pH impairment is attributed to discharges from the combined sewer system and the separate storm sewer system. Monitoring requirements for pH are included in this permit renewal to maintain consistency with the District's water quality standard and to ensure the discharge does not contribute to the existing pH impairment in the Tidal Basin.

3.3.6 The 2010 Chesapeake Bay TMDL (established 2010)

EPA established the Chesapeake Bay TMDL for nitrogen, phosphorus, and sediment (Bay TMDL) in 2010 as a result of significant involvement and investment by the Chesapeake Bay Program (CBP) partnership. See EPA's website for more information on the development of the Bay TMDL: https://www.epa.gov/chesapeake-bay-tmdl/chesapeake-bay-tmdl-document. The Bay TMDL identified 478 individual wasteload allocations (WLAs) for significant wastewater facilities across the 92 river segments and identified aggregate WLAs for non-significant wastewater facilities. The CBP partners, including the District, have been implementing the Bay TMDL since 2010; most recently, the Bay states

[1] Organics TMDLs include Chlordane, DDD, DDE, DDT, Dieldrin, Heptachlor Epoxide, PAHs, and PCBs.

developed Phase III Watershed Implementation Plans (WIPs) to provide further information on how they intend to continue implementing the Bay TMDL.[2]

The District's 2019 Phase III Watershed Implementation Plan (WIP)

The District's Phase III WIP, which was finalized in 2019, describes the District's strategy for continuing to reduce nitrogen, phosphorus, and sediment in the Chesapeake Bay. The District's Phase III WIP guides the District's continued implementation of the Bay TMDL and outlines the various pollutant reduction strategies the District plans to implement to meet planning targets. These planning targets were calculated by EPA and agreed to by the CBP partnership. As part of its Phase III WIP, the District developed local planning goals for various source sectors, including individually permitted wastewater point sources.

Chapter 6 of the District's Phase III WIP includes planning goals for individually permitted municipal and industrial facilities. The planning goals for these facilities are based on existing permit limits at the time of WIP development and DMR data for the specific progress reporting period of July 2017 through June 2018. These data were used as inputs to the Chesapeake Assessment Scenario Tool[3] (CAST), which is a CBP partnership load estimator tool that provides estimates of load reductions for sources such as wastewater. States, federal agencies, and local governments use the results from CAST to identify which pollutant reduction strategies provide the greatest reduction in TN, TP, and TSS loads and to determine if WLAs are being met. District's Department of Energy and Environment (DOEE) used CAST to estimate load reductions and set planning goals for the nonsignificant permitted facilities in the District. See Table 6-5 of the District's Phase III WIP.

In an effort to better understand how the District's Phase III WIP planning goals for the nonsignificant permitted facilities are intended to implement the Bay TMDL aggregate WLAs, EPA Region 3 consulted with DOEE and the Chesapeake Bay Program Office. After several discussions, EPA Region 3 understands that the planning goals for the facilities listed in Table 6-5 of the District's Phase III WIP are not intended to be incorporated into NPDES permits as effluent limits. The District's Phase III WIP and the WLAs of the Bay TMDL both have the ultimate goal of reducing pollutant loadings into the Bay by 2025.

Nonsignificant Dischargers and the Bay TMDL

The Chesapeake Bay TMDL categorizes the National World War II Memorial as a non-significant industrial discharger and includes this facility in the aggregate wasteload allocations for Total Nitrogen (TN), Total Phosphorus (TP), and Total Suspended Solids (TSS). For facilities included within an aggregate WLA, the TMDL assumes permitting authorities will explain in the permit fact sheet that the limits assigned to the individual facility are included as part of the aggregate TMDL WLA (Section 8.3.3 of the Bay TMDL). Moreover, the TMDL expects these facilities to provide, at minimum, TN, TP, and TSS monitoring data to verify the loads do not contribute to any exceedance of the individual or aggregate WLA. The National World War II Memorial is one of four nonsignificant permits listed under the

[2] As described on EPA's website https://www.epa.gov/chesapeake-bay-tmdl/chesapeake-bay-watershed-implementation-plans-wips, the Watershed Implementation Plans are the roadmap for how the Bay jurisdictions, in partnership with federal and local governments, will achieve the Bay TMDL allocations.

[3] For more information about CAST visit https://cast.chesapeakebay.net/about.

aggregate for its associated stream segment. Table 4 below contains relevant information extracted from the Appendix Q spreadsheet of the Bay TMDL.

TN and TP

The Bay TMDL expects that renewed NPDES permits will require monitoring of TN, TP, and TSS to verify existing loads are consistent with the assumptions of the aggregate WLAs. As a result, the 2018 permit required sampling of TN, TP, and TSS. The sampling results over the last permit cycle show that the TN and TP discharged from the facility is consistent with the assumptions and requirements of the aggregate wasteload allocation for nonsignificant dischargers in the Bay TMDL. As such, monitoring for TN and TP is no longer required during the permit term, however, the special condition in Part III.C was imposed in the permit requiring the Permittee to submit TN and TP data with the next permit reissuance application to ensure the discharges continue to be consistent with the Chesapeake Bay TMDL aggregate wasteload allocation.

TSS

Section 4.5.2 of the Bay TMDL *Sources of Nitrogen, Phosphorus, and Sediment To The Chesapeake Bay – Industrial Discharge Facilities* states that discharges from industrial facilities represent a *de minimis* source of sediment. The aggregate WLA for sediment was established based on the TSS effluent limits for each facility included in the aggregate. At the time the Bay TMDL was approved, the WWII Memorial had an existing TSS effluent limit of 30 mg/L. Therefore, a monthly average limit of 30 mg/L of TSS must not be exceeded for the WWII Memorial's discharge to be consistent with the TMDL. A 30 mg/L effluent limit for TSS is maintained in the permit to meet the aggregate WLA assumptions of the TMDL for sediment.

Table 4. Excerpt from Appendix Q of the Chesapeake Bay TMDL.

Row number	Facility	NPDES	EOS[4] TN WLA (lbs/yr)	DEL[5] TN WLA (lbs/yr)	EOS TP WLA (lbs/yr)	DEL TP WLA (lbs/yr)	EOS TSS WLA (lbs/yr)	DEL TSS WLA (lbs/yr)
4	**Aggregate**	**See Permit Numbers Below**	**3,298.07**	**3,285.41**	**613.56**	**594.56**	**34,167.35**	**34,190.00**
5	GSA - (WEST HEATING PLANT)	DC0000035						
6	NULL (WWII Memorial)	DC0000345						
7	Pepco-Benning	DC0000094						
8	Washington Navy Yard	DC0000141						

[4] Edge of Stream load is the amount of a pollutant reaching a simulated stream segment from a point in that stream's watershed. (Section 11 of the Bay TMDL)

[5] Delivered load is the amount of a pollutant delivered to the tidal waters of the Chesapeake Bay or its tidal tributaries from an upstream point of discharge/runoff after accounting for permanent reductions in pollutant loads due to natural in-stream processes in nontidal rivers.

4.0 Basis for Effluent Limitations

In general, the Clean Water Act (Act) requires compliance with all applicable statutory and regulatory requirements, including effluent limitations based on the capabilities of technologies available to control pollutants (i.e., technology-based effluent limits) and limitations that are protective of the water quality standards of the receiving water (i.e., water quality-based effluent limits). Typically, technology-based effluent limitations or TBELs are developed for all applicable pollutants of concern (40 C.F.R § 122.44(a)). Technology-based treatment requirements represent the minimum level of control that must be imposed under Sections 301(b) and 402 of the Clean Water Act.

4.1 Technology Based Effluent Limitations (TBELs)

Federal regulations at 40 C.F.R. § 122.44(a) and § 125.3 require that permits include conditions requiring dischargers to meet applicable TBELS. Where, as is the case with the World War II Memorial, EPA has not promulgated effluent limitation guidelines (ELGs) for an industry, permit limitations may be based on best professional judgment (BPJ). (40 C.F.R. § 125.3(c)). The TBELs in this permit are expressed as non-numeric pollution prevention requirements for minimizing pollutants in the discharge. These non-numeric pollution prevention requirements are included in the facility's Storm Water Pollution Prevention Plan or SWPPP. The permit requires the facility to update and maintain their SWPPP to reduce or prevent the discharge of pollutants in the stormwater component of their discharge. The facility's SWPPP is included in the permit's administrative record.

4.2 Water Quality Based Effluent Limitations (WQBELs)

Water quality-based effluent limitations, or WQBELs, are developed where TBELs are not adequate to meet water quality standards in the receiving water (§122.44(d)). 40 C.F.R. § 122.44(d)(1)(i) requires limitations to be established in permits to control all pollutants or pollutant parameters that are or may be discharged at a level that *cause*, have the *reasonable potential (RP) to cause*, or *contribute* to an excursion above any state water quality standard (WQS), including state narrative water quality criteria. The WQBELs in this permit will be as stringent as necessary to achieve applicable water quality standards. EPA assessed the reasonable potential (RP) for the discharge from this facility to cause, have the RP to cause, or contribute to an exceedance of the District's applicable WQS. EPA used the *Technical Support Document for Water Quality-based Toxics Control* (TSD) approach to conduct that analysis.

5.0 Reasonable Potential (RP) Analysis

A reasonable potential analysis was conducted using DMR data and data submitted with the permit application to determine if the discharge shows the potential to exceed in-stream water quality criteria. 40 C.F.R § 122.44(d)(1)(iii) requires effluent limitations be established in permits when it is determined that a discharge will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard, including narrative criteria. Procedures in the TSD were used in the RP analysis and the spreadsheet detailing the calculations can be found in Appendix A of this fact sheet. The data used for the RP analysis is available in the permit record. For pollutants in which the RP analysis shows the potential to cause or contribute to an exceedance of in-stream water quality values, water quality-based effluent numbers must be calculated as required at 40 C.F.R. § 122.44(d).

5.1 Parameters of Concern

The Permittee has one active outfall discharging to the Tidal Basin. The parameters of concern for this facility are *E. coli*, iron, chlorine, TN, TP, oil and grease, pH, and TSS. A parameter of concern is defined as a pollutant with quantifiable values reported to EPA. A parameter is considered a candidate for the RP analysis when the reported quantifiable values are at or above water quality criteria after accounting for variability[6]. This is achieved by applying a multiplying factor to the parameter's highest value. If the parameter's highest value does not exceed the water quality criterion after applying the multiplying factor, then that parameter does not continue with the RP analysis to completion. The step-by-step approach to the RP analysis can be found in the RP spreadsheet which is in Appendix A of this fact sheet.

5.2 Dilution Factors

A calculated dilution factor of 4.2 for Outfall 001 was applied to these discharges based on the nature of the flows of the tidal basin and effluent. EPA followed a conservative approach to the calculation by using 1/3 of the flow of the tidal basin[7]

The dilution factors affect the outcome of the RP analysis and the calculation of water quality based effluent limits (WQBELs). The dilution factor was calculated by dividing 1/instream waste concentration.

Instream Waste Concentration (IWC) calculation is:

IWC = Maximum effluent flow/(stream flow + maximum effluent flow)*100
IWC = 0.148mgd/(61.5mgd+0.148mgd)*100 = 0.24066

Dilution factor: 1/0.24066 = **4.2**

Effluent flows:

Outfall Number	Average (cfs)	Max (CFS)	Average (mgd)	Max (mgd)	Dilution Factor
001	0.072234823	0.229529473	0.047	0.148	4.2

Tidal Basin flows:

Tidal Basin	Condition	Receiving Water Flow	Allowable % of river flow	1/3 stream	instream waste concentration (%)
Whole river at 7Q10 (mgd)	7Q10	186.373346	33.00%	**61.5**	**0.2406600323**

[6] EPA requested that the Permittee provide monitoring data for arsenic because the World War II Memorial has treatment systems to reduce the presence of arsenic in the discharge; however, the Permittee did not use a sufficiently sensitive method to determine whether the pollutant can be quantified at or below the WQS. As a result, monitoring for arsenic was imposed in the permit to determine whether the treatment system is functioning properly and meeting water quality standards for arsenic.

[7] This approach was based on Chapter 21 section 1105.7(f) of the District's Water Quality Standards regulations which does not allow a discharge's mixing zone to occupy more than one third (1/3) of the width of the waterway.

For more information on the dilution factor calculations, see the reasonable potential spreadsheet that is included in the permit's administrative record.

5.3 Outcome of Reasonable Potential Analysis

The following table sets out the outcome of the Reasonable Potential Analysis by Outfall and Parameter. "X" indicates that EPA found reasonable potential.

Table 10. Outcome of the RP analysis at outfall 001 at the World War II Memorial.

	E. coli	**TRC**	**Iron**	**pH**	**Arsenic**	**Oil & Grease**	**TSS, TN, TP**
001	X	N/A	X	N/A	N/A		N/A

5.4 Justification for water quality-based effluent limitations

E. coli

DMR data and the *E. coli* data submitted with the application were evaluated and indicate a reasonable protentional to cause or contribute to an exceedance of the District's water quality standard of 126 MPN/100 mL for *E. coli*[8] (as a concentration). As such, the permit contains new limits for *E. coli* at Outfall 001 based on the results of the RP analysis.

Because the WWII Memorial discharge is an intermittent comingled stormwater discharge, a best management practice (BMP) approach was used in the previous permit in accordance with 40 CFR §122.44(k) in lieu of imposing a WQBEL to address the presence of *E. coli* in the discharge. The Permittee was also required to monitoring for *E. coli* throughout the permit term and complete a source tracking study to determine the source of *E. coli*. They were also required to submit a plan of action that they would take to mitigate or eliminate the source(s) of *E. coli* in the discharge. The Permittee submitted sampling data to EPA and identified some notable events associated with the sampling data that may explain the exceedances, but EPA received no plan of action. Due to covid restrictions and staff turnover, the Permittee had difficulty consistently implementing BMPs to mitigate or eliminate the sources of bacteria in the discharge resulting in periodic exceedances of the district's water quality standard for *E. coli*. The data submitted continued to show elevated levels of *E. coli* and it does not appear as though the NPS has developed or fully implemented a plan of action to the extent that elevated levels of *E. coli* have been mitigated. As a result, final effluent limit of 126 MPN/100 mL was imposed in the permit expressed as a concentration.[8]

The limit for *E. coli* is new and the DMR data show the Permittee will not be able to immediately meet these limits at these outfalls. The Permittee will need time to evaluate options for treatment/mitigation and implement the chosen treatment system if applicable in order to meet the effluent limitation. Per 40 C.F.R § 122.47 and the District of Columbia's Municipal Regulations at Title 21 Section 21-1105.9 a

[8] The District's water quality standard for *E. coli* is 126 MPN/100 mL expressed as geometric mean, however, the World War II Memorial discharge is an intermittent discharge making it challenging to meet the requirements needed to calculate a geometric mean. As a result, the limit is expressed as a concentration, not a geometric mean.

compliance schedule was included in the permit to allow time for the Permittee to come into compliance with the new limits. See section 5.2 below for the compliance schedule rationale and documentation of "as soon as possible" consistent with 40 C.F.R. § 122.47(a)(1).

Iron

The 2010 permit included a special condition requiring the Permittee to complete and submit to EPA an iron study which assessed, evaluated, and recommended a course of action for addressing the elevated iron levels in its discharge. The study was completed within the required time frame and concluded that the primary source of elevated iron levels was groundwater infiltration through cracks in the slurry wall around the Storm Vault. The study recommended sealing the leaks near the pipe openings. A site visit in November 2015 indicated the slurry wall was currently undergoing repairs; in March 2016 the National Park Service confirmed the repair was completed. The DMR data and sampling data submitted with the 2023 application continues to show iron concentrations periodically above the D.C. water quality criterion of 1.0 mg/L and the RP analysis showed there is a reasonable potential to cause or contribute to an exceedance of the District's water quality standard for iron. While the DMR data from the 2010 permit term indicated the repair of the slurry wall has helped reduce iron levels in the discharge, it does not appear as though the repair continued to keep groundwater infiltration out. As such, the permit contains new limits for iron at Outfall 001.

The limit for iron is new and the DMR data show the Permittee will not be able to immediately meet these limits. The Permittee needs time to evaluate options for treatment/mitigation and implement the chosen treatment system if applicable in order to meet the effluent limitation. Per 40 C.F.R § 122.47 and the District of Columbia's Municipal Regulations at Title 21 Section 21-1105.9 a compliance schedule was included in the permit to allow time for the Permittee to come into compliance with the new limits. See section 5.5 below for the compliance schedule rationale and documentation of "as soon as possible" consistent with 40 C.F.R. § 122.47(a)(1).

Total Residual Chlorine (TRC) & pH

The total residual chlorine and pH effluent limits in the permit are WQBELs designed to meet the District's WQS for those parameters. Specifically, this permit adopts the District's WQS for total residual chlorine and pH as the WQBELs for this permit. Therefore, no RP analysis is needed for these parameters. The WQBEL for total residual chlorine is that no chlorine shall be discharged in detectable amounts – i.e., the discharge of total residual chlorine shall not be greater than the non-detect level of less than 0.1 mg/L. The WQBEL for pH is 6.0 to 8.5 as specified in Section 21-1104.8 of the District of Columbia Municipal Regulations, Water Quality Standards.

Oil and Grease

The limits in the permit are designed to meet the District's WQS for Oil and Grease. Specifically, this permit adopts the District's WQS for Oil and Grease as an average monthly limit of 10 mg/L. In the absence of a Continuous Maximum Criterion (CMC) for Oil and Grease, the daily maximum limit was calculated by multiplying the average monthly limit of 10 mg/L by 1.5 resulting in a max daily limit of 15 mg/L. (See Section 5.4.2 of EPA's 1991 Technical Support Document for Water Quality Based Toxics Control (TSD))

5.5 Compliance Schedule rationale and documentation of "as soon as possible" as required by 40 C.F.R. § 122.47(a)(1).

The Permittee needs a total of thirty-six (36) months to come into compliance with the effluent limits for *E. coli* and iron because the Permittee needs to conduct a source tracking study and evaluate different treatment or mitigation options for each pollutant to determine the most suitable option. There are other actions including securing funding to conduct the analysis and impose treatment if needed. Once the Permittee submits a plan of action for addressing the pollutants and determines the best options available for reducing these pollutants in the discharges, they will need another twelve (12) months to implement the compliance plan of action which includes beginning the process of procuring any necessary treatment technologies or equipment that will be needed to come into compliance with the final effluent limits. The Permittee will need the next six (6) months to complete installation of any treatment technology or additional equipment necessary to achieve compliance with the final limits. The final six (6) months will be necessary to collect data on the newly installed treatment technology to determine if any adjustments need to be made to ensure compliance with the final limits.

6.0 Special Conditions

6.1 Special Conditions in the 2018 Permit

Source Tracking Study (Part III.A)

The 2018 permit required that within twelve months from the effective date of the permit, the Permittee shall submit a report to EPA identifying the source(s) of *E. coli* at the WWII Memorial. Additionally, the Permittee was required to submit, with the report required under this condition, a plan of action to address and mitigate the elevated levels of *E. coli* in the discharge. The plan of action was to include, but is not limited to, the development and implementation of Best Management Practices (BMPs) that target the reduction of *E. coli* in the discharge. Although the raw monitoring data at various sampling locations was provided to EPA in an Excel spreadsheets there was no report submitted to EPA identifying the source(s) of *E. coli* at the WWII Memorial. Additionally, the Permittee did not submit with the report required under this condition a plan of action to address and mitigate the elevated levels of *E. coli* in the discharge.

Benchmark Monitoring

Benchmark monitoring was required in the 2018 permit in addition to the monitoring requirements specified in Part I Section B of this permit. Upon implementation of the plan of action, including implementation of BMPs, *E. coli* was to be below the benchmark value of 126 col/100 mL. If the benchmark value was exceeded, then the Permittee must initiate a corrective action that will assess and address the exceedance. The benchmark value was not an effluent limitation; a benchmark exceedance, therefore, is not a permit violation. However, if a corrective action is required as a result of a benchmark exceedance, failure to conduct a corrective action is a permit violation. Since there was no plan of action implementation, BMP installation, and there were exceedances to 126 col/100mL the permittee has not met this special condition.

Additional Monitoring and Reporting Requirements for Iron

Monitoring for iron was a special condition in the 2018 permit as specified in Part III Section B and according to the frequency specified in Part I of the permit. The Permittee was to use a sufficiently sensitive method and was to report iron concentrations above the benchmark value of 1.0 mg/L to the EPA. If there were 3 consecutive results above 1.0 mg/L the Permittee was to submit to EPA a plan of action to reduce the iron concentrations below the water quality criterion of 1.0 mg/L. The plan of action should have been provided within 30 days of the time the Permittee becomes aware of the three consecutive exceedances. The written submission was to contain a description of the exceedance and its cause and steps taken or plan to reduce, eliminate, and prevent occurrences of the exceedance. When iron concentrations were below the benchmark value of 1.0 mg/L no further actions were necessary. It does not appear as though the permittee met this special condition.

6.2 Special Conditions in the final permit

Special Condition A. Compliance Schedule for E. coli and Iron (See Part III.A of the permit and Part 3.2.3 of this fact sheet)

A reasonable potential analysis was conducted at Outfall 001 (discussed in more detail in Section 3.0 and Appendix A) for *E. coli* and showed the discharge has the reasonable potential to cause or contribute to an exceedance of water quality criteria for *E. coli*, therefore, limits were included in the permit. These *E. coli* limits are new at this outfall and DMR data show that the Permittee will not be able to immediately meet the *E. coli* limits upon effective date of the permit. The District's water quality standard for bacteria was adopted after July 1, 1977 (revised from fecal coliform to *E. coli* in 2005). 40 C.F.R § 122.47 allows the use of a compliance schedule in permits if certain conditions are met[9] and the District of Columbia's Municipal Regulations Title 21 Section 21-1105.9 also allows the permit to include a compliance schedule when deemed appropriate. As such, Part III.A of the permit provides a compliance schedule for Outfall 001 to allow the Permittee time to come into compliance with the new *E. coli* limits as soon as possible but no later than 36 months after the permit effective date.

A reasonable potential analysis was conducted at Outfall 001 (discussed in more detail in Section 3.0 and Appendix A) for iron and showed the discharge has a reasonable potential to cause or contribute to an exceedance of water quality criteria for iron at Outfall 001. This is a new, more stringent permit requirement. Based on discharge data, the Permittee will not be able to meet this new limit upon permit reissuance, therefore, a compliance schedule for iron was included in the permit. The District's water quality standard for iron was adopted after July 1, 1977. The regulations found at 40 C.F.R § 122.47 allows the use of a compliance schedule in permits if certain conditions are met and the District of Columbia's Municipal Regulations Title 21 Section 21-1105.9 also allows the permit to include a compliance schedule when deemed appropriate. As such, Part III.A provides compliance schedule for Outfall 001 to allow the Permittee time to come into compliance with the new iron limits as soon as possible but no later than 24 months after the permit effective date.

[9] These conditions are outlined in 40 C.F.R. § 122.47 and clarified in EPA's 2007 "Hanlon Memo" which can be found in the permit's administrative record.

Special Condition B. Monitoring Requirements for Arsenic and Manganese

This special condition is new, there was no monitoring requirement for these parameters in the previous permit. DOEE has concerns with manganese in all groundwater discharges in the District. EPA assumes manganese is not a pollutant of concern for this discharge; however, the data included with the permit application did not include results for manganese to confirm this assumption. As a result, EPA is requiring additional samples to be submitted to confirm manganese is not a pollutant of concern.

EPA requested arsenic sampling due to the application stating that an arsenic treatment system is installed. The purpose of requesting arsenic sampling was to determine if the treatment system was still working efficiently although it is unclear if the treatment system is still in use. The sampling results showed arsenic to be below the reporting level (RL) of 0.0010 mg/L which is not sensitive enough to determine compliance with the district's water quality criteria of 0.14 µg/L (or 0.00014 mg/L).

Therefore, this special condition requires the Permittee to collect a minimum of three (3) samples for arsenic and manganese and submit the results to EPA within the first year of the permit term. EPA will evaluate the results and determine if additional requirements are necessary.

Special Condition C. Monitoring Requirements for Total Nitrogen and Total Phosphorus (Chesapeake Bay TMDL Pollutants)

The 2018 permit required sampling of TN, TP, and TSS to determine whether the discharge is consistent with the assumptions and requirements of the aggregate wasteload allocation for the Chesapeake Bay TMDL. The sampling results over the last permit cycle show that the TN and TP concentrations are consistent with the assumptions and requirements of the aggregate wasteload allocation for nonsignificant dischargers in the Bay TMDL. As such, monitoring for TN and TP is no longer required during the permit term, however, the special condition in Part III.C was imposed in the permit requiring the Permittee to submit TN and TP data with the next permit reissuance application to ensure the discharges continue to be consistent with the Chesapeake Bay TMDL aggregate wasteload allocation.

Special Condition D. Storm Water Pollution Prevention Plan

The Permittee submitted a SWPPP to EPA that was last updated in June 2021. The Permittee continues to update the SWPPP to reflect current conditions and practices at the site although EPA and DOEE noted that parts of the SWPPP were not permit specific and mentioned requirements under EPA's 2021 Multi-Sector General Permit (MSGP) which is not relevant to this permit.

This special condition outlines specific requirements for the management of stormwater to minimize the discharge of pollutants in the facility's stormwater discharge.

7.0 Endangered Species Protection

EPA submitted a determination letter to the Fish and Wildlife Service (FWS) dated November 30, 2023, stating that this project as proposed will have "no effect" on the northern long-eared bat. The FWS responded on January 9, 2024 that no further Section 7 consultation is required for this project unless project plans change.

In addition, the monarch butterfly is a candidate species and not yet listed or proposed for listing. There are no section 7 requirements for candidate species.

For listed species or critical habitats that fall under the jurisdiction of The National Oceanic and Atmospheric Administration Fisheries (also known as National Marine Fisheries Service or NMFS), EPA submitted a biological evaluation with the determination that all effects are insignificant or discountable, and that the discharges from the World War II Memorial may affect but are not likely to adversely affect listed species or critical habitat. EPA has completed consultation with the National Marine Fisheries Service in that determination and they have provided a letter of concurrence to that affect. This letter can be found in the permit's administrative record.

8.0 National Historic Preservation Act

The National Historic Preservation Act of 1966. and implementing regulations (36 C.F.R. Part 800) requires federal agencies to take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation, or designee, the opportunity to comment on such undertakings. See Section 106, 54 U.S.C. § 306108. EPA has determined that the terms and conditions of this permit do not direct the World War II Memorial to undertake any action that would affect historic properties. As such, in accordance with 36 CFR § 800.3(a)(1), EPA notified the DC State Historic Preservation Office that the permit does not have the potential to cause effects on historic properties.

9.0 Anti-Backsliding

Section 402(o) of the CWA and 40 CFR 122.44(l) prohibit the renewal, reissuance or modification of an existing NPDES permit that contains effluent limits, permit conditions, or standards that are less stringent than those established in the existing permit, unless certain exceptions are met. All effluent limits in the permit are either identical to or more stringent than those in the previous permit.

10.0 Antidegradation Statement

The Tidal Basin, Middle Potomac River, and Washington Ship Channel are Tier 1 protection waters. Title 21 Chapter 1102.1 of the District's Water Quality Standard Antidegradation Policy defines a Tier 1 water as "Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." The permit contains water quality-based and technology-based effluent limits for pollutants as required by the approved District of Columbia Water Quality Standards and approved TMDLs. Based on this information, EPA concludes that the discharges from this facility will not downgrade the water quality of the Tidal Basin.

11.0 Clean Water Act Section 401 Certification

In accordance with CWA 401(a)(1), EPA requested a water quality certification from the District of Columbia, via DOEE, to ensure compliance with the District's WQS.

401 Pre-filing meeting request to DOEE: April 17, 2023
401 Certification request to DOEE: May 19, 2023
401 Certification received from DOEE: July 5, 2023

Appendix A. Reasonable Potential Analysis Calculations

Five-step TSD approach to Reasonable Potential Analysis

Using the TSD approach, the following is a description of the 5 steps used to conduct the RP analysis at Outfall 001.

1) Determine the total number of effluent data values (n) for the pollutant of interest and identify the highest value of the dataset for that parameter.
2) Determine the coefficient of variation (CV) of the dataset. The CV is equal to the standard of deviation divided by the long-term average. The default CV for fewer than 10 data values is 0.6, as specified in Box 3-2 of the TSD.
3) Determine the appropriate confidence level for the RP analysis. For this permit, EPA used the 99th confidence level, recommended by the TSD in section 5.5.4.
4) Determine the RP multiplier, using Table 3-1 of the TSD. Generally, if n is greater than 20, the multiplier is calculated per section 3.3.2 of the TSD. However, the RP multiplier was calculated for all pollutants regardless of the number of samples. The highest value from the data set is then multiplied by the RP multiplier. Use this value with the appropriate dilution to project a maximum receiving water concentration (MRWC).

Before projecting the maximum receiving water concentration, EPA calculates an "adjusted effluent concentration" or AEC to determine if the pollutant of concern is a candidate for completing reasonable potential analysis. If the pollutant does not exceed the water quality criterion (WQC) after applying the multiplying factor to the highest effluent concentration, then that pollutant does not continue with the RP analysis to completion. The AEC is calculated by multiplying the highest effluent concentration (HEC) by the reasonable potential multiplier (RPM) which is the first part in Step 4 above.

If the AEC > WQC then EPA should continue with the RP analysis and the projected MRWC is calculated which is in the second part of Step 4.

5) Compare the projected maximum receiving water concentration (MRWC) to the applicable standard. EPA finds reasonable potential when the projected MRWC is greater than the ambient criterion.

TSD Steps 1-4

If the number of samples was less than 20 ($n \leq 20$) a default CV value of 0.6 was used and the RP multiplier was obtained from Table 3.1 of the TSD. If the number of samples was greater than 20 (n>20), then both the CV and the RP multiplier were calculated in accordance with the TSD.

Outfall 001							
Parameter of concern	**# of samples**	**Highest Effluent Concentration**	**CV**	**RP Multiplier**	**Adjusted Effluent Concentration**	**DC WQC**	**Continue with RP Analysis?**

E. coli (MPN/100mL)	36	2419.6	1.6	4.20	10,171	126.0	Yes
Iron (mg/L)	57	27.10	2.14	3.62	98.10	1.0	Yes
Oil and Grease (mg/L)	53	21.4	0.36	1.41	30.19	15	Yes

Step 4, continued. Calculate the Maximum Receiving Water Concentration (MRWC):

MRWC = ((AEC – IBC/DF) +IBC, where

AEC – Adjusted Effluent Concentration
IBC – Instream Background Concentration
DF – Dilution Factor – see calculation after the table in Step 5 below

TSD Step 5.

Outfall 001						
Parameter of concern	**Adjusted Effluent Concentration**	**Instream Background Concentration**	**Dilution Factor**	**MRWC**	**WQC**	**RP?**
E. coli (MPN/100mL)	10,171		4.2	2,447.75	126	YES
Iron (mg/L)	98.10		4.2	23.61	1.0	YES
Oil and Grease (mg/L)	30.19		4.2	7.26	10	NO

Dilution Factor (DF):

A calculated dilution factor of 4.2 was applied to Outfall 001 based on the default assumption of incomplete mixing of the effluent with the receiving water.

The dilution factor was calculated based on the maximum discharge flow and the calculated flow of the Tidal Basin:

Tidal Basin Flow		**Calculation**
Tidal Basin Surface Area (square meters)	415,000	
Tidal Basin Tidal Range (meters per 12 hours)	0.85	
Tidal Basin Flow (cubic meters per 12 hours)	352,750	Tidal Basin Surface area * Tidal Basin Tidal Range
Tidal Basin Flow (cubic meters per hour)	29,395.83	Tidal Basin Flow (cubic meters per 12 hours) ⁄. 12
Tidal Basin Flow (gallons per hour)	7,765,556.08	Tidal Basin Flow (cubic meters per hour) * 264.172
Tidal Basin Flow ((mgd))	**186.37**	(Tidal Basin Flow (gallons per hour) ⁄. 60)* 0.00144
DCWQS 1105 mixing zone (use 1/3 of flow of receiving stream)	**62.12**	Tidal Basin Flow ((mgd)) ⁄. 3
conversion to cfs	288.5059396	Tidal Basin Flow ((mgd))* 1.548 (mgd = 1.548 cfs)

WWII Discharge Flow	
Approximate Amount of Water Discharged to Tidal Basin (gallons per day)	5,656
WWII Discharge Flow (cfs)	6.0802
WWII Discharge Flow (gpm)	**3.9278**

EPA followed a conservative approach to the calculation by using 1/3 of the flow of the Tidal Basin[10].

Therefore, 186. 37 mgd x 33% = 62 mgd is the flow used for the Tidal Basin.

Dilution Factor Calculation is:
1 / Instream Waste Concentration (IWC)

IWC = ((Maximum Effluent Flow)/ (Stream Flow + Maximum effluent flow))*100
IWC = 0.148 mgd/(62 mgd+0.148)*100 = 0.241
DF = 1/0.241 or 4.2

Developing a Water-Quality Based Effluent Limit:

> For those pollutants where there was a reasonable potential to cause or contribute to an exceedance of applicable WQSs, the second step is the development of WQBEL for each pollutant. The procedure for this is described at Section 5.4 of the TSD.

1. Compute the Wasteload Allocation (WLA): WLA = ((WQC – IBC) * DF) + IBC, where

   WQC – Water Quality Criterion
   IBC – Instream Background Concentration
   DF – Dilution Factor

Outfall 001				
Parameter of Concern	**Water Quality Criterion**	**Instream Background Concentration**	**Dilution Factor**	**Wasteload Allocation**
E. coli (MPN/100mL)	126	Not available	4.2	524
Iron (mg/L)	117.2	Not available	4.2	4.2

2. Calculate the Long-Term Average (LTA). The long-term average calculation is based on the 99th confidence level as reflected with the z score of 2.326.

   LTA = WLA * $e^{(0.5*\text{sigma square} - 2.326*\text{sigma})}$
   Sigma square (σ^2) = ln (CV^2 +1)
   Sigma (σ) = square root of σ^2

[10] This approach was based on Chapter 21 section 1105.7(f) of the DC WQS regulations which does not allow a discharge's mixing zone to occupy more than one third (1/3) of the width of the waterway.

Outfall 001					
Pollutant	**Z**	**CV**	**σ^2**	**σ**	**LTA**
E. coli (MPN/100mL)	2.326	1.6	1.27	1.13	71.8
Iron (mg/L)	2.326	2.14	1.72	1.31	0.46

3. Calculate permit limits:

   i. MDL = LTA * $e^{(2.326*\sigma - 0.5*\sigma^2)}$
   $\sigma^2 = \ln(CV^2 + 1)$
   σ = square root of σ^2
   The MDL is based on the 99th confidence level with the z score of 2.326 as recommended by the TSD[11].

   ii. AML = LTA*$e^{\wedge(z\sigma_4 - 0.5\sigma^2_4)}$
   Where $\sigma^2_4 = \ln(CV^2/4+1)$

Outfall 001							
Pollutant	**Z**	**CV**	**σ^2**	**σ**	**LTA**	**MDL**	**AML**
E. coli (MPN/100mL)	N/A. The effluent limit for *E. coli* is the District's WQS expressed as a concentration, therefore no calculation is needed.						126
Iron (mg/L)	2.326	2.14	1.72	1.31	0.46	4.2	1.3

RP_DC0000345_WWII.May.2023.xlsx

[11] Refer to section 5.5.4 of the TSD.

Appendix B. 2020 Source Tracking Results (provided by the NPS)

WWII *E. coli* Source Tracking Study Results

SAMPLE LOCATION	SAMPLE DATE			
	are MPN/100mL DC water quality standard is 126MPN/			
	3/19/2020	4/24/2020	5/1/2020	5/13/2020
	6:40 AM	8:00 AM	6:40 AM	7:30 AM
Sump Pump 2 (SP2 SW)				1
Sump Pump 3 (SP3 NW)				1
24" Sed				1
Outfall 001A (Normal Samp)	20	550	22	5.1
Oil Water Seperator Pipe (24" Oil Sep)				3.1
Ceremonial Pool Filter (Cere. Filter)				1
Rainbow Pool Filter (RB Filter)				1
Rain Fall Amount Via CBS (in)	0.43	0.35	1.05	0
Rain Fall Amount Via Weather Underground (in)	0.41	1.3	1.12	0

Wet sample from DMR
Dry sample from DMR
Dry sample from ESTS
Wet sample from ESTS
Results Above 126MPN/100mL

CBS rainfall amounts are taken from a rain gadge onsite, recorded just prior to sampling	
Weather Underground rainfall amounts are totals for a 24 hour period	

NOTABLE EVENTS
February 20, 2020 due to conditions (water leak) the LMRP was drained down (02/20) for repairs and cleaning
March The LMRP was filled again, but it was soon discovered the pool still had a substatial leak (underground), that the pool could not maintain normal compasity (still remains 10-20" lower than normal 08/2020)
March 16, 2020 non essetial workers and telework approved staff were told to stay home due to covid-19
April 3, 2020 Restrooms and indoor visitor areas closed
May 22, 2020 Public Restrooms on the Mall open back up
June 15, 2020 Started to find dead mallard ducklings in LMRP - It was concluded that Coccidosis was the cause of death
June 9, 2020 the oil water separator was cleaned

July 2020 Park starts to notice an uptick in visitors swimming in the WWII Pools, also notices an up tick in the number of ducks in the WWII Pools, likley due to the status of LMRP
July 4, 2020 Independence Day Fireworks display went off near LM and WAMO.WWII was open for people viewing
July 7, 2020 sample was taken during a rain event that ended up producing 3.5 inches of precip. The pool ended up overflowing into the plaza. Two of the samples note a >2419.6 level which from the lab indicates the levels were so high that they exceeded the chart limit.*
*August 4, 2020 I requested samples be taken due to Tropical Storm Isaias impacting the area. However because of this, there was a miss comunication and the July dry sample was not taken.

Appendix C. Response to Pre-Public Notice Draft Comments

2023 World War II Memorial
EPA Response to Pre-Public Notice Draft Comments

On September 29, 2023, EPA made the draft NPDES permit for the World War II Memorial, permit number DC0000345, available for public notice and comment for a period of 30 days. The public notice and comment period closed on October 30, 2023.

EPA made numerous revisions to the draft World War II Memorial Permit in response to comments received from Department of Energy and Environment and the National Parks Service on the pre-public notice draft. No comments were received during the public notice period.

This document provides EPA's responses to the comments received on the pre-public notice draft document.

DOEE Comments (received 8/15/2023):

1. NPDES Permit, page 4, Section B, table:
(a) The endnote/footnote numbers do not much all the explanations that have been provided below the table. For example (5) is not explained.
(b) There is no endnote (6) in the table.
(c) Endnote *"(6) Total Nitrogen is the sum of Total Kjeldahl Nitrogen (organic and reduced), ammonia, and nitrate-nitrite*" is not in the table. i.e. total nitrogen is not part of the pollutants to be monitored in the table.
(d) The sampling frequency in the permit (Section B) table is different from the Fact Sheet, Section 1.0, Summary of Changes Made, last bullet: {*Changed sampling frequency from "monthly" to "per discharge" because this is an intermittent discharge and the Permittee must sample each time they discharge}*. We recommend that you should accordingly change all "monthly" to "per discharge" sampling in the permit.

EPA Response to Comment: All of the requested edits have been made. The endnotes/footnotes were renumbered, the former endnote #6 was deleted since it was not relevant to the permit, and the discrepancies in "monthly" to "per discharge" was reconciled for all sampling to be monthly to be more aligned with the reporting system.

2. Fact Sheet
(a) Page 21, first paragraph: Was the data EPA obtained from DOEE for Anacostia River or Potomac River? Tidal Basin discharges into the Potomac River.
(b) Page 21, Dilution Factor (DF): here you are using "*complete mixing*" yet on Page 13 , Section 5.2 Dilution Factors, first paragraph – you stated that "*incomplete mixing was more appropriate*". Which is the correct mixing?

(c) Change 92 to 62 in the statement "*Therefore, 186. 37mgd x 33% = 92 mgd is the flow*….".

EPA Response to Comment: All of the requested edits have been made. The reference to the Anacostia River was removed, the reference to complete mixing was replaced with incomplete mixing, and 92 was changed to 62 in the statement referenced above.

National Parks Service Comments (received 8/07/2023):

The comments provided by the National Parks Service were grammatical in nature and all of those edits were accepted.