

Re: Draft Fact Sheet
National Pollutant Discharge Elimination System (NPDES)
NPDES Permit Renewal

NPDES PERMIT NUMBER: DC0000345

PERMITTEE NAME and MAILING ADDRESS:

United States National Park Service
National Mall & Memorial Parks
900 Ohio Drive, S.W.
Washington, D.C. 20024

FACILITY LOCATION:

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

RECEIVING STREAM:

Tidal Basin: An Impoundment Bordering
The Middle Potomac River and the Washington Ship Channel

FACILITY DESCRIPTION:

The World War II Memorial was initially proposed by the America Battle Monuments Commission to commemorate and to honor all who served in the armed forces of the United States during the Second World War. The site which is presently administered by the National Park Service occupies approximately 8.5 acres in the National Mall area of the Nation's Capitol and is bounded on the east side by 17th street, on the west by the Lincoln Reflecting Pool, on the north side by Constitution Gardens, and on the south side by Independence Avenue and the Tidal Basin. The Main Plaza area consists of a large Rainbow Pool with fountains holding approximately 320,000 gallons of water, a smaller Ceremonial Pool which holds approximately 50,000 gallons of water, and decorative statues and large stone plaques dedicated to the Services and to the veterans. In addition to the Main Ceremonial Plaza area, there are pedestrian walkways throughout the site; a public parking area; vehicular maintenance access areas; a comfort station; and a visitor's information center.

DISCHARGE DESCRIPTION:

The effluent from the World War II Memorial site is discharged through a single outfall to the receiving waters of the Tidal Basin which has been designated for the following uses in the District of Columbia Water Quality Standards: primary contact recreation; secondary contact recreation and aesthetic enjoyment; protection and propagation of fish, shellfish, and wildlife; protection of human health related to the consumption of fish and shellfish; and navigation. The

impoundment which borders the Middle Potomac River and the Washington Ship Channel has been listed by the District of Columbia in the Report entitled, "2006 Integrated Report to the Environmental Protection Agency and the United States Congress Pursuant to Sections 305(b) and 303(d) of the Clean Water Act (P.L. 97-117)" as being impaired for bacteria, pH, and organics. Total maximum daily loadings (TMDLs) for the listed impairments have been prepared and approved by United States Environmental Protection Agency (EPA).

An underdrain system which is located beneath the Memorial provides for the permanent collection of groundwater generated from the site. The storm water that is generated from the Main Plaza area and associated buildings, vehicle parking, and other access areas is captured by a below grade drainage system. The filter backwash water and associated flushings of the wash water generated through periodic cleaning and maintenance activities and to prevent ice damage during the winter months of the Memorial Pools contributes intermittently to the below grade system. The influent sources from the different activities are treated using a combination of various technologies consisting of iron prefilter and arsenic removal for the groundwater, sand filter for the fountain water, oil water separator and a three chamber sedimentation basin for the storm water, and dechlorination for the Ceremonial and Rainbow pools. After treatment, the comingled effluent of groundwater, storm water, and fountain water (filter backwash and flushings of wash water) is collected and discharged through Outfall No. 001 to the waters of the Tidal Basin. Due to the tidal influences at this Outfall, samples of the effluent are taken for monitoring and analysis at a wetwell located at Outfall No. 001A before it is pumped for discharge to the Tidal Basin through Outfall No. 001.

PROPOSED EFFLUENT LIMITATIONS:

When developing proposed effluent limitations and monitoring requirements for the reissued permit, EPA considered the District of Columbia Water Quality Standards, the final TMDL documents that have been developed by the District of Columbia for the impaired pollutants of concern within the receiving stream network, the facility's current NPDES Permit which was issued in April, 2004, the Permittee's renewal application dated October 27, 2008, the Permittee's monthly discharge monitoring reports (DMRs), and the NPDES Compliance Evaluation/Sampling Inspection Report dated May 12, 2009, that was performed by EPA and the District Department of the Environment (DDOE).

The existing NPDES permit imposes monitoring and reporting requirements for several pollutants of concern, including total suspended solids, arsenic, iron, silver, copper, oil and grease, pH, and total residual chlorine. Monitoring reports have produced a set of established baseline trends and values for each pollutant. In addition, EPA and DDOE have conducted a compliance inspection of the permitted facilities. EPA considered the information in the monitoring and inspection reports in determining the parameters to be included in the renewed NPDES permit. EPA's review of the DMRs, the process train and treatment systems for the different components which contribute to the discharge, and the compliance inspection report, showed levels for arsenic, copper, and silver to be consistently within acceptable (either not detected at or above the quantitation limit) ranges, so as not to have an impact on the water quality of the receiving waterbody. While effluent sampling for iron was neither detected at or

above the quantification limit, the effluent sampling from the wetwell of Outfall No. 001A for this parameter did exhibit slightly elevated levels after treatment above the quantification limit. The treatment system for the storm water component of the discharge would be expected to meet most water quality needs of the receiving waterbody. However, sediment and oil and grease which are common constituents associated with stormwater runoff from the activities at the site have the potential to convey excess amounts of these pollutants which must be treated and accounted for in the effluent discharge to the Tidal Basin.

Therefore, the new permit includes effluent limits providing greater control of pollution. The pH parameter is monitored and reported to ensure consistency with numeric criteria established in the current DC Water Quality Standards (WQS) and the TMDL for the parameter so that the discharge does not become a contributor to the pH impairment that already exists in the Tidal Basin. A numeric value for oil and grease in Class C waters, derived from the current DC WQS, has been assigned under the new permit to this pollutant of concern and a best practicable judgement (BPJ) determination of one and one-half times the average monthly value which is commonly used in permit writing was made to establish the maximum daily allowable value. Since the DC WQS are not specific on numeric criteria for total suspended solids, the calculations were determined using the best practicable technology (BPT) approach using secondary treatment effluent guidelines for deriving the average monthly and maximum daily values. The chlorine additive from the public water supply used at the Memorial site is a potential threat to the aquatic community. Therefore, the new permit includes criteria for a chlorine residual value in the permit designed to protect the environment of the receiving waterbody.

The permit to be reissued for the World War II Memorial will require continued monitoring and reporting of iron values each time a storm event greater than 0.1 of an inch occurs which results in a discharge to further establish benchmark values. The Permittee will be required to determine the reasons for the elevated iron levels in the effluent through a study and to implement actions to reduce these values during the permit term. In addition to estimating the flow each time a storm related event discharge occurs that is greater than 0.1 of an inch, the permit will require the Permittee to sample for total suspended solids (30mg/l monthly average; 60 mg/l daily maximum); oil and grease (10mg/l monthly average; 15 mg/l daily maximum); pH (values between 6.0 standard units and 8.5 standard units); and residual chlorine (value not greater than 0.1mg/l). A final special condition of the permit will require the Permittee to amend the operation and maintenance portion of their Storm Water Pollution Prevention Plan to improve facility practices in both operations and sampling protocol in accordance with the recommended actions of the compliance/inspection report dated May 12, 2009, that was performed by and discussed with EPA and DDOE personnel.

PERMIT PROCEDURES:

Under EPA's current procedures for public notice and comment of minor NPDES permits in the District of Columbia, the draft permit will be posted on the regional website and sent to those on EPA's mailing list of interested parties for a thirty (30) day review and comment period. This review period will begin on January 25, 2010 and end on February 23, 2010. Comments

will also be solicited at the same time from the Permittee, the states of Maryland and Virginia, the United States Fish and Wildlife Services, and the National Oceanic and Atmospheric Administration National Marine Fisheries Service. A copy of the draft permit will also be provided to the District Department of the Environment to certify under Section 401 of the Clean Water Act that the permit complies with Federal and District applicable regulatory requirements.

During the review period, any interested persons may submit written comments or make a written request for a public hearing (stating the nature of the issues proposed to be raised). To comment on this draft permit, request additional information, or request a public hearing, please contact Mr. Garrison D. Miller, mail code 3WP41, Office of NPDES Permits and Enforcement, United States Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103-2029. Comments concerning the pending District's Section 401 certification may be submitted in writing to Mr. Collin R. Burrell, Associate Director for Water Quality Division, District Department of the Environment, Natural Resources Administration, 51 N Street, NE, 5th Floor, Washington, D.C. 20002.