



**STATE OF MARYLAND  
WATER MANAGEMENT ADMINISTRATION  
DEPARTMENT OF THE ENVIRONMENT  
WATER QUALITY CERTIFICATION**



**CERTIFICATION NUMBER:** 19-WQC-0001

**ISSUED TO:** Operations Division  
Philadelphia District, Corps of Engineers  
Wanamaker Building, 100 Penn Square East  
Philadelphia, PA 19107-3391

**EFFECTIVE DATE:** April 1, 2019

**EXPIRATION DATE:** March 31, 2020

**Description of Certified Project:** This Water Quality Certification is issued for the maintenance dredging of the Chesapeake and Delaware (C&D) Canal and its approach channel during the period October 1, 2019 and March 31, 2020 and placement of the dredged material at the Pearce Creek Dredged Material Containment Facility (DMCF). Maintenance dredging will be performed as required to maintain the authorized 35-foot project depth. All material will be removed by bucket, hopper or hydraulic pipeline dredges and placed in the Pearce Creek Dredged Material Containment Facility. Based on past experience, the following quantities will be dredged:

1. Southern Approach Channel, Pooles Island to Sassafra River - approximately 700,000 cubic yards of material to be removed.
2. Sassafra River to Courthouse Point - approximately 600,000 cubic yards of material to be removed.
3. Courthouse Point to Maryland State Line within the Canal – approximately 200,000 cubic yards of material to be removed.

This water quality certification is issued under authority of Section 401 of the Federal Clean Water Act and its Amendments, Title 9, Subtitle 3 of the Environment Article, and Code of Maryland Regulations (COMAR) 26.08.02.10. This certification does not relieve the Certification Holder from the responsibility to obtain any other approvals, licenses or permits in accordance with federal, State, or local requirements. The Maryland Department of the Environment (“MDE” or “the Department”) has determined from a review of the application file that the project described above will not violate Maryland’s water quality standards, provided that the following conditions are satisfied.

The Certification Holder shall comply with the following conditions:

**GENERAL CONDITIONS**

1. X The Dredged Material Containment Facility shall be operated in a manner which will not violate Maryland's Water Quality Standards as set forth in COMAR 26.08.02. The applicant shall notify the Water and Science Administration's Compliance Program, at 410-537-3510, ten (10) days prior to the placement of dredged material at the Pearce Creek DMCF.
2. X The project shall be operated and maintained in accordance with the approved final plans as required by this Certification and any approved revisions.
3. X The certification holder shall notify the Water and Science Administration's Nontidal Wetlands and Waterways Division, in writing, upon transferring property ownership or responsibility for compliance with these conditions to another person. The new owner/operator shall request, in writing, transfer of this water quality certification to his/her name.
4. X The certification holder shall allow the Water and Science Administration or its representative to inspect the project area at reasonable times and to inspect records regarding this project.

**SPECIAL CONDITIONS**


1. The sediments to be dredged from the C&D Canal and its approach channel shall be tested in accordance with Environmental Protection Agency regulation/guidelines to ensure the suitability for placement of the dredged material at its designated site. The results of the Corps of Engineers' sediment testing shall be provided to the Department for its review prior to commencing any dredging and dredged material placement.
2. Dredging shall not be conducted from April 1 through September 30, inclusive, of any year.
3. The Corps of Engineers shall inspect and maintain the liner to ensure that any dredged material placed at the Pearce Creek DMCF will not result in the deterioration/contamination of groundwater resources.
4. The Corps of Engineers shall take all steps necessary to ensure that discharges of sediment or any other pollutants to waters of the State do not occur at any time that the DMCF is in operation.
5. The Corps of Engineers shall continue to implement its MDE-approved plan dated January 2017 for monitoring the groundwater in the Magothy, Upper Patapsco Shallow, and, Upper Patapsco Deep aquifers. The plan describes the wells to be monitored, the constituents to be monitored at each well, and the frequency of monitoring water levels and constituents for each well. The plan includes scale map(s) showing the location, well identification #, and aquifer monitored for all monitoring wells. The Corps shall submit an annual report by February 1 of each year containing tabular results of the prior year's monitoring, including water level maps and data trends using previous year's data from each monitoring well. In addition, when necessary, the Corps of Engineers shall implement the MDE-approved plan for properly abandoning and sealing any wells within the Pearce Creek DMCF.

6. The Corps of Engineers shall continue to implement its MDE-approved plan for all surface water discharges from the Pearce Creek DMCF. The discharge monitoring plan includes key parameters such as flow volume/discharge rate, total suspended solids, pH, dissolved oxygen, nutrients, and metals. Monitoring results shall be reported to MDE's Water and Science Administration Compliance Program on a monthly basis except when monitoring results indicate exceedances of any water quality standards. Exceedances of water quality standards must be immediately reported (i.e., within 24 hours of becoming known).
7. The Corps of Engineers shall maintain the structural integrity and stability of the existing dike system at the Pearce Creek DMCF under all modes of operation and weather conditions. The Corps of Engineers shall notify MDE immediately if any structural stability problems are observed at the DMCF.
8. The Corps of Engineers shall notify MDE prior to any proposed modifications of the Pearce Creek DMCF that could impact the quantity or quality of any discharges from the facility, either to surface or groundwater, or any modification that has the potential to alter the structural stability of the dikes. MDE reserves the right to review and approve any new plans to modify the facility prior to construction.

Based on the aforementioned conditions, the Department has determined that the proposed dredging and the reactivation of the Pearce Creek DMCF for the placement of the dredged material is consistent with the State's federally-approved Coastal Zone Management Program, as required by Section 307 of the Federal Coastal Zone Management Act of 1972, as amended.

Failure to comply with these conditions shall constitute reason for suspension or revocation of the Water Quality Certification and legal proceedings may be instituted against the certification holder in accordance with the Annotated Code of Maryland. In granting this certification, the Department reserves the right to inspect the operations and records regarding this project at any time.

**CERTIFICATION APPROVED**

  
D. Lee Currey  
Administrator  
Water and Science Administration

4/1/19  
Date



**SUMMARY OF THE BASIS FOR DECISION**  
**TO ISSUE WATER QUALITY CERTIFICATION # 19-WQC-0001**

**Name of Applicant:** Operations Division  
Philadelphia District,  
U.S. Army Corps of  
Engineers

**Application Number:** 19-WQC-0001

**MDE Reviewer:** Denise M. Keehner

**Date of Decision:** April 1, 2019

In the case of the proposed maintenance dredging of the Chesapeake and Delaware (C&D) Canal and its approach channel and placement of the dredged material at the Pearce Creek Dredged Material Containment Facility (DMCF) by the Corps of Engineers (Corps), the question for the Department to address is whether or not the proposed project impacts are acceptable under the regulations as they pertain to the proposed project activities.

**PUBLIC NOTICE**

Adjoining property owners, local government officials and other interested persons must be notified of an application for a water quality certification. In addition, an opportunity to comment and request a public informational hearing must be provided via a local newspaper. The public notice on this application was published in the Cecil Whig on February 15, 2019. The public notice was also posted on the Department's website. The comment period closed on March 8, 2019.

No public informational hearing was requested. Comments submitted to the record are summarized and addressed below.

**PROJECT PURPOSE AND NEED**

The purpose of the project is to maintain the federally-authorized depths of the C&D Canal and the placement for the dredged material generated during the calendar years 2019 – 2020.

The Port of Baltimore is a major economic engine for the State of Maryland. The C&D Canal is an import transit route to and from the Port of Baltimore. Maintenance dredging of the C&D canal and its approach channel, including a site for the placement of the dredged material, is necessary to maintain the federally-authorized depth of these channels at 35 feet.

Historically, the Pearce Creek DMCF was an important upland site for the placement of dredged material from the C&D Canal and its approach channel. Approximately 260 acres in size, the site has sufficient capacity to handle years of maintenance dredging of the Canal.

## **ALTERNATIVES ANALYSIS**

Alternatives are considered by the Department to demonstrate that a proposed activity has no practicable alternative. With regard to the placement of the dredged material, the Department considered alternatives to the placement of the dredged material at the Pearce Creek DMCF.

Alternatives considered by the Department included the following: (1) No Action; (2) Pooles Island Open Water Placement site(s); (3) Poplar Island Environmental Restoration Project; (4) Courthouse Point DMCF, and (5) Chesapeake City and Bethel DMCFs. These alternatives are briefly discussed below.

No Action Alternative. This alternative would consist of no proposed maintenance dredging of the Canal and its approach channel and, therefore, no need for a dredged material placement site. The Department determined that the no action alternative does not meet the demonstrated purpose and need for the project.

Pooles Island Open Water Placement Site(s). Under State law, the Pooles Island Open Water Placement Site(s) were prohibited from receiving the placement of dredged material after December 31, 2010. Thus, this alternative is no longer a viable option for the open water placement of dredged material from the C&D Canal and its approach channel.

Poplar Island Environmental Restoration Project. For several years, dredged material from the approach channel to the Canal was transported and placed at the Poplar Island Environmental Restoration Project in Talbot County. However, the Department has determined that this alternative is not economically feasible as a long-term option for the placement of dredged material from the C&D Canal and its approach channel due to the placement site's distance from the proposed dredging and the additional costs associated with transporting the material.

Courthouse Point DMCF. The Courthouse Point DMCF in Cecil County is another upland site historically used for the placement of dredged material from the Canal and its approach channel. Based on data/information provided by the Corps, this facility may be contributing to groundwater deterioration beneath the site. Recognizing that the Pearce Creek DMCF would ultimately be needed for the placement of dredged material, the Corps chose to address the issues associated with reactivating the Pearce Creek. (Specifically, the Corps has installed a liner to prevent groundwater contamination and the issue of supplying public water to homes has been resolved except for 5 homes for which agreement to move to public water has not yet been provided by the property owners or their representatives.)

Chesapeake City and Bethel DMCFs. These upland placement sites are small and are traditionally reserved for the placement of dredged material from the interior portions of the C&D Canal within Maryland. The Department has determined these sites, due to their limited capacity and purpose, are not an option for the placement of dredged material from the approach channel to the C&D Canal.

Based on these considerations, MDE has determined that the Pearce Creek DMCF is the most practicable alternative for the placement of dredged material from the proposed project.

## **APPLICATION REVIEW**

The Department's consideration of this application to utilize the Pearce Creek DMCF for the placement of dredged material from the C&D Canal and its approach channel was based on the following key considerations: (1) the avoidance of any future contamination/deterioration of groundwater resources from the placement of additional dredged material at the site; and (2) the provision of a new potable water supply system for those communities/residents whose drinking water wells have been adversely impacted by the historic placement of dredged material at the Pearce Creek DMCF, and, who desired and agreed to connection to public water supply.

To avoid impacts from the future placement of dredged material, the Department is requiring that the liner installed at the Pearce Creek DMCF be monitored and maintained to ensure that dredged material does not impact groundwater in the area.

Regarding the water supply issue, the Department believes that the communities/residents in the vicinity of the Pearce Creek DMCF have been adversely impacted by the historic placement of dredged material at the facility. The Maryland Port Administration, a major stakeholder in this project, has addressed these impacts by extending public water service from the Town of Cecilton to the affected communities/residents who have agreed to public water service.

The Department is requiring the Corps to monitor operational discharges from the facility. If the surface water discharge monitoring results indicate any violation of the State's water quality standards, the Corps is required to immediately report to the Department such violations, so that the Department can respond in a timely manner with required corrective actions.

In addition, the Department is requiring the Corps to implement a plan for monitoring the groundwater in the Magothy and Patapsco aquifers. The purpose of the groundwater monitoring is to ensure that the integrity of the liner is maintained and to obtain data/information on the long-term quality of groundwater resources under and in the surrounding areas of the Pearce Creek DMCF. The Department anticipates that the monitoring will indicate a gradual improvement in the quality of groundwater resources over the long term.

## **PUBLIC COMMENTS**

The Department's record for the submission of public comments closed on March 8, 2019.

The few written comments received on the application generally supported issuance of the WQC but provided comments on the timing of the activity.

Timing of Activities. The major comment received in response to the application concerned the timing of maintenance dredging. Several commenters sought clarification that dredging would only occur between October 1, 2019 and March 31, 2020.

MDNR specifically noted that although MDNR is not requesting a change in the dredging window of October 1, 2019-March 31, 2020 for this project, they will continue to monitor the situation to determine if there is a need, in subsequent years, to change the start of the dredging period to November 1. MDNR raised this issue because of concerns about the impact of October dredging on spawning and recreational fishing.