

AquaBlok® Installation Profile



Site Location: *US EPA Region*
Detroit River, Michigan

Project Status: *Completed 2021*

Objective: Establish a chemical isolation barrier between impacted sediments and the overlying water column.

Setting/Purpose: The Remediation area is part of Detroit River, AOC and enabled the extension of the Riverwalk area north of downtown Detroit. The Remediation area consisted of an area extending about 40 feet from the existing bank bulkhead and continuing parallel with the bank for 1,250 feet. The project remediated sediments located just downstream of the MacArthur Bridge which leads to Belle Isle. Impacted sediment was addressed with an 'active' cap consisting with a mixture of sand with AquaGate+PAC®.

Contaminant(s) of Concern: Polycyclic aromatic hydrocarbons (PAHs), cyanide, mercury, and lead.

AquaBlok Cap Design / Site Area: The chemical isolation layer or active cap was constructed using an AquaGate+PAC which was 6% powder activated carbon by weight. This material was mixed with locally sourced sand at a ratio to achieve a mixture containing 3% activated carbon after placement in the river. The target cap thickness was 12-inches.

Method of Placement: Installation was performed by via level cut clamshell mounted on an excavator. A barge with hopper was loaded at the shoreline and used to transport AquaGate+PAC sand mixture to the installation barge. Installation progressed incrementally from upstream to downstream allowing the placement barge to utilize spuds for accurate placement of capping materials and to prevent spudding into the newly installed cap.

Current Status: Since the completion of installation no visible sheen has been reported. Additional monitoring of the capping zones is planned, but the areas addressed have been deemed successful in accomplishing the objectives outlined.

Site Owner: The Detroit River Conservancy Inc / **Contractor:** Severson Environmental / **Engineering Firm:** Anchor QEA

