

AquBlok Installation Profiles

Site Location:	Eagle River Flats Superfund Site in Fort Richardson, Alaska [US EPA Region 10]
Project Status:	Completed in 1994
Setting/Purpose:	Wetland (freshwater, with periodic brackish tidal inundation). Encapsulation of contaminated sediments.
Contaminant(s) of Concern:	White Phosphorous (WP)
Cap Design/Site Area:	Placed at hydrated thicknesses ranging from approximately 2.4 inches (~6 cm) on level ground to approximately 6.3 inches (~16 cm) in "cratered" areas of the project site. Approximately 4,000 square meters (43,000 square feet).
Method of Placement:	Helicopter with specially designed material drop bags.



Site Location: Grasse River, Massena, New York [US EPA Region 2]

Project Status: Completed in September 2001.

Environmental Setting: River (freshwater)

Intended Purpose: Encapsulation of contaminated sediments

Contaminant(s) of Concern: PCBs (polychlorinated biphenyls)

Cap Design/Site Area: Multi-layer design. Design comprised of a basal layer of hydrated AquaBlok (~3-4 inches or ~8-10 cm in target thickness) covered by a surficial layer of sand/topsoil mix (~6 inches or ~15 cm in target thickness). Site area was 2,760 square meters (29,700 square feet).

Method of Placement: Crane and clamshell from barge.



Site Location: Ottawa River in Toledo, Ohio [US EPA Region 5]

Project Status: Completed 1999

Setting/Purpose: River (freshwater) with estuary characteristic.
Encapsulation of contaminated sediments.

Contaminant(s) of Concern: PCBs (polychlorinated biphenyls), various metals

Cap Design/Site Area: Three different cap designs of approximately equal area and occurring within three different sections of the site
The site area was 9,950 square meters (107,000 sq.ft)

Method of Placement: Various methods demonstrated, including: telescoping - articulating conveyor (barge- and shore-based), crane plus clamshell (shore-based), helicopter with specially designed material drop bags.



Site Location: Upper Outfall in Macon, Georgia

Project Status: October 2001

Setting/Purpose: River (freshwater). Encapsulation of contaminated sediments.

Contaminant(s) of Concern: PAHs (polynuclear aromatic hydrocarbons).

Cap Design/Site Area: Multi-layer design comprised of a basal layer of hydrated layer (~6-7 inches or ~15-18 cm in target thickness) covered by a layer of sand (~4-6 inches or ~10-15 cm in target thickness) covered by a surficial layer of riprap stone (~36 inches or ~91 cm in target thickness). Site area was 150 square meters (1,600 square feet).

Method of Placement: Shore-based excavator.



Site Location: Deer Creek Superfund Project in St. Louis, Missouri

Project Status: Completed February 2002

Setting/Purpose: River . Encapsulation of contaminated sediments, within the context of a bank stabilization project.

Contaminant(s) of Concern: Hydrocarbon/petroleum-based (creosote) from an industrial process plant.

Cap Design/Site Area: Multi-component design:
* River-channel area: Layer of hydrated AquaBlok (~6 inches or ~15 cm in target thickness) covered by a non-woven geotextile and aggregate/riprap stone (~26 inches or ~66 cm in target thickness).
* Bank-slope area: Layer of hydrated AquaBlok (~6 inches or ~15 cm in target thickness) placed in Geoweb cells covered by a non-woven geotextile covered by a surficial layer of aggregate and riprap stone (~26 inches or ~66 cm in target thickness).
* Site was 510 square meters (5,500 square feet).

Method of Placement: Material typically placed directly from SuperSacks suspended from a shore-based excavator.



