Active sediment cap included in clean-up strategy at high-profile superfund site

Historical operations at the BROS Superfund Site included waste oil storage, processing and disposal. The waste oil operations in addition to a major earthen dike breach in the 1970’s resulted in extensive damage to plant life and significantly impacted approximately three acres of the swamp. The wastes, which contain heavy metals, PCBs, and other organic compounds, have seeped into the soil and contaminate surface waters and ground water supplying private drinking wells. The Site was placed on the Superfund National Priorities List in 1983. Remediation of the BROS Superfund Site was complex and required management of many interconnected issues.

PROJECT DETAILS
BROS Superfund Site
Logan Township, New Jersey, U.S.A

Design Engineer and Construction Manager: ERM
General Contractor:
Panther Technologies

LOCATION
Logan Township, New Jersey, U.S.A

PRODUCTS USED
ORGANOCLAY®
REACTIVE CORE MAT®

Images (Left to Right) – Site work prior to the installation of REACTIVE CORE MAT® (Left). REACTIVE CORE MAT® being spread out on the site (middle). Additional site and water remediation that was performed on the site as part of the overall remediation strategy (right).

CHALLENGE:
As part of the overall remediation strategy, the use of an Engineered Permeable Cap was included in the design which utilized CETCO’s ORGANOCLAY® filled REACTIVE CORE MAT®.

REACTIVE CORE MAT® was installed to isolate residual COCs and to provide a stable base for restored plant community. Because of the potential for water flow, the cap also had to allow for water and gasses to pass through the barrier while still containing the contaminants.
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SOLUTION:
As part of the remediation strategy, use of an Engineered Cap was included in the design utilizing CETCO’s ORGANOCLAY® filled REACTIVE CORE MAT®. The REACTIVE CORE MAT® was installed to isolate residual COCs and to provide a stable base for restored plant community.

RESULT:
Installation of the REACTIVE CORE MAT® ran smoothly and on schedule, to the satisfaction of the Engineer, Contractor and U.S. EPA. While other remediation activities proceed on the site, the REACTIVE CORE MAT® proved to be an integral part of the total remediation strategy.