

CLIENT

MD Medical Center

PROBLEM

A federal facility built during WWII for the manufacturing of military grade explosives started to show signs of deterioration within the 70-year-old flat wall concrete tanks.

SOLUTION

Spray Shield Green1 lining was applied to eliminate future deterioration of the concrete walls and improve the tanks' sediment cleaning operations.

A federal facility built during WWII for the manufacturing of military grade explosives was converted into a Veterans Association Hospital Campus after the war.

A freshwater treatment facility was built on the campus in the early 1950's to provide potable water for the entire self-sufficient campus.

Fresh water is pumped directly from the Susquehanna River into two 16'W x 60' L x15' High concrete sedimentation settling tanks. These 70-year-old flat wall concrete tanks were showing signs of deterioration as exposed aggregates and bug holes.

The Sediment Filtration tanks must be kept operational to provide a continual supply of potable water to the MD Health Campus. In order to rehab both tanks, one tank needed to be de-watered, prepped and sprayed while the sister tank is kept operational. Due to the two tanks being situated side-by-side, they each shared a common center wall of 8" thick concrete. The common shared wall became an obstacle with infiltration coming from the working (filled) tank into the emptied tank.

In order to dry this common wall on the negative pressure side to be sprayed, the water level of the working tank on the positive pressure side needed to be lowered to a level that reduced the hydrostatic pressure enough to eliminate infiltration and allow the Spray Shield Green I application to proceed.

RESULTS

200 mils of Spray Shield Green1 lining was applied to eliminate future deterioration of the concrete walls and improve the tanks' sediment cleaning operations.

With crews working two shifts day and night, both tanks were completed quickly while the campus fresh water supply was at no time interrupted.

