

PRINCE WILLIAM GROUND STORAGE TANK

Experience using a fluoropolymer polyurethane finish from Tnemec for new potable water tanks in northern Virginia's rapidly growing Prince William County led engineers to use the same coating system to renovate an existing 250,000-gallon standpipe. "They're a long-time Tnemec customer that had been using acrylic polyurethanes until we came out with the Series 700 HydroFlon," according to Tnemec coating consultant Mike Enoch. "When they learned that HydroFlon could give them better color and gloss retention compared to traditional acrylic polyurethanes, they decided to use the higher performing product."

Following abrasive blast cleaning in accordance with SSPC-SP10/NACE No. 2 Near-White Metal Blast, the tank's interior received three coats of Series FC20 Pota-Pox, a fast-curing polyamide epoxy, which was used to accommodate the anticipated temperature fluctuations during the interior coating application. "Normally, when an existing lining is blasted off, three coats are applied on to make sure the dry film thickness is achieved," Enoch noted. "Application was done during a time of year when the contractor was a little concerned about weather, which is why they used Series FC20 Pota-Pox so they could recoat quicker and it would cure quicker."

"It was a full containment project because the tank is located on a busy intersection and they had to contain the blast," Enoch recalled. The exterior was prepared in accordance with SSPC-SP6/NACE No. 3 Commercial Blast Cleaning, which is recommended for locations where a rust-inhibitive primer will be used in an exterior application. The contractor primed the exterior with Series 90-1K97 Tneme-Zinc, a single-component, moisture-cured, zinc-rich primer, which was spray-applied. Tneme-Zinc provides extraordinary performance with a user-friendly, easy application process.

Next, the exterior steel received a coat of Series 1075 Endura-Shield II, a semi-gloss aliphatic acrylic polyurethane. Endura-Shield II is highly resistant to abrasion, wet conditions, corrosive fumes and exterior weathering. After the containment system had been removed, the contractor roller-applied the finish coat of Series 700 HydroFlon.

Prince William County is located 35 miles southwest of Washington, D.C., and is an integral part of the Washington metropolitan area. Three new potable water tanks coated with Tnemec's HydroFlon are part of an ongoing effort to keep pace with the area's rapid population growth.

FEATURED PRODUCTS

Series FC20 Pota-Pox
Series N140 Pota-Pox Plus
Series 1075 Endura-Shield II

Series 90-1K97 Tneme-Zinc
Series 700 HydroFlon



PROJECT INFORMATION

Project Location

Prince William, Virginia

Project Completion Date

May 2003

Owner

Prince William County

Architect/Engineer

Hazen & Sawyer
Fairfax, Virginia

Applicator

Brickwood Contractors
Manassas, Virginia

The Ground Storage Tank in Prince William, Virginia features Series 700 HydroFlon which provides excellent color and gloss retention compared to traditional acrylic polyurethanes.

