

WADSWORTH STANDPIPE

When the City of Wadsworth, Ohio started receiving complaints about mold and mildew growing on a 700,000 gallon standpipe located near a residential neighborhood, engineers replaced its existing acrylic polyurethane exterior coating system with fluoropolymer technology from Tnemec. "Today, city officials are impressed with the fact that they have not had the regrowth of mold and mildew that they saw with the previous coating system," according to Tnemec coating consultant Sean Carlin. "With the old coating, city crews had to go out every year with bleach and a pressure washer to clean off the mold and mildew."

Carlin emphasized that he did not sell the fluoropolymer system based on its resistance to mold and mildew. "At that time, there was no research I could use to support that claim," Carlin recalled. "I described the color and gloss retention of fluoropolymer performance and the fact that it was going to look good for a long time."

The exterior surface of the standpipe was prepared in accordance with SSPC-SP6/NACE No. 3 Commercial Blast Cleaning and primed with Series 90-97 Tneme-Zinc, a two-component zinc-rich urethane, which was spray-applied. Next, an intermediate coat of Series 73 Endura-Shield, an aliphatic acrylic polyurethane was roller-applied. Series 700 HydroFlon, a two-component, fluoropolymer polyurethane, was roller-applied as the finish coat, completing the exterior three-coat system.

Carlin has monitored the condition of the Wadsworth water tank since the HydroFlon system was applied in 2004, as well as a sister standpipe tank that was topcoated several years earlier with a standard urethane system. "I don't see the regrowth of mold and mildew with the HydroFlon coating system that I do with the standard urethane," Carlin acknowledged. "Mold and mildew have a harder time growing on the fluoropolymer surface."

These findings are validated by comparable field experiences showing much higher gloss retention with HydroFlon compared to other coatings. And in laboratory studies using the Test Method for Cleanability of Coatings (MIL-PRF-85285C Section 4.6.8.), which was developed for the U.S. military, HydroFlon scored highest among the coatings tested.

"The city crews who used to go out and clean the tank in its former state with mold and mildew have really noticed the change," Carlin added. "Since HydroFlon was applied, their phone has stopped ringing with people complaining."

FEATURED PRODUCTS

- Series 73 Endura-Shield
- Series 90-97 Tneme-Zinc
- Series 700 HydroFlon



PROJECT INFORMATION

Project Location
Wadsworth, Ohio

Project Completion Date
Summer 2004

Owner
City of Wadsworth

Architect / Engineer
City of Wadsworth Water Department

Fabricator / Applicator
George Kontoupes Painting - Allen Park, Michigan

The top photo shows the mold and mildew growing on the Wadsworth standpipe when coated with an acrylic polyurethane system. The bottom photo shows very minor mildew growth due to grass clippings, after a Tnemec fluoropolymer system was applied.

