

## GEM WATER STORAGE TANK

In 1997 the 100,000 gallon pedestal water tank in Gem, Indiana, created a ripple in the coatings industry when it became the first potable water tank in the country to use a moisture cure, zinc-rich aromatic urethane as an interior primer. "The idea of using a zinc-rich primer for potable water immersion was controversial at the time," recalled Tnemec coating consultant Jerry Petro.

The project featured the two-component, moisture-cured, zinc-rich aromatic urethane, Series 91-H<sub>2</sub>O Hydro-Zinc, as the primer on both interior and exterior steel. The primer offers superior adhesion to both SSPC-SP10 (interior) and SSPC-SP6 (exterior) prepared steel. On the interior, Series 91-H<sub>2</sub>O was followed by two coats of spray-applied Series 40 Pota-Pox L.T. The exterior received an intermediate coat of Series 40 and a topcoat of Series 74 Endura-Shield, both roller applied.

The ability to use Hydro-Zinc as a universal primer on both the interior and exterior steel was a selling point for the project's fabricator, Phoenix Fabricators & Erectors, Inc. of Indianapolis as well as the engineer, Robert E. Curry of R. E. Curry & Associates, Inc., according to Petro. "The advantage is you eliminate putting different generic coatings on the interior and the exterior" he explained. "Now that Series 91-H<sub>2</sub>O Hydro-Zinc is certified in accordance with ANSI/NSF Std. 61 for use on the interior of potable water tanks, we can put it on all surfaces." In fact, Hydro-Zinc was the first organic zinc-rich primer to receive that certification.

More than five years of testing and research went into evaluating Series 91-H<sub>2</sub>O Hydro-Zinc before it was first used on the Greenfield pedestal tank, Petro noted. "When I talked to Curry about the project, we discussed the performance data and the product's outstanding long-term corrosion resistance," Petro said. "I told him that as long as we kept the topcoats refurbished, we should not have to blast the interior nor the exterior back to bare metal. To this day, there have been no problems with the zinc coating system on the tank and R. E. Curry & Associates continues to specify Hydro-Zinc."

Since that first application in Greenfield, Indiana, Series 91-H<sub>2</sub>O Hydro-Zinc has been used on thousands of water tanks nationwide, Petro added.

### FEATURED PRODUCTS

**Series 40 Pota-Pox L.T.**  
**Series 91-H<sub>2</sub>O Hydro-Zinc**  
**Series 74 Endura-Shield**



### PROJECT INFORMATION



**Project Location**  
Gem, Indiana

**Project Completion Date**  
August 1997

**Owner**  
Windsor Homes, Inc.

**Engineer**  
R.E. Curry & Associates  
Danville, Indiana

**Applicator**  
Phoenix Fabricators & Erectors  
Indianapolis, Indiana

The pedestal in Gem, IN was the first water tank to feature Tnemec's Series 91-H<sub>2</sub>O Hydro-Zinc as an interior primer.

