## WAUWATOSA 2.5 MILLION GALLON TOROSPHERE

Located on the western fringe of Milwaukee, Wauwatosa is an "edge city" with its relatively new concentration of business, shopping and entertainment. When the city's 2.5 million Torosphere water tank began showing its age, utility district engineers opted for a leading edge coating system from Tnemec. "It's a huge tank - the largest elevated tank in the state," according to Tnemec coating consultant John Laird. "It was a full containment project that involved removing all the existing paint down to the bare steel and starting from scratch."

The tank was completed in two phases, beginning with its 33,000-square-foot interior which was completed in 1998. Interior steel was prepared in accordance with SSPC-SP10/NACE No. 2 Near-White Metal Blast Cleaning prior to the spray application of Series 91-H<sub>2</sub>O Hydro-Zinc, a two-component, aromatic urethane zinc-rich primer. The interior also received two coats of Series FC20 Pota-Pox, a fast-curing polyamide epoxy.

The tank's exterior was recoated in 2001. After surface preparation in accordance with SSPC-SP6/NACE No. 3 Commercial Blast Cleaning, Series 90-97 Tneme-Zinc, a two-component, zinc-rich aromatic urethane primer, was spray-applied, followed by a rollerapplied intermediate coat of Series 27 F.C. Typoxy, a versatile polyamide epoxy used as a field tie-coat. Next, a coat of Series 73 Endura-Shield, an aliphatic acrylic polyurethane, was roller-applied. Endura-Shield is highly resistant to abrasion, wet conditions, corrosive fumes, chemical contact and exterior weathering. A final coat of Series 76 Endura-Clear, an aliphatic polyurethane clear coat, was roller-applied for added protection from ultraviolet light and to provide long-term color and gloss retention.

"The owner was very happy," Laird added. "They had excellent contractors and everything has held up great. It still looks like it was just painted."

The Wauwatosa Water Utility was established in 1897 to provide its customers with water using city-owned wells and ground water as its source of supply. During the 1960s, the utility reached an agreement to purchase water from the Milwaukee Water Works and changed to Lake Michigan surface water as its source of supply.

## FEATURED PRODUCTS

Series FC20 Pota-Pox (Fast Cure) Series 27 F.C. Typoxy Series 73 Endura-Shield

Series 76 Endura-Clear Series 90-97 Tneme-Zinc Series 91-H<sub>2</sub>O Hydro-Zinc



Project Location

**Project Completion Dates** 

Owner

Engineer

Fabricator / Applicator

Before and after photos of the 2.5 Million Gallon Torosphere in Wauwatosa, Wisconsin. The interior was repainted with Tnemec protective coatings in 1998 and the exterior, as shown above, was repainted in 2001.

