

MOLINE WATER TREATMENT PLANT

When it came to protecting millions of dollars' worth of new technology and infrastructure for the Moline Water Treatment Plant, the city and project engineers entrusted the job to the same coating company the city had relied on for decades. "Tnemec was specified and used throughout the treatment plant expansion project," according to Tnemec coating consultant Keith Kennett. "Moline made a huge investment in expanding and updating its water treatment facility, meeting the current and future needs of the community. It's a critical part of the city's infrastructure that needs to perform, and Tnemec's proven performance assures the city that their investment is protected."

The plant features ClariCone units, which are hydraulic cone clarifiers that treat the Mississippi River water used by the City of Moline. All new and recoated steel was prepared by the fabricator in accordance with SSPC-SP10/NACE No. 2 Near-White Metal Blast Cleaning (immersion areas) or SSPC-SP6/NACE No. 3 Commercial Blast Cleaning (non-immersion areas), then primed with an epoxy primer. Series 20 Pota-Pox, a polyamide epoxy, was used for the immersion areas and Series N140 Pota-Pox Plus, a polyamidoamine epoxy, was used for the non-immersion areas. The pre-primed ClariCone units were then delivered to the plant where they received further coating application.

Two coats of Series 20, an ANSI/NSF Std. 61 certified epoxy for use on the interior of potable water tanks, was spray-applied in the immersion areas, while one coat of Series N140 was brush-and roller-applied in the non-immersion areas. Series N140 provides excellent resistance to abrasion as well as chemical contact exposure.

Additionally, Series 1 Omnithane, a single component, moisture-cured aromatic polyurethane coating containing micaceous iron oxide and zinc, was used as a field primer for miscellaneous piping, valves and support structures.

"Moline and Tnemec have a long history together," Kennett added. "Our coatings are used throughout the city's entire water supply and treatment systems, from their water towers to their water reclamation facilities."

The Moline Water Treatment Plant Improvements Project was part of a 12-year effort that focused on the modernization and upgrade of the city's water plant facilities. Improvements included new chemical storage and feed systems, filtration upgrades, new laboratory facilities, security updates and a Supervisory Control And Data Acquisition (SCADA) computer system.

FEATURED PRODUCTS

Series 1 Omnithane
Series N140 Pota-Pox Plus
Series 20 Pota-Pox



PROJECT INFORMATION

Project Location

Moline, Illinois

Project Completion Date

April 2004

Owner

City of Moline

Architect/Engineer

Greeley & Hansen
Chicago, Illinois

Field Applicator

Economy Painting
Peoria, Illinois

Series 20 Pota-Pox and Series N140 PotaPox Plus, both epoxy coatings from Tnemec, protect the steel ClariCone units at the Moline Water Treatment Plant in Illinois.

