

# MERCK WATER TANKS & PIPING

Ground water tanks on the Merck Pharmaceutical campus in West Point, Pennsylvania, were being painted every two years due to constant condensation on the painted surfaces. Engineers needed a more effective solution to the corrosion and safety problems caused by the excess moisture. Merck consulted the contractor and decided to coat the tanks and associated piping with Aerolon – a fluid-applied thermal insulating coating system from Tnemec that utilizes aerogel particles for enhanced condensation control.

“These tanks are used to pump water into treatment for the West Point campus,” recalled coating consultant Wally Bates. “They’re located in a large metal shed without climate control, so the cool water that’s being pulled from the ground causes the tanks and piping to be much colder than the ambient temperature.”

Aerolon offers a versatile and viable solution in conditions where condensation is most likely to form. The coating system can be modeled using programs like 3E Plus® to determine necessary thickness given specific project factors, such as temperature and dew point.

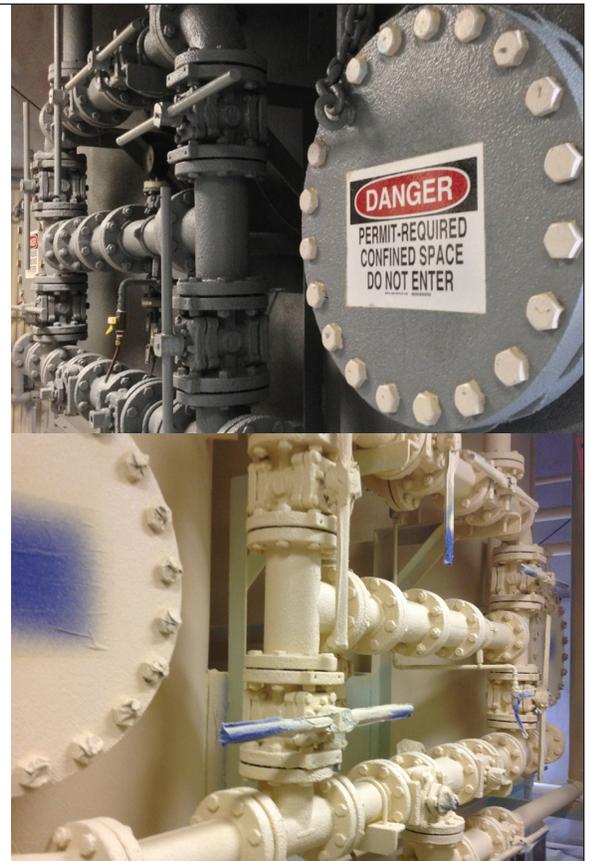
All carbon steel surfaces were prepared before a prime coat of Series N69 Hi-Build Epoxoline II was brush- and roller-applied. Following the prime coat, two coats of Series 971 Aerolon Acrylic were spray-applied for a final DFT of 80-90 mils. Series 971 can be applied at 40-50 mils DFT per coat, making application more efficient than other options while its water-based formulation is low VOC and low odor.

The system’s topcoat, Series 1028 Enduratone, was spray-applied at 2.0-3.0 mils DFT. This water-based HDP acrylic polymer coating is mildew resistant and exhibits very good gloss and color stability. Series 1028 is available in a wide variety of colors to match the requests of the owner.

“The application was completed without issue,” Bates remembered. “Several company engineers watched it and they were impressed by the look of the finished product. They look forward to the long-term performance improvement.”

## FEATURED PRODUCTS

- Series N69 Hi-Build Epoxoline II
- Series 971 Aerolon Acrylic
- Series 1028 Enduratone



## PROJECT INFORMATION

### Project Location

West Point, Pennsylvania

### Project Completion Date

May 2014

### Owner

Merck Pharmaceutical - West Point, Pennsylvania

### Contractor / Applicator

J.P. Smith Contracting - Glenside, Pennsylvania

In an effort to control condensation forming on water tanks and their associated piping, engineers at this facility selected Aerolon, an innovative, thermal insulating coating system from Tnemec.

