

CITY OF HOBBS EFFLUENT BOOSTER STATION

It took major coordination between different agencies and engineers before the work began, but a great decision was made when coating the interior piping at the City of Hobbs Effluent Booster Pump Station. In order to preserve the wastewater pipes and fittings in the station, and combat heavy abrasion, Series 431 Perma-Shield PL was selected because of its low pigment volume concentration (PVC) and innovative coal tar free, resin-rich formulation. This modified epoxy would provide resistance to H₂S gas and provide excellent chemical resistance to the ductile iron substrate.

"The City of Hobbs has a tradition of choosing products based on quality and longevity," stated Coatings Consultant Lane Salvato. "And, of course, the engineer wanted the best system they can get within budget." Parkhill, Smith & Cooper, the engineer, had used Tnemec products in the past, and appreciated the accelerated testing done on the Series 431, so they had confidence in the product. "Their previous success with our Series 434 and 436 Perma-Shield products gave them the confidence to choose Tnemec."

The ductile iron pipes used in the project were manufactured in Birmingham, Alabama by American Cast Iron Pipe Company. Series 431 was shop-applied at location by Vulcan Pipe and Steel Coatings after being prepared according to NAPF 500-03-04, with a 3.0 mil angular surface profile. The coating was spray-applied at 40-50 mils dry film thickness (DFT) with an airless plural-component system using an internal spinner gun. In order to prevent pinholes and establish a homogeneous film, and because Series 431 is self-priming, Vulcan sprayed two coats on each pipe, using a total of 350 gallons of the product. The resulting, newly-coated pieces were shipped to Hobbs, New Mexico on April 1st.

The various-sized fittings and valves used in the project were shipped to Hobbs from Tyler, Texas. They were supplied by Tyler Union and coated by Jifco, Inc of Texas. The fittings were prepared in a similar manner, in accordance with NAPF 500-03-05, and spray-applied with Series 431 Perma-Shield PL at 40-50 mils DFT.

The pipes and fittings arrived in Hobbs and the first pipe was laid into the ground on April 10th, 2013. Before going in the ground, in accordance with NACE RP 0188-99, all of the lining was high-voltage holiday detected at 4,000 volts. "The engineer was truly impressed with the end result; it was contiguous, with no visible problems at all," said Salvato. "It took involvement from everybody, but all looks great."

FEATURED PRODUCTS

Series 431 Perma-Shield



PROJECT INFORMATION

Project Location

Hobbs, New Mexico

Project Completion Date

April 2013

Owner

City of Hobbs

Engineer

Parkhill, Smith, & Cooper, Inc. - Lubbock, Texas

Shop Applicators

Vulcan Pipe and Steel Coatings, Inc. - Bessemer, Alabama

Jifco, Inc. - Kosse, Texas

Distributor

Ferguson Enterprises, Inc. - Albuquerque, New Mexico

The City of Hobbs Effluent Booster Station used approx. 560 gallons of Series 431 Perma-Shield PL to protect wastewater pipes and fittings.

