

RED RIVER TERMINALS FUEL TANKS

Replacing the floor of an aboveground fuel storage tank is time consuming and a major expense compared to applying a protective lining, which is why Red River Terminals initiated a program in 2007 to reline its fuel tanks with a Tank Armor thick-film epoxy lining from Tnemec. "We were brought in after an inspection found the floor in one of their storage tanks pitted and in need of replacement," Tnemec coating consultant Brandon Lomasney recalled. "Replacing a floor is about four times the cost of applying a protective liner. So after the new floor was installed and the lining was applied, the decision was made to reline the remaining tanks under a preventive maintenance program to reduce their life-cycle costs."

The interior of each tank was prepared in accordance with SSPC-SP5/NACE No. 1 White Metal Blast Cleaning and relined with Series 330 Tank Armor, a thick-film reinforced self-priming epoxy lining for corrosion control. The lining was applied at 30 mils dry film thickness (DFT) and tested for hardness and holidays. "The applicator liked the way the Tank Armor lining is applied and its performance," Lomasney explained. "It can be applied in a single monolithic coat, so there's no need for a primer."

Red River Terminals also evaluated the condition of exterior coatings on the roofs and shells of each tank. "The roofs were in the worst shape," Lomasney acknowledged. "They're exposed to direct sunlight, moisture and coastal conditions, so you have a very corrosive environment. We also tested coatings on the exterior shell of each tank for adhesion, film erosion and the percentage of rusting to see if they were in good enough condition to be overcoated. Our recommendation was to overcoat tank walls and blast and paint the roofs."

Series 30 Spra-Saf EN, an advanced technology hydrophobic acrylic polymer, was specified for use on the roofs and tank walls. Spra-Saf EN is a direct-to-metal, corrosion-inhibiting coating with long-term corrosion protection and weathering properties. It can also be used as an overcoat on painted surfaces that have been high-pressure washed and cleaned of all visible rust in accordance with SSPC-SP11 Power Tool Cleaning to Bare Metal.

"They plan to recoat these tanks over a four-year period, doing three tanks per year," Lomasney added.

Red River Terminals is a petroleum distribution complex that includes a liquid storage terminal with related dock, piping, tanks capable of 340,000 barrels of storage and four-bay automated truck racks. The company was the Port of Shreveport-Bossier's first tenant and remains the port's highest volume tenant.

FEATURED PRODUCTS

Series 30 Spray-Saf EN
Series 330 Tank Armor



PROJECT INFORMATION

Project Location

Port of Shreveport-Bossier, Louisiana

Project Completion Date

2009 (ongoing)

Field Applicator

Martin Specialty Coatings

Rather than replacing the pitted floor in an aboveground fuel storage tank, Red River Terminals chose to reline the tank with a Tank Armor thick-film epoxy lining that can be applied in a single monolithic coat.

