

CASE STUDY #3

Petroleum Storage Tank, Refinery, Corpus Christi, Texas

The Opportunity

At a leading petroleum refinery in Corpus Christi, Texas, a 325'-diameter tank was being re-lined. After an exhausted period of maintenance, the tank failed to pass inspection due to detectable contaminant levels, and as a result the coating company was unwilling to coat the tank. The floating roof tank had an extraordinarily high contaminant level due to the extremely polluted water-cut zone.

The tank had withstood multiple abrasive blast attempts over the course of several months, but the tank remained out of service. The client was faced with the potential of a \$535,000/day demurrage fee from a tanker that was fast approaching with cargo to unload.

The Solution

At the suggestion of Sherwin Williams, CorrX was used. Within four days, the 325' tank was cleaned and decontaminated using the CorrX technology, passing the inspection required for coating. Coatings were applied and the tank was immediately returned to service. As a result of CorrX, the customer did not incur any penalties. One month later, a second 285'-diameter floating roof tank at the same location was cleaned, decontaminated, coated and returned to service in record time following the success of the first project.

The Findings

In 2006, the 325'-diameter tank was re-inspected. At first glance, it appeared to have a 180' coating blister in the center of the floor. The coating company rep and the original contractor were called back to the site. Upon closer inspection, they discovered that the "blister" was actually a seismic upheaval and that the only coating failure was a hairline crack around the perimeter of the beveled floor. There was absolutely no undercutting of the coating. Moreover, when the contractors began to repair the crack in the tank, they found that the coating was virtually impossible to strip from the metal.