CNOOC HUIZHOU WASTEWATER SYSTEM

After successfully rehabilitating a concrete wastewater tank at a Chinese National Offshore Oil Company (CNOOC) facility in 2014, Tnemec products were specified by the company again to complete a massive plant expansion in 2017.

The harsh environment in oil refineries requires strong coating systems to protect concrete tanks from numerous different hazardous substances. The facility had a number of concrete wastewater tanks that were designed to house rainwater and cooling water, with others designated for alkali and acidic wastewater.

Tnemec representatives in China recommended the combination of Series 218 MortarClad, Series 27WB Typoxy, Series 61 Tneme-Liner and Series 365 Tank Armor, to provide long-lasting protection and durability for immersion in chemical-exposed areas.

The project began with detailed surface preparation. Concrete tank walls and floors were cleaned and prepared according to CSP-5 standards by abrasive blast cleaning.

Series 218 was used to help resurface and prepare all concrete structures for lining. Series 27WB, a low VOC, hybrid epoxy coating, was applied to all rainwater and cooling water storage tanks.

Series 61 and Series 365 were applied to the alkali and acidic tanks using airless spray and plural component spray methods.

Overall, over 50,000 gallons of Tnemec coatings were used to cover and protect 1.5 million square feet of concrete tanks.

The Chinese National Offshore Oil Company is the chief crude oil and natural gas producer in China and one of the largest oil and gas exploration and production companies in the world. The CNOOC group primarily operates in offshore China and the South China Sea, but also holds assets around the world. The group nets an average daily production of nearly 1.3 million BOE, or barrel of oil equivalent, with reserves close to 5 billion BOE.

FEATURED PRODUCTS

Series 27WB Typoxy  Series 218 MortarClad
Series 61 Tneme-Liner  Series 365 Tank Armor

All of the concrete tanks in the CNOOC Huizhou plant were lined with reliable, time-tested Tnemec products. The coatings were specified based on exposure, including rain and cooling water, alkali wastewater and acid wastewater.