

Company:

This customer is one of the largest wastewater operations in the US. The company distributes water and provides wastewater services to about 7 million people, including residential, commercial, and industrial customers.

Problem:

The company was experiencing high maintenance expenses in their cake slurry tank as a result of corrosion. The original manufacturer had coated the tank with a coal tar substance to protect the carbon steel. Due to the high degree of acidic concentrate contained in these tanks, the relatively thin coal tar coating was easily compromised by abrasion from the slurry and did not provide sufficient corrosion protection for the steel interior. As a result, the steel floor of the tank had corroded significantly to a point of failure, leaking the corrosive slurry into the surrounding equipment areas.



Cake Slurry Tank – Interior Prior to Application

Solution:

Because of the abrasive nature of the materials and acid concentrate contained in the company's cake slurries, a thin coating was not the optimal choice for this application. Rhino Linings was chosen because of its ability to be applied to surfaces of any shape or size, providing an impermeable monolithic membrane that can withstand highly corrosive environments. First, the sludge tank was cleaned and blasted to achieve an angled profile of approximately 2-3 mils and then primed with Rhino Linings Primer 251. Then Rhino Linings' Hi-Chem™ formulation was sprayed at a thickness of 1/2" (1.27 cm) on the bottom of the tank and 1/4" (.635 cm) on the sidewalls of the tank.

Results:

One year after application, the company did an inspection of their cake slurry tank to confirm the integrity of the lining. The inspection confirmed that there had been absolutely no wear or deterioration of the Rhino Linings. Based upon this positive performance, the company decided to expand their application of Rhino Linings formulations to other areas of their operations, including their concrete holding tanks.



Cake Slurry Tank – Exterior View

For further information regarding industrial applications, please contact Rhino Linings Industrial Division at 877-509-4603, or visit us at our website at: www.rhino linings industrial.com.

Industrial applications are highly specialized and specific consultation and training may be required to perform such applications. Rhino Linings USA, Inc. does not provide confined space training and expertise in this area may be required for some applications. Product MSDS sheets and specific chemical properties should be evaluated before undertaking any industrial application.