

Technical Report – CHILLED WATER TANK

Subject: Chilled Water Tank at Calpine Cogeneration Plant

Date: September 2009

Problems: Insulation destroyed by hurricane force winds, Corrosion Under Insulation (CUI), and radiant heat gain

Product: Mascoat Industrial-DTI

Dry Film Thickness: 40 mils

Calpine's Cogeneration Plant, located in Pasadena, TX USA needed to replace 1.5" of foam insulation on a 120 foot OD Chilled Water Tank that was damaged during Hurricane Ike in September 2008. When the damaged insulation was removed, the substrate was already beginning to corrode. While researching options through approved contractors, Brand Industrial informed Calpine about Mascoat Industrial-DTI from the success they had seen at other facilities. Between ease of

application, the coating's ability to withstand weather and the fact that it would provide an excellent radiant barrier, Calpine decided to apply the coating to the tank top.



Mascoat performed a thermal analysis for the company and predicted that only 40 mils of Mascoat Industrial-DTI would be able to replace the 1.5" foam in this specific environment. Additionally, it would provide a seamless barrier from Corrosion Under Insulation.



After the substrate was sandblasted and primed with Amerlock 400, 40 mils of Mascoat Industrial-DTI was applied in two successive coats by a crew of 4 men. A total of 5 days was needed to coat the entire roof of the tank.

The customer has reported that it is a cost-effective, low maintenance solution that will keep them at ease for years to come.