

PROJECT:

Water Tank/Concrete Restoration

LOCATION:

Oyster Bay, NY

OWNER:

Water Authority of Oyster Bay

APPLICATOR:

Delphi Engineering

COATING SYSTEM:

AQUASEAL[™] Synergy Series
Polyurea Coating - 80 mils

TOTAL AREA:

30' diameter x 2 1/2" high

DATE COMPLETED:

June 2010

PROBLEM:

The Water Authority of Oyster Bay, NY wanted to eliminate the moisture zone between the concrete and steel base of a water tower. Condensation would occur, due to the humid climate, and run down the side of the tank, gathering at the seam between the concrete and steel. This moisture problem was causing the concrete to spall and the steel to deteriorate from rust.

SOLUTION:

Nick Pjatikin, of Delphi Engineering, installed Aquaseal[™] Synergy Series polyurea using SPI's LPG[™] (Low Pressure Gear) mobile equipment. The polyurea seamless liner bridged the steel tank, concrete foundation, and anchor bolts. This provided a seamless, waterproof, protective liner that fully adhered to all of the substrates.

Prior to the application of polyurea, the Delphi applicators prepared the multiple surfaces to ensure proper adhesion. The concrete was media blasted to remove all

debris particles and damaged concrete. The freshly painted steel was scuffed to take off the shine and provide an anchor profile to promote better adhesion.

The applicator spray-applied 80 mils of Aquaseal[™] polyurea. Finally, a two part urethane paint was added for U.V. color stability and aesthetic purposes to color match the rest of the tank.

RESULTS:

Oyster Bay Water Authority officials appreciated the value of using polyurea as a protective coating to prevent further steel corrosion and concrete spalling. Their decision to retrofit the water storage tank with SPI's Aquaseal[™] Synergy Series polyurea provided a tremendous cost savings by eliminating the need to decommission and replace the entire tank.

