

Underground Water Reservoir



THE SITUATION

In certain parts of England the treated potable water is stored in underground reservoirs prior to being distributed to homes and businesses. These underground tanks are typically constructed of concrete or brick/block with a concrete reinforced roof. The land above these reservoirs is used for purposes such as farming which includes the use of fertilizers and chemicals.

Constructed 30 to 40 years ago, the concrete roofs of the reservoirs have become porous potentially allowing dirty rain water and farming chemicals to penetrate the concrete and enter the drinking water.

The customer was looking for an effective long term solution of sealing the reservoirs that did not require rebuilding or taking them out of service.

THE SOLUTION

Prior to contacting LINE-X, the customer tried a variety of solutions including membranes, epoxy resins and liquid tar. None of these solutions proved effective.

LINE-X sealed the concrete roofs using LINE-X Aquarethane Extreme.

The project was completed in two stages over a two month period. At no time were the reservoirs taken out of service.

THE RESULTS

The customer was delighted with the solution. LINE-X Aquarethane Extreme was effective where other solutions had failed. Equally important to the customer, the LINE-X solution kept the tanks in service and did not require any structural rebuild. Finally, the LINE-X solution was more economical than the failed alternatives.

Based on the success, the LINE-X dealer is being asked to bid on future reservoir preservation projects.

THE PROCEDURE

The customer was responsible for removing the dirt covering the reinforced concrete roof. The LINE-X dealer cleaned the roof of residual dirt and soil and cleaned the concrete by pressure washing with water.

LINE-X Aquarethane Extreme was applied to a thickness of 125 mils.

Following the application, the customer restored the dirt cover using a bulldozer. Once the LINE-X Aquarethane was covered with dirt, no special protection of the coating was needed.