

At a Sprayroq product installation demonstration in Lancaster, S.C., Public Works Director Mack McDonald observed the use of SprayWall polyurethane, which he believed could help restore an aging clarifier at the city's wastewater treatment plant. The structure was not only crumbling away daily, but due to an uneven substrate, was very difficult to clean and keep free of algae.

SOLUTION

The structure was cleaned using a 4,000 PSI pressure washer. Special care was taken to remove all unstable material, creating a solid substrate to begin the build-back. After cleaning, OCS installed a rapid-set repair mortar to build back and fill large voids left by years of deterioration. ½" of micro silicate mortar was then installed to profile the floor and interior walls to prevent future leakage. Great care was taken to ensure that proper fall was maintained and that clearances were honored for the "dinosaur teeth" and sedimentation paddles.On the exterior wall, a high build, fast-setting epoxy was installed. This allowed the wall to be profiled precisely 18 inches from the floor without any additional build-up at the transition point. OCS then spray-applied 125 mils of SprayWall by Sprayroq on the floor, interior wall, and exterior wall of the trough. This gave the structure instant leak protection, chemical resistance and a new 50-year service life.

RESULTS

After the structure was returned to service, improved performance was immediately noticeable. The structure no longer leaks. Also, it is now much easier to clean, according to Mack, and does not have to be cleaned as often.