

Polyclad 767 is key in critical water pipeline rehab



Millions in Southern California rely on Etiwanda Pipeline



Location: Fontana and Rencho Cucamonga, California, USA

Owner: Metropolitan Water District of Southern California (MWD)

Contractor: F.D. Thomas

Date applied: Spring and summer 2023

Exposure: Periodic immersion in moving water

Coatings applied: Polyclad 767 rigid polyurethane

About the pipeline

The Etiwanda Pipeline is a critical piece of Southern California's water supply puzzle. Built in the 1990s, it carries raw water from reservoirs and canals upstate to a treatment facility in the Los Angeles suburbs.

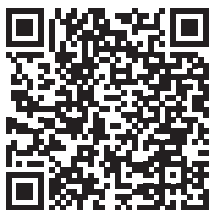
The cement mortar lining original to the 12-foot-wide pipeline was regarded an ordinary and sufficient corrosion protection method at the time. But more recently, intense droughts and inconsistent water supplies led to the mortar lining drying out and cracking apart in places. Newly exposed steel began to corrode. MWD took the pipeline out of service in 2022 to begin a rehabilitation.

Coating selection explanation

Initially, authorities specified Polyclad 767 based on its strong performance against competing lining products in a trial. This self-priming rigid polyurethane meets AWWA C222 criteria and is UL-approved for ANSI/NSF 61 potable water contact.

But its fast cure time and long recoat window became important during the middle of the project, in the aftermath of powerful winter storms. The storms dumped enough rain to end a drought and replenish reservoirs, which led to state water authorities allocating to the MWD and other districts 100% of the water supplies they had asked for.

Unwilling to let the ongoing pipeline rehabilitation stand between customers and water, MWD ordered an acceleration of the work. Crews were able to apply the lining faster because it cures quickly enough to pass back over it for a second coat shortly after the first while remaining accepting of that second coat without the need to clean or abrade. As a result, the pipeline returned to service two months ahead of schedule.



Scan to read
the full case study