Restoring a Municipal Reservoir in Dallas, PA with CIM Eco 1061 – Zero VOC, NSF/ANSI 61 Approved Coating

Case Study: Concrete Reservoir Tank, Drinking Water. Dallas PA





DN Tanks crews prepare and apply the CIM Eco 1061 coating system inside the Dallas, PA municipal reservoir.

Introduction

Built in the 1960s, the 100-foot diameter concrete water storage tank at 1000 Follies Road in Dallas, Pennsylvania has served as critical municipal drinking water infrastructure for decades. Owned by the State Correctional Institution at Dallas, the tank's 20-foot walls and 14,200 square feet of interior surface area—spanning both floors and walls—represent a significant asset that the facility depends on for a safe, continuous water supply.

DN Tanks, a contractor based in Wakefield, Massachusetts and a specialist in tank construction and rehabilitation, was brought in to lead the restoration. Their scope called for a coating solution that could meet the rigorous demands of potable water storage while standing up to the realities of working inside an enclosed concrete structure.

The Challenge

After decades in service, the tank's interior concrete had begun to deteriorate, and leaking had started to occur. Left unaddressed, this kind of structural wear threatens both water quality and the long-term integrity of the asset. Additionally, there is a cost to losing water into the ground and treating more water that is lost. The facility needed a comprehensive interior repair and recoating solution that would seal the tank against leaks, protect the concrete substrate, and restore safe, reliable operation.

Compounding the technical challenge was the enclosed nature of the workspace. Applying a liquid coating system inside a confined concrete tank raises real concerns about worker safety, particularly around fume exposure from volatile organic compounds (VOCs) commonly found in traditional coating products. Any solution needed to deliver long-term durability without compromising the safety of the application crew.

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The Solution

The project team selected CIM Industries' Eco 1061 coating system, applied by DN Tanks after draining the tank, repairing the concrete, cleaning the substrate, and patching damaged areas.
The system followed a multi-layer application process:

- EMT Primer: Applied at 15–20 mils to support adhesion, using 50 units.
- Cant Detail: A ½-inch cant reinforced transition points.
- Scrim and TG Reinforcement: Reinforced transitions and penetrations for added durability.
- Eco 1061 Topcoat: Applied at 60 mils across floors and walls, using 160 five-gallon pails to cover 14,200 square feet.

Eco 1061 was selected for the enclosed tank because its 100% solids, no-VOC formulation reduced volatile fumes and associated PPE needs. Its fast cure allowed the tank to return to service in 72 hours, minimizing disruption to water supply operations.
The team initially considered CIM's standard 1061 but switched to Eco 1061 for its environmental profile and quicker turnaround, aligning safety, schedule, and long-term performance.

The Results

By selecting Eco 1061, the project team kept the tank rehabilitation on its service schedule, avoiding costly delays. The coating system's rapid 72-hour cure time meant the reservoir was back in service quickly, minimizing the operational gap for a facility that depends on uninterrupted water access.

Beyond the immediate turnaround, the new CIM liner is expected to deliver decades of extended service life for the tank, provided the exterior structure remains sound. For a reservoir built in the 1960s, this represents a substantial extension of its useful life without the cost and disruption of full reconstruction.



Interior view of the completed municipal reservoir, coated with CIM Eco 1061.

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