Natura Wastewater Treatment Plant

Tijuana, Mexico (2016)

PRODUCTS USED:

Krystol Internal Membrane™ (KIM®) Krystol Waterstop Treatment™
Krytonite™ Swelling Waterstop

OWNER:	ENGINEER:	GENERAL CONTRACTOR:
Grupo Ruba	Rigoberto Laborin	Laval Tijuana S.A. de C.V.

READY-MIX SUPPLIER:	DISTRIBUTOR:
CEMEX	Punto Seco S.A. de C.V.

BACKGROUND

The new Natura wastewater treatment plant serves over 7,200 households in Tijuana, Mexico, dewatering the sludge from their used water before transporting and disposing of it. To that end, multiple concrete water tanks and containment areas make up the treatment plant, allowing the facility to properly secure the wastewater and treat it.

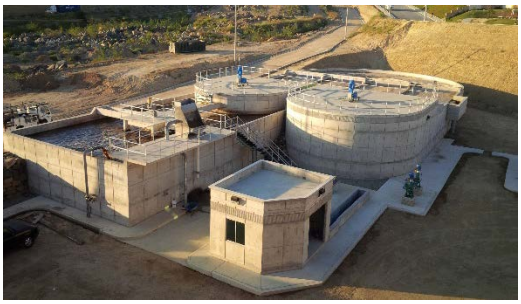
It's a critical operation that ensures each household remains sanitary. Because of that, the owner of the treatment plant wanted to ensure it could continue operating for decades. However, to do that, they needed a long-term and durable waterproofing solution for their plant's concrete tanks.

Initially, the team in charge of making that happen considered using external surface-applied membranes. They soon decided against this option as it would not provide a permanent waterproofing solution.

SOLUTION

Instead, the team specified the use of Kryton's concrete waterproofing products for all the water and liquid containment tanks. They chose these products because of their unparalleled 25-year warranty, comprehensive technical service support, and successful 40-year history with waterproofing concrete and increasing its durability. As a result, in total, the team used 2,100 m^3 (74,161 ft^3) of concrete waterproofed with Kryton's KIM. Because KIM contains Krystol® technology, it can initiate a chemical reaction within the concrete using water and unhydrated cement particles.

KRYTON®
SMART CONCRETE®



1645 East Kent Avenue, Vancouver, BC, Canada, V5P 2S8 | T 1.604.324.8280 | F 1.604.324.8899 | W kryton.com | E info@kryton.com

Natura Wastewater Treatment Plant

Tijuana, Mexico (2016)

PRODUCTS USED:

Krystol Internal Membrane™ (KIM®) Krystol Waterstop Treatment™
Krytonite™ Swelling Waterstop

That creates insoluble needle-shaped crystals, which fill up the concrete's pores, capillaries, and micro-cracks to block water and waterborne contaminants from passing through. Any moisture introduced through cracks in the concrete will trigger this crystallization and self-sealing process.

To protect the rest of the structure, the team used over 1,000 m (3,281 ft) of Kryton's Krystol Waterstop Treatment and Krytonite Swelling Waterstop on all the construction joints.

After that, they added water to the concrete basins, which created some expected small leaks in some of the constructed joints and cracks. The team then called the Kryton product distributor who advised them that KIM would self-seal those areas in a couple of days. The team had trust in Kryton's products, so they waited. A couple days later, their trust was validated as the leaks were no longer there and the joints were all sealed. As of 2017, that remains the case with the concrete waterproofing performing perfectly and the structure remaining leak-free.

KRYTON®
SMART CONCRETE®

Kryton International Inc.
1645 East Kent Avenue, Vancouver, BC, Canada, V5P 2S8 | T 1.604.324.8280 | F 1.604.324.8899 | W kryton.com | E info@kryton.com