

ONTARIO
**KNOW-HOW
IN ACTION**

BELZONA[®]
GREAT LAKES

004/2021

**WASTEWATER
CLARIFIER
IMMERSION PROTECTION**


BELZONA[®]
Repair • Protect • Improve
AUTHORIZED DISTRIBUTOR

THE PROJECT

CLARIFIER
REFURBISHMENT
OCTOBER, 2011

The only wastewater treatment plant in the city of Sarnia serves over 70,000 citizens in Ontario. The secondary clarifiers at the Water Pollution Control Center were pitted and deteriorated due to chemical attack from the biological treatment process. The city decided to coat one of the four secondary tanks to see if the results were favorable.

CORROSION PROTECTION

The 13-year-old weirs, which run 24 hours a day, clean up the city's water before sending it back out to the St. Clair River, which runs south from Lake Huron in Michigan to Lake St. Clair in Ontario. Acting as an international border between Canada and the United States, Therefore, the efficiency of the treatment plant was vital. In addition to this, the clarifiers were covered in algae and debris, creating a particular problem during the summer season when the crew usually works on the maintenance program.

The fact that the secondary clarifiers (young, compared to the 50-year-old primary clarifiers) needed repair so badly meant that the plant needed to make some moves quickly.



THE SOLUTION

The tank was power washed with 10,000 psi and allowed to dry. Once the concrete was dry, pits, cracks or holes were conditioned with Belzona 4911 and then filled with Belzona 4131 using a trowel.

After completion, Belzona 5811 was applied to the entire internal part of the tank with rollers and brushes to provide protection against the environment in this stage of the process.

EXCELLENT MECHANICAL PROPERTIES



Belzona helped get the tank back in production, helping the entire city of Sarnia. For more information about this application and feedback from the Maintenance Mechanic of the facility, please read the full article [here](#)

Belzona 4111 when exhibits high mechanical strength providing excellent protection against the effects of abrasion, impact, vibration as well as providing excellent environmental protection while being impermeable to water.

Belzona 5811 (Immersion Grade) is a solvent free system, designed for the protection of metallic and non metallic surfaces operating under immersion conditions. This material can be virtually applied to any surface.