

REVIVING ASSETS:

WASTEWATER TANK RESTORATION

www.nanotechinnovation.ca

Summer 2025







Client Profile

Richmond Steel Recycling is a leading Canadian scrap metal recycling organization with over 50 years of industry experience. Based in Richmond, BC, the company provides comprehensive metal recycling and recovery services across Western Canada, Alaska, and Washington State. Their offerings include scrap metal drop-off and collection via bin services, industrial demolition, asset management, and specialized auto recycling, operating British Columbia's only large-scale auto shredder.



Challenge

Effective stormwater management is essential in steel recycling, requiring reliable infrastructure. This metal stormwater tank, vital for containing collected rainwater, faced corrosion-induced metal deterioration which could eventually result in significant integrity challenges.

A potential tank failure posed risks of major operational disruptions and environmental challenges. With replacement costs estimated at \$30,000-\$40,000, Richmond Steel needed an innovative, cost-effective restoration solution to ensure the tank's longevity and prevent costly interruptions.





Solution

A high-performance, multi-layer coating system featuring AnarPrime™ was chosen to restore the interior of the 20,000-gallon metal stormwater tank. By using this advanced solution, Richmond Steel achieved significant cost savings while extending the asset's service life and avoiding a costly replacement.

The tank's interior was prepared by wire brushing corroded areas to an SSPC-SP3 standard, followed by a thorough power wash. AnarPrime™ was then directly applied to the rusty interior surfaces. A durable epoxy topcoat was then added to create a seamless, protective barrier. This cost-effective restoration was completed in just under a week, significantly extending the tank's service life with minimal operational downtime.



Benefits & Results



No Business Disruption

Ensuring operational continuity and environmental compliance is paramount for industrial facilities. This restoration avoided the significant operational disruption and lengthy downtime associated with full tank replacement



Significant Savings

Restoration completed at a fraction of the \$30,000 - \$40,000 replacement cost



Extended Asset Lifespan

Delivered long-term corrosion protection, ensuring durability. Backed by a strong warranty for enhanced peace of mind









Surface Preperation

Loose flakes and blisters were removed by light wire brushing, followed by a pressure washing to remove contaminants





Our



3-in-1 Converter, Primer & Sealer coating

Two coats of Anarprime™ were applied to chemically convert existing rust into a stable, anticorrosion layer, creating a paintable surface and crucial foundation for subsequent coats.

Middle Coat

A Fast Cure epoxy was applied for enhanced chemical and moisture resistance. This highsolids epoxy provides a strong barrier against the corrosive wastewater environment.





Top Coat

Given the specific application of the tank that required a top coat suitable for immersion applications, a highperformance polysiloxane top coat was applied over the epoxy. This final layer provides enhanced durability and UV protection against the tank's harsh working environment

AnarPrime

Gallery



Before











Get In Touch



Mobile Number (778) 584-9977



Address





Email Address info@nanotechinnovation.ca



Website

Nanotechinnovation.ca