

DUNGANNON WATER RESERVOIR

ONTARIO, CANADA

SPECIALTY PRODUCTS GROUP - VAPOR LOCK™ 40/41 PROJECT



Case Study: Dungannon Water Reservoir

Project Overview:

The Township of Ashfield-Colborne-Wawanosh operates the Dungannon Drinking Water System, which supplies safe drinking water to more than 262 residents. The system utilizes a well based groundwater source and is designed to address naturally occurring arsenic in the area's bedrock through effective filtration treatment. A dedicated reservoir provides flow balancing and aquifer management, helping maintain a reliable water supply while meeting all applicable drinking water quality requirements.

Results & Benefits:

- Permanent integral corrosion protection for reinforced concrete structures
- Enhanced waterproofing to reduce water and vapor intrusion
- Self-healing & Pre-Healing nano-technology for long-term durability
- VOC-free formulation supporting environmentally responsible construction
- Reduced maintenance requirements and extended asset service life
- Improved protection of critical drinking water infrastructure against deterioration over time

About Vapor Lock™ 40/41

Vapor Lock™ 40/41 Corrosion Inhibiting & Waterproofing Concrete Admixture is a ready-to-use concrete admixture that provides both corrosion protection and integral waterproofing. Utilizing VOC-free proprietary technology, it becomes a permanent component of the concrete matrix, delivering long-term durability without affecting the finished structure.

The admixture works by protecting embedded reinforcing steel from corrosion while reducing water and vapor transmission through the concrete. Its advanced self-healing & pre-healing nano-technology continuously reacts within the concrete, helping to maintain protection over the life of the structure.

How Vapor Lock™ 40/41 Helped

To further enhance the durability and long-term performance of the Dungannon Drinking Water System infrastructure, Vapor Lock™ 40/41 Corrosion Inhibiting & Waterproofing Concrete Admixture was incorporated into critical concrete components. The admixture provides dual protection by acting as both a powerful corrosion inhibitor and an integral waterproofing solution.

