

Spray-Applied FR Geomembrane

Trans Mountain Burnaby Terminal: Seamless Compliance to CAN/ULC S668 with the installation of a Fire Resistant, Canadian-Made, Composite Liner

November 11, 2022

Burnaby, British Columbia



Above: Trans Mountain Burnaby Terminal
Right: Application of 150D-FR Spray-Applied Polyurea
Site Photos: Courtesy of Layfield Geosynthetics

Quantum Chemical is pleased to announce the installation of 13,000 m² (139,900 ft²) of **PRECIDIUM™ 150D-FR** fire resistant polyurea at Trans Mountain Burnaby Terminal.



PRECIDIUM™ 150D-FR was developed and tested in Quantum's R&D Test Lab to exceed the required property performance of spray-applied liners and geotextile systems for secondary containment. Notably, it also passes the stringent CAN/ULC S668 Standard for Secondary Containment of Flammable and Combustible Liquids - a requirement of the National Fire Code of Canada. The 150D-FR is green by nature, with zero VOCs, for environmental sustainability. For this particular project it is also green by design to blend into the area's forest environment. Product development and manufacturing are completed at Quantum's facility in Alberta.

Layfield Geosynthetics constructed the secondary containment portion of this project which involved the application of 60 mils of **PRECIDIUM™ 150D-FR** onto their **GeoVolt™** geosynthetic conductive composite. This composite liner system was placed over vertical shotcrete walls to form a key component of the secondary containment for hydrocarbons at the Burnaby Facility. Use of a conductive GeoVolt™ allowed the geomembrane liner to be electrically holiday tested for immediate detection and repair of any voids in the polyurea system. The composite secondary containment liner was then covered by an additional layer of shotcrete.

Kiewit-Ledcor Trans Mountain Partnership (KTLP), the General Construction Contractor for the Lower Mainland portion of the Expansion Project, required a flexible, spray-applied material to conform to the shotcrete substrate and seal easily around the steel anchors which penetrated the shotcrete.

Quantum Chemical is a specialty coatings formulator and manufacturer involved in the containment, transportation, utility infrastructure and building construction/refurbishment industries with a keen focus on fire retardant and Zero VOC products.

For additional information about **PRECIDIUM 150D-FR**, please be sure to visit us at <https://www.quantumchemical.com/precidium-secondary-containment> .

Contact: Vicki Beier: vbeier@quantumchemical.com or dmartin@quantumchemical.com