

QUICK CONCEPT TANK FACTS

Tank Capacity	11,000m ³
Wall Height	10 Feet
Build Time	3 Weeks
Fluid Quality	Landfill Leachate
Liner System	Enviro Liner® 6040 Conductive Geotextile Enviro Liner® 6040 Geotextile
Leak Detection	Yes
Floating Cover	Yes

A 4-Million Gallon Concept Tank™ was recently constructed in response to the urgent need for leachate storage capacity and a waste landfill. The Concept Tank™ was fitted with an innovative floating cover system to eliminate rainwater ingress, thereby reducing the potential overflow to the environment in a severe rain event. The tank also featured multiple floor penetrations with pipework for draining and filling.

FLOATING COVER

The floating cover is primarily constructed from the same material as the tank liner, Enviro Liner® 6040. This method of sealing the tank delivers significantly reduced time and cost compared to a standard steel roof structure whilst still providing all the operational requirements that will also stand the test of time. The cover has various weights and floats welded to it to maintain a clean finish. Stormwater sumps remove any capture rainwater from the surface of the cover.

DOUBLE LAYER LINER WITH LEAK DETECTION

To ensure the highest level of environmental protection, the tank features a double layer liner with an integrated leak detection system. This provides real-time monitoring, swiftly identifying any potential leaks without any fluid going to ground.

GRAPHENE COATED GEOTEXTILE FOR SPARK TESTING

Geovolt® – a non-woven geotextile with a conductive membrane layer – was installed between the primary and secondary liner layers. This enable the liner to be thoroughly tested for any damage prior to filling the tank with water.

CONSTRUCTION TIMELINE

Despite the complexity of the design and innovative features, the Concept Tank was successfully constructed in just three weeks. This achievement was made possible through meticulous planning, streamlined construction processes, and the unique modular nature of the Concept Tank.