



QUICK CONCEPT TANK FACTS

Tank Capacity	3 Million Gallons
Wall Height	10 Feet
Build Time	3 Weeks
Fluid Quality	Fresh Water
Floating Cover	Enviro Liner® 6040
Liner System	Enviro Liner® 6040 Geotextile
Leak Detection	No

THE CHALLENGE:

The client's need was for a 3-million-gallon water storage facility to serve as a truck refill station for dust suppression activities across their site. Traditionally, this client had relied on the construction of earthen containments for bulk water storage. However, these earthen ponds presented numerous operational challenges, such as a high susceptibility to sediment buildup and the potential for algal growth that could be inadvertently dispersed during dust suppression activities.

To compound the complexity of the project, the site was situated roughly 1,000 miles away from the nearest capital city.

THE SOLUTION:

A 3-million-gallon Concept Tank was constructed off-site, significantly minimizing the on-site presence of the crew and equipment. The tank was swiftly assembled on a flat, compacted earthen pad without the need

Additionally, inground containments carried an increased risk of leaking, especially without precise identification, and placed greater demands on pumping requirements.

Furthermore, the water storage location had to adapt as the mining operation evolved. This meant that a pond might need to be decommissioned, remediated, and replaced in a more strategically positioned area that better supported daily activities.

for concrete footings, completing the setup in just three weeks.

To enhance truck refill efficiency, the tank was equipped with a 16-inch suction line integrated through the tank's floor and a 10-inch inlet through the wall. Crucially, addressing contamination concerns and eliminating evaporation, a flexible geomembrane floating cover system was installed on the Concept Tank. This comprehensive cover featured floats, ballast, vents, stormwater pumps, a floating walkway, and an access hatch.

With walls standing at a height of 10 feet, the pre-stressed concrete structure effectively barred animals from entering the tank, safeguarding water quality and preventing damage to the internal liner due to animal interference.

At the culmination of the mining project, the Concept Tank can be relocated and repurposed for similar activities at a new site. This not only reduces waste but also aligns with the client's commitment to minimizing their carbon footprint, all while delivering substantial cost savings compared to constructing a new facility.