

Frac tank floating covers for aboveground storage

Proper engineering and construction of tanks used in horizontal drilling and hydraulic fracturing processes is a critical issue for the future of oil and gas production. One element of containment that must be considered is frac tank floating covers, **FIG. 1**, which aid in overall all containment, evaporation control and protection of avian wildlife, among other things. Colorado Lining International (CLI) now offers cost-effective thermal and evaporation control frac tank floating covers for aboveground storage tanks in oilfield applications.

Patent-pending tethering and ballast systems.

A new, innovative tethering mount system has been introduced that is designed to function in vertical walled tanks, or containment structures that can be circular, rectangular or irregular in shape. The design's purpose is to maintain flexible or semi-rigid floating cover systems in their proper orientation. The system provides the maximum coverage over the contained media fluid, while helping prevent wind uplift and displacement by wind, or other forces, which may be applied to the cover.

The entire cover and tethering system is low-cost and the reusable hardware reduces cost over time for successive tank sets, which would require only cover membranes and minimal additional consumables. The tethering technology restrains cover movement and rotation in high winds, while allowing vertical cover displacements, when water is pumped into or out of the containment. With this system, production on most cover membranes can be made in just one or two panels, allowing for fast installation. A patent-pending perimeter cover ballast



FIGURE 1

Colorado Lining International's frac tank floating covers offer cost-effective thermal and evaporation control for aboveground storage tanks in the oil field.

system helps prevent wind uplift, allowing for the use of light-weight, high-performance insulated panels.

Pond, pit and impoundment liners. Custom-sized panels, which eliminate up to 80% of field seams, offer guaranteed quality and speedy construction in the field. Trained and certified field service crews all, with the proper health and safety training, are there to meet your specific needs.

Mobile water impoundments. The aboveground storage systems are designed for multiple sets, and are easy to install and remove. They are highly visible and require very little excavation, offering rapid leak detection and, often, less-complicated secondary containment. The panel fabrication and production is done in climate-controlled factories, providing high-quality, certified seams that save both time and

money in the field. CLI recommends the use of reinforced lining materials for this type of application. With vertical wall systems, such as those found in mobile water impoundments, the reinforcing scrim adds tremendous strength and durability to the wall sections of each panel.

Secondary containment and coating material support. CLI recognizes the importance and necessity of regulation for environmental safety specific to this trade. Secondary and spill containment is critical for oil and gas. CLI has a trusted reputation with geomembrane systems for secondary containment, and is evolving with the industry. The company now offers spray-on liner and coatings, as an alternative and/or support to geomembrane systems. Coatings include LVOC and solvent-free options, making them an even better choice for the environment.

Coatings are easily installed, and cure and dry quickly. They can be specified and designed as part of a multilayer system to meet specific regulations.

Floating covers for pits and frac tanks.

With one of the best technical groups in the market, CLI has been able to offer innovative solutions to the floating cover market in the oil and gas industry. CLI has utilized its experience in gas collecting systems for agriculture to provide cost-effective cover systems that are designed and engineered for long-term use in oil and gas applications, like produced water cover systems.

A belief in superior training and certification.

CLI remains a family owned and operated company that was founded in 1978 in Parker, Colo., and is a certified fabricator and installer of quality geomembranes. The company has grown from a small, four-person fabrication crew, to an industry leader in solving complicated containment issues, with turn-key geosynthetic services for many industries, including oil and gas. The company has more than three decades of service, and has fabricated and installed more than 800 million sq ft of geomembranes and specialty materials.

CLI credits an experienced, dedicated and well-trained team with its success and adheres to Safeland USA, ISNetwork and PEC Premiere Standards. The company's in-house quality control programs for factory and field seam testing follow strict ASTM standards that meet or exceed all industry standards. CLI is an IAGI-certified installation contractor, and is dedicated to training and certifying its welding technicians through the Certified Welding Technician Program. ●