Oil’s Well That Ends Well

Southern California is home to arresting natural beauty: palm trees, endless ocean vistas and gorgeous mountains. It is truly a land of plenty and diversity. Some say the entertainment industry rules, but in fact a variety of industries fuel the area’s economy.

Blessed with a wealth of natural resources, the region is an important supplier of the things that make the world go—like oil and petroleum products.

Within spitting distance of the pristine beaches of southern Los Angeles and northern Orange counties lie abundant underground crude oil deposits—a scenario that poses both challenges and opportunities for residents, businesses and local governments.

One of the area’s major oil producers generates 450 barrels of oil (18,900 gallons) daily at its petroleum processing operation in Orange County. On a 58-acre parcel of land, this producer extracts the crude from the ground, separates the water and re-injects it into the ground and holds the oil until trucks arrive for shipment. The operation comprises 65 wells, an extensive pipeline system and a network of processing and storage tanks.

To say this producer operates in harmony with its surroundings is an understatement. Like many petroleum operations in southern California, the facility is in close proximity to people and businesses. Also, the stakes are high from an environmental perspective. Every day demands that you strike a delicate balance between maintaining rigorous production and quality levels and complying with governmental regulations.

In 2008, the producer wanted to do a major upgrade and turned to CST Storage, the world’s largest provider of modular, factory coated bolted storage tanks for dry bulk and liquid applications in municipal, industrial and agricultural markets. The project’s scope was significant—replace the existing tanks, consolidate the pipeline and reduce the tank farm’s footprint from 1.6 acres to just a half acre.

CST built and installed the original tanks in 1970, and the order for the replacement tanks was one of its largest and most extensive to date. CST worked with the producer to understand its requirements and designed and manufactured 12 tanks of galvanized, bolted carbon steel:

- 4 production tanks – 32.680 ft diameter x 16.12 ft tall
- 2 primary wash tanks – 26.154 ft diameter x 24.18 ft tall
- 1 wash tank – 9.231 ft diameter x 24.18 ft tall
- 1 oil tank – 9.231 ft diameter x 16.12 ft tall
- 1 water tank – 15.385 ft diameter x 16.12 ft tall
- 2 Wemco surge tanks – 15.385 ft diameter x 16.12 ft tall
- 1 clean water surge tank – 15.385 ft diameter x 8.06 ft tall

CST was founded in 1893 to serve the oil industry, and was a pioneer in the use of bolted steel storage tanks for petroleum applications. Today, CST is the only certified and monogrammed API-12B tank manufacturer in the world. Its PetroTec® tanks are custom designed to meet the rigorous conditions associated with complex and volatile substances like petroleum.

Time and again, CST’s bolted tanks have met the challenge of discriminating customers, complex specifications and rigorous environmental standards. In an industry that has traditionally looked to welded tanks, this oil producer has nothing but praise for the bolted tank design.

“We’re pleased with the performance of CST’s bolted tanks,” says the manager of the facility. “We’re handling a large volume of crude oil and water where there’s no margin for error, and I have every confidence in the integrity and security of CST’s tanks.”

When this producer was planning the upgrade to its tank farm it sought approval from the California Coastal Commission, which is charged with preserving the area’s wetlands. With CST at its side, the producer confidently responded to a 14-point mandate from the Commission which included, among other things, provisions for water quality management, spill prevention control, hazard mitigation and compliance with geotechnical recommendations.

“With our extensive petroleum industry experience, we understand what our clients are up against and what they need to succeed,” says Dave Oveson, Regional Sales Manager, CST Storage. “Our client has a tough job satisfying all those stakeholders and we love the challenge of helping him overcome obstacles, improve efficiency and satisfy his customers.”

The facility’s storage tanks have an aggregate capacity of 10,600 gallons—a large amount of oil to store at one time. That’s a large amount, but they wouldn’t have it any other way because their customers have come to expect it—and frankly, in this era of uncertainty, you can never be too prepared.

“We keep a lot of crude on the premises as a hedge against supply chain risks like a trucker’s strike or a refinery shutdown,” says the facility’s manager. “Under those conditions, the CST tanks stand up to our rigorous demands, and that helps me sleep at night.”

CST consistently delivers the complete package of people, products and technical expertise to fulfill customer needs. You can trust CST to deliver the right tank and cover recommendation for the right long lasting solution.