

Kern oil producer partners on field wastewater treatment project

John Cox, Bakersfield Californian, 1-21-15

A local demonstration project announced Tuesday would treat up to 136,500 gallons per day of oil field wastewater for reuse in agriculture and steam-based well stimulation.

OriginOil Inc., the Los Angeles-based developer of "Electro Water Separation," said it has partnered with Bakersfield oil producer Vaquero Energy Inc. to install a pair of facilities treating "produced water," the salty fluid that comes up from the ground along with oil. The installations would also process "flowback," the sand- and chemical-laced solution left over from the well stimulation technique known as hydraulic fracturing, or "fracking."

The project is promising because local oil producers are under pressure to find alternatives to disposing of their wastewater through injection wells and unlined sumps, both of which are the focus of state regulatory reviews.

Chevron is often held up as a local success in wastewater treatment. Its Kern River complex treats nearly 10 billion gallons of oil field wastewater per year and ships it to the Cawelo Water District for irrigation purposes.

While some local oil producers also divert their wastewater to growers, the cost of doing so has discouraged others from changing their disposal habits.

OriginOil said its treatment process, already tested in Colorado natural gas fields and West Texas light oil reservoirs, uses no chemicals and little energy.

As part of the project, Goleta-based TriSep Corp. will complement OriginOil's system with a membrane filtration system removing oil, suspended solids and bacteria.

One of the two treatment units installed at the undisclosed Vaquero property will process 250 barrels per day, or 10,500 gallons. The other treats 3,000 barrels per day, or 126,000 gallons.

Vaquero is participating in the pilot project because it has made a priority of treating produced water for reuse in its steam operations and agriculture, the company's operations manager, Wyatt Shipley, said in a news release.

He noted the project offers an added benefit: extra oil.

"OriginOil's units are treating our produced water while also recovering significant amounts of oil, which otherwise would have been lost to disposal," Shipley said in the statement. "We are excited about the potential for this new technology to work in the field."