



## **Division of Oil, Gas, and Geothermal Resources**

### **Livermore Aquifer Exemption Meeting, January 11, 2017**

#### **Background**

The California Division of Oil, Gas, and Geothermal Resources has a joint plan with the U.S. Environmental Protection Agency and the State Water Resources Control Board to ensure that California's oil operations are in compliance with the federal Safe Drinking Water Act (SDWA), which protects groundwater suitable for drinking or other human use. This project is part of that larger process.

#### **Things to know**

- ◆ This project is not about the use of "fracking" and will not endanger municipal drinking water supplies.
- ◆ The nearest Livermore municipal water supply source is located about 4 miles away from the oil field.
- ◆ Although this is a meeting about a proposed aquifer exemption, it's important to understand that not all aquifers are sources of drinking water.
- ◆ This oil field has been active since 1967, and injection has occurred into the field since April 1968.
- ◆ In California, almost all oil is produced along with a larger amount of briny groundwater -- in the Livermore field, approximately equal amounts of water and oil are produced. The water and oil are naturally comingled.
- ◆ That water is typically injected back underground where it came from after the oil is skimmed off. Nothing is added to the water before it is re-injected.

- ◆ This proposal must go through three levels of government review. Both the California Division of Oil, Gas, and Geothermal Resources and the State Water Resources Control Board must concur that an application is appropriate, based on scientific evidence. Ultimately, the United States Environmental Protection Agency has the final say of whether an exemption is granted.
- ◆ If this application is approved, the producer may expand the underground area into which injection would occur from 26 to 75.4 acres.
- ◆ Why is that OK? The borders of the original aquifer exemption were drawn around the known extent of the oil field in the early 1970s. In the 40-plus years since that was done, we have learned that the naturally oil and briny geologic formation under the field is larger than previously thought. The proposed expanded borders of the aquifer exemption reflect that understanding.
- ◆ If the expansion is approved, all that will happen is that the water produced along with oil will go back into the geological formation it came from, which has never been a source of drinking water.
- ◆ The aquifer into which expansion may occur has native water that contains oil, high levels of Boron, and has a natural average measurement of 7,800 milligrams/liter of total dissolved solids (TDS) – nearly 8 times higher than the California standard for drinking water.

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