

## commentletters

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**From:** Jane McNaboe <janemcnaboe@yahoo.com>  
**Sent:** Friday, May 29, 2015 11:57 AM  
**To:** commentletters  
**Subject:** Comment Letter: Proposed Draft Model Criteria for Groundwater Monitoring

To: SWRCB



From: M. Jane Ellis-McNaboe, PG

As a California Professional Geologist I feel that the proposed regulations are misguided.

Three monitoring wells as proposed, one up-gradient and two down-gradient, will be very expensive to install. A monitoring well that I was involved with was drilled to 1500', the cost was \$120,000. This expense will provide no protection to groundwater and will likely stop additional oil development.

The term 'aquifer' is not clear in the proposed regulations. The operator or hydrologist will have difficulty determining what 'each aquifer' is that the well penetrates.

When an oil well is hydraulically fractured the fracture fluids are pumped out leaving propped fractures behind. The only possible place for groundwater contamination from the well is from wellbore integrity where the oil well penetrated aquifers with a TDS below 10,000 ppm. The oil is trapped below the surface, making a reservoir which has not leaked for millions of years. It is not likely to leak following a fracture stimulation.

The potential to contaminate groundwater from wellbore integrity problems is the same from any oil, water, cathodic protection, or monitoring well drilled.

The proposed groundwater monitoring is not going to protect groundwater and should not be implemented. Possibly the focus should be on wellbore integrity, if a problem is discovered then a site investigation and groundwater monitoring can be implemented in with a focused approach.

Regards,

Jane Ellis-McNaboe, PG  
California Professional Geologist, 4127