

STATE OF ALASKA
ALASKA OIL AND GAS CONSERVATION COMMISSION
333 West 7th Avenue, Suite 100
Anchorage, Alaska 99501

Re: THE REQUEST OF UNION)	Aquifer Exemption Order No. 8
OIL COMPANY OF CALIFORNIA)	Beluga Formation
for an Aquifer Exemption Order for the)	Sterling Formation
Cohoe Unit #1 Well, Section 8, T3N,)	Cohoe Unit #1 Well
R11W, Seward Meridian.)	June 6, 2002

IT APPEARING THAT:

1. Union Oil Company of California ("UNOCAL") submitted an application, dated December 27, 2001, requesting that the Alaska Oil and Gas Conservation Commission issue an aquifer exemption for purposes of Class II disposal in the Cohoe Unit #1 well located near Kasilof, Alaska. Additional information requested by the Commission was received on February 25, 2002 and March 28, 2002.
2. The Commission published notice of an opportunity for a public hearing in the Anchorage Daily News on January 25, 2002.
3. The Commission did not receive any protest or request for a public hearing.
4. The Commission has jurisdiction in this matter under AS 31.05.030(h), 20 AAC 25.440, and 40 CFR 147, Subpart C - Alaska.
5. The Commission submitted a copy of the UNOCAL Aquifer Exemption application and a copy of a proposed aquifer exemption order to the U.S. Environmental Protection Agency, Region 10, ("EPA Region 10") on April 2, 2002, in accordance with Section 14 of the November 22, 1991 Memorandum of Agreement between EPA Region 10 and the Commission.
6. EPA Region 10 did not object to the aquifer exemption order for the Cohoe #1 well.

FINDINGS:

1. In correspondence dated December 27, 2001 UNOCAL requested an aquifer exemption to accommodate disposal injection of Class II oil field waste into the Sterling and Beluga Formations in the Cohoe Unit #1 well. Additional information was received on February 25, 2002 and March 28, 2002.

2. Unocal has requested an aquifer exemption for all aquifers within a one-half mile radius and below 2,800' measured depth (MD) in the Cohoe Unit #1 well.
3. The Cohoe Unit #1 well is a former wildcat exploration well drilled in 1973 to a total depth of 15,683' MD and subsequently plugged and abandoned. The well is located on the Kenai Peninsula approximately 3 miles northwest of Kasilof and 2 miles south of the Kenai Gas Field.
4. Wireline log analytical techniques, which comply with EPA recommended methods as described in "Survey of Methods to Determine Total Dissolved Solids Concentrations", (KEDA Project No. 30-956), were used to characterize formation water total dissolved solids (TDS) contents in the Cohoe Unit #1 well.
5. Wireline log analysis from the Cohoe Unit #1 well demonstrates that the interval for which UNOCAL has requested the aquifer exemption contains water with a TDS concentration between 3,000 and 10,000 mg/l.
6. The EPA exempted all freshwater aquifers in the adjacent Kenai Gas Field below a depth of 1300 feet in 40 CFR 147.102.
7. Two disposal wells in the Kenai Gas field, the KU 11-17 and KU 14-4, are injecting Class II wastes in stratigraphic intervals equivalent to that proposed for the Cohoe Unit #1 well.
8. The KU 11-17 and KU 14-4 are both injecting in the Sterling Formation between true vertical depths of 3,970 to 4,570 and have safely disposed of over 687,000 and 829,000 barrels of oil field waste respectively.
9. The performance of the KU 11-17 and KU 14-4 wells demonstrates the Sterling Formation contains significant confining layers that are sufficient to prevent movement of Class II wastes into sources of freshwater.
10. Six water wells have been identified within a mile of the Cohoe Unit #1 well. The nearest water well is approximately .6 miles from the proposed injection site.
11. The deepest water wells in the Cohoe Unit #1 vicinity are approximately two hundred feet. Potable water in this area is confined to Quaternary deposits that are approximately 150 thick in the Cohoe Unit #1 well.
12. Those portions of freshwater aquifers occurring within a one-half mile radius and below 2800' MD in the Cohoe Unit #1 well do not currently serve as a source of drinking water.

CONCLUSIONS:

1. Those portions of freshwater aquifers occurring below 2800' MD in the Cohoe Unit #1 well are situated at a depth and location that makes recovery of water for drinking water purposes economically impractical.

2. Those portions of aquifers occurring within a one-half mile radius and below 2800' MD in the Cohoe Unit #1 well cannot reasonably be expected to serve as an underground source of drinking water.
3. Those portions of aquifers occurring within a one-half mile radius and below the depth of 2800' MD in the Cohoe Unit #1 well qualify as exempt freshwater aquifers under 20 AAC 25.440(a).

NOW, THEREFORE, IT IS ORDERED THAT the aquifers occurring within a one-half-mile radius and below the depth of 2800' MD in the Cohoe Unit #1 well are exempt under 20 AAC 25.440.

DONE at Anchorage, Alaska, and dated June 6, 2002.

Cammy Oechsli Taylor, Chair
Alaska Oil and Gas Conservation Commission

Daniel T. Seamount, Jr., Commissioner
Alaska Oil and Gas Conservation Commission

AS 31.05.080 provides that within 20 days after receipt of written notice of the entry of an order, a person affected by it may file with the Commission an application for rehearing. A request for rehearing must be received by 4:30 PM on the 23rd day following the date of the order, or next working day if a holiday or weekend, to be timely filed. The Commission shall grant or refuse the application in whole or in part within 10 days. The Commission can refuse an application by not acting on it within the 10-day period. An affected person has 30 days from the date the Commission refuses the application or mails (or otherwise distributes) an order upon rehearing, both being the final order of the Commission, to appeal the decision to Superior Court. Where a request for rehearing is denied by nonaction of the Commission, the 30-day period for appeal to Superior Court runs from the date on which the request is deemed denied (i.e., 10th day after the application for rehearing was filed).