

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

Re: THE INQUIRY OF the Alaska Oil and Gas Conservation Commission, under Alaska Statute 31.05.030(b), regarding the adequacy of the supply of seawater from the Kuparuk River Unit to the Oooguruk Unit for enhanced recovery injection purposes. ) Docket Number: AIO-11-20  
) Other Order No.71  
)  
) Oooguruk Unit  
) Oooguruk-Kuparuk Oil Pool  
) Oooguruk-Nuiqsut Oil Pool  
)  
) December 21, 2011

**IT APPEARING THAT:**

1. On March 31, 2011, Pioneer Natural Resources Alaska, Inc. (Pioneer) submitted Annual Reservoir Surveillance Reports concerning the Oooguruk-Kuparuk and Oooguruk-Nuiqsut Oil Pools. These reports mentioned issues pertaining to obtaining an adequate supply of water for enhanced recovery injection from the adjacent Kuparuk River Unit.
2. On August 14, 2011, an article appeared in PETROLEUM NEWS containing quotes from Pioneer executives indicating that production from the Oooguruk Unit was less than expected due to an inadequate supply of water for enhanced recovery injection operations.
3. On September 18, 2011, a notice of public hearing was published on the State of Alaska Online Public Notice website and on the Alaska Oil and Gas Conservation Commission (AOGCC) website. This notice was published in the ALASKA JOURNAL OF COMMERCE on September 18, 2011. The hearing was tentatively scheduled for October 25, 2011.
4. One public comment was received on October 25, 2011.
5. The public hearing was held as scheduled on October 25, 2011.
6. The hearing record was held open until November 4, 2011 to provide Pioneer, operator of the Oooguruk Unit, and ConocoPhillips Alaska Inc. (CPAI), operator of the of the Kuparuk River Unit, opportunity to provide comments on the public comment that the AOGCC received on October 25, 2011.
7. Pioneer and CPAI chose not to provide additional comments for the hearing record.

**FINDINGS:**

1. On April 11, 2008, the AOGCC issued Area Injection Orders 33 and 34, which authorize a waterflood project in the Oooguruk-Kuparuk Oil Pool and an under-saturated water-alternating-gas injection project in the Oooguruk-Nuiqsut Oil Pool for the purpose of enhanced oil recovery from these pools.

2. Pioneer's injection water consists of surplus seawater that is obtained from the adjacent Kuparuk River Unit on an as-available basis via a connection into the Kuparuk River Unit seawater distribution system near Drillsite 3A.
3. Due to the location of the Oooguruk Unit's tie-in to the Kuparuk River Unit seawater distribution system, Pioneer only has access to surplus seawater in the Central Processing Facility 3 area of the Kuparuk River Unit. Surplus seawater in other portions of the Kuparuk River Unit it is not available to the Oooguruk Unit.
4. Pioneer testified that oil production from the Oooguruk Unit is approximately 1,000 barrels per day less than it could be due to an insufficient supply of injection seawater. However, Pioneer does not believe waste of resources is occurring but rather recovery is being deferred.
5. Pioneer testified that the Oooguruk-Kuparuk Oil Pool is approximately 4 million reservoir barrels behind full voidage replacement and that the Oooguruk-Nuiqsut Oil Pool is approximately 400,000 reservoir barrels behind full voidage replacement. Pioneer also testified that as of the time of the hearing the instantaneous voidage replacement ratio has generally been greater than 1:1, and that they expect to fully make up for the under injection that has occurred thus far.
6. Pioneer testified that they are looking into several options to obtain more water from the Kuparuk River Unit.
7. CPAI testified that seawater is available for other units (currently the Colville River and Oooguruk Units) only when the supply of seawater from the Kuparuk Seawater Treatment Plant exceeds Kuparuk River Unit needs.
8. The Oooguruk Unit and Colville River Unit tie into the Kuparuk River Unit seawater distribution system at different points so these units are not competing for the same supply of surplus water.
9. The written public comments submitted to the AOGCC claimed that the only reason the Oooguruk Unit has an insufficient supply of seawater for injection is that the Oooguruk Unit owners are unwilling to pay the price the Kuparuk River Unit charges for surplus seawater.

#### **CONCLUSIONS:**

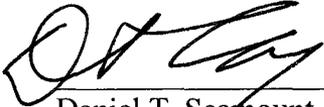
1. The Oooguruk Unit is currently more than 4 million reservoir barrels behind full voidage replacement.
2. There is no evidence to support the written public comment that the reason for this injection shortfall is the unwillingness of the Oooguruk Unit owners to pay the asking price for surplus seawater from the Kuparuk River Unit.
3. Pioneer is examining other options that will allow them to obtain additional water from the Kuparuk River Unit.
4. There is no evidence to indicate that ultimate recovery is being harmed at this time or is likely to be harmed in the foreseeable future or that the deferred production will not be recovered at a later date.
5. Pioneer is operating the Oooguruk Unit in a prudent manner.
6. CPAI is behaving as a prudent operator by making sure that Kuparuk River Unit seawater needs are met before making seawater available to other units.

**ACCORDINGLY:**

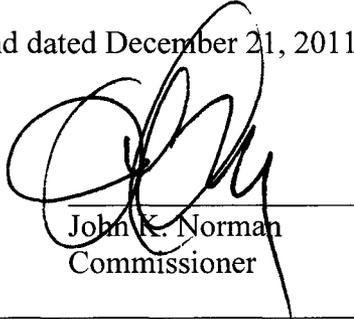
No action by the AOGCC is necessary at this time.

The AOGCC hereby closes the inquiry regarding the adequacy of the supply of seawater from the Kuparuk River Unit to the Ooguruk Unit for enhanced recovery injection purposes.

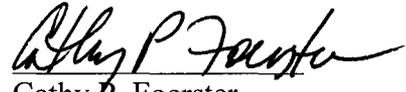
**DONE** at Anchorage, Alaska and dated December 21, 2011.



Daniel T. Seamount, Jr.  
Chair, Commissioner



John K. Norman  
Commissioner



Cathy P. Foerster  
Commissioner

**RECONSIDERATION AND APPEAL NOTICE**

As provided in AS 31.05.080(a), within **20** days after written notice of the entry of this order or decision, or such further time as the AOGCC grants for good cause shown, a person affected by it may file with the AOGCC an application for reconsideration of the matter determined by it. If the notice was mailed, then the period of time shall be **23** days. An application for reconsideration must set out the respect in which the order or decision is believed to be erroneous.

The AOGCC shall grant or refuse the application for reconsideration in whole or in part within 10 days after it is filed. Failure to act on it within 10-days is a denial of reconsideration. If the AOGCC denies reconsideration, upon denial, this order or decision and the denial of reconsideration are **FINAL** and may be appealed to superior court. The appeal **MUST** be filed within **33** days after the date on which the AOGCC mails, **OR 30** days if the AOGCC otherwise distributes, the order or decision denying reconsideration, **UNLESS** the denial is by inaction, in which case the appeal **MUST** be filed within **40** days after the date on which the application for reconsideration was filed.

If the AOGCC grants an application for reconsideration, this order or decision does not become final. Rather, the order or decision on reconsideration will be the **FINAL** order or decision of the AOGCC, and it may be appealed to superior court. That appeal **MUST** be filed within **33** days after the date on which the AOGCC mails, **OR 30** days if the AOGCC otherwise distributes, the order or decision on reconsideration. As provided in AS 31.05.080(b), "[t]he questions reviewed on appeal are limited to the questions presented to the AOGCC by the application for reconsideration."

In computing a period of time above, the date of the event or default after which the designated period begins to run is not included in the period; the last day of the period is included, unless it falls on a weekend or state holiday, in which event the period runs until 5:00 p.m. on the next day that does not fall on a weekend or state holiday.

