

# STATE OF ALASKA

SARAH PALIN, GOVERNOR

## ALASKA OIL AND GAS CONSERVATION COMMISSION

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ANCHORAGE, ALASKA 99501-3539  
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### CORRECTED ADMINISTRATIVE APPROVAL AREA INJECTION ORDER 3.026

Mr. Steve Rossberg  
Wells Manager  
BP Exploration (Alaska) Inc.  
P.O. Box 196612  
Anchorage, AK 99519-6612

RE: PBU W-42 (PTD 1880570) Request for Administrative Approval  
Prudhoe Bay Oil Pool

Dear Mr. Rossberg:

The Commission has corrected the Administrative Approval to reflect the correct well name, incorrect reference to allowing WAG injection and attaching a sundry matrix.

Pursuant to Rule 9 of Area Injection Order (AIO) 3.000, the Alaska Oil and Gas Conservation Commission (Commission) hereby grants BP Exploration (Alaska) Inc. (BPXA)'s request for administrative approval to resume water injection in the subject well.

Administrative approval AIO 3.009 authorized the continued injection of water only into PBU W-42. The Commission determined injection could continue with tubing by inner annulus communication subject to a number of restrictive conditions. Additional testing subsequent to approval of AIO 3.009 confirmed that PBU W-42 also had a casinghead leak. BPXA requested cancellation of the administrative approval, stating it did not intend to operate PBU W-42 without a passing mechanical integrity test of the outer annulus. The Commission canceled AIO 3.009 on September 14, 2007.

BPXA allegedly performed a sealant repair of the casinghead leak in November 2007. Work was performed without Commission approval and without BPXA submitting required paperwork closing out the sealant repair. Information provided by BPXA in response to Commission inquiries about the repairs – including a report of sundry well operations dated April 23, 2009 – indicates that the sealant repair was successful in mitigating the casinghead leak.

BPXA is reminded that most repairs to injection well mechanical integrity require at least a report of completed sundry well operations (Form 10-404) and some require prior

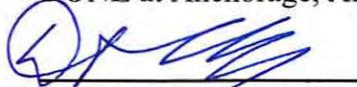
approval. In the case of pumping a sealant, BPXA should have sought Commission approval, and followed up work with a report of sundry operations in a timelier manner. The attached document titled "*Well Work Operations and Sundry Notice/Reporting Requirements for Pools Subject to Sundry Waiver Rules*," ("sundry matrix") dated July 15, 2005, sets out the appropriate sundry approval and reporting requirements for frequently performed well operations in the pools that have been defined in the Prudhoe Bay Field. **Please ensure all appropriate BPXA persons involved with planning and permitting of injection well mechanical integrity repairs have read and understood the sundry matrix.**

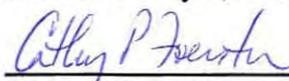
The current request for administrative approval indicates PBU W-42 exhibits manageable inner annulus repressurization as shown by wellhead pressure trends. Diagnostic mechanical integrity testing performed in March and April 2009 confirms the well exhibits competent tubing and production casing. BPXA has elected to perform no additional corrective action at this time on PBU W-42.

The Commission believes that the well's condition does not compromise overall well integrity so as to threaten the environment or human safety, if the well's operation is subject to the certain constraints. The Commission's administrative approval to continue water injection in PBU W-42 is conditioned upon the following:

1. BPXA shall record wellhead pressures and injection rate daily;
2. BPXA shall submit to the AOGCC a monthly report of well pressures and injection rates, and shall flag the well's periodic pressure bleeds on the report;
3. BPXA shall limit the well's outer annulus pressure to 500 psi; inner annulus pressure shall be limited to 2000 psi;
4. BPXA shall perform an MIT of the tubing-casing annulus every 2 years to the maximum anticipated injection pressure;
5. BPXA shall immediately notify the AOGCC and shut in the well if there is any continued deterioration in well integrity, indicated by increased inner or outer annulus pressure, increased repressure rate, or increased bleed frequency;
6. After well shut in due to a change in the well's mechanical condition, AOGCC approval shall be required to restart injection; and
7. The MIT anniversary date is April 10, 2009.

**DONE** at Anchorage, Alaska and dated May 8, 2009.

  
Daniel T. Seamount, Jr.  
Chair

  
Cathy P. Foerster  
Commissioner

  
John K. Norman  
Commissioner



Attachment

cc: BPXA Well Integrity Coordinator, PRB-20  
P.O. Box 196612  
Anchorage, AK 99519-6612

**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 Commission grants for good cause shown, a person affected by it may file with the Commission 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 Commission 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 Commission 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 Commission mails, **OR 30** days if the Commission 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 Commission 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 Commission, and it may be appealed to superior court. That appeal **MUST** be filed within **33** days after the date on which the Commission mails, **OR 30** days if the Commission 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 Commission 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.

**Well Work Operations and Sundry Notice/Reporting Requirements for Pools Subject to Sundry Waiver Rules  
July 15, 2005**

**DEVELOPMENT [PRODUCTION] WELLS**

No Forms Required <b>-10-403 Not Required -10-404 Not Required</b>	1 Form Required <b>-10-403 Not Required -10-404 / 407 or other form Required</b>	2 Forms Required <b>-10-403 Required -10-404 / 407 or other form Required</b>
<p>Thru-tubing Operations (D)</p> <ul style="list-style-type: none"> <li>• Fill tag</li> <li>• Set &amp; pull retrievable plugs</li> <li>• Change GLV's</li> <li>• Dummy &amp; gauge ring runs</li> <li>• Pull &amp; rerun SSSV's</li> <li>• Pressure surveys – unless required by some specific approval</li> <li>• Temperature surveys – unless required by some specific approval</li> <li>• Caliper surveys</li> <li>• Reperforating existing intervals</li> <li>• Bottom hole samples</li> <li>• Spinner surveys</li> <li>• Logs – CNL, TDT, CO, CCL, CBL and Other Types – Unless required by some specific approval</li> <li>• Pump changes.</li> <li>• Packoff GLM (POGLM)</li> </ul>	<p>Thru-tubing Operations (D)</p> <ul style="list-style-type: none"> <li>• Permanent cement or mechanical plugs that do not completely abandon a zone. (D)</li> <li>• Cutting off tailpipes. (D)</li> <li>• Perforate new intervals within a pool (D)</li> <li>• Patches (D)</li> </ul>	<p>Thru-tubing Operations (D)</p> <ul style="list-style-type: none"> <li>• Perforate a new pool (D)</li> </ul> <p align="center"><b>SPECIAL (D)</b></p> <p>On a case-by-case basis, a 10-403 will be required for a particular well or operation if the Commission requests it.</p> <p>If a well is operating under a sundry approval, a 10-403 may be required to perform work. The operator should consult with the AOGCC to determine if a 10-403 is needed.</p>

**Well Work Operations and Sundry Notice/Reporting Requirements for Pools Subject to Sundry Waiver Rules  
July 15, 2005**

**DEVELOPMENT [PRODUCTION] WELLS**

No Forms Required <b>-10-403 Not Required -10-404 Not Required</b>	1 Form Required <b>-10-403 Not Required -10-404 / 407 or other form Required</b>	2 Forms Required <b>-10-403 Required -10-404 / 407 or other form Required</b>
Pumping Operations, including using coil.(D) <ul style="list-style-type: none"> <li>• Tubing scale removal</li> <li>• Sludge removal</li> <li>• Freeze protection</li> <li>• Ice plug removal</li> <li>• Inhibitor squeezes</li> <li>• Hot Oil</li> <li>• Tubing acid jobs</li> <li>• Fill clean out</li> </ul>	Pumping Operations, including using coil. <ul style="list-style-type: none"> <li>• Stimulations (frac or acid) (D)</li> <li>• Remedial cementing operations               <ul style="list-style-type: none"> <li>○ Conductor Fill (D)</li> </ul> </li> <li>• Squeezes/plugs to control fluid movement in zone (D)</li> </ul>	Pumping Operations, including using coil <ul style="list-style-type: none"> <li>• Remedial cementing operations (including but not limited to)               <ul style="list-style-type: none"> <li>○ Casing shoes (outer annulus) (D)</li> </ul> </li> <li>• Repair casing (including but not limited to)               <ul style="list-style-type: none"> <li>○ mechanical repairs (D)</li> <li>○ “pumping” repairs (cement or gel squeezes) (D)</li> </ul> </li> </ul>
Other Operations (D) <ul style="list-style-type: none"> <li>• Xmas tree &amp; valve replacement</li> <li>• Diagnostic &amp; pressure testing – unless required by some specific approval</li> </ul>	Other Operations <ul style="list-style-type: none"> <li>• Seal welding on bradenheads (D)</li> </ul>	Other Operations <ul style="list-style-type: none"> <li>• Convert producer (D) to injector</li> <li>• Major welding repairs on wellheads (D)</li> <li>• Conductor “cutaways” and surface casing welding repairs (D)</li> <li>• Annular disposal (D) (Reported on form 10-423)</li> </ul>
	Rig/Coil Operations <ul style="list-style-type: none"> <li>• Alteration of mechanical completion (including but not limited to)               <ul style="list-style-type: none"> <li>○ Pulling tubing, milling packers (D)</li> <li>○ Install velocity strings (D)</li> </ul> </li> </ul>	Rig/Coil Operations <ul style="list-style-type: none"> <li>• Repair Casing (including but not limited to)               <ul style="list-style-type: none"> <li>○ Mechanical repairs (D) (scab liners, tiebacks, etc)</li> </ul> </li> </ul>

**Well Work Operations and Sundry Notice/Reporting Requirements for Pools Subject to Sundry Waiver Rules  
July 15, 2005**

**SERVICE [INJECTION] WELLS**

No Forms Required <b>-10-403 Not Required -10-404 Not Required</b>	1 Form Required <b>-10-403 Not Required -10-404 / 407 or other form Required</b>	2 Forms Required <b>-10-403 Required -10-404 / 407 or other form Required</b>
<p>Thru-tubing Operations (S)</p> <ul style="list-style-type: none"> <li>• Fill tag</li> <li>• Set &amp; pull retrievable plugs</li> <li>• Change GLV's</li> <li>• Dummy &amp; gauge ring runs</li> <li>• Pull &amp; rerun SSSV's</li> <li>• Pressure surveys – unless required by some specific approval</li> <li>• Temperature surveys – unless required by some specific approval</li> <li>• Caliper surveys</li> <li>• Reperforating existing intervals</li> <li>• Bottom hole samples</li> <li>• Spinner surveys</li> <li>• Logs – CNL, TDT, CO, CCL, CBL and Other Types – Unless required by some specific approval</li> </ul> <p>If operations in this column are planned on a <b>disposal</b> well, the operator should contact the AOGCC to determine if a 10-403 is needed.</p>	<p>Thru-tubing Operations (S)</p> <ul style="list-style-type: none"> <li>• Perforate new interval within a pool (S)</li> </ul> <p>A 10-403 should be submitted for any perforating (new or reperf) operations on a <b>Class II disposal well</b>.</p>	<p>Thru-tubing Operations (S)</p> <ul style="list-style-type: none"> <li>• Perforate a new pool. (S)</li> <li>• Permanent cement or mechanical plugs that do not completely abandon a zone (S)</li> <li>• Patches (S)</li> <li>• Cutting off tailpipes. (S)</li> </ul> <p align="center"><b>SPECIAL (S)</b></p> <p>On a case-by-case basis, a 10-403 will be required for a particular well or operation if the Commission requests it.</p> <p>If a well is operating under a sundry approval, a 10-403 may be required to perform work. The operator should consult with the AOGCC to determine if a 10-403 is needed.</p> <p>Please note that authorization from EPA Region 10 may be necessary to perform any work on a <b>Class I disposal well</b>.</p>

**Well Work Operations and Sundry Notice/Reporting Requirements for Pools Subject to Sundry Waiver Rules  
July 15, 2005**

**SERVICE [INJECTION] WELLS**

No Forms Required <b>-10-403 Not Required -10-404 Not Required</b>	1 Form Required <b>-10-403 Not Required -10-404 / 407 or other form Required</b>	2 Forms Required <b>-10-403 Required -10-404 / 407 or other form Required</b>
Pumping Operations, including using coil.(S) <ul style="list-style-type: none"> <li>• Tubing scale removal</li> <li>• Sludge removal</li> <li>• Freeze protection</li> <li>• Ice plug removal</li> <li>• High pressure breakdown or inhibitor squeezes, excluding frac or acid jobs</li> <li>• Hot Oil</li> <li>• Tubing acid jobs</li> <li>• Fill clean out</li> </ul>	Pumping Operations, including using coil. <ul style="list-style-type: none"> <li>• Remedial cementing operations                             <ul style="list-style-type: none"> <li>○ Conductor Fill (S)</li> </ul> </li> <li>• Squeezes/plugs to control fluid movement in zone (S)</li> </ul>	Pumping Operations, including using coil. <ul style="list-style-type: none"> <li>• Stimulations (frac or acid) (S)</li> <li>• Remedial cementing operations (including but not limited to)                             <ul style="list-style-type: none"> <li>○ Casing shoes (outer annulus) (S)</li> </ul> </li> <li>• Repair casing (including but not limited to)                             <ul style="list-style-type: none"> <li>○ mechanical repairs (S)</li> <li>○ “pumping” repairs (cement or gel squeezes) (S)</li> </ul> </li> </ul>
Other Operations (S) <ul style="list-style-type: none"> <li>• Xmas tree &amp; valve replacement</li> <li>• Diagnostic &amp; pressure testing – unless required by some specific approval</li> </ul>	Other Operations <ul style="list-style-type: none"> <li>• Injection well MIT (on MIT form) (S)</li> <li>• Initial conversion from water injector to WAG injector (S)</li> <li>• Convert from injector to producer if for more than 30 days. (S)</li> <li>• Seal welding on bradenheads (S)</li> </ul>	Other Operations <ul style="list-style-type: none"> <li>• Major welding repairs on wellheads (S)</li> <li>• Conductor “cutaways” and surface casing welding repairs (S)</li> <li>• Annular disposal (S) (Reported on form 10-423)</li> </ul>
		Rig/Coil Operations <ul style="list-style-type: none"> <li>• Alteration of mechanical completion (including but not limited to)                             <ul style="list-style-type: none"> <li>○ Pulling tubing ,milling packers (S)</li> </ul> </li> <li>• Repair Casing (including but not limited to)                             <ul style="list-style-type: none"> <li>○ Mechanical repairs (S) (scab liners, tiebacks, etc)</li> </ul> </li> </ul>