

January 27, 1994

ADMINISTRATIVE APPROVAL AIO NO. 2.6

Re: Amend Rule 6 to allow additional means for demonstrating mechanical integrity of injection wells

Paul S. White, Senior Engineer
Kuparuk Petroleum Engineering
ARCO Alaska, Inc.
P. O. Box 100360
Anchorage, AK. 99510-0360

Dear Mr. White:

ARCO Alaska, Inc. (ARCO), as operator of the Kuparuk River Unit, by letter dated January 20, 1994 requested the Commission modify Rule 6 of Area Injection Order No. 2. The modification would allow use of a variety of logging devices to demonstrate mechanical integrity of injection wells.

The commission has determined that alternative means for demonstrating mechanical integrity of injection wells is appropriate.

This approval supersedes Area Injection Order No. 2 Rule 6, and Administrative Approval AIO No. 2.4.

Therefore Rule 6 of Area Injection Order No. 2 is amended to read:

Rule 6 Demonstration of Tubing/Casing Annulus Mechanical Integrity

A schedule must be developed and coordinated with the Commission which ensures that the tubing/casing annulus for each injection well is pressure tested prior to initiating injection and at least once every four years thereafter. A test surface pressure of 1500 psi, or 0.25 psi/ft multiplied by the vertical depth of the packer, whichever is greater; but not to exceed a hoop stress greater than 70% of the casing's minimum yield strength. The test pressure must be held on the tubing/casing for 30 minutes with no more than a 10% decline. Alternative EPA approved methods may also be used with Commission approval, including but not limited to timed-run radioactive tracer surveys, oxygen activation logs, temperature logs and noise logs. Wells with tubing-to-casing communication must be surveyed or logged every other year and wells which

demonstrate mechanical integrity every fourth year. The Commission must be notified at least 24 hours in advance to enable a representative to witness pressure tests or the application of alternative methods.

BY ORDER OF THE COMMISSION

David W. Johnston, Chairman
Alaska Oil and Gas Conservation Commission

Russell A. Douglass, Commissioner
Alaska Oil and Gas Conservation Commission

Tuckerman Babcock, Commissioner
Alaska Oil and Gas Conservation Commission