

2. Requirements for the demonstration of mechanical integrity are unclear as written in Area Injection Order 22C, specifically regarding the testing frequency.
3. It is appropriate both to amend Area Injection Order No. 22C to include requirements governing an injection well integrity failure, and to clarify the mechanical integrity demonstration requirements to be consistent with other injection orders issued by the Commission.

NOW, THEREFORE, IT IS ORDERED:

In addition to statewide requirements under 20 AAC 25 (to the extent not superseded by these rules), the following rules govern Class II injection operations in the affected area described below and supersede and replace the rules adopted in Area Injection Order No. 22C dated June 25, 2004:

Umiat Meridian

<u>Township Range, UM</u>	<u>Sections</u>
T11N-R12E	Sec 2: W1/2 Sec 3: All Sec 4: E 1/2, NW 1/4, E 1/2 SW 1/4 Sec 5: E 1/2 1/2 NE1/4 Sec. 9: NE1/4, N1/2 SE1/4 Sec 10: NW1/4 SW1/4, W1/2 NW1/4
T12N-R12E	Sec 15: S1/2 SE1/4, SW1/4 Sec 16: NW1/4, S1/2 Sec 17: S1/2, NE1/4 Sec 18: SE1/4 Sec 19: N1/2 NE1/4 Sec 20: E1/2, N1/2 NW1/4 Sec 21: All Sec 22: All Sec 23: S1/2, S1/2 NW1/4, S1/2 NE1/4 Sec 25; S1/2, S1/2 NW1/4 Sec 26; All Sec 27: All Sec 28: All Sec 29: E1/2 NE1/4, SE1/4 Sec 32: E1/2 Sec 33: All Sec 34: All Sec 35: All Sec 36: All

Rule 1. Authorized Injection Strata for Enhanced Recovery

Injection is permitted into the accumulation of hydrocarbons that is common to, and correlates with, the interval between 6765' - 7765' measured depth ("MD") in the Mobil Oil Corporation Mobil-Phillips North Kuparuk State No. 26-12-12 well.

Rule 2 Injection Pressures

The injection operations shall not allow fractures to propagate into the confining intervals. Surface wellhead injection pressures shall be limited to 2800 psi for water and 3800 psi for gas.

Rule 3. Fluid Injection Wells

- a. The underground injection of fluids must be through a well permitted for drilling as a service well for injection in conformance with 20 AAC 25.005, or through a well approved for conversion to a service well for injection in conformance with 20 AAC 25.280.
- b. An application to drill or convert a well for injection must be accompanied by the information required by 20 AAC 25.402(c), and must include cementing records, cement quality log or formation integrity test records.

Rule 4. Monitoring the Tubing-Casing Annulus Pressure Variations

The tubing by casing annulus pressure and injection rate of each injection well must be checked at least weekly to confirm continued mechanical integrity.

Rule 5. Demonstration of Tubing-Casing Annulus Mechanical Integrity

The mechanical integrity of an injection well must be demonstrated before injection begins, and before returning a well to service following a workover affecting mechanical integrity. A Commission-witnessed mechanical integrity test must be performed after injection is commenced for the first time in a well, to be scheduled when injection conditions (temperature, pressure, rate, etc.) have stabilized. Subsequent tests must be performed at least once every four years thereafter (except at least once every two years in the case of a slurry injection well). The Commission must be notified at least 24 hours in advance to enable a representative to witness mechanical integrity tests. Unless an alternate means is approved by the Commission, mechanical integrity must be demonstrated by a tubing by casing annulus pressure test using a surface pressure of 1500 psi or 0.25 psi/ft multiplied by the vertical depth of the packer, whichever is greater, that shows stabilizing pressure and does not change more than 10 percent during a 30-minute period. Results of mechanical integrity tests must be readily available for Commission inspection.

Rule 6. Well Integrity Failure

Whenever any pressure communication, leakage or lack of injection zone isolation is indicated by injection rate, operating pressure observation, test, survey, log, or other evidence, the Operator shall notify the Commission by the next business day and submit a plan of corrective action on a Form 10-403 for Commission approval. The Operator shall immediately shut in the well if continued operation would be unsafe or would threaten contamination of freshwater, or if so directed by the Commission. A monthly report of daily tubing and casing annuli pressures and injection rates must be provided to the Commission for all injection wells indicating well integrity failure or lack of injection zone isolation.

Rule 7. Notification of Improper Class II Injection

The operator shall notify the Commission if it learns of any improper injection of fluids into a Class II well. Additionally, compliance with the notification requirements of any other State or Federal agency remains the operator's responsibility.

Rule 8. Other conditions

- a. It is a condition of the authorization granted by this Order that the operator shall comply with all applicable Commission regulations.
- b. The Commission may immediately suspend, revoke, or modify this authorization if injected fluids fail to be confined within the designated injection strata.

Rule 9. Administrative Action

Unless notice and public hearing are otherwise required, the Commission may administratively waive the requirements of any rule herein or administratively amend any rule as long as the change does not promote waste or jeopardize correlative rights, is based on sound engineering and geoscience principles, and will not result in an increased risk of fluid movement into freshwater.

Rule 10. Authorized Fluids for Enhanced Recovery

The fluids authorized by this Order for injection and conditions of the authorization are as follows:

- a. produced water from the AOP or Prudhoe Bay Unit processing facilities;
- b. source water from the Prince Creek formation provided that the water is shown to be compatible with the AOP formation and administrative approval to inject is obtained from the Commission;
- c. enriched hydrocarbon gas processed within the Prudhoe Bay Unit processing facilities, with the following conditions:
 1. reservoir pressure must be maintained to ensure miscibility of the injectant, and

2. expansion of injection outside of the North of Crest and West Blocks must be administratively approved prior to long-term injection;
- d. immiscible hydrocarbon gas from the AOP or Prudhoe Bay Unit processing facilities provided that Commission approval of the associated depletion strategy and surveillance plans is obtained prior to start of injection;
- e. tracer survey fluid to monitor reservoir performance; and
- f. non-hazardous filtered water collected from AOP well house cellars and well pads.

DONE at Anchorage, Alaska, and dated January 30, 2008.





John K. Norman, Chairman



Cathy F. Foerster, Commissioner

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 reconsideration. A request for reconsideration 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 reconsideration, both being the final order of the Commission, to appeal the decision to Superior Court. Where a request for reconsideration 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 reconsideration was filed).