RULE CHANGE PROPOSED BY OIL CONSERVATION COMMISSION STAFF

CASE 2243

RULE 309-A. CENTRAL TANK BATTERIES

Oil shall not be transported from a lease until it has been received and measured in a facility of an approved design located on the lease. Such facilities shall permit the testing of each well at reasonable intervals and may be comprised of manually gauged closed stock tanks for which proper strapping tables have been prepared, with a maximum of sixteen proration units producing into said tanks, or of automatic custody transfer (ACT) equipment. The use of such automatic custody transfer equipment shall be permitted only after compliance with the following:

- 1. The operator shall file with the Commission Form C-106, Notice of Intention to Utilize Automatic Custody Transfer Equipment, and shall receive approval thereof prior to transferring oil through the ACT system. The carrier shall not accept delivery of oil through the ACT system until Form C-106 has been approved.
- 2. Form C-106 shall be submitted in quadruplicate to the appropriate District Office of the Commission and shall be accompanied (in quadruplicate) by the following:
 - (a) Plat of the lease showing thereon all wells which will be produced into the ACT system.
 - (b) Schematic diagram of the ACT equipment, showing thereon all major components such as surge tanks and their capacity, extrastorage tanks and their capacity, transfer pumps, monitors, reroute valves, treaters, samplers, strainers, air and gas eliminators, back pressure valves, metering device (indicating type and capacity, i.e., whether automatic measuring tank, positive volume metering chamber, weir-type measuring vessel, or positive displacement meter). Schematic diagram shall also show means employed to prove accuracy of measuring device.
 - (c) Letter from transporter agreeing to utilization of ACT system as shown on schematic diagram.
- 3. Form C-106 will not be approved by the Commission unless the ACT system is to be installed and operated in compliance with the following:
 - (a) Provision must be made for accurate determination and recording of uncorrected volume and applicable temperature, or of temperature corrected volume. The overall accuracy of the system shall equal or surpass manual methods.
 - (b) Provision must be made for representative sampling of the oil transferred for determination of API gravity and BS&W content.
 - (c) Provision must be made if required by either the producer or the transporter of the oil to give adequate assurance that only merchantable oil is run by the ACT system.

- (d) Provision must be made for set-stop counters to stop the flow of oil through the ACT system at or prior to the time the allowable has been run. All counters shall provide non-reset totalizers which shall be visible for inspection at all times.
- (e) All necessary controls and equipment must be enclosed and sealed, or otherwise be so arranged as to provide assurance against, or evidence of, accidental or purposeful mismeasurement resulting from tampering.
- (f) All components of the ACT system shall be properly sized to ensure operation within the range of their established ratings. All components of the system which require periodic calibration and/or inspection for proof of continued accuracy must be readily accessible. The frequency and methods of such calibration and/or inspection shall be as set forth in Rule 309-A, 4-c.
- (g) The control and recording system must include adequate failsafe features which will provide assurance against mismeasurement in the event of power failure, or the failure of the ACT system's component parts.
- (h) 1. The ACT system and allied facilities shall include such fail-safe equipment as may be necessary, including high level switches in the surge tank or overflow storage tank which, in the event of power failure or malfunction of the ACT or other equipment, will shut down all artificially lifted wells connected to the ACT system and will shut-in all flowing wells at the well-head or at the header manifold, in which latter case all flowlines shall be pressure tested to at least 1½ times the maximum well-head shut-in pressure prior to initial use of the ACT system and once each year thereafter.
 - 2. As an alternative to the requirements of paragraph (h) 1 above, the producer shall provide and shall at all times maintain a minimum of available storage capacity above the normal high working level of the surge tank to receive and hold the amount of oil which may be produced during maximum unautended time of lease operation.
- 4. (a) In all ACT systems employing automatic measuring tanks weirtype measuring vessels, positive volume metering chambers, or any other volume measuring container, the container and allied components shall be properly calibrated prior to initial use and shall be operated, maintained, and inspected as necessary to ensure against incrustation changes in clingage factors, valve leakage or other leakage, and improper action of floats, level detectors, etc.
 - (b) In all ACT systems employing positive displacement meters, the meter(s) and allied components shall be properly calibrated prior to initial use and shall be operated, maintained, and inspected as necessary to ensure against mismeasurement of oil.

- (c) The measuring and recording devices of all ACT systems shall be checked for accuracy at least once each month unless exception to such determination has been obtained from the Secretary-Director of the Commission. API Standard 1101, "Measurement of Petroleum Liquid Hydrocarbons by Positive Displacement Meter," shall be used where applicable. Determinations may be made against Master Meters, Portable Prover Tanks, or Prover Tanks permanently installed on the lease. If permanently installed Prover Tanks are used, the distance between the opening and closing levels and the provision for determining the opening and closing readings shall be sufficient to detect variations of .05%. Reports of determinations shall be filed on the Commission Form entitled "Meter Test Report," or on another acceptable form and shall be submitted in duplicate to the appropriate District Office of the Commission.
- (d) To obtain exception to the requirement of paragraph (c) above that all measuring and recording devices be checked for accuracy once each month, either the producer or transporter may file such a request with the Secretary-Director of the Commission setting forth all facts pertinent to such exception. The application shall include a history of the average factors previously obtained, both tabulated and plotted on a graph of factors versus time, showing that the particular installation has experienced no erratic drift. The applicant shall also furnish evidence that the other interested party has agreed to such exception. The Secretary-Director may then set the frequency for determination of the system's accuracy at the interval which he deems prudent.
- 5. Failure to operate an automatic custody transfer system in compliance with this rule shall subject the approval thereof to revocation by the Commission.