e-CFR Data is current as of May 22, 2008

Title 30: Mineral Resources

PART 250—OIL AND GAS AND SULPHUR OPERATIONS IN THE OUTER CONTINENTAL SHELF

Subpart K—Oil and Gas Production Rates

§ 250.1100 Definitions for production rates.

Terms used in this subpart shall have meanings given below:

Enhanced recovery operations means pressure maintenance operations, secondary and tertiary recovery, cycling, and similar recovery operations which alter the natural forces in a reservoir to increase the ultimate recovery of oil or gas.

Gas reservoir means a reservoir that contains hydrocarbons predominantly in a gaseous (single-phase) state.

Gas-well completion means a well completed in a gas reservoir or in the gas cap of an oil reservoir with an associated gas cap.

Maximum Efficient Rate (MER) means the maximum sustainable daily oil or gas withdrawal rate from a reservoir which will permit economic development and depletion of that reservoir without detriment to ultimate recovery.

Maximum Production Rate (MPR) means the approved maximum daily rate at which oil or gas may be produced from a specified oil-well or gas-well completion.

Nonsensitive reservoir means a reservoir in which ultimate recovery is not decreased by high reservoir production rates.

Oil reservoir means a reservoir that contains hydrocarbons predominantly in a liquid (single-phase) state.

Oil reservoir with an associated gas cap means a reservoir that contains hydrocarbons in both a liquid and gaseous (two-phase) state.

Oil-well completion means a well completed in an oil reservoir or in the oil accumulation of an oil reservoir with an associated gas cap.

Sensitive reservoir means a reservoir in which ultimate recovery is decreased by high reservoir production rates. A high reservoir production rate is one which exceeds the MER.

Waste of oil and gas means: (1) The physical waste of oil and gas; (2) the inefficient, excessive, or improper use of, or the unnecessary dissipation of reservoir energy; (3) the locating, spacing, drilling, equipping, operating, or producing of any oil or gas well(s) in a manner which causes or tends to cause a reduction in the quantity of oil or gas ultimately recoverable from a pool under prudent and proper operations or which causes or tends to cause unnecessary or excessive surface loss or destruction of oil or gas; or (4) the inefficient storage of oil.

§ 250.1101 General requirements and classification of reservoirs.

- (a) Wells and reservoirs shall be produced at rates that will provide economic development and depletion of the hydrocarbon resources in a manner that would maximize the ultimate recovery without adversely affecting correlative rights.
- (b) For directionally drilled wells in which the completed interval is closer than 500 feet from a unit or lease line or for vertically drilled wells in which the surface location is closer than 500 feet from a unit or lease line, for which the unit, lease, or royalty interests are not the same, the prior approval by the Regional Supervisor is required before production is commenced. An operator requesting such an approval shall furnish the Regional Supervisor with letters expressing acceptance or objection from operators of offset properties.
- (c) The lessee shall propose a classification for each reservoir as an oil reservoir, an oil reservoir with an associated gas cap or a gas reservoir, and as sensitive or nonsensitive.
- (d) All oil reservoirs with associated gas caps shall be initially classified as sensitive and shall require establishing a maximum efficient production rate and balancing of production in accordance with §250.1102(a) (1) and (5) of this part. All other oil reservoirs and all gas reservoirs shall be initially classified as nonsensitive.

- (e) A reservoir may be reclassified by the Minerals Management Service (MMS) as to type and sensitivity at any time during its productive life when information becomes available showing that reclassification is warranted.
- (f) The lessee must pay the service fee listed in §250.125 of this part with its request for either a 500 feet from lease/unit line production interval or to produce from a completion in an associated gas cap of a sensitive reservoir under this section.

[53 FR 10690, Apr. 1, 1988. Redesignated and amended at 63 FR 29479, 29486, May 29, 1998; 70 FR 49876, Aug. 25, 2005]

§ 250.1102 Oil and gas production rates.

- (a) MER. (1) The lessee shall submit a proposed MER for each producing sensitive reservoir on Form MMS–127, Sensitive Reservoir Information Report (SRI), along with appropriate supporting information to the Regional Supervisor within 45 days after discovering that a reservoir is sensitive.
- (2) The lessee may propose to revise an MER by submitting Form MMS-127 with appropriate supporting information.
- (3) The effective date of an MER for a reservoir or revision thereof shall be the first day of the month in which Form MMS–127 is submitted.
- (4) When approved, the MER shall not be exceeded, except as provided in paragraph (a)(5) of this section.
- (5) If a reservoir is produced at a rate in excess of the MER for any month, the lessee should initiate measures necessary to balance production (offset overproduction by underproduction) during the next succeeding month. All overproduction shall be balanced by the end of the next succeeding calendar quarter following the quarter in which the overproduction occurred. Any operation in an overproduction status in any reservoir for two successive calendar quarters shall be shut in from that reservoir until the actual production is equal to that which would have occurred under the approved MER, unless an alternative plan is approved by the Regional Supervisor.
- (6) The lessee shall review the MER for each producing sensitive reservoir at least once a year and submit Form MMS–127 with appropriate supporting information.
- (7) The lessee may request the reclassification of a reservoir from sensitive to nonsensitive and request approval for termination of an MER by submitting Form MMS–127 with information supporting the reclassification and termination.
- (8) At the request of the Regional Supervisor, the lessee shall furnish the information specified on Form MMS–127 for any producing nonsensitive reservoir.
- (9) Public information copies of Form MMS-127 shall be submitted in accordance with §250.186.
- (b) MPR. (1) The lessee shall propose an MPR for each producing well completion together with full information on the method used in its determination. The MPR shall be based on well tests and any limitations imposed by well and surface equipment, sand production, gas-oil and water-oil ratios, location of perforated intervals, and prudent operating practices. The sum of the MPR's of wells completed in a sensitive reservoir shall not exceed the approved MER.
- (2) The lessee shall conduct a well-flow potential test within 30 days of the date of first continuous production on all new, recompleted, and reworked well completions. Within 15 days after the end of the test period, the lessee must submit a proposed MPR with well potential test for the individual well completion on Form MMS–126, Well Potential Test Report. The initial MPR shall not exceed 110 percent of the test rate submitted and shall be effective on the first day of the month following the end of the test period if approved by the Regional Supervisor. During the 30-day period allowed for testing, the lessee may produce a new, recompleted, or reworked completion at rates necessary to establish the MPR. After the 30-day period and prior to approval of the initial MPR, a well completion may be produced at a rate not to exceed the proposed rate. The lessee shall report the total production obtained during the test period and shall identify all other wells completed in the reservoir on Form MMS–126.
- (3) At least one well test shall be conducted during a calendar half for producing oil-well and gas-well completions and results submitted on Form MMS–128, Semiannual Well Test Report. Well tests shall be submitted within 45 days of the day the test was conducted.
- (4) Unless otherwise ordered by the Regional Supervisor, a revised MPR shall automatically be approved for each well completion for each well test submitted equal to 110 percent of the test rate. The revised MPR will be effective on the first day of the month following the date the well test was conducted. Prior to the approval of a proposed increase of the MPR, a well completion may be produced at a rate not to exceed the proposed increased rate.

- (5) When a well test is not submitted during a calendar half for a producing oil-well or gas-well completion, the MPR will be automatically canceled effective on the first day of the appropriate following calendar half.
- (6) When the results of a semiannual well test for an oil-well or gas-well completion cannot be submitted within the specified time, the lessee shall request an extension of time for submitting those test results. The extension must be approved in advance by the Regional Supervisor to continue production under the last approved MPR.
- (7) When approved by the Regional Supervisor, an MPR shall not be exceeded, except as provided in paragraphs (b)(4) and (c) of this section.
- (8) Public Information copies of Form MMS-126 shall be submitted in accordance with §250.186.
- (9) Public information copies of Form MMS-128 shall be submitted in accordance with §250.186.
- (c) *Temporary rates*. Temporary production rates resulting from normal variations and fluctuations exceeding a well MPR or reservoir MER shall not be considered a violation, provided that such production in excess of an approved MER is balanced by production in accordance with the provisions of paragraph (a)(5) of this section.

[53 FR 10690, Apr. 1, 1988, as amended at 58 FR 49928, Sept. 24, 1993. Redesignated and amended at 63 FR 29479, 29486, May 29, 1998; 64 FR 72794, Dec. 28, 1999; 65 FR 2875, Jan. 19, 2000; 71 FR 19646, Apr. 17, 2006; 72 FR 25201, May 4, 2007]

§ 250.1103 Well production testing.

- (a) The required well testing shall be conducted for a period of not less than four consecutive hours. Immediately prior to the 4-hour test period, the well completion shall have produced under stabilized conditions for a period of not less than six consecutive hours. The 6-hour pretest period shall not begin until after the recovery of a volume of fluid equivalent to the amount of fluids introduced into the formation during completion, recompletion, reworking, or treatment operations. Measured gas volumes shall be adjusted to the standard conditions of 14.73 pounds per square inch absolute (psia) and 60 °F for all tests. When orifice meters are used, a specific gravity for the gas shall be obtained or estimated, and a specific gravity-correction factor shall be applied to the orifice coefficient. The Regional Supervisor may require a prolonged test or retest of a well completion if the test is determined to be necessary for the establishment of a well MPR or a reservoir MER. The Regional Supervisor may approve test periods of less than 4 hours and pretest stabilization periods of less than 6 hours for well completions provided that test reliability can be demonstrated under such procedures.
- (b) At the request of the Regional Supervisor, the lessee shall conduct a multipoint back-pressure test to determine the theoretical open-flow potential of a gas well. The test shall be conducted within 30 days of the Regional Supervisor's request or within the time period specified by the Regional Supervisor.
- (c) An MMS representative may witness any well test of oil-well and gas-well completions. Upon request, a lessee shall provide advance notice to the Regional Supervisor of the time and date of well tests.

[53 FR 10690, Apr. 1, 1988. Redesignated at 63 FR 29479, May 29, 1998, as amended at 72 FR 25201, May 4, 2007]

§ 250.1104 Bottomhole pressure survey.

- (a) For each new reservoir, the lessee shall conduct a static bottomhole pressure survey within 3 months after the date of first continuous production.
- (b) For each producing reservoir with three or more producing completions, the lessee shall conduct annual static bottomhole pressure surveys in a sufficient number of key wells to establish an average reservoir pressure. The Regional Supervisor may require that a survey be performed on specific wells.
- (c) The results of all static bottomhole pressure surveys obtained by the lessee shall be filed with the Regional Supervisor within 60 days after the date of the survey.

§ 250.1105 Flaring or venting gas and burning liquid hydrocarbons.

- (a) Lessees may flare or vent oil-well gas or gas-well gas without receiving prior approval from the Regional Supervisor only in the following situations:
- (1) When gas vapors are flared or vented in small volumes from storage vessels or other low-pressure production vessels and cannot

be economically recovered.

- (2) During an equipment failure or to relieve system pressures. The lessee must comply with the following conditions:
- (i) Lessees must not flare or vent oil-well gas for more than 48 continuous hours unless the Regional Supervisor approves. The Regional Supervisor may specify a limit of less than 48 hours to prevent air quality degradation.
- (ii) Lessees must not flare or vent gas from a facility for more than 144 cumulative hours during any calendar month unless the Regional Supervisor approves.
- (iii) Lessees must not flare or vent gas-well gas beyond the time required to eliminate an emergency unless the Regional Supervisor approves.
- (3) During the unloading or cleaning of a well, drill-stem testing, production testing, or other well-evaluation testing. Flaring or venting must not exceed 48 cumulative hours per testing operation on a single completion. The Regional Supervisor may allow less time to prevent air quality degradation or more time if lessees need additional time to evaluate reservoir parameters.
- (b) Lessees may flare or vent oil-well gas for up to 1 year when the Regional Supervisor approves the request for one of the following reasons:
- (1) The lessee initiated an action which, when completed, will eliminate flaring and venting; or
- (2) The lessee submitted an evaluation supported by engineering, geologic, and economic data indicating that either:
- (i) The oil and gas produced from the well(s) will not economically support the facilities necessary to save and/or sell the gas; or
- (ii) There is not enough gas to market.
- (c) Lessees may burn produced liquid hydrocarbons only if the Regional Supervisor approves. To burn produced liquid hydrocarbons, the lessee must demonstrate that the amounts to burn would be minimal, or that the alternatives are infeasible or pose a significant risk that may harm offshore personnel or the environment. Alternatives to burning liquid hydrocarbons include transporting the liquids or storing and re-injecting them into a producible zone.
- (d) Lessees must prepare records detailing gas flaring or venting and liquid hydrocarbon burning for each facility. The records must include, at a minimum:
- (1) Daily volumes of gas flared or vented and liquid hydrocarbons burned;
- (2) Number of hours of flaring, venting, or burning on a daily basis;
- (3) Reasons for flaring, venting, or burning; and
- (4) A list of the wells contributing to flaring, venting, or burning, along with the gas-oil ratio data.
- (e) Lessees must keep these records for at least 2 years. Lessees must allow Minerals Management Service representatives to inspect the records at the lessees' field office that is nearest the Outer Continental Shelf facility, or at another location agreed to by the Regional Supervisor. If the Regional Supervisor requests to see the records, lessees must provide a copy.
- (f) Requirements for flaring and venting of gas containing H_2 S —(1) Flaring of gas containing H_2 S. (i) The Regional Supervisor may, for safety or air pollution prevention purposes, further restrict the flaring of gas containing H_2 S. The Regional Supervisor will use information provided in the lessee's H_2 S Contingency Plan (§250.490(f)), Exploration Plan or Development and Production Plan, and associated documents in determining the need for such restrictions.
- (ii) If the Regional Supervisor determines that flaring at a facility or group of facilities may significantly affect the air quality of an onshore area, the Regional Supervisor may require the operator(s) to conduct an air quality modeling analysis to determine the potential effect of facility emissions on onshore ambient concentrations of SO₂. The Regional Supervisor may require monitoring and reporting or may restrict or prohibit flaring pursuant to §§250.303 and 250.304.
- (2) Venting of gas containing H_2S . You must not vent gas containing H_2S except for minor releases during maintenance and repair activities that do not result in a 15-minute time weighted average atmospheric concentration of H_2S of 20 ppm or higher anywhere on

the platform.

- (3) Reporting flared gas containing H_2 S. In addition to the recordkeeping requirements of paragraphs (d) and (e) of this section, when required by the Regional Supervisor, the operator must submit to the Regional Supervisor a monthly report of flared and vented gas containing H_2 S. The report must contain the following information:
- (i) On a daily basis, the volume and duration of each flaring episode;
- (ii) H₂S concentration in the flared gas; and
- (iii) Calculated amount of SO₂emitted.

[61 FR 25148, May 20, 1996, as amended at 62 FR 3800, Jan. 27, 1997. Redesignated and amended at 63 FR 29479, 29486, May 29, 1998; 68 FR 8435, Feb. 20, 2003]

§ 250.1106 Downhole commingling.

- (a) An application to commingle hydrocarbons produced from multiple reservoirs within a common wellbore shall be submitted to the Regional Supervisor for approval and shall include all pertinent well information, geologic and reservoir engineering data, and a schematic diagram of well equipment. The application shall provide the estimated recoverable reserves as well as any available alternate drainage points which might be used to produce the reservoirs separately.
- (b) For a competitive reservoir, notice of intent to submit the application shall be sent by the applicant to all other lessees having an interest in the reservoir prior to submitting the application to the Regional Supervisor.
- (c) The application shall specify the well-completion number to be used for subsequent reporting purposes.
- (d) The applicant must pay the service fee listed in §250.125 of this part with its request for downhole commingling.

[53 FR 10690, Apr. 1, 1988. Redesignated at 63 FR 29479, May 29, 1998, as amended at 70 FR 49876, Aug. 25, 2005]

§ 250.1107 Enhanced oil and gas recovery operations.

- (a) The lessee shall timely initiate enhanced oil and gas recovery operations for all competitive and noncompetitive reservoirs where such operations would result in an increased ultimate recovery of oil or gas under sound engineering and economic principles.
- (b) A proposed plan for pressure maintenance, secondary and tertiary recovery, cycling, and similar recovery operations to increase the ultimate recovery of oil and/or gas from a reservoir shall be submitted to the Regional Supervisor for approval before such operations are initiated.
- (c) Periodic reports of the volumes of oil, gas, or other substances injected, produced, or reproduced shall be submitted as required by the Regional Supervisor.