

a crown block shall be equipped with a safety device which is designed to prevent the traveling block from striking the crown block. The device shall be checked for proper operation weekly and after each drill-line slipping operation. The results of the operational check shall be entered in the operations log.

**§ 250.512 Field well-completion rules.**

When geological and engineering information available in a field enables the District Supervisor to determine specific operating requirements, field well-completion rules may be established on the District Supervisor's initiative or in response to a request from a lessee. Such rules may modify the specific requirements of this subpart. After field well-completion rules have been established, well-completion operations in the field shall be conducted in accordance with such rules and other requirements of this subpart. Field well-completion rules may be amended or canceled for cause at any time upon the initiative of the District Supervisor or upon the request of a lessee.

**§ 250.513 Approval and reporting of well-completion operations.**

(a) No well-completion operation shall begin until the lessee receives written approval from the District Supervisor. If completion is planned and the data are available at the time the Application for Permit to Drill, Form MMS-123 (see § 250.410 through § 250.418 of this part), is submitted, approval for a well completion may be requested on that form. If the completion has not been approved or if the completion objective or plans have significantly changed, approval for such operations shall be requested on Form MMS-124, Sundry Notices and Reports on Wells.

(b) The following information shall be submitted with Form MMS-124 (or with Form MMS-123):

(1) A brief description of the well-completion procedures to be followed, a statement of the expected surface pressure, and type and weight of completion fluids;

(2) A schematic drawing of the well showing the proposed producing zone(s) and the subsurface well-completion equipment to be used;

(3) For multiple completions, a partial electric log showing the zones proposed for completion, if logs have not been previously submitted; and

(4) When the well-completion is in a zone known to contain H<sub>2</sub>S or a zone where the presence of H<sub>2</sub>S is unknown, information pursuant to § 250.490 of this part.

(c) Within 30 days after completion, Form MMS-125, Well Summary Report, including a schematic of the tubing and subsurface equipment, shall be submitted to the District Supervisor.

(d) Public information copies of Form MMS-125 shall be submitted in accordance with § 250.190.

[53 FR 10690, Apr. 1, 1988, as amended at 58 FR 49928, Sept. 24, 1993. Redesignated and amended at 63 FR 29479, 29485, May 29, 1998; 64 FR 72794, Dec. 28, 1999; 68 FR 8434, Feb. 20, 2003]

**§ 250.514 Well-control fluids, equipment, and operations.**

(a) Well-control fluids, equipment, and operations shall be designed, utilized, maintained, and/or tested as necessary to control the well in foreseeable conditions and circumstances, including subfreezing conditions. The well shall be continuously monitored during well-completion operations and shall not be left unattended at any time unless the well is shut in and secured.

(b) The following well-control-fluid equipment shall be installed, maintained, and utilized:

(1) A fill-up line above the uppermost BOP;

(2) A well-control, fluid-volume measuring device for determining fluid volumes when filling the hole on trips; and

(3) A recording mud-pit-level indicator to determine mud-pit-volume gains and losses. This indicator shall include both a visual and an audible warning device.

(c) When coming out of the hole with drill pipe, the annulus shall be filled with well-control fluid before the change in such fluid level decreases the hydrostatic pressure 75 pounds per square inch (psi) or every five stands of drill pipe, whichever gives a lower decrease in hydrostatic pressure. The number of stands of drill pipe and drill

**§ 250.515**

**30 CFR Ch. II (7-1-03 Edition)**

collars that may be pulled prior to filling the hole and the equivalent well-control fluid volume shall be calculated and posted near the operator's station. A mechanical, volumetric, or electronic device for measuring the amount of well-control fluid required to fill the hole shall be utilized.

**§ 250.515 Blowout prevention equipment.**

(a) The BOP system and system components and related well-control equipment shall be designed, used, maintained, and tested in a manner necessary to assure well control in foreseeable conditions and circumstances, including subfreezing conditions. The

working pressure rating of the BOP system and BOP system components shall exceed the expected surface pressure to which they may be subjected. If the expected surface pressure exceeds the rated working pressure of the annular preventer, the lessee shall submit with Form MMS-124 or Form MMS-123, as appropriate, a well-control procedure that indicates how the annular preventer will be utilized, and the pressure limitations that will be applied during each mode of pressure control.

(b) The minimum BOP system for well-completion operations must meet the appropriate standards from the following table:

When	The minimum BOP stack must include
(1) The expected pressure is less than 5,000 psi.	Three BOPs consisting of an annular, one set of pipe rams, and one set of blind or blind-shear rams.
(2) The expected pressure is 5,000 psi or greater or you use multiple tubing strings.	Four BOPs consisting of an annular, two sets of pipe rams, and one set of blind or blind-shear rams.
(3) You handle multiple tubing strings simultaneously.	Four BOPs consisting of an annular, one set of pipe rams, one set of dual pipe rams, and one set of blind or blind-shear rams.
(4) You use a tapered drill string .....	At least one set of pipe rams that are capable of sealing around each size of drill string. If the expected pressure is greater than 5,000 psi, then you must have at least two sets of pipe rams that are capable of sealing around the larger size drill string. You may substitute one set of variable bore rams for two sets of pipe rams.
(5) It is after February 21, 2006 .....	At least one set of blind-shear rams. The blind-shear rams must be capable of shearing the drill pipe or tubing in the hole.

(c) The BOP systems for well completions shall be equipped with the following:

(1) A hydraulic-actuating system that provides sufficient accumulator capacity to supply 1.5 times the volume necessary to close all BOP equipment units with a minimum pressure of 200 psi above the precharge pressure without assistance from a charging system. No later than December 1, 1988, accumulator regulators supplied by rig air and without a secondary source of pneumatic supply, shall be equipped with manual overrides, or alternately, other devices provided to ensure capability of hydraulic operations if rig air is lost.

(2) A secondary power source, independent from the primary power source, with sufficient capacity to close all BOP system components and hold them closed.

(3) Locking devices for the pipe-ram preventers.

(4) At least one remote BOP-control station and one BOP-control station on the rig floor.

(5) A choke line and a kill line each equipped with two full opening valves and a choke manifold. At least one of the valves on the choke line shall be remotely controlled. At least one of the valves on the kill line shall be remotely controlled, except that a check valve on the kill line in lieu of the remotely controlled valve may be installed provided that two readily accessible manual valves are in place and the check valve is placed between the manual valves and the pump. This equipment shall have a pressure rating at least equivalent to the ram preventers.

(d) An inside BOP or a spring-loaded, back-pressure safety valve and an essentially full-opening, work-string safety valve in the open position shall be maintained on the rig floor at all times during well-completion operations. A wrench to fit the work-string