

RULE

Department of Natural Resources Office of Conservation

Application to Drill (LAC 43:XIX.103)

In accordance with the provisions of the Administrative Procedure Act (R.S. 49:950, et seq.) and Title 30 of the Louisiana Revised Statutes of 1950 (R.S. 30:4 et seq.), the Louisiana Office of Conservation hereby amends LAC 43:XIX Subpart 1 (Statewide Order No. 29-B) Chapter 1 (General Provisions).

Title 43

NATURAL RESOURCES

Part XIX. Office of Conservation—General Operations

Subpart 1. Statewide Order No. 29-B

Chapter 1. General Provisions

§103. Application to Drill

A. All applications for permits to drill wells for oil or gas or core test wells below the fresh water sands shall be made on Form MD-10-R or revisions thereof, and mailed or delivered to the district office. These applications, in duplicate, shall be accompanied by three copies of the location plat, preferably drawn to a scale of 1000 feet to the inch. The plats shall be constructed from data compiled by a registered civil engineer or surveyor and shall definitely show the amount and location of the acreage with reference to quarter-section corners, or other established survey points. There shall also be shown all pertinent lease and property lines, leases, offset wells, and the location and distance from the well to the nearest shoulder of any Interstate highway within the boundaries of the plat. When the tract to be drilled is composed of separately-owned interests which have been pooled or unitized, the boundaries to the acreage in each separately-owned interest must be indicated. Plats must have well locations certifications either written on or attached to the well location plats and this certification must be signed by a registered civil engineer, qualified surveyor or a qualified engineer regularly employed by the applicant. If possible the application card shall give the name and address of the drilling contractor, otherwise the information, as soon as determined, shall be supplied by letter to the district manager.

1. Applicants that receive a drilling permit for a well located within 1,000 feet of an Interstate highway shall furnish a copy of the approved drilling permit and the certified location plat to the appropriate state and local authorities, including all emergency responders.

B. When dual completion applications are granted, each well shall be considered as two wells. The production from each sand shall be run through separate lead lines and the production from each sand shall be measurable separately. The department's agent shall designate suitable suffixes to the well number which will serve as reference to each producing sand.

C. No well shall be drilled, nor shall the drilling of a well be commenced, before a permit for such well has been issued by the Office of Conservation; furthermore, any work, such as digging pits, erecting buildings, derricks, etc., which the operator may do or have done, will be done at his own risk and with the full understanding that the Office of Conservation may find it necessary to change the location or

deny the permit because of the rules and regulations applying in that instance.

D. No well shall commence drilling below the surface casing until a sign has been posted on the derrick, and subsequently on the well if it is a producer, showing the operator of record of the well, name of lease, section, township, range, and the serial number under which the permit was issued. The obligation to maintain a legible sign remains until abandonment.

E. In order to make the designation of the well, as referred to above, more uniform throughout the state, and thus to facilitate the handling of all matters relative to any particular well, the following system of rules has been developed for use in the naming of wells in the future in Louisiana.

1. In no case shall any operator name or well name exceed 30 characters. A space is equivalent to one character.

a. Abbreviations shall be used whenever possible to comply with the above. It is recommended that "S" be used for sand and "U" for unit.

b. The official well name appearing on Form MD-10-R (Application to Drill) shall be used when reporting on all Office of Conservation forms and also in any correspondence.

2. Lease Wells. All wells drilled on a lease basis shall bear the lessor's surname and initials or given name.

Example:	Lease Name	Well Number
	J. R. Smith	Number 2

3. The commissioner shall prescribe or cause to have prescribed the procedure for assigning well and/or nomenclature and shall issue a memorandum concerning same from time to time as the need arises.

a. Developmental units proposed at a hearing shall be named in accordance with the latest memorandum, and the well number shall depend on whether or not there are any other wells in existence on the lease.

b. Any unit maps filed with an application for hearing must reflect proposed unit names in accordance with the latest memorandum.

4. Units with Alternate Unit Wells. For those cases where more than one well serves the same proration unit, the wells shall be named in accordance with the latest memorandum, and the well number shall be followed by the letters ALT in the case of each alternate well.

Example:	Lease Name	Well Number
	Hayes Sue; J. R. Smith	Number 1
	Hayes Sue; Dave Luke	Number 1 ALT
	Hayes Sue; St. Mary	Number 22 ALT

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943), amended (August 1958), (August 1961), (May 1973), amended by the Department of Natural Resources, Office of Conservation, LR 34:2639 (December 2008).

James H. Welsh
Commissioner

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RULE

Department of Natural Resources Office of Conservation

Diverter Systems and Blowout Preventers (BOP) (LAC 43:XIX.111)

In accordance with the provisions of the Administrative Procedure Act (R.S. 49:950 et seq.) and Title 30 of the Louisiana Revised Statutes of 1950 (R.S. 30:4 et seq.), the Louisiana Office of Conservation hereby amends LAC 43:XIX Subpart 1 (Statewide Order No. 29-B) Chapter 1 (General Provisions).

Title 43

NATURAL RESOURCES

Part XIX. Office of Conservation—General Operations

Subpart 1. Statewide Order No. 29-B

Chapter 1. General Provisions

§111. Diverter Systems and Blowout Preventers (BOP)

A. Diverter System. A diverter system shall be required when drilling surface hole in areas where drilling hazards are known or anticipated to exist. The district manager may, at his discretion, require the use of a diverter system on any well. In cases where it is required, a diverter system consisting of a diverter sealing element, diverter lines, and control systems must be designed, installed, used, maintained, and tested to ensure proper diversion of gases, water, drilling fluids, and other materials away from facilities and personnel. The diverter system shall be designed to incorporate the following elements and characteristics:

1. dual diverter lines arranged to provide for maximum diversion capability;
2. at least two diverter control stations. One station shall be on the drilling floor. The other station shall be in a readily accessible location away from the drilling floor;
3. remote-controlled valves in the diverter lines. All valves in the diverter system shall be full-opening. Installation of manual or butterfly valves in any part of the diverter system is prohibited;
4. minimize the number of turns in the diverter lines, maximize the radius of curvature of turns, and minimize or eliminate all right angles and sharp turns;
5. anchor and support systems to prevent whipping and vibration;
6. rigid piping for diverter lines. The use of flexible hoses with integral end couplings in lieu of rigid piping for diverter lines shall be approved by the district manager.

B. Diverter Testing Requirements

1. When the diverter system is installed, the diverter components including the sealing element, diverter valves, control systems, stations and vent lines shall be function and pressure tested.
2. For drilling operations with a surface wellhead configuration, the system shall be function tested at least once every 24-hour period after the initial test.
3. After nipping-up on conductor casing, the diverter sealing element and diverter valves are to be pressure tested to a minimum of 200 psig. Subsequent pressure tests are to be conducted within seven days after the previous test.
4. Function tests and pressure tests shall be alternated between control stations.
5. Recordkeeping Requirements

a. Pressure and function tests are to be recorded in the driller's report and certified (signed and dated) by the operator's representative.

b. The control station used during a function or pressure test is to be recorded in the driller's report.

c. Problems or irregularities during the tests are to be recorded along with actions taken to remedy same in the driller's report.

d. All reports pertaining to diverter function and/or pressure tests are to be retained for inspection at the wellsite for the duration of drilling operations.

C. BOP Systems. The operator shall specify and insure that contractors design, install, use, maintain and test the BOP system to ensure well control during drilling, workover and all other appropriate operations. The surface BOP stack shall be installed before drilling below surface casing. The BOP stack shall consist of the appropriate number of ram-type preventers necessary to control the well under all potential conditions that might occur during the operations being conducted. The pipe rams shall be of proper size(s) to fit the drill pipe in use. The use of annular-type preventers in conjunction with ram-type preventers is encouraged.

1. The requirements of LAC 43:XIX.111.C-I shall not be applicable for wells drilled to or completed in the Nacatoch Formation in the Caddo Pine Island field.

2. The commissioner of conservation, following a public hearing, may grant exceptions to the requirements of LAC 43:XIX.111.C-I.

D. BOP Working Pressure. The working pressure rating of any BOP component, excluding annular-type preventers, shall exceed the maximum anticipated surface pressure (MASP) to which it may be subjected.

E. BOP Auxiliary Equipment. All BOP systems shall be equipped and provided with the following:

1. A hydraulically actuated accumulator system which shall provide 1.5 times volume of fluid capacity to close and hold closed all BOP components, with a minimum pressure of 200 psig above the pre-charge pressure without assistance from a charging system.

2. A backup to the primary accumulator-charging system, supplied by a power source independent from the power source to the primary, which shall be sufficient to close all BOP components and hold them closed.

3. Accumulator regulators supplied by rig air without a secondary source of pneumatic supply shall be equipped with manual overrides or other devices to ensure capability of hydraulic operation if the rig air is lost.

4. At least one operable remote BOP control station in addition to the one on the drilling floor. This control station shall be in a readily accessible location away from the drilling floor. If a BOP control station does not perform properly, operations shall be suspended until that station is operable.

5. A drilling spool with side outlets, if side outlets are not provided in the body of the BOP stack, to provide for separate kill and choke lines.

6. Choke and kill lines each equipped with two full-opening valves. At least one of the valves on the choke line and the kill line shall be remotely controlled. In lieu of remotely controlled valves, two readily-accessible manual valves may be installed provided that a check valve is placed between the manual valves and the pump.

7. A valve installed below the swivel (upper kelly cock), essentially full-opening, and a similar valve installed

at the bottom of the kelly (lower kelly cock). A wrench to fit each valve shall be stored in a location readily accessible to the drilling crew.

8. An essentially full-opening drill-string safety valve in the open position on the rig floor shall be available at all times while drilling operations are being conducted. This valve shall be maintained on the rig floor to fit all connections that are in the drill string. A wrench to fit the drill-string safety valve shall be stored in a location readily accessible to the drilling crew.

9. A safety valve shall be available on the rig floor assembled with the proper connection to fit the casing string being run in the hole.

10. Locking devices installed on the ram-type preventers.

F. BOP Maintenance and Testing Requirements

1. The BOP system shall be visually inspected on a daily basis.

2. Pressure tests (low and high pressure) of the BOP system are to be conducted at the following times and intervals:

a. during a shop test prior to transport of the BOPs to the drilling location. Shop tests are not required for equipment that is transported directly from one well location to another;

b. immediately following installation of the BOPs;

c. within 14 days of the previous BOP pressure test. Exceptions may be granted by the district manager in cases where a trip is scheduled to occur within 2 days after the 14-day testing deadline;

d. before drilling out each string of casing or liner (The district manager may require that a conservation enforcement specialist witness the test prior to drilling out each casing string or liner);

e. Not more than 48 hours before a well is drilled to a depth that is within 1000 feet of a hydrogen sulfide zone (The district manager may require that a conservation enforcement specialist witness the test prior to drilling to a depth that is within 1000 feet of a hydrogen sulfide zone);

f. when the BOP tests are postponed due to well control problem(s), the BOP test is to be performed on the first trip out of the hole, and reasons for postponing the testing are to be recorded in the driller's report.

3. Low pressure tests (200-300 psig) of the BOP system (choke manifold, kelly valves, drill-string safety valves, etc.) are to be performed at the times and intervals specified in LAC 43:XIX.111.F.2. in accordance with the following provisions.

a. Test pressures are to be held for a minimum of five minutes.

b. Variable bore pipe rams are to be tested against the largest and smallest sizes of pipe in use, excluding drill collars and bottom hole assembly.

c. Bonnet seals are to be tested before running the casing when casing rams are installed in the BOP stack.

4. High pressure tests of the BOP system are to be performed at the times and intervals specified in LAC 43:XIX.111.F.2 in accordance with the following provisions.

a. Test pressures are to be held for a minimum of five minutes.

b. Ram-type BOP's, choke manifolds, and associated equipment are to be tested to the rated working pressure of the equipment or 500 psi greater than the calculated MASP for the applicable section of the hole.

c. Annular-type BOPs are to be tested to 70% of the rated working pressure of the equipment.

5. The annular and ram-type BOPs with the exception of the blind-shear rams are to be function tested every seven days between pressure tests. All BOP test records should be certified (signed and dated) by the operator's representative.

a. Blind-shear rams are to be tested at all casing points and at an interval not to exceed 30 days.

G. BOP Record Keeping. The time, date and results of pressure tests, function tests, and inspections of the BOP system are to be recorded in the driller's report and are to be retained for inspection at the wellsite for the duration of drilling operations.

H. BOP Well Control Drills. Weekly well control drills with each drilling crew are to be conducted during a period of activity that minimizes the risk to drilling operations. The drills must cover a range of drilling operations, including drilling with a diverter (if applicable), on-bottom drilling, and tripping. Each drill must be recorded in the driller's report and is to include the time required to close the BOP system, as well as, the total time to complete the entire drill.

I. Well Control Safety Training. In order to ensure that all drilling personnel understand and can properly perform their duties prior to drilling wells which are subject to the jurisdiction of the Office of Conservation, the operator shall require that contract drilling companies provide and/or implement the following:

1. periodic training for drilling contractor employees which ensures that employees maintain an understanding of, and competency in, well control practices;

2. procedures to verify adequate retention of the knowledge and skills that the contract drilling employees need to perform their assigned well control duties.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943), amended by the Department of Natural Resources, Office of Conservation, LR 34:2640 (December 2008).

James H. Welsh
Commissioner

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