

Subject 391-3-13 OIL AND GAS AND DEEP DRILLING

Rule 391-3-13-.01 Purpose

The purpose of these rules is to establish the administration and enforcement procedures of the Georgia Oil and Gas and Deep Drilling Act of 1975, as amended, and to carry out the purposes and requirements of the Act. These rules are promulgated in order to:

- (a) Protect the health, safety and welfare of the citizens of Georgia by requiring that adequate protection of underground fresh water supplies be assured in any drilling operation which may penetrate through any strata which contain fresh water;
- (b) Protect environmentally sensitive areas;
- (c) Encourage oil and gas exploration to identify new sources of energy.

Cite as Ga. Comp. R. & Regs. R. 391-3-13-.01
Authority: Oil and Gas and Deep Drilling Act of 1975, Ga. L. 1976, p. 966 et seq., as amended; Ga. L. 1976, p. 544 et seq.
History. Original Rule entitled "Purpose" was filed on December 23, 1981; effective January 12, 1982.

Rule 391-3-13-.02 Definitions

All terms used in these rules shall be interpreted in accordance with the definitions as set forth in the Georgia Oil and Gas and Deep Drilling Act of 1975, as amended, the **Hand-Book of Oil Industry Terms and Phrases** (R.D. Langenkamp, The Petroleum Publishing Company, Second Edition, 1977), and as otherwise herein defined:

- (a) "Abandonment" means, for purposes of compliance with requirements herein, that a well has not been used for six (6) consecutive months and cannot be operated, whether because it was drilled as a dry hole or has ceased to produce, or that operations have not been conducted thereon. "Shut-in" wells, shall not be considered to be abandoned. "Abandonment" shall not be construed to require the plugging of a well that has been approved by the Department for future utilization.
- (b) "Act" means the Oil and Gas and Deep Drilling Act of 1975, as amended.
- (c) "Blow-out" means any uncontrolled escape of oil, gas or other fluid from any formation.

- (d) "Blow-out preventer" means a well control assembly that may be closed around the drill pipe or that completely closes the top of the casing if the drill pipe is withdrawn.
- (e) "Board" means the Board of Natural Resources.
- (f) "Circulation" means the passing of fluid (typically drilling mud) down through the drill stem and up to the surface in the process of rotary drilling or down the casing and up to the surface in the setting of casing.
- (g) "Common source of supply" means the reservoir strata or pool separated from any other reservoir strata or pool that contain, or from competent evidence appears to contain, a common accumulation of oil or gas or both.
- (h) "Completion" means development of a well in an attempt to produce oil and/or gas or final placement of cement plugs in a nonproducing well, whichever occurs last [refer also to "Well Completion Report" subsection (ii) below]. Completion is the last act as determined by the Director on a well which result in such well being capable of producing oil and/or gas through permanent well head equipment after production tubing has been run, or final placement to cement plug(s) in a nonproducing well.
- (i) "Condensate" means the liquid hydrocarbons produced by the condensation of natural gas, either after it leaves the reservoir or while it remains in the reservoir.
- (j) "Conservation" means conserving, preserving, guarding, or protecting the oil and gas resources of the State by obtaining the maximum efficiency with a maximum efficiency with a minimum waste in the production, transportation, processing, refining, treating, and marketing of the unrenewable oil and gas resources of the State.
- (k) "Department" means the Department of Natural Resources.
- (l) "Director" means the Director of the Environmental Protection Division.
- (m) "Drilling" means the boring of a hole in the earth by mechanical means and all associated activities, including but not limited to: casing, perforating, plugging, cementing and capping.
- (n) "Drill site" means the exact location of the well bore.
- (o) "Drill site tract" means the land area devoted to the well, mud pits, and other ancillary operations.
- (p) "Environmentally sensitive area of the Coastal Zone" means that area of the coastal zone where salt water-bearing strata overlie the fresh water aquifer system.
- (q) "Field" means the general area which is underlaid or appears to be underlaid by at least one pool. "Field" shall include the underground reservoir or reservoirs containing crude

petroleum oil or natural gas, or both. The words "field" and "pool" mean the same thing when only one underground reservoir is involved; however, "field," unlike "pool" may relate to two or more pools.

- (r) "Gas" means all natural gas, including casinghead gas, and all other produced hydrocarbons not defined as oil in subsection (w) below, or condensate as defined in subsection (i) above.
- (s) "Illegal mineral" means any mineral, including oil or gas, which has been produced within the State of Georgia in violation of the Act or any rule or regulation adopted and promulgated hereto or any other issued hereunder.
- (t) "Illegal product" means any product of oil, gas or other mineral, any part of which was processed or derived, in whole or in part, from any illegal mineral.
- (u) "Mineral" means any naturally occurring substance found in the earth which has commercial value and includes oil and gas as defined herein, but does not include fresh water.
- (v) "Mineral product" means any commodity made from any mineral.
- (w) "Oil" means crude petroleum oil and other hydrocarbons, regardless of gravity, which are produced at the well in liquid form by ordinary production methods and which are not the result of condensation of gas after it leaves the reservoir.
- (x) "Owner" means the person who has the right to drill into and produce from any pool and to appropriate the production either for himself and another, or himself and others.
- (y) "Operator" means any person who is in charge of the development of a lease, the drilling of a well, or the operation of a producing well, and in addition, for the purpose of assigning responsibility, may also be the person indicated as operator by the most current records of the Department.
- (z) "Person" means any natural person, corporation, joint venture, association, partnership, receiver, trustee, guardian, executor, administrator, fiduciary or representative of any kind, all agencies or instrumentalities of the State, and all county or municipal governments or any authority.
- (aa) "Pool" means an underground reservoir containing a common accumulation of crude petroleum oil or natural gas, or both. Each zone of a general structure which is completely separated from any other zone in the structure is covered by the term "pool" as used herein.
- (bb) "Producer" means the owner of a well or wells capable of producing oil or gas, or both.
- (cc) "Re-enter" means to bring a rig back onto a boring after having moved off location in order to re-establish contact with the borehole. "Re-enter" shall not be construed to mean

bringing a rig back onto a location simply to facilitate downhole geophysical logging; rather "re-enter" applies when "completion" or "drilling" operations as defined in subsection (h) and (m) above are performed.

- (dd) "Shut-in" means a well where the wellhead valves are closed thereby shutting off production. A "shut-in" well is capable of producing either oil or gas.
- (ee) "State" means the State of Georgia.
- (ff) "Tender" means a permit or certificate of clearance for transportation of minerals, including oil and gas, or mineral products produced under the provision of the Act or these Rules and Regulations, approved and issued or registered under the authority of the Board.
- (gg) "Waste" in addition to its ordinary meaning, means "physical waste" as that term is generally understood in the oil and gas industry, and it shall include, but not limited to:
 1. The inefficient, excessive or improper use or dissipation of reservoir energy; and the locating, spacing, drilling, equipping, operating, or producing of any oil or gas well or wells in a manner which results; or tends to result, in a reduction in the quantity of oil or gas ultimately to be recovered from any pool in this State;
 2. The inefficient storing of oil; and the locating, spacing, drilling, equipping, operating or producing of any oil or gas well or wells in a manner causing, or tending to cause, unnecessary or excessive surface loss or destruction of oil or gas;
 3. Abuse of the correlative rights and opportunities of each owner of gas or oil in a common reservoir due to nonuniform, disproportionate and unratable withdrawals causing undue drainage between tracts of land;
 4. The production of oil or gas in such a manner as to cause unnecessary water channeling or zoning;
 5. The operation of any oil well or wells with an inefficient gas-oil ratio;
 6. The drowning with water of any stratum of part thereof capable of producing gas or oil, except where approval of such a project has been granted by the Director;
 7. Underground waste, however caused and whether or not defined as the same relates to any activity regulated by the provisions of these Rules;
 8. The creation of unnecessary fire hazards as the same relates to any activity regulated by the provisions of these Rules;
 9. The escape into the open air, from a well producing both oil and gas, of gas in excess of the amount which is necessary in the efficient drilling or operation of the well;

10. Permitting gas produced from a gas well to escape into the air, except for testing purposes.
- (hh) "Well" means any boring drilled in or constructed in the search for and/or the production of oil, gas, or other minerals, or water. "Well" also means any boring drilled or constructed for the following purposes:
1. For the exploration or production of any minerals other than oil or gas where such boring exceeds a depth of 1800 feet;
 2. For the exploration or production of any mineral located in the "environmentally sensitive area of the Coastal Zone" when such well is drilled to a depth sufficient to penetrate the fresh water aquifer system;
 3. For the exploration of underground storage or injection of foreign material in an underground reservoir;
 4. For the underground disposal of waste material;
 5. For the exploration or production of fresh water when such well exceeds a depth of 1800 feet;
 6. For the exploration or production of brine or saltwater.
- (ii) "Well Completion Report" means a form prescribed by the Department with accompanying illustrations and narrative providing descriptive as-constructed well information. The "well completion report" generally consists of all well records including well logs, test locations and intervals, sampling locations and intervals, test results, casing installed, plugs installed, perforated intervals and other descriptive information.
- (jj) Words other than those defined in (a)-(ii) above are given their usual customary and accepted meaning; all words of a technical nature or a nature peculiar to the oil and gas industry are given that meaning defined in the **Handbook of Oil Industry Terms and Phrases** or that which is generally accepted within the oil and gas industry.

Cite as Ga. Comp. R. & Regs. R. 391-3-13-.02
Authority: Oil and Gas and Deep Drilling Act of 1975, Ga. L. 1975, p. 966 et seq., as amended; Ga. L. 1976, p. 544 et seq.
History. Original Rule entitled "Definitions" was filed on December 23, 1981; effective January 12, 1982.

Rule 391-3-13-.03 Enforcing Official

The Board of Natural Resources delegates to the Department the administrative duties created under the Act and designates the Director of the Environmental Protection Division as the appropriate official to administer and enforce these Rules and Regulations.

Cite as Ga. Comp. R. & Regs. R. 391-3-13-.03
Authority: Oil and Gas and Deep Drilling Act of 1975, Ga. L. 1975, p. 966 et seq., as amended; Ga. L. 1976, p. 544 et seq.
History. Original Rule entitled "Enforcing Official" was filed on December 23, 1981; effective January 12, 1982.

Rule 391-3-13-.04 Well Permit

- (1) Before any well is drilled or re-entered, the person desiring to drill or re-enter the same shall submit to the Department the following items:
 - (a) A properly completed "Application for Permit to Drill" on application forms obtained from the Department.
 - (b) A fee of \$25 for each application submitted.
 - (c) A plat and an index map (see 8. below) showing the location of the proposed well which conforms to the following specifications:
 1. The scale of the plat shall be indicated graphically and shall not be less than one (1) inch equals one thousand (1,000) feet. The size of the sheet upon which the plat is drawn shall not exceed twenty-four (24) inches by twenty-four (24) inches.
 2. A labeled vector indicating either true, grid, or magnetic north.
 3. The surface elevation of the drill site (well location) shall be established.
 4. The plat shall accurately show the distance to the two closest lease lines and/or property lines and/or drilling unit boundaries from the proposed well location. Where appropriate, the plat shall show the military district, block number and tract or unit identity.
 5. The plat shall be constructed by a surveyor registered by the State of Georgia or by a professional engineer registered by the State of Georgia.
 6. The plat shall contain a signed statement or certification by the surveyor or registered professional engineer that all measurements are accurate as shown on the plat.
 7. The plat shall show the amount of acreage assigned to the drilling unit and the drill site tract.

8. The index map shall show all federal, state, county, and municipal highways and roads and all railroads within a radius of one (1) mile of the proposed well location; and all buildings, prominent landmarks within one thousand (1,000) feet of the proposed well location. In addition, sufficient information shall be provided so that the location of the proposed well can be plotted to within plus or minus one hundred (± 100) feet on a standard U.S. Geological Survey quadrangle map. The appropriate U.S. Geological Survey quadrangle map with the well site location indicated within plus or minus one hundred (± 100) feet may be substituted for a hand drafted index map.
 9. If conditions require that two or more attempts are necessary in order to satisfactorily drill and/or construct the well, the location of each attempt shall be indicated on updated plats submitted to the Department.
- (d) A properly completed "Affidavit of Ownership or Control" on an application form obtained from the Department.
 - (e) A properly completed "Organization Report" on an application form obtained from the Department as specified in (7) of this section.
 - (f) Illustrations and narrative material of the proposed operation. The illustrations and narrative should describe the following:
 1. Proposed well depth.
 2. Casing and cementing program.
 3. Procedures to prevent blow-outs, caving, and seepage.
 4. Procedures to prevent fires, waste, H₂S containment and spillage.
 5. Sampling and logging program.
 6. Reclamation program for mud-pits, sumps, reserve pits, and dikes.
 7. Disposal of drilling fluids.
 - (g) Procedures for hazard mitigation identified in 3. and 4. above may be included by reference if the operator has already provided such procedures to the Department. The Department also may request such additional information as it deems necessary.
 - (h) A bond, or undertaking, in the amount specified below in Table I for each proposed well, and filed on a properly completed "Bonding Form" obtained from the Department. Such bond shall be executed by the operator as principal, and by a surety approved to do business in this State, and shall be payable to the State of

Georgia Department of Natural Resources. The bond shall be conditioned to secure the faithful performance of all requirements of the Act, these Rules and Regulations and permit conditions. (The correct legal name and address of the principal and the surety shall be set forth on the bond, which shall be countersigned by the Georgia agent of such surety, who shall also set forth the correct legal name and address of such agent). In the event of a failure by the operator to fully comply with the Act, Rules and Regulations or permit conditions, said bond shall be forfeited and the Department shall expend the proceeds of the bond to fulfill the operator's responsibilities so as to protect the State and its citizens from any injury which may result from such failure. The bond shall remain in effect for a period of two years after said well is plugged and properly abandoned, two years after receipt by the Director of a properly completed "Well Completion Report" as described in 391-3-13-.15, or two years from the date of receipt of all data and reports required by these Rules, **whichever occurs last.**

TABLE I

Permit Depth	Amount of Bond
Less than 2,000 feet	\$10,000
2,000 to 3,000 feet	\$20,000
3,000 to 6,000 feet	\$30,000
Over 6,000 feet	\$40,000

- (i) In the event the owner or operator wishes to keep the well open for additional testing after drilling rig removal. The Director may require that an additional bond in the amount of \$10,000 be furnished, subject to the same terms and conditions as the initial bond. Also, if the operator plans to drill multiple wells and can demonstrate to the satisfaction of the Director that the operator has adequate financial resources to cover all plugging and abandonment costs, a blanket bond in the amount of \$50,000 may be substituted. This blanket bond shall be subject to the same terms and conditions as the aforementioned individual well bond. The Director may require that the blanket bond not be applicable for any well left open after rig removal.
- (2) Any operator applying for a permit to drill a directionally controlled well shall fulfill the prescribed requirements of (1) of this section. In addition, the survey plat must show the proposed bottom hole location and the surface location. In the event an operator, in good faith, commences and proceeds with the drilling of a straight well and thereafter decides to deviate the well directionally, he may do so by first notifying the Director by telephone, secondly confirming in writing the fact thereof, and thirdly complying with the provisions governing intentionally deviated wells as hereinabove provided.
- (3) The Director shall, within fifteen (15) days after receipt of a properly completed application to drill or re-enter a well, either issue or deny the permit. Drilling or re-entry shall not begin until a permit is issued. Permits shall expire one (1) year from the date of issuance if

spudding operations in connection with the proposed well have not begun.

- (4) If the application and supporting documentation is found satisfactory, a permit shall be issued by the Director. The permit shall contain such terms and conditions the Director deems necessary for the applicant to operate in accordance with the Act and these Rules and Regulations. The permit shall become final unless a written request by the applicant for a hearing is made within thirty (30) days of the issuance of such permit.
- (5) If an application for a permit is denied by the Director, the applicant may request a hearing, if such request is in writing and is made within thirty (30) days from the date of the denial of the permit.
- (6) Noncompliance with any provision of the Act, these Rules and Regulations, or any permit condition shall be grounds for the revocation, suspension or modification of any permit.
- (7) Every person acting as an operator or agent for an operator or independently engaged in the production of or drilling for oil, condensate, or gas shall file with the Director an "Organization Report," on forms obtained from the Department. The "Organization Report" shall contain the following information: the name, telephone number post office address of such person; the exact legal name under which such person or businesses is being operated or conducted; the exact corporate name, if such is incorporated, and the place of incorporation of such corporation; the business or businesses in which the person is typically engaged; the names and post office addresses of all other persons acting as trustee, together with the names and post office addresses of the manager, agent, or executives thereof, as well as the names and post office addresses of principal officers thereof. When a business is conducted under an assumed name, as a partnership or a sole proprietorship, the "Organization Report" shall show the names and post office addresses of all owners or partners in addition to the other information herein required. Should any change occur as to facts stated in the filed report prior to bond termination, a revised "Organization Report" shall be filed with the Director within thirty (30) days of such change.
- (8) An operator may request modification of any permit condition. Such request must be in writing and properly documented. The Director may grant such modification if he is satisfied that the request is justified and if the modification will allow the operator to remain in compliance with Act and these Rules and Regulations.
- (9) Within ten (10) days after permit approval, the operator shall give written notice to the land-owner or tenant occupying the land of the operator's intent to drill and general schedule.

Cite as Ga. Comp. R. & Regs. R. 391-3-13-.04
Authority: Oil and Gas and Deep Drilling Act of 1975, Ga. L. 1975, p. 966 et seq., as amended; Ga. L. 1976, p. 544 et seq.
History. Original Rule entitled "Well Permit" was filed on December 23, 1981; effective

Rule 391-3-13-.05 Spacing of Wells

- (1) The spacing of wells in proven oil and/or gas fields or in areas that Board may designate, shall be governed by special rules for that particular field or area, adopted after due notice and public hearing.
- (2) Wells drilled in areas not covered by special rules shall be drilled a minimum of 330 feet or other distance, determined by the Director to provide an adequate safety buffer to the public, from any lease boundary, property line, dwelling, place of public gathering or producing oil or gas well. The applicant for a permit to drill such a well shall demonstrate to the Director that the application has available for assignment to said well, leases or acreage of area and size to constitute a reasonable producing unit for such well. Oil wells drilled in areas not covered by special rules shall be drilled on a drilling unit consisting of forty (40) surface contiguous acres. The well shall be located 330 feet from the exterior boundary of the drilling unit and at least 660 feet from the every other well drilling to or producing from, or for which a permit shall have been granted to drill to the same pool. Gas wells drilled in areas not covered by special rules shall be drilled on a drilling unit consisting of one hundred sixty (160) surface contiguous acres. The well shall be located 660 feet from the exterior boundary of the drilling unit and at least 1867 feet from every other well drilling to or producing from, or for which a permit shall have been granted to drill to the same pool.

Cite as Ga. Comp. R. & Regs. R. 391-3-13-.05
Authority: Oil and Deep Drilling Act of 1975, p. 966 et seq., as amended; Ga. L. 1976, p. 544 et seq.
History. Original Rule entitled "Spacing of Wells" was filed on December 23, 1981; effective January 12, 1982.

Rule 391-3-13-.06 Establishment of the Drilling Units and Operation Units

After discovery of an oil and gas pool and for the prevention of waste, to avoid the drilling of an excessive number of wells and to assure the ultimate maximum recovery of gas or oil, the Director shall, after due investigation and a hearing, establish drilling and/or operation units. The director also, after investigation and a hearing, shall make such special orders as will give to each producer the opportunity to use his just and equitable share of the maximum reservoir energy of any pool.

Cite as Ga. Comp. R. & Regs. R. 391-3-13-.06
Authority: Oil and Gas and Deep Drilling Act of 1975, Ga. L. 1975, p. 966 et seq., as amended; Ga. L. 1976, p. 544 et seq.
History. Original Rule entitled "Establishment of Drilling Units and Operation Units" was

filed on December 23, 1981; effective January 12, 1982.

Rule 391-3-13-.07 Determining and Naming Fields and Pools

Fields and pools shall be classified as to common sources of supply from which they produce and such sources shall be determined and named by the Director. In naming fields, reference shall be given to common usage and geographic names. Separate pools within the same field shall be named according to the producing formation.

Cite as Ga. Comp. R. & Regs. R. 391-3-13-.07
Authority: Oil and Gas Deep Drilling Act of 1975, Ga. L. 1975, p. 966 et seq., as amended; Ga. L. 1976, p. 544 et seq.
History. Original Rule entitled "Determining and Naming Fields and Pools" was filed on December 23, 1981; effective January 12, 1982.

Rule 391-3-13-.08 Access of Department Agents

In order to protect the health, safety, and welfare of the citizens of Georgia and to protect fresh water supplies, the Department's designated agents shall have access at all reasonable times to all well, production and transportation records and shall be permitted to enter upon private or public property to inspect such records and to inspect any and all wells, storage facilities and pipelines. All operators of wells and drilling rigs are required to permit and assist the agents of the Department in making tests or inspections that may be reasonably required to determine compliance with the Act and these Rules and Regulations.

Cite as Ga. Comp. R. & Regs. R. 391-3-13-.08
Authority: Oil and Gas and Deep Drilling Act of 1975, Ga. L. 1975, p. 966 et seq., as amended; Ga. L. 1976, p. 544 et seq.
History. Original Rule entitled "Access of Department Agents" was filed on December 23, 1981; effective January 12, 1982.

Rule 391-3-13-.09 Change of Operator

- (1) Any person or persons wishing to become the new operator of a well a wells must submit to the Director for his approval a request for a change of operator accompanied by the following if not previously filed:
 - (a) A properly completed and notarized "Affidavit of Ownership or Control" of said well or wells.
 - (b) A properly completed "Organization Report," on form obtained from the Department.

- (c) A bond, or undertaking, in full and complete compliance with section **391-3-13-.04(1)(g)** of these Rules, if such requirement has not been fulfilled previously.
 - (d) A notarized letter from the present operator requesting the Director to approve the applicant as the new operator of such well.
- (2) The request for Change of Operator will be reviewed by the Director, who shall approve or deny the change within thirty (30) days of receipt of the above items. If a change of operator is denied, the application may request a hearing, if such request is in writing and made within thirty (30) days of the denial of the permit.

Cite as Ga. Comp. R. & Regs. R. 391-3-13-.09
Authority: Oil and Gas and Deep Drilling Act of 1975, Ga. L. 1975, p. 966 et seq., as amended; Ga. L. 1976, p. 544 et seq.
History. Original Rule entitled "Change of Operator" was filed on December 23, 1981; effective January 12, 1982.

Rule 391-3-13-.10 Drilling

- (1) Identification of wells. The operator of any well shall paint or stencil and post and keep posted in a conspicuous place near the well, the name of the operator, the name of the lease or property owner, the number of the well and the number of the permit for the well. The identification shall be posted before spudding or re-entry and shall remain posted until the well is properly plugged and the location is restored to a condition satisfactory to the Director. In the event of a change of operator, well name and number, a new sign reflecting the change shall be posted.
- (2) Notices of activities. The Director shall be notified by telephone less than twenty-four (24) hours (or other time-period acceptable to the Director) prior to performing any one or more of the following activities:
 - (a) spudding;
 - (b) setting casing;
 - (c) electrical or geophysical logging;
 - (d) drill-steam testing;
 - (e) removing drilling rig;
 - (f) perforating;
 - (g) plugging [refer to section **391-3-13-.12(3)**]; or,

- (h) any other activity the Director may designate.
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- (3) Prior notification to performing the aforesaid activities shall be to allow the Director to send a duly authorized representative to the location to witness the activity at the specified time, if the Director deems necessary.
 - (4) Control of wells. The operator shall take all necessary precautions to keep all wells under control at all times, shall utilize only contractors or employees trained and competent to drill and operate such wells, and shall utilize and maintain materials and high-pressure fittings and equipment necessary to insure the safety of operating conditions and procedures. The design of integrated casing, cementing, drilling mud and blow-out prevention programs shall be based upon sound engineering principles and must take into account the depths at which various fluid or mineral-bearing formations are expected to be penetrated, the formation fractures gradients and pressures expected to be encountered, and other pertinent geologic and engineering data and information about the area.
 - (5) Notification of fire, leaks, or blow-outs. The operator shall immediately notify the Director by phone giving full details concerning all fires, leaks or blow-outs which occur at such wells. Drillers shall take immediate action to control fires, leaks or blow-outs as appropriate.
 - (6) Well record. During the drilling of every well, the owner, operator, contractor, driller, or other persons responsible for the conduct of drilling operations, shall keep at the well a detailed and accurate record available to the Department and its agents at all times. Pertinent information from such records shall be recorded on a "Well Information Form" obtained from the Department. The "Well Information Form" shall be furnished to the Director within forty-five (45) days after removal of the rig from the well site and will describe progressively the general lithology of strata, water and oil or gas encountered as well as such additional information as to abnormal pressure, zones of lost circulation, caving strata, casing record, and other information as are usually recorded in the normal procedure of drilling. The "Well Information Form" shall be held in confidence as described in Section 391-3-13-.10(9) below.
 - (7) Electrical, Geophysical and Other Logs.
 - (a) A record of all electrical, sonic, radioactivity, mud, and mechanical logging or surveying of the well shall be maintained and two copies furnished to the Director within forty-five (45) days after completion. Field prints of logs necessary to determine fresh water-salt water interfaces and, if appropriate [refer to 391-3-13-.10(11)(c) below], integrity of cement to casing must be available to the Department's agent at Oil well site.
 - (b) To assure the protection of fresh water zones (paragraph (10) of this section), the Department shall have the authority to require and/or perform geophysical logging at any time during the drilling provided:

1. Hole conditions allow such logging;
 2. The operator does not intend or has not scheduled to perform spontaneous potential-resistivity type logs of sufficient accuracy to identify the fresh water-salt water interface.
- (c) The Department will not perform any logging where the operator has performed logging adequate for identifying the fresh water-salt water interface. If the Department performs the logging of any well, the owner or operator shall prepare and provide full access to the well and assist the Department as necessary until the logging is completed. If the owner or operator is requested to conduct logging, such logging shall be at the owner or operator's expense. Two copies of all geophysical logs obtained by the Department shall be supplied to the owner of the well within (30) days. All geophysical logs obtained by the Department shall be held in confidence as provided in paragraph (9) of this section.
- (8) Samples: Each operator shall file with the Director a complete set of cuttings or cores correctly labeled and identified as to depth, not later than thirty (30) days for cuttings and ninety (90) days for core splits after completion of the well. Cuttings shall be collected at 30 foot intervals from a depth of 500 feet to the total depth drilled. Cuttings are not required for the uppermost 500 feet. Missing intervals shall be noted and the reasons for the missing samples shall be described. Side-wall cores need not be submitted as long as written descriptions are filed within forty-five (45) days after completion of the well.
- (9) Confidentiality. All samples, cuttings, cores, logs and well records shall be held in confidence by the Department for a period of six (6) months from the time of well completion. Extension of the confidential period may be granted by the Director for good cause when documented by the operator. The confidentiality afforded by this section shall in no way impair the right or ability of the Director to enforce the provisions of the Act and these Rules and Regulations.
- (10) Protection of fresh water. All fresh water shall be confined to its respective strata and shall be adequately protected. Special precautions identified in paragraphs (11), (12), (13), (14), and (15) of this section and Sections 391-3-13-.12 and 391-3-13-.16 shall be taken in drilling and abandoning of wells to guard against any loss of fresh water or contamination of fresh water by oil, condensate, gas, salt-water, or other contaminants.
- (11) Mud pits, sumps, reserve pits and dikes.
- (a) Before commencing to drill, properly maintained mud pits, sumps, reserve pits or tanks of sufficient size to receive and contain the maximum volume of drilling fluid anticipated at the surface shall be constructed, and thereafter maintained, for the reception of such materials.

- (b) After a well is completed or abandoned, all fluids, and recoverable slurry that remain in all pits, sumps, and tanks shall be safely returned to the well on location, or removed and disposed of, as approved by the Director. All mud pits, sumps, reserve pits and dikes shall be backfilled with earth or graded and compacted in such a manner as to be returned to a nearly natural state.

(12) Casing.

- (a) The operator shall case and cement all wells with a sufficient number of strings of high-quality casing, without leaks, in a manner necessary to:
 - 1. prevent release or fluids from any stratum through the well bore (directly or indirectly) into the ground waters or onto the surface, except into pits or tanks provided for this purpose;
 - 2. prevent communication between separate hydrocarbon bearing strata (except where such strata have been approved for commingling) and between hydrocarbon and water-bearing strata;
 - 3. prevent contamination of fresh-water strata;
 - 4. support unconsolidated sediments; and,
 - 5. otherwise provide a means to control formation pressures and fluids.
- (b) The operator shall install such casing necessary to withstand collapse, bursting, tensility, and other stresses and the casing shall be cemented in a manner which supports the casing. Safety factors in casing program design shall be of sufficient magnitude to provide optimum well control while drilling and to assure safe operations for the life of the well.
- (c) Determination of proper casing-setting depths shall be based upon all geologic factors including the presence or absence of hydrocarbons and fresh-water depths on a well-for-well basis.
- (d) Surface casing shall be new or reconditioned pipe that, to the satisfaction of the Director, has been tested, inspected and certified to verify a good usable condition. Surface casing shall be set at a depth and cemented in a manner necessary to protect all fresh-water aquifers and provide well control until the next string of casing is set. Surface casing shall be cemented with a volume sufficient to fill the annular space from the casing shoe to the surface, plus 10 percent. Cement shall be added from the bottom upward. All cement shall be allowed to set for 12 hours before the cement plug is drilled or test initiated. If cement returns are not received at the surface or returns are lost while circulating, remedial cementing at the surface will be done by running a minimum of 100 feet of small diameter pipe in the

annular space bringing cement to the surface. Also if circulation is lost during cementing operations, the Director may require that a temperature or cement bond log be run to determine whether the casing is properly cemented.

- (e) Production casing shall be set before completing well for production, and such casing shall be new pipe or reconditioned pipe that to the satisfaction of the Director has been tested, inspected, and certified to verify good usable condition. It shall be cemented in a manner necessary to cover or isolate all zones which contain hydrocarbons, but in case, a calculated volume sufficient to fill the annular space at least 500 feet above the uppermost producible hydrocarbon zone must be used. After the cement has set and before drilling the plug, the casing or a maximum test of 1500 pounds per square inch. Whenever the pressure drops ten (10) percent in thirty (30) minutes, the casing will be deemed inadequate and shall be repaired and retested until the requirements thereof are met.

- (13) Blow-out prevention. Adequate blow-out preventers and high pressure fittings for keeping the well control shall be attached to properly anchored and cemented casing strings. The blow-out preventers must meet the approval of the Director and shall be tested regularly and the results recorded in the driller's log. Agents of the Department may require that the blow-out preventers be tested at any reasonable time during operations provided such testing does not result in creating a hazardous condition.

- (14) Control of formation pressures. The operator shall continuously maintain in the hole, from top to bottom, good drilling fluid of sufficient weight to control any formation pressures which may be encountered. In the event of lost-circulation, the operator will immediately notify the Director and make provisions to restore circulation either by casing-off the affected zone, increasing mud viscosity, or other techniques acceptable to the Director. The aforementioned drilling fluid requirements shall in no way be construed to preclude other drilling techniques. Air drilling, flame drilling, electric-arc drilling, plasma jet drilling, laser beams, and erosion drilling are permitted, provided, however, that the operator uses other appropriate methods approved by the Director to control any pressures which may be encountered.

- (15) Directional drilling. All wells must be drilled with due diligence to maintain a reasonably vertical well bore; however, a well may be intentionally deviated and directionally controlled, provided that the location of the deviated well at total depth of the well is in compliance with the applicable spacing rules and the requirements of section (3) above are met.

Cite as Ga. Comp. R. & Regs. R. 391-3-13-.10
Authority: Oil and Gas and Deep Drilling Act of 1975, Ga. L. 1975, p. 966 et seq., as amended; Ga. L. 1976, p. 544 et seq.
History. Original Rule entitled "Drilling""was filed on December 23, 1981; effective January

Rule 391-3-13-.11 Shooting, Perforating, Chemical Treatment or Fracturing of Wells

Wells should not be shot, perforated, chemically treated, or fractured, until the Director is notified. Each well shall be treated, or fractured in such manner as will not cause injury to the formation, or result in water encroachment into any oil or gas formation. Necessary precautions shall be taken to prevent injury to the casing. Routine chemical treatments for corrosion control shall be excluded from this notice requirement. If chemical treating, or fracturing results in irreparable injury to the well or to the oil or gas information, the Director may issue emergency orders for the well to be properly plugged and abandoned.

Cite as Ga. Comp. R. & Regs. R. 391-3-13-.11 Authority: Oil and Gas and Deep Drilling Act of 1975, Ga. L. 1975, p. 966 et seq., as amended; Ga. L. 1976, p. 544 et seq. History. Original Rule entitled "Shooting, Perforating, Chemical Treatment or Fracturing of Wells" was filed on December 23, 1981; effective January 12, 1982.

Rule 391-3-13-.12 Plugging

- (1) The owner or operator may keep a well open for additional testing after removal of the drilling rig, if the written approval of the Director is first obtained, and by demonstrating to the satisfaction of the Director that (a) the open well is constructed so as to assure that fresh water aquifers are protected from intraformational migration of fluids through the bore hole and (b) that the operator has adequate and readily available financial resources to plug the well.
- (2) The owner or operator of any well shall be responsible for the plugging of any well after said well is abandoned, utilizing the services of a well cementing contractor. Any well declared abandoned by the Director shall be plugged within sixty (60) days by the operator, or the surety bond will be forfeited to the Department.
- (3) Before any work is commenced to plug any well, the owner or operator thereof shall give 24-hours notice to the Director of this intent. Upon notification, the Department may send duly authorized representatives to the location at the time specified to witness the plugging of such well.
- (4) The methods and procedure for plugging a well shall be as follows;
 - (a) Each oil or gas producing formation shall be sealed with a cement plug which extends not less than 100 feet above the producing formations nor less than 100 feet below the producing formations. The Director may allow a bridge plug with a

minimum of 10 feet of cement on top to be placed immediately above each perforated horizon in cased holes.

- (b) A cement plug of appropriate ingredients not less than 150 feet in length shall be placed at the base of all fresh water bearing strata unless the strata are protected by properly cemented surface casing. Where the natural contact between fresh and salt ground waters is transitional the cement plug shall be such length to extend at least 50 feet above and below the transition zone.
- (c) A cement plug not less than 200 feet in length shall be placed 100 feet above to 100 feet below the base of the surface casing. This plug may be omitted if this interval is protected by smaller diameter casing which has been properly grouted.
- (d) A 50 foot plug shall be placed near the surface of the ground in each hole to be plugged in such a manner as not to interfere with soil cultivation.
- (e) The interval between plugs shall be filled with fluid weighing not less than nine and one-half (9.5) pounds per gallon.
- (f) Additional cement plugs not specified above may required by the Director at other locations so as to prevent the commingling of oil, gas, salt, water, and fresh water from one formation to another.
- (g) Other plugging methods may be used provided written approval is obtained from the Director.
- (h) When a well be plugged may be used safely as a fresh water well and such utilization is desired by the land or surface owner, the well need not be filled above the required sealing plug set at the base of fresh water, provided the land or surface owner agrees in writing to the Director to take full responsibility for the well. including correcting any plugging defects that result in the migration of salty water or oil or gas through the well, and to comply fully with all laws and rules and provided written approval is obtained from the Director.
- (j) When a well to be plugged may be safely used as a ground water monitoring well by the Department, the well need not be filled above the required sealing plug set at the base of fresh water; provided the owner will permit the Department access to the well for testing purposes.

Cite as Ga. Comp. R. & Regs. R. 391-3-13-.12
Authority: Oil and Gas and Deep Drilling Act of 1975, Ga. L. 1975, p. 966, et seq., as amended; Ga. L. 1976, p. 544 et seq.
History. Original Rule entitled "Plugging" was filed on December 23, 1981; effective January 12, 1982.

Amended: F. Nov. 24, 1992; eff. Dec. 14, 1992.

Rule 391-3-13-.13 Notice of Rig Removal

The Director shall notified before any drilling rig is removed from any unplugged well, and permission must be granted by the Director for such removal. The Director may stipulate special protective measures to be taken before granting permission to remove a drilling rig, including but not limited to, the temporary plugging of the well or requiring monthly inspections of the well by an engineer or geologist registered to practice in Georgia. If, in the judgment of the Director, the well poses a hazard to health of the public or the environment, the Director may issue emergency orders for the well to be properly plugged and abandoned.

Cite as Ga. Comp. R. & Regs. R. 391-3-13-.13
Authority: Oil and Gas and Deep Drilling Act of 1975, Ga. L. 1975, p. 966, et seq., as amended; Ga. L. 1976, p. 544 et seq.
History. Original Rule entitled "Notice of Rig Removal" was filed on December 23, 1981; effective January 12, 1982.
Amended: F. Nov. 24, 1992; eff. Dec. 14, 1992.

Rule 391-3-13-.14 Production Well

- (1) Before any mineral well can be initially tested for production the operator must notify the Director. The test may be witnessed by a representative of the Director and the results filed with the Director within forty-five (45) days such test.
- (2) As described in Section [391-3-13-.11](#) wells shall not be shot, perforated, chemically treated, or fractured until the Director is notified.
- (3) Before any oil or gas well can be brought into production, the operator must apply to the Director for permission to produce. Such application shall include, but not be limited to, a description of the geologic characteristics of the reservoir and safety precautions. The operator also shall describe whether the proposed production will be oil or gas, how waste brines and gases will be disposed, how the oil or gas will be transported from the wellhead, the nature and timing of proposed production, and any additional information so that the Director may investigate and hold hearings for the establishment of drilling and operations units.

Cite as Ga. Comp. R. & Regs. R. 391-3-13-.14
Authority: Oil and Gas and Deep Drilling Act of 1975, Ga. L. 1975, p. 966, et seq., as amended; Ga. L. 1976, p. 544 et seq.
History. Original Rule entitled "Production Well" was filed on December 23, 1981; effective January 12, 1982.

Rule 391-3-13-.15 Well Completion Report

A properly completed "Well Completion Report" shall be submitted to the Director within forty-five (45) days of well completion. This report shall include, but not limited to, information pertaining to the well record, well logs, tests conducted, casing installed, plugs installed, and other descriptive information that the Director may require. Such report shall be signed by the operator or his representative, and the operator shall affirm that all provided information is accurate. Within thirty (30) days of receipt of an accurate and properly completed "Well Completion Report" the Director shall notify the operator whether additional measures are necessary in order to safely produce oil or gas or to finally abandon the well.

Cite as Ga. Comp. R. & Regs. R. 391-3-13-.15
Authority: Oil and Gas and Deep Drilling Act of 1975, Ga. L. 1975, p. 966, et seq., as amended; Ga. L. 1976, p. 544 et seq.
History. Original Rule entitled "Well Completion Report" was filed on December 23, 1981; effective January 12, 1982.

Rule 391-3-13-.16 Spills

All spills of oil, petroleum products and salt-water shall be reported and handled in accordance with the Georgia Water Quality Control Act, the Georgia Oil and Gas and Deep Drilling Act of 1975, as amended, and any other applicable federal, state, and municipal laws, ordinances and regulations.

Cite as Ga. Comp. R. & Regs. R. 391-3-13-.16
Authority: Oil and Gas and Deep Drilling Act of 1975, Ga. L. 1975, p. 966, et seq., as amended; Ga. L. 1976, p. 544 et seq.
History. Original Rule entitled "Spills" was filed on December 23, 1981; effective January 12, 1982.

Rule 391-3-13-.17 Enforcement

The administration and enforcement of these Rules and Regulations shall be in accordance with the Act and the Georgia Administrative Procedure act. Enforcement measures include, but are not limited to, administrative orders, court orders, injunctive relief, and civil and criminal penalties.

Cite as Ga. Comp. R. & Regs. R. 391-3-13-.17
Authority: Oil and Gas and Deep Drilling Act of 1975, Ga. L. 1975, p. 966, et seq., as amended; Ga. L. 1976, p. 544 et seq.
History. Original Rule entitled "Enforcement" was filed on December 23, 1981; effective January 12, 1982.

