

WEST VIRGINIA ADMINISTRATIVE REGULATIONS

Department of Mines

Chapter 22-4

(1964)

GENERAL OUTLINE

Series IV Oil and Gas Wells

Section 1. General

Section 2. Regulations

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Section 1. General

1.01 Scope. These regulations pertain to the oil and gas wells division of the Department of Mines.

1.02 Authority. These regulations are issued under authority of Section 13, Article 4, Chapter 22, Code of West Virginia, as amended.

1.03 Effective Date. These rules and regulations are promulgated on 8-12-64 and become effective sixty days (60) thereafter.

1.04 Filing Date. These rules and regulations were filed in the office of the Secretary of State on 8-12-64.

1.05 Certification. These rules and regulations are certified authentic by the Director of Department of Mines by certification number 1.

Section 2. Regulations

2.01 Workable Coal Beds. Any coal seam twenty inches or more in thickness, shall be deemed a workable coal bed in the administration of this Article, unless a seam of less thickness is being commercially worked, in which instance, such latter seam shall be a "workable coal bed."

2.02 Rules and Procedure. Rules of procedure and evidence where not otherwise prescribed by statute in all matters coming before the Department of Mines, shall be similar to those utilized in courts of record in West Virginia.

2.03 Procedure of Well Operator. All persons, firms associations or corporation owning or operating any wells for oil or gas in the State of West Virginia shall register with the Department of Mines, giving the name and address of such person, firm, association or corporation and the name, address and official title of the person in charge of the operations in West Virginia.

2.04 Location Map. All maps accompanying applications to drill, abandon, or fracture an oil and/or gas well originally drilled before the fifth day of June one-thousand nine hundred twenty-nine, shall be legible and of a permanent character according to the form prescribed by the Department of Mines. A separate application and a separate map of location shall be filed for each well.

The following data shall be shown on all maps or plats submitted to the Department of Mines for the purpose of locating oil or gas wells or other wells for which permits are required or for the abandonment of such wells:

(1) Permanent Landmarks; Accuracy. The location shall be tied into at least two permanent landmarks by courses and distances to an accuracy of one part in 200, and such landmarks, if they are not permanently established property corners, shall be referenced to a property corner. Said well shall be drilled within 10 feet of the exact location designated on the map.

An accuracy of one part in 2500 may be required for locations of wells on lands containing workable coal beds which are assigned to operating coal mines. The coal operator must notify the owner of such requirement within ten days from receipt of plat and notice by the Oil and Gas Division, Department of Mines.

(2) Description. Landmarks and permanently established property corners used shall be named and described on such maps. They shall include standing corner trees, set stones, iron pipes, T-rails, or other manufactured monuments. If landmarks used are not property corners, they must be adequately referenced to property corners to permit their future location.

(3) Method Showing Property Lines. The courses and distances of at least all of the farm lines adjoining and those connecting the said landmarks or farm corners, shall be given on such map of location. All lines actually surveyed shall be shown on the maps in solid lines; lines shown from deed descriptions only shall be designated by broken lines.

(4) Name and Acreage. The name and acreage of the farm on which the well is to be located, shall be given.

(5) Adjoining Farm Names. The names of all adjoining farms coming within the scope of such map, shall be given.

(6) Streams, Railroads; all Roadways to be Shown. The names and locations of all streams, road, railroads and highways coming within the scope of such map, shall be given.

(7) Location of other Wells to be Shown. The location of all wells on the lease which come within the scope of the well location map and for which the Department of Mines has a record, being from June 5, 1929, to present date, whether active drilling or abandoned, shall be shown.

(8) Proven Elevation. The elevation of the surface at the location shall be given, and it shall be tied in either to a government

bench mark, or some other point of proven elevation by spirit levels. The location of government bench mark or point of proven elevation shall be noted and described on the map.

(9) North, South Line to be Shown. A north and south line shall be given.

(10) Scale of Map. Maps shall be drawn to a scale not to exceed 1" = 2000' (1:24,000).

(11) Map Size, Accuracy, Certification to be Shown: The map shall be legible and of a permanent character of a size not to exceed 8 1/2 inches by 14 inches and shall show essentially similar data to that shown on the specimen map hereto attached, and the same is made a part of these rules and regulations. Maps shall specify the minimum degree of accuracy of the surveying and mapping. Maps shall be made under the supervision of registered professional engineers or qualified land surveyors. The following certificate signed by said registered professional engineer or qualified land surveyor shall be placed upon said map:

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by Section 2.04 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

(12) Distance and Manner Well Location. The latitude and longitude of the location shall be given where indicated on the sample map and the topographic map location of the well shall be shown on the tracing by a "cross". Topographic maps as prepared by the U. S. Geological Survey shall be used with a scale of  $\frac{1}{62500}$  only (1:62500).

2.05 Procedure Well Operator and/or Mine Operator. The well operator shall furnish the coal operator or coal owner, whether or not such rights have been separated from the surface of the tract about to be drilled, a copy of application for Permit (Form OG-1) and Well Location Map showing proposed well, in the manner set forth in Section 2, Article 4, Chapter 22 of the Code, and in the event there are mine workings, either active, projected, or abandoned, within 500 feet of such location, the mine operator, to whom any such workings belong, shall file with the Department of Mines on or before the day on which the permit in question is due to be issued, a map showing any and all of the company's mine workings, projected workings, or abandoned workings within 500 feet of such location; showing thereon the said location in its relation to the workings of said mine or mines. Said map shall show the elevation of the coal seam or coal seams shown thereon.

2.06        Coal Operator Procedure. All coal operators or coal owners shall cause to be placed on their property maps, the locations of all oil or gas wells penetrating the workable coal beds, or oil or gas-producing strata whether they be active wells, wells being drilled, or abandoned wells; and all such wells coming within the scope of any mine map, shall be shown thereon. All coal operators shall diligently endeavor to ascertain the location and all available data concerning each and every well which has been drilled on said property and shall make and keep a record of such information.

2.07        Records. All well drillers shall keep at each well, while drilling the same, accurate records of the drilling, re-drilling or deepening all such wells showing all formations, the casing used, and such other information as is called for on Form OG-10. The same information shall be furnished with respect to fractured wells which were originally drilled before June 5, 1929. A copy of all this information shall be delivered to the well operator.

(1)        Forms. Well Record Form (OG-10) (two copies) shall accompany each "notice of intention to plug" (Form OG-9). A log of the well shall also accompany application for Permit to fracture an oil and/or gas well originally drilled before June 5, 1929, where it is available to the well operator.

(2) Formations to be Shown. The complete Form OG-10, described above shall show a true, accurate, and complete log of the well showing the details of the formation to the bottom, including the name, color, and character of the strata, the thickness of same, the strata shot, fractured, acidized and/or treated, all evidence of water (fresh or salt water), oil or gas, coal thickness, depths and where found.

(3) Well Records to be Submitted. Within 90 days after the drilling, fracturing, and/or treating of any well is completed, two copies of Form OG-10 (Well Record and/or Log) shall be sent by registered mail by the well operator to the Department of Mines, Charleston, West Virginia.

2.08. Casing.

(1) Manner and Procedure. In addition to the casings required and described in Sections 5, 6, 7 and 8 of Article 4, Chapter 22 of the Code, there shall be used in each well such material, equipment, and/or procedures necessary to properly protect the producing horizons and water-bearing strata for the life of the well.

(2) Fresh Water Encountered. A protective string of casing shall be left in the well for the life of the well, which extends through the fresh water horizon, when fresh water is encountered.

(3) Multiple Casing Through Coal Seams. Wells drilled in areas underlain with workable coal seams shall be provided with a coal-protecting string of casing for the life of the well, as required under Sections 5, 6, 7 and 8 of Article 4, Chapter 22 of the Code. The casing used through the workable coal seam is in addition to the producing string of casing.

2.09 When Wells to be Plugged. All dry or abandoned wells shall immediately be plugged according to Sections 9 and 10 of Article 4, Chapter 22 of the West Virginia Code (1931) and also amended Section 9 of Article 4, Chapter 22 of said Code and effective July 1, 1963 and applying the following rules:

(1) Manner in Which Plugging Must be Done: All dry and abandoned wells shall be plugged and filled in the manner described in the above-mentioned Section 10 of Article 4 to the end that there will be no infiltration of water into any oil or gas-bearing strata or workable coal seam. Such plugging and filling shall be done in such a manner as to prevent any migration of oil, gas or water to any other strata than that in which they occur.

(2) Materials. Non-porous material shall be used in plugging and suitable plugs set as indicated in Section 9 and 10, Article 4, Chapter 22 of the West Virginia Code. Hydraulic cement (cement and water only) properly mixed shall be used through the coal seams and for all other cement plugs.

2.10      Notice of Intention to Plug and Abandon

(1)      Forms Used.    Shall be made on Form OG-9, Notice of Intention to Plug and Abandon Well, to Department of Mines.

(2)      Bond; Other Securities to be Posted.    Performance Bond, deposit of collateral securities and/or cash in the amount of \$1,000 for each well to be plugged, with the right of the well operator to file blanket bond or deposit of collateral securities for all wells in the amount of \$10,000, "before plugging any well for which Bond has not been furnished heretobefore, "as provided in Sections 2 and 9 of the West Virginia Code, effective July 1, 1963.

(3)      Location Map.    A tracing of location as described under 2.04, if such location map has not previously been filed with the Department of Mines.

(4)      Well Record.    Well Record (log) and data sheet Form OG-10, shall be filled out as indicated and filed in duplicate with the Department of Mines.

(5)      Work Order; Manner and Method.    A "work order" shall give a detailed statement as to the manner in which the work of plugging and filling such well is to be done, including such information as the location, by depth, kind and length of plugs to be used; plans for muddling, cementing, and filling; plans for testing and for shooting and removing casing, and any other pertinent information regarding said abandonment, all of which shall be in compliance with Section 10 of

Article 4, Chapter 22 of the Code.

(6) Work Order Form; Reverse Side OG-9. The said "work order" shall be made out on forms to be furnished by the Department of Mines and filed in triplicate with the Department of Mines for approval or correction and a copy shall accompany each notice to the coal owner or coal operator and to all available adjacent lease or property owners, required to be notified.

(7) Approval of Work Order. If no objections to said "work order" are filed with the Department on or before the third day after the receipt of said "work order" by the Department or none interposed by the Department, and/or prior written consent has been given by the coal operator and received by the Department, as amended by Article 4, then the said "work order" will be approved and one copy returned to the well operator as his authority for doing the work according to the approved plan. No work on the abandonment of any well will be held up beyond the five-day period except on the order of the Department of Mines.

2.11 Marker and Affidavit

(1) Method and Manner. Upon the completion of the plugging and filling of any abandoned well, a permanent monument or marker consisting of a length of pipe (minimum size 6 inches) filled with concrete (or the equivalent thereof if approved by the Department) shall be erected over the location; the marker shall extend not less than thirty (30) inches above the surface and not less than

10 feet below the surface, and shall be sealed in with concrete for the purpose of making the marker permanent. The name of the company and the number of the well shall be stamped or cast or otherwise permanently affixed to said marker. The erection of the marker shall in no way interfere with the bleeder pipe from the well where such pipe is required as in paragraph 2, Section 10, Article 4, Chapter 22 of the Code. This marker shall be accurately described on affidavit as to time and manner of plugging and filling the well and will be accepted as a satisfactory landmark and should be used as such in the location of adjacent wells.

(2) Affidavit. As soon as the plugging of a well is completed, affidavit (forms to be furnished by the Department of Mines) giving in detail the manner in which the well was plugged and filled, must be sent to the Department of Mines.

(3) Execution of Affidavit by Necessary Parties. Form OG-8 relative to the filling and plugging of said wells, shall be executed by at least two parties doing the actual work, whether or not they are Service Company, plugging contractor or well operator employees.

2.12 Equipment Before any well is begun in any field where it is not known that high pressure does not exist, proper anchorage shall be laid so that the control casing-head may be used on the inner string of casing at all times, and this type of casing-head shall be

kept in constant use unless it is known from previous experience and operation on wells adjacent to the one being drilled that high pressure will not be encountered therein.

2.13        Necessary Preparation.    Equipment for conserving natural gas shall be provided before "drilling in." In all proven or well-defined gas fields or where it can be reasonably expected that gas in commercial quantities will be encountered, adequate preparations shall be made for the conservation of gas before "drilling in" any well.

2.14        Commercial Well Properly Equipped.    Whenever natural gas in commercial quantities, in a well defined gas-bearing stratum, known to contain natural gas in such quantities, is encountered in any well drilled for oil or gas in this State, all such strata shall be adequately protected from infiltrating waters. However, this rule shall not prevent the drilling deeper in search of oil in any well as provided in Section 14 of Article 4, Chapter 22 of the Code.

2.15        Necessary Equipment.    All well operators, contractors, or drillers, pipeline companies, or gas distributing companies, for or producing crude oil or natural gas or piping oil or gas for any purpose, shall use every possible precaution in accordance with the most approved methods to stop and prevent waste of oil or gas, or both,

in drilling and producing operations, or in piping or distributing, and shall not wastefully utilize oil or gas or allow the same to leak or escape from natural reservoirs, wells or pipelines.

2.16        Proper Equipment.    So far as it is practical to do so, gas being produced at a high pressure should be separated in the well, from that being produced at a much lower pressure, by means of casing, tubing, braden heads and packers, in order to eliminate the flow of high pressure gas into the low pressure sands.

2.17        Parties Responsible.    All contractors and drillers (including all Service Companies) carrying on business or doing work in the oil and gas fields of West Virginia as well as lease holders, land owners, and operators generally, shall take notice of and are hereby directed to observe and apply the foregoing rules and regulations; and all contractors, drillers, Service Companies, and land owners and operators will be held responsible for infraction of said laws, rules and regulations.

2.18.       Pillar Plans; Manner; Method; Procedure.    In the matter of the pillar to be left around any well, the size will depend upon the nature and height of the coal, the nature of the top and bottom and the amount of overburden. A map or plan showing similar data to the specimen hereto attached and made a part of this rule, should be filed

with the Department of Mines as soon as the mine workings approach within 500 feet of any well penetrating the coal seam being worked, for the approval of the Department of Mines, before coming within 200 feet of such well. Section 11 of Article 4, Chapter 22 of the Code is self-explanatory. All pillar cases should be promptly attended to when the workings are within 500 feet of any well.

2.19        Notification.    When title to a well for which a permit has been issued is transferred from one well operator to another well operator, the Department of Mines shall be immediately notified. Failure to do so shall be considered a violation of the Rules and Regulations and punishable under Section 17, Article 4, Chapter 22 of the West Virginia Code.

2.20        When Well Operator to Give Notification.    Well operator shall notify the Department of Mines and the proper district oil and gas inspector within 48 hours after actual drilling has commenced.

2.21        Drilling; Fracturing; Plugging Permits Expiration Term.  
All permits issued to drill, redrill, deepen, fracture and/or plug, shall be null and void unless well operator commences operations to perform the above outlined procedures within four (4) months from the date said permits were issued to well operator.