

JOINT SELECT COMMITTEE ON MARCELLUS SHALE

COUNSEL: Lazell Altizer Williams

ABSTRACT

SHORT TITLE: Creating Natural Gas Horizontal Well Control Act

CODE REFERENCE: §22-6-1, §22-6-12, §22-6-14, & §22-6-36 (Amends); §§22-6A-1 thru §22-6A-17 (New); §22C-8-2 (Amends); §22C-9-2 (Amends);

PROPOSED LAW PRESENTED TO THE COMMITTEE:

This legislation mirrors Eng. Com. Sub. For Com. Sub. For Senate Bill No. 424, which passed the Senate but died in the House on the last day of the 2011 regular session. Generally, the legislation makes two significant changes regarding gas well regulation in the state:

1. It modifies the definitions of deep well and shallow well throughout the oil and gas statutes to allow shallow wells to enter the Onondaga formation to a depth of 100 ft for purposes other than production. Current law limits penetration into the Onondaga to a depth of 20 ft ("rat hole" issue). It also modifies two sections in the current oil and gas statute (§22-6) to allow the DEP to promulgate rules which govern methods of surveying and information contained on plats. These sections require the preparation of plats prior to conducting certain activities. Finally, it modifies Section 36 in the existing gas statute to require notice to coal operators and owners and lessees of coal seams who file a declaration of their ownership interest in the county clerk's office. This is in addition to the notice requirement to owners and lessees of record.

2. It creates a new article to deal solely with natural gas horizontal wells, excluding coalbed methane wells. A section-by-section analysis follows.

§21-1-3a. Division of Labor.

This new section requires horizontal well operators to submit annually employment reports to Division of Labor (DOL) beginning January 31, 2012, detailing, among other things, number

of instate employees versus number of out-of-state employees, city & state of residence, total payroll broken down by residency, and average salary by job. The DOL is then required to submit a report to the Legislature by February 15 of each year.

§22-6-1. Definitions.

Changes definition of "Shallow well" in Oil and Gas Act, the conventional well statute. Current law allows shallow wells to be drilled no deeper than twenty feet into Ononaga formation. The change would allow a well to be drilled to a depth of 100 feet into Ononaga formation and still retain its shallow well classification.

While allowing the shallow well to be drilled deeper, the geologic section from which production can occur remains the same as is currently permitted. This change was made because the Marcellus sits on top of the Onondaga formation where logging and completion operations are difficult to conduct to the base of the Marcellus while maintaining shallow well status. This is commonly referred to as the "rat hole" issue. (Note: The amendment to §22C-8-2 and §22C-9-2 makes the same change for consistency reasons)

§22-6-2. Secretary -- Powers and duties generally; department records open to public; inspectors.

As noted below, with the repeal of the Oil and Gas Inspectors' Examining Board (Board), §22C-7-1 through §22C-7-3, this section is amended to give the secretary the authority to directly hire oil and gas inspectors with the abolishment of the Board.

§22-6-2a. Oil and gas inspectors qualifications and salary.

This section establishes minimum qualifications to be eligible to be hired as an oil and gas inspector. Essentially, an inspector must be a West Virginia citizen, have at least two years actual relevant experience in the oil and gas industry, one of which may be satisfied with relevant academic or relevant experience, and have good theoretical and practical knowledge of the industry. It also establishes a minimum salary of \$40,000 for a oil and gas supervisor and \$35,000 for an oil and gas inspector.

§22-6-12. Plats prerequisites to drilling or fracturing wells; preparation and contents; notice and information furnished

to coal operators, owners or lessees; issuance of permits; performance bonds or securities in lieu thereof; bond forfeiture.

This section in current law requires an operator to prepare a plat of the land on which operations are conducted prior to drilling, fracturing or stimulating any well. The amendment authorizes the DEP with advice from the Board of Professional Surveyors to promulgate rules to govern methods of surveying and information on plats related to oil and gas permits. Information would include mineral boundary lines, mineral and surface owner names, and named waterways and state highway and county numbered route numbers.

§22-6-14. Plats prerequisite to introducing liquids or waste into wells; preparation and contents; notice and information furnished to coal operators, owners or lessees and director; issuance of permits; performance bonds or security in lieu thereof.

The amendment to this section is identical to the amendment to §22-6-12 except that it applies to plats which are required prior to introducing liquid pressure to recover oil or for the disposal of pollutants.

§22-6-36. Declaration of oil and gas notice by owners and lessees of coal seams

This provision is amended to provide that owners and lessees of coal seams who file a declaration of their interest in a coal seam in the county clerk's office are entitled to receive notices and plats provided for in §22-6-12 (notice & plat to coal operators & owners & lessees of record before drilling, fracturing or stimulating a well), §22-6-13 (Notice to coal operators, owners or lessees of record of intention to fracture), §22-6-14 (notice & plat to coal operators & owners & lessees of record prior to introducing liquids or waste into wells), and §22-6-23 (Notice to coal operators & owners & lessees of record prior to plugging, abandoning, & reclaiming a well). If declaration isn't filed, then notification is made to the owners and lessees of coal seams of record.

§22-6A-1. Short title.

This new article is the "Horizontal Well Act."

§22-6A-2. Legislative findings and declaration of public policy.

This section recognizes, among other things, new and existing technologies and drilling practices, including horizontal drilling, have created opportunity for efficient development of natural gas in underground shales and other geologic formations. Also recognizes these operations may require large impoundments to store water needed for the operations, and that current law for conventional operations are not adequate to address the potential environmental impact of these operations. Therefore, a new regulatory program is needed and is in the public interest to protect environment and our economy for current and future generations.

§22-6A-3. Applicability; exceptions; karst formations.

This new article would apply to any natural gas well operation, other than a coal bed methane well, that utilizes a horizontal drilling method. As noted in the next section below, a horizontal well is one that is drilled using a horizontal drilling method and disturbs 3 or more surface acres or uses more than 210,000 gallons of water in any month. Horizontal wells permitted prior to the effective date of the new Act would not be subject to its requirements. This section also requires the Secretary of the DEP to promulgate emergency and legislative rules establishing standards for horizontal well operations in karst regions of the state, and to review the regulatory program to determine whether oil and gas rules need to be revised further to address drilling in karst areas.

§22-6A-4. Definitions.

This section defines the following terms used in Horizontal Well Act: Best management practices; Department; Horizontal Drilling; Horizontal Well; Flowback Recycle Impoundment; Freshwater Impoundment; Impoundment; and Pit. A horizontal well is defined as a well which is drilled using a horizontal drilling method and disturbs 3 or more surface acres or uses more than 210,000 gallons of water in any month.

§22-6A-5. Application of article six of this chapter to horizontal wells subject to this article.

To the extent horizontal wells are similar to conventional wells, this section incorporates by reference the following code sections in the convention well statute (§22-6-1 through §22-6-41):

- Sec. 3 - inspector findings and orders;
- Sec. 4 - review of findings and orders by secretary;
- Sec. 5 - requirements for findings, order and notices;

Sec. 7 - issuance of water pollution control permits;

Sec. 10 - Procedure for filing comments; certification of notice; Increases comment period from 15 to 30 days comment period

Sec. 12 - plat prerequisites with two changes (30 days instead of 15 days and plats shall identify mineral tract boundaries);

Sec. 13 - notice of fracturing with one change (30 days instead of 15 days);

Sec. 15 - deep well objections with one change (30 days instead of 15 days);

Sec. 17 - shallow well objections with one change (30 days instead of 15 days);

Sec. 18 - protective devices when penetrating a coal seam;

Sec. 19 - protective devices for life of well;

Sec. 20 - protective devices when penetrating a coal seam that has been mined through;

Sec. 21 - freshwater casings;

Sec. 22 - filing of reports;

Sec. 27 - cause of action for explosions;

Sec. 28 - supervision of secretary;

Sec. 29 - Funds with reference to permit fees contained in this article;

Sec. 31 - prevention of waste of gas;

Sec. 32 - rights of adjacent owners to prevent waste of gas;

Sec. 33 - circuit court actions to restrain waste;

Sec. 36 - declaration of coal seam owner and lessees but incorporates notice only under §22-6-12 and 13;

Sec. 39 - injunctive relief;

Sec. 40 - judicial review.

Any conflict between incorporated sections from article six and sections in this new article will be resolved in favor of the provisions in the new Horizontal Well Act.

§22-6A-6. Secretary of Environmental Protection; powers and duties.

This section gives the secretary sole authority to regulate all horizontal wells, to use oil and gas inspectors or any employee in office of oil and gas to enforce the Horizontal Well Act, to promulgate rules to implement the Act, and to make investigations and inspections to ensure compliance with Act.

It also clarifies that except for duties set forth in

Shallow Gas Well Review Board Act (§22C-8-1 through §22C-8-19), Coalbed Methane Review Board Act (§22-21-1 through §22-21-29), and Oil and Gas Conservation Commission Act (§22C-9-1 through §22C-9-16), the secretary has sole authority over permitting, location, spacing, drilling, operation and plugging of oil and gas wells, and production operations in the state.

§22-6A-7. Horizontal permit required; permit fee; application; soil and erosion control plan; well site safety plan; site construction plan; water management plan; installation of permit number; suspension of permit.

This section makes it unlawful to begin horizontal well operations without a permit and requires the operator to file an application for a permit containing the following information:

- a. Name & address of applicant and agent and those entitled to notice;
- b. Name & address of every ongoing coal operation and owner and lessee of record of coal seams not yet operating beneath the tract of land on which well is or may be located;
- c. Identification of well as required by secretary and well work for which permit is requested.
- d. Approximate or actual depth of well drilled.
- e. Each formation involved;
- f. Entire casing program for each well, if required.
- g. Information regarding conversion of existing wells;
- h. With respect to stimulation of horizontal wells, all information required to demonstrate compliance with Section five requirements;
- i. Soil and erosion control plan which addresses, among other things, methods of stabilization and drainage, method of reclamation in compliance with Section 12. Operations disturbing 5 acres or more are required to submit soil and erosion control plan certified by registered professional engineer.
- j. Operations withdrawing more than 210,000 gallons from water of the state in any month, must include a Water Management Plan addressing the following:
 - Type & source of water, location by latitude & longitude within 48 hours prior to withdrawal and sign identifying location as required by section 8;
 - Anticipated volume of each withdrawal;
 - Anticipated months of withdrawal;
 - Plan to dispose of wastewater;

- Listing of anticipated additives used in fracturing fluid; and additives actually used after completion of fracturing operations;
- Water Resources Protection Plan addressing information required in Water Management Plan & the following:

- List current designated & existing water uses & public water intakes within one mile of withdrawal location;
- Demonstration that sufficient in-stream flow will be available immediately below withdrawal point; &
- method of surface water withdrawal to protect aquatic life.

- k. Proposed angle and direction of the well, actual or approximate depth at which well deviates from the vertical, angle and direction of the lateral well bore until it reaches its total target depth, and the length and direction of any actual or proposed horizontal lateral or well bore.

Additionally, a separate permit is required for each well drilled. The permit fee is \$10,000 for the initial well and \$5,000 for each additional well drilled on a single well pad at same location. Additional provision provide for the operator designating an agent, installing permit number, distributing the well site safety plan to local emergency planning committees prior to commencing construction, waiving requirements of this section and sections eight and ten and five(e) and issuing emergency permit for not more than thirty days, denying a permit for committing substantial violation of a previously issued horizontal well permit or rules issued hereunder, and suspending a permit. Permits would be suspended for violation of the road maintenance agreement with the Division of Highways required by section twenty-one of this new article until compliance with the agreement is achieved. Appeals would be to the appropriate circuit court.

§22-6A-8. Review of application; issuance of permit in absence of objections; performance standards; copy of permit to county assessor.

This section incorporates most of current §22-6-11 with the following additions:

- a. No permit may be issued less than 30 days after filing of application; current law is fifteen days;
- b. Requires secretary to ascertain whether permit applicant is in compliance with laws governing workers' compensation and unemployment compensation. If Executive Director of Workforce WV or Insurance Commissioner does not respond to DEP within 15 calendar days, compliance will be deemed;
- c. The secretary may inspect proposed well work location to assure adequate review of the application;
- d. Identify location of withdrawal 48 hours prior to withdrawal, install sign at location, record and retain information regarding water used, flowback water, and produced water maintained for three years, and subject to inspection by DEP.
- e. Finally, each operator must adopt appropriate best management practices; plug wells as required by Act, use impervious materials to ensure leachate does not degrade surface water or groundwater, grade, terrace, seed, etc., disturbed areas not needed for production, protect off-site areas from damage, take action pursuant to industry standards to minimize fire hazards or conditions harmful to public health and safety, protect quality and quantity of surface water and groundwater, and construct roads pursuant to standards established by rule or Act.

§22-6A-9. Certificate of approval required for large impoundment construction; certificate of approval and annual registration fees; application required to obtain certificate; term of certificate; revocation or suspension of certificates; appeals; farm ponds; criminal penalty.

This section makes it unlawful to construct any impoundment greater than 210,000 gallons without a certificate of approval from the secretary. The fee is \$300 for each impoundment along with an annual registration fee of \$100. This fee requirement applies to placement, construction, enlargement, alteration, repair, or removal. Certificates must be issued or denied within 60 days of application and are good for one year. Plans and specifications for impoundments must bear seal of a registered professional engineer. Certificates may be revoked or suspended if the secretary determines the impoundment constitutes an imminent danger to human life or property.

Provisions are also made for leaving impoundments for farm use pursuant to U. S. Department of Agriculture standards, hearings and appeals, and the secretary is authorized to promulgate rules to implement this section.

§22-6A-10. Notice to property owners.

This section requires the operator prior to filing a permit application to give notice to the surface owner of at least 72 hours but not more than 45 days prior to entering to conduct any plat surveys required by this Act.

It also provides that the following persons must receive copies of all applications, approvals, required by the Act and all plats, and erosion and sediment and control plans no later than the filing date of the application:

- a. Surface owners of record of land proposed for well site, roads, or impoundments;
- b. Coal owner, operator or lessee of land on which well is to be drilled;
- c. Operator of any storage field within which the well work activity is to take place;
- d. adjacent surface owners of record; and
- e. any surface owner of purveyor of water within 2,500 feet of center of horizontal well pad.

Operator may serve required documents on three or more tenants-in-common or other co-owners upon person of record for tax purposes. Persons entitled to submit comments are entitled to receive copy of any issued permit or a modification or denial of a permit if requested along with comments on a permit application. Also, surface owners and coal owners and operators and lessees are entitled to receive notice within 7 days but no less than 2 days before commencement of work requiring any disturbance, if requested along with comments. Also, notice of any seismic activity must be given three days before commencement.

§22-6A-11. Procedure for filing comments; certification of notice; procedures for considering objections and protests; public hearing option; issues to be considered; public notice and hearing procedures.

This section establishes specific procedure for filing comments to provide additional input local residents regarding impacts of the proposed horizontal well location.

§22-6A-12. Well location restrictions.

This section establishes a buffer zone of 625 between well sites and residences and certain agricultural structures. Additionally, it provides that a well site cannot be drilled within 100 feet of any watercourse or water body, within 200 feet of a wetland, within 300 feet of a naturally producing trout stream, and within 1,000 feet of a publice surface water or groundwater intake.

§22-6A-13. Plugging and abandonment.

This section directs the secretary to promulgate rules regarding plugging and the method of plugging of horizontal wells as well as notices in connection with plugging operations.

§22-6A-14. Reclamation requirements.

This section requires an operator to reclaim all pits and impoundments and remove all concrete pads, drilling supplies and equipment within six months after completion of the drilling process. The operator would also have to grade, seed, sod, etc. all disturbed areas not needed for production. Salt water and oil must be removed periodically and properly disposed, and no pit may be used for permanent disposal of salt water or left permanent. Impoundments are allowed to remain if allowed by law or agreement between the operator and surface owner for benefit and use by the owner.

It also requires an operator to complete reclamation of a well pad with multiple horizontal wells within six months after completion of drilling for a well, unless the operator begins drilling another well within the six-month period.

Within six months after a horizontal well that has produced is plugged or after plugging a dry hole, the operator must remove all production and storage facilities, supplies, equipment, and any oil, salt water and debris and fill remaining excavations. Requirements regarding grading, terracing, seeding, etc., would also apply in the same time period.

Finally, an operator has a duty to reclaim all disturbed areas in accordance with the approved soil and erosion plan, and the secretary may grant an extension of the mandated reclamation

time frame by up to six months. Appeal of a denial by the secretary would have to be filed in circuit court.

§22-6A-15. Performance Bonds; corporate surety or other surety.

This section requires an operator to furnish a \$50,000 bond to guarantee compliance with all requirements of the Act for each horizontal well drilled. If multiple wells are drilled or stimulated, the operator can furnish a blanket bond of \$250,000 to cover all wells. No bond may be released until the operator satisfies all requirements of the Act. Provision is also made for assignment or transfer and bond forfeiture and collection. These bonding requirements mirror current law in the conventional gas statute (§22-6-26).

§22-6A-16. Surface owners agreements.

This section encourages operators and surface owners to enter into a surface owner compensation agreement prior to commencement of drilling operations. It also provides for an award of attorneys to surface owners in certain circumstances.

§22-6A-17. Reimbursement of property taxes of encumbered properties.

This section requires an operator to make a one-time payment of \$2,500 to a surface owner as compensation for payment of real property taxes for lands encumbered or disturbed by a horizontal operation.

§22-6A-18. Civil Action for contamination or deprivation of fresh water source or supply; presumption.

Establishes rebuttable presumption that contamination or loss of fresh water source or supply within 2,500 feet of gas well site is caused by gas operation (§22-6-35); establishes five defenses to the presumption:

- a. pollution existed prior to drilling or alteration activity as established by predrilling or pre-alteration survey;
- b. landowner or water purveyor refused operator permission to perform predrilling or pre-alteration survey;
- c. water supply is not w/in 1000 feet of well;
- d. pollution occurred more than 6 months after drilling;
- e. pollution caused by something else;

Also, requires operator to replace affected water supply

unless waived by property owner, provide an emergency drinking water supply within 24 hours and temporary water supply within 72 hours, provide permanent water supply within 2 years, and pay all reasonable costs incurred by property owner in securing water supply. Water supply required by this section cannot be discontinued until authorized by the secretary.

§22-6A-19. Offenses; civil and criminal penalties.

This section establishes a civil penalty of up to \$5000 per day for any violation of any provision in the Act or rules promulgated thereunder. The agency would have to file a civil action in the circuit court of the county in which the operation is located to recover any penalty. If awarded by the court, penalties would be credited to the general fund,.

It also establishes a civil penalty of \$100,000 for willful disposal of waste fluids, drill cuttings or any other liquid substances generated in the development of a horizontal well which could impact surface water or groundwater in violation of the Act.

Three misdemeanor offenses are also created for willful violations of the Act. Any person willfully violating the Act regarding the manner of drilling, casing, or plugging and filling any well is subject to a fine not exceeding \$5,000, or confinement in a regional jail for up to 12 months, or both.

Any intentional misrepresentation of a material fact regarding an application, record, report, plan or other document filed or required in accordance with the Act is subject to a fine of between \$1,000 and \$10,000, confinement in a county or regional jail for up to six months, or both.

Any willful violation of any horizontal well permit, any provision in the Act, or any rule or order of the secretary or board is subject to fine of between \$2,500 and \$25,000 per day, confinement in a county or regional jail for up to one year, or both.

§22-6A-20. Local Ordinances

This provision preempts local ordinances from regulating horizontal gas operations to the extent they attempt to regulate the method of gas operations. But local governments may regulate zoning and land development of gas activities, including time and place of operations to protect public health, safety & welfare.

§22-6A-21. Division of Highways approval of well road access.

This section requires a gas operator to enter into a road maintenance agreement with the Division of Highways and submit a letter of certification from the Division to the DEP indicating compliance with this requirement. Also, this provision would make the operator liable and responsible for the actions of its subcontractors and others operating under the road maintenance agreement.

§22-6A-22. Establishment of public website information and electronic notification registry regarding horizontal well permit applications.

The secretary is required to establish a public website which lists and details information pertinent to horizontal wells, provides notice of public hearings, establishes registration program to receive notice of horizontal well applications.

§22-6A-23. Air quality regulation, study and rulemaking.

This section provides that activities at well sites that impact air quality are subject to regulation under the state air quality act, and that the DEP secretary must report to the Legislature by July 1, 2012, on the need for further regulation under the air quality program.

§22-6A-24. Impoundment and pit safety study.

This section requires the secretary to file a report with the Legislature by July 1, 2012, on whether legislative rules are needed to regulate pits and impoundments.

§22-6A-25. Comprehensive regulatory review of state hydraulic fracturing regulations.

This section requires the secretary to request STRONGER (State Review of Oil and Natural Gas Environmental Regulations) to review the State's horizontal well regulatory program for comparison to STRONGER'S 2010 Hydraulic Fracturing Guidelines and report results of the study to the Legislature by July 1, 2012.

§22-6A-26. Casing and cementing standards.

This section directs the secretary to develop a guidance document which establishes minimum casing and cementing standards

applicable to horizontal wells.

§22C-7-1 through §22C-7-3. Oil and Gas Inspectors' Examining Board.

The article, which deals with testing and ranking persons eligible for appointment as oil and gas inspectors, is repealed. The responsibility for testing and hiring inspectors is given to the DEP secretary as noted in the explanation of the amendment to §22-6-2 above.

§22C-8-2. Definitions.

Changes definition of "Shallow well" and "Deep Well" in Shallow Gas Well Review Board Act. Current law allows shallow well to be drilled no deeper than twenty feet into Ononaga formation. This change would allow drilling to a depth of 100 feet into Ononaga formation and well would retain shallow well classification.

(Note: As noted above, the amendment to this section and §22C-9-2 is also made in §22-6-1 to ensure the definition of shallow well is consistent in these three sections)

Regarding deep well, current law defines a deep well as drilled or completed in a formation below the top of the uppermost member of the Onondaga group. The change excludes coal bed methane wells from the definition.

§22C-9-2. Definitions

Changes definition of "Shallow well" and "Deep Well" in Oil and Gas Conservation Act. Current law allows shallow well to be drilled no deeper than twenty feet into Ononaga formation. This change would allow drilling to a depth of 100 feet into Ononaga formation and well would retain shallow well classification.

(See clarification regarding changing definition of shallow well and note in §22-6-1 & §22C-8-2)

Regarding deep well, current law defines a deep well as drilled or completed in a formation below the top of the uppermost member of the Onondaga group. The change excludes coal bed methane wells from the definition.

TITLE: Ok

GOVERNMENT AGENCIES AFFECTED: DEP; Oil & Gas Conservation

Commission; Shallow Gas Well Review Board; Oil and Gas
Inspectors' Examining Board.