

ENROLLED

H. B. 401

(By Mr Speaker, Mr. Thompson)

[By Request of the Executive]

[Passed December 14, 2011; in effect from passage.]

AN ACT to repeal §22C-7-1, §22C-7-2 and §22C-7-3 of the Code of West Virginia, 1931, as amended; to amend said code by adding thereto a new section, designated §5B-2B-4a; to amend and reenact §22-6-1 and §22-6-2 of said code; to amend said code by adding thereto a new section, designated §22-6-2a; to amend said code by adding thereto a new article, designated §22-6A-1, §22-6A-2, §22-6A-3, §22-6A-3a, §22-6A-4, §22-6A-5, §22-6A-6, §22-6A-7, §22-6A-8, §22-6A-9, §22-6A-10, §22-6A-10a, §22-6A-11,

§22-6A-12, §22-6A-13, §22-6A-14, §22-6A-15, §22-6A-16, §22-6A-17, §22-6A-18, §22-6A-19, §22-6A-20, §22-6A-21, §22-6A-22, §22-6A-23 and §22-6A-24; to amend said code by adding thereto a new article, designated §22-6B-1, §22-6B-2, §22-6B-3, §22-6B-4, §22-6B-5, §22-6B-6, §22-6B-7 and §22-6B-8; to amend and reenact §22C-8-2 of said code; and to amend and reenact §22C-9-2 of said code, all relating generally to oil and gas wells; requiring West Virginia Workforce Investment Council to complete certain reviews and provide report to Legislature; expanding powers of Secretary of the Department of Environmental Protection; authorizing secretary to determine number of oil and gas inspectors and supervisors and to make investigations or inspections to ensure compliance with applicable law; providing for inspector qualifications, duties and minimum salaries; creating Natural Gas Horizontal Well Control Act; providing short title; making legislative findings and declarations of public policy; requiring secretary to submit written report to Legislature on number of waivers granted; providing for applicability of act and exceptions; providing special considerations regarding karst formations; requiring the secretary to propose emergency and legislative rules pertaining to drilling in karst formations; defining terms; making horizontal wells subject to certain provisions

in article six, chapter twenty-two of the Code of West Virginia; specifying powers and duties of secretary, including certain rule-making power and reporting duties; requiring permit for horizontal wells; establishing permit application requirements and contents; requiring bond and permit fees; providing for issuance of emergency permits; providing for denial, suspension and reinstatement of permits in certain circumstances; providing for application review, requirements for issuance of permit and permit requirements; establishing performance standards; providing for copies of permits to be furnished to county assessors; requiring certificate of approval for large pits or impoundments construction; requiring application for certificate; establishing application requirements and payment of fees; providing for modification, revocation or suspension of certificate and hearing procedure, including an administrative appeals process; providing exceptions for certain farm ponds; authorizing secretary to propose legislative rules governing large pits and impoundment; providing certain notices to certain property owners regarding certain applications and intent to enter property to survey or to conduct seismic activity; requiring the submission of certain documents and information to be provided with such notice; clarifying that notice to certain lienholders is not

notice to certain landowners; providing for public notice and comment; requiring applicant to file Class II ad and allowing submission of written comments to Department of Environmental Protection; establishing certain information to be contained in the published newspaper notice; providing for the publishing public comment received by the Department of Environmental Protection on the department's public website; clarifying method of delivery of notice; establishing procedure for filing written comments; establishing well location restrictions; requiring the secretary to prepare a report to the legislature on noise, light dust and volatile organic compounds and their relationship to well location restrictions for occupied dwellings; allowing the secretary to propose guidelines and procedures for controlling and mitigating levels of noise, light, dust and volatile organic compounds in relation to horizontal drilling activities; requiring promulgation of legislative rules for plugging and abandonment of horizontal wells; exempting certain wells from Natural Gas Horizontal Well Control Act; establishing reclamation requirements; requiring performance bonds or other security; providing notice of planned operation and contents of notice to certain surface owners; providing notice to certain surface owner and offer for compensation for certain damages to certain surface owner;

providing for reimbursement of property taxes to surface owner; providing for civil action, rebuttable presumption and relief for water contamination or deprivation; establishing water rights and replacement procedure; establishing civil penalties and offenses; establishing criminal penalties and offenses; requiring gas operations to submit certification from Division of Highways that operator has entered into road maintenance agreement pursuant to Division of Highways Oil and Gas Road Policy; creating public website and electronic notification registry of horizontal well permit applications and public notice of website; providing for the publication of information pertaining to permit applications on that public website; providing for air quality study, report to Legislature and rulemaking; requiring secretary to report to Legislature regarding safety of pits and impoundments; providing casing and cement standards; authorizing secretary to promulgate legislative and emergency rules relating to casing and cement standards; authorizing secretary to promulgate legislative rules governing pits and impoundments; providing secretary authority to establish, revise and grant waivers regarding casing and cement standards and programs; creating the Oil and Gas Horizontal Well Production Damage Compensation Act; providing legislative findings and purpose; defining terms;

providing conditions and parameters for compensation of surface owners for drilling operations; preserving common law right of action and providing offset for compensation or damages paid; requiring notice of claims by surface owners; providing manner in which oil and gas operator must provide notice of reclamation; providing for offers of settlement; providing procedures for civil actions, arbitration and fees; preserving alternate remedies; and modifying definitions of "shallow wells" and "deep wells".

Be it enacted by the Legislature of West Virginia:

That §22C-7-1, §22C-7-2 and §22C-7-3 of the Code of West Virginia, 1931, as amended, be repealed; that said code be amended by adding thereto a new section, designated §5B-2B-4a; that §22-6-1 and §22-6-2 of said code be amended and reenacted; that said code be amended by adding thereto a new section, designated §22-6-2a; that said code be amended by adding thereto a new article, designated §22-6A-1, §22-6A-2, §22-6A-3, §22-6A-3a, §22-6A-4, §22-6A-5, §22-6A-6, §22-6A-7, §22-6A-8, §22-6A-9, §22-6A-10, §22-6A-10a, §22-6A-11, §22-6A-12, §22-6A-13, §22-6A-14, §22-6A-15, §22-6A-16, §22-6A-17, §22-6A-18, §22-6A-19, §22-6A-20, §22-6A-21, §22-6A-22, §22-6A-23 and §22-6A-24; that said code be amended by adding thereto a new article, designated §22-6B-1, §22-6B-2, §22-6B-3, §22-6B-4, §22-6B-5, §22-6B-6, §22-6B-7 and §22-6B-8; that §22C-8-2 of said code

be amended and reenacted; and that §22C-9-2 of said code be amended and reenacted, all to read as follows:

CHAPTER 5B. ECONOMIC DEVELOPMENT ACT OF 1985.

ARTICLE 2B. WEST VIRGINIA WORKFORCE INVESTMENT ACT.

§5B-2B-4a. Report to Legislature.

(a) The Legislature finds that:

(1) The advent and advancement of new technologies in horizontal drilling and the production of horizontal wells defined in article six-a, chapter twenty-two of this code has created thousands and has the potential to create thousands of additional drilling, production, construction, manufacturing, and related jobs in West Virginia and in the Appalachian Basin;

(2) This economic opportunity presents new and exciting opportunities for jobs for West Virginians;

(3) The state needs to take all necessary steps to retain, educate and train West Virginians to have the skills necessary to compete for job opportunities resulting from horizontal drilling; and

(4) Specific attention shall be made by the state of West Virginia to train and educate West Virginia citizens that have not historically or traditionally been exposed to the oil and gas industry through training programs offered by community colleges, technical schools and institutions and small business owners. Small

business owners shall be made aware by the State of West Virginia of any and all programs and grants available to assist them in training said individuals.

(b) To assist in maximizing the economic opportunities available with horizontal drilling, the council shall make a report to the Joint Committee on Government and Finance and the Legislative Oversight Commission on Education Accountability on or before November 1 of each year through 2016, detailing a comprehensive review of the direct and indirect economic impact of employers engaged in the production of horizontal wells in the State of West Virginia, as more specifically defined in article six-a, chapter twenty-two of this code, which shall include:

- (1) A review of the total number of jobs created;
- (2) A review of total payroll of all jobs created;
- (3) The average salary per job type;
- (4) A review of the number of employees domiciled in the State of West Virginia;
- (5) A review of total economic impact;
- (6) The council's recommendations for the establishment of an overall workforce investment public education agenda with goals and benchmarks toward maximizing job creation opportunities in the State of West Virginia;
- (7) A review of number of jobs created for minorities based on

race, ethnicity and gender;

(8) A review of number of jobs created for individuals re-employed from the state of West Virginia's unemployment rosters;

(9) A review of number of jobs created for returning veterans;
and

(10) A review of number of jobs created for legal West Virginia residents and non-West Virginia residents.

(c) To the extent permitted by federal law, and to the extent necessary for the council to comply with this section, the council, Workforce West Virginia, the Division of Labor, and the Office of the Insurance Commissioner may enter into agreements providing for the sharing of job data and related information.

CHAPTER 22. ENVIRONMENTAL RESOURCES.

ARTICLE 6. OFFICE OF OIL AND GAS; OIL AND GAS WELLS.

§22-6-1. Definitions.

As used in this article:

(a) "Casing" means a string or strings of pipe commonly placed in wells drilled for natural gas or petroleum or both;

(b) "Cement" means hydraulic cement properly mixed with water;

(c) "Chair" means the chair of the West Virginia shallow gas well review board as provided for in section four, article eight, chapter twenty-two-c of this code;

(d) "Coal operator" means any person or persons, firm,

partnership, partnership association or corporation that proposes to or does operate a coal mine;

(e) "Coal seam" and "workable coal bed" are interchangeable terms and mean any seam of coal twenty inches or more in thickness, unless a seam of less thickness is being commercially worked, or can in the judgment of the department foreseeably be commercially worked and will require protection if wells are drilled through it;

(f) "Director" means the Secretary of the Department of Environmental Protection as established in article one of this chapter or other person to whom the secretary has delegated authority or duties pursuant to sections six or eight, article one of this chapter.

(g) "Deep well" means any well other than a shallow well or coalbed methane well, drilled to a formation below the top of the uppermost member of the "Onondaga Group";

(h) "Expanding cement" means any cement approved by the office of oil and gas which expands during the hardening process, including, but not limited to, regular oil field cements with the proper additives;

(i) "Facility" means any facility utilized in the oil and gas industry in this state and specifically named or referred to in this article or in article eight or nine of this chapter, other than a well or well site;

(j) "Gas" means all natural gas and all other fluid hydrocarbons not defined as oil in this section;

(k) "Oil" means natural crude oil or petroleum 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 underground reservoirs;

(l) "Owner" when used with reference to any well, shall include any person or persons, firm, partnership, partnership association or corporation that owns, manages, operates, controls or possesses such well as principal, or as lessee or contractor, employee or agent of such principal;

(m) "Owner" when used with reference to any coal seam, shall include any person or persons who own, lease or operate such coal seam;

(n) "Person" means any natural person, corporation, firm, partnership, partnership association, venture, receiver, trustee, executor, administrator, guardian, fiduciary or other representative of any kind, and includes any government or any political subdivision or any agency thereof;

(o) "Plat" means a map, drawing or print showing the location of a well or wells as herein defined;

(p) "Pollutant" has the same meaning as provided in section

three, article eleven of this chapter;

(q) "Review board" means the West Virginia Shallow Gas Well Review Board as provided for in section four, article eight, chapter twenty-two-c of this code;

(r) "Safe mining through of a well" means the mining of coal in a workable coal bed up to a well which penetrates such workable coal bed and through such well so that the casing or plug in the well bore where the well penetrates the workable coal bed is severed;

(s) "Secretary" means the Secretary of the Department of Environmental Protection as established in article one of this chapter or other person to whom the secretary has delegated authority or duties pursuant to sections six or eight, article one of this chapter;

(t) "Shallow well" means any gas well, other than a coalbed methane well, drilled no deeper than one hundred feet below the top of the "Onondaga Group": *Provided*, That in no event may the "Onondaga Group" formation or any formation below the "Onondaga Group" be produced, perforated or stimulated in any manner;

(u) "Stimulate" means any action taken by a well operator to increase the inherent productivity of an oil or gas well, including, but not limited to, fracturing, shooting or acidizing, but excluding cleaning out, bailing or workover operations;

(v) "Waste" means (i) physical waste, as the term is generally

understood in the oil and gas industry; (ii) the locating, drilling, equipping, operating or producing of any oil or gas well in a manner that causes, or tends to cause a substantial reduction in the quantity of oil or gas ultimately recoverable from a pool under prudent and proper operations, or that causes or tends to cause a substantial or unnecessary or excessive surface loss of oil or gas; or (iii) the drilling of more deep wells than are reasonably required to recover efficiently and economically the maximum amount of oil and gas from a pool; (iv) substantially inefficient, excessive or improper use, or the substantially unnecessary dissipation of, reservoir energy, it being understood that nothing in this chapter authorizes any agency of the state to impose mandatory spacing of shallow wells except for the provisions of section eight, article nine, chapter twenty-two-c of this code and the provisions of article eight, chapter twenty-two-c of this code; (v) inefficient storing of oil or gas: *Provided*, That storage in accordance with a certificate of public convenience issued by the Federal Energy Regulatory Commission is conclusively presumed to be efficient; and (vi) other underground or surface waste in the production or storage of oil, gas or condensate, however caused. Waste does not include gas vented or released from any mine areas as defined in section two, article one, chapter twenty-two-a of this code, or from adjacent coal seams which are the subject of a current permit issued under article two

of chapter twenty-two-a of this code: *Provided, however,* That nothing in this exclusion is intended to address ownership of the gas;

(w) "Waters of this state" has the same meaning as the term "waters" as provided in section three, article eleven of this chapter;

(x) "Well" means any shaft or hole sunk, drilled, bored or dug into the earth or into underground strata for the extraction or injection or placement of any liquid or gas, or any shaft or hole sunk or used in conjunction with such extraction or injection or placement. The term "well" does not include any shaft or hole sunk, drilled, bored or dug into the earth for the sole purpose of core drilling or pumping or extracting therefrom potable, fresh or usable water for household, domestic, industrial, agricultural or public use;

(y) "Well work" means the drilling, redrilling, deepening, stimulating, pressuring by injection of any fluid, converting from one type of well to another, combining or physically changing to allow the migration of fluid from one formation to another or plugging or replugging of any well; and

(z) "Well operator" or "operator" means any person or persons, firm, partnership, partnership association or corporation that proposes to or does locate, drill, operate or abandon any well as

herein defined.

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

(a) The secretary shall have as his or her duty the supervision of the execution and enforcement of matters related to oil and gas set out in this article and in articles six-a, eight, nine, ten and twenty-one of this chapter.

(b) The secretary is authorized to propose rules for legislative approval in accordance with the provisions of article three, chapter twenty-nine-a of this code necessary to effectuate the above stated purposes.

(c) The secretary shall have full charge of the oil and gas matters set out in this article and in articles six-a, eight, nine, ten and twenty-one of this chapter. In addition to all other powers and duties conferred upon him or her, the secretary shall have the power and duty to:

(1) Supervise and direct the activities of the office of oil and gas and see that the purposes set forth in subsections (a) and (b) of this section are carried out;

(2) Determine the number of supervising oil and gas inspectors and oil and gas inspectors needed to carry out the purposes of this article and articles six-a, eight, nine, ten, and twenty-one of this chapter and appoint them as such. All appointees must be qualified

civil service employees, but no person is eligible for appointment until he or she has served in a probationary status for a period of six months to the satisfaction of the secretary;

(3) Supervise and direct such oil and gas inspectors and supervising inspectors in the performance of their duties;

(4) Make investigations or inspections necessary to ensure compliance with and to enforce the provisions of this article and articles six-a, eight, nine, ten, and twenty-one of this chapter;

(5) Prepare report forms to be used by oil and gas inspectors or the supervising inspector in making their findings, orders and notices, upon inspections made in accordance with this article and articles six-a, eight, nine, ten and twenty-one of this chapter;

(6) Employ a hearing officer and such clerks, stenographers and other employees, as may be necessary to carry out his or her duties and the purposes of the office of oil and gas and fix their compensation;

(7) Hear and determine applications made by owners, well operators and coal operators for the annulment or revision of orders made by oil and gas inspectors or the supervising inspector, and to make inspections, in accordance with the provisions of this article and articles eight and nine of this chapter;

(8) Cause a properly indexed permanent and public record to be kept of all inspections made by the secretary or by oil and gas

inspectors or the supervising inspector;

(9) Conduct research and studies as the secretary shall deem necessary to aid in protecting the health and safety of persons employed within or at potential or existing oil or gas production fields within this state, to improve drilling and production methods and to provide for the more efficient protection and preservation of oil and gas-bearing rock strata and property used in connection therewith;

(10) Collect a permit fee of \$400 for each permit application filed other than an application for a deep well, horizontal wells regulated pursuant to article six-a of this chapter, or a coalbed methane well; and collect a permit fee of \$650 for each permit application filed for a deep well: *Provided*, That no permit application fee is required when an application is submitted solely for the plugging or replugging of a well, or to modify an existing application for which the operator previously has submitted a permit fee under this section. All application fees required hereunder are in lieu of and not in addition to any fees imposed under article eleven of this chapter relating to discharges of stormwater but are in addition to any other fees required by the provisions of this article: *Provided, however*, That upon a final determination by the United States Environmental Protection Agency regarding the scope of the exemption under section 402(1)(2) of the federal Clean Water Act (33

U.S.C. 1342(1)(2)), which determination requires a "national pollutant discharge elimination system" permit for stormwater discharges from the oil and gas operations described therein, any permit fees for stormwater permits required under article eleven of this chapter for such operations may not exceed \$100.

(11) Perform all other duties which are expressly imposed upon the secretary by the provisions of this chapter;

(12) Perform all duties as the permit issuing authority for the state in all matters pertaining to the exploration, development, production, storage and recovery of this state's oil and gas;

(13) Adopt rules with respect to the issuance, denial, retention, suspension or revocation of permits, authorizations and requirements of this chapter, which rules shall assure that the rules, permits and authorizations issued by the secretary are adequate to satisfy the purposes of this article and articles six-a, seven, eight, nine, ten and twenty-one of this chapter particularly with respect to the consolidation of the various state and federal programs which place permitting requirements on the exploration, development, production, storage and recovery of this state's oil and gas; and

(14) Perform such acts as may be necessary or appropriate to secure to this state the benefits of federal legislation establishing programs relating to the exploration, development, production,

storage and recovery of this state's oil and gas, which programs are assumable by the state.

(d) The secretary shall have authority to visit and inspect any well or well site and any other oil or gas facility in this state and may call for the assistance of any oil and gas inspector or inspectors or supervising inspector whenever such assistance is necessary in the inspection of any such well or well site or any other oil or gas facility. Similarly, all oil and gas inspectors and supervising inspectors shall have authority to visit and inspect any well or well site and any other oil or gas facility in this state. Such inspectors shall make all necessary inspections of oil and gas operations required by this article and articles six-a, eight, nine, ten and twenty-one of this chapter; administer and enforce all oil and gas laws and rules; and perform other duties and services as may be prescribed by the secretary. The inspectors shall note and describe all violations of this article and articles six-a, eight, nine, ten or twenty-one of this chapter and promptly report those violations to the secretary in writing, furnishing at the same time a copy of the report to the operator concerned. Any well operator, coal operator operating coal seams beneath the tract of land, or the coal seam owner or lessee, if any, if said owner or lessee is not yet operating said coal seams beneath said tract of land may request the secretary to have an immediate inspection made. The operator

or owner of every well or well site or any other oil or gas facility shall cooperate with the secretary, all oil and gas inspectors and the supervising inspector in making inspections or obtaining information.

(e) Subject to the provisions of article one, chapter twenty-nine-b of this code, all records of the office shall be open to the public.

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

(a) No person is eligible for appointment as an oil and gas inspector or supervising inspector unless, at the time of probationary appointment, the person: (1) is a citizen of West Virginia, in good health and of good character, reputation and temperate habits; (2) has had at least two years actual relevant experience in the oil and gas industry: *Provided*, That no more than one year of the experience requirement may be satisfied by any of following: (i) A bachelor of science degree in science or engineering; (ii) an associate degree in petroleum technology; or (iii) actual relevant environmental experience including, without limitation, experience in wastewater, solid waste or reclamation, each full year of which shall be considered as a year of actual relevant experience in the oil and gas industry; and (3) has good theoretical and practical knowledge of oil and gas drilling and production methods, practices and techniques, sound safety practices

and applicable water and mining laws.

(b) In order to qualify for appointment as an oil and gas inspector or supervising inspector by the secretary, an eligible applicant shall submit to a written and oral examination by the Division of Personnel within the Department of Administration and shall furnish any evidence of good health, character and other facts establishing eligibility required by the Division of Personnel. The Office of Oil and Gas shall determine the substance of the examinations administered to candidates for the positions of oil and gas inspector and supervising oil and gas inspector by the Division of Personnel. If the Division of Personnel finds after investigation and examination that an applicant: (1) is eligible for appointment; and (2) has passed all written and oral examinations, the division shall add the applicant's name and grade to the register of qualified eligible candidates and certify its action to the secretary. No candidate's name may remain on the register for more than three years without requalifying.

(c) Every supervising oil and gas inspector shall be paid not less than \$40,000 per year. Every oil and gas inspector shall be paid not less than \$35,000 per year.

ARTICLE 6A. NATURAL GAS HORIZONTAL WELL CONTROL ACT.

§22-6A-1. Short title.

This article shall be known and cited as the "Horizontal Well

Act".

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

(a) The Legislature finds that:

(1) The advent and advancement of new and existing technologies and drilling practices have created the opportunity for the efficient development of natural gas contained in underground shales and other geologic formations;

(2) These practices have resulted in a new type and scale of natural gas development that utilize horizontal drilling techniques, allow the development of multiple wells from a single surface location, and may involve fracturing processes that use and produce large amounts of water;

(3) In some instances these practices may require the construction of large impoundments or pits for the storage of water or wastewater;

(4) Existing laws and regulations developed for conventional oil and gas operations do not adequately address these new technologies and practices;

(5) The secretary should have broad authority to condition the issuance of well work permits when, in the secretary's discretion, it is necessary to protect the safety of persons, to prevent inadequate or ineffective erosion and sediment control plans, to prevent damage to publicly owned lands or resources, to protect fresh

water sources or supplies or to otherwise protect the environment;

(6) Concomitant with the broad powers to condition the issuance of well work permits, the secretary should also have broad authority to waive certain minimum requirements of this article when, in his or her discretion, such waiver is appropriate: *Provided*, That the secretary shall submit a written report of the number of waivers granted to the Legislature commencing January 1, 2013, and each year thereafter;

(7) Practices involving reuse of water in the fracturing and stimulating of horizontal wells should be considered and encouraged by the department, as appropriate; and

(8) Allowing the responsible development of our state's natural gas resources will enhance the economy of our state and the quality of life for our citizens while assuring the long term protection of the environment.

(b) The Legislature declares that the establishment of a new regulatory scheme to address new and advanced natural gas development technologies and drilling practices is in the public interest and should be done in a manner that protects the environment and our economy for current and future generations.

(c) The Legislature declares that in view of the urgent need for prompt decision of matters submitted to the secretary under this article, all actions which the secretary or oil and gas inspectors

are required to take under this article shall be taken as rapidly as practicable, consistent with adequate consideration of the issues involved.

§22-6A-3. Applicability; exceptions.

Notwithstanding any other provision of this code to the contrary, the provisions of this article shall apply to any natural gas well, other than a coalbed methane well, drilled using a horizontal drilling method, and which disturbs three acres or more of surface, excluding pipelines, gathering lines and roads, or utilizes more than two hundred ten thousand gallons of water in any thirty day period: *Provided*, That this article does not apply to or affect any well work permitted for a horizontal well or orders issued regarding horizontal wells or permit applications pending prior to the effective date of this article: *Provided, further*, That this article shall not apply to or affect any rights bargained for in any agreement between a surface owner and operator made prior to the effective date of this article .

§22-6A-3a. Karst terrain; rulemaking.

(a) Because drilling horizontal wells in naturally occurring karst terrain may require precautions not necessary in other parts of the state, the secretary may require additional safeguards to protect this geological formation. When drilling horizontal wells in naturally occurring karst terrain, such additional safeguards may

include changing proposed well locations to avoid damage to water resources, special casing programs, and additional or special review of drilling procedures.

(b) In order to carry out the purposes of this section, the secretary, in consultation with the state geologist, shall propose emergency and legislative rules in accordance with the provisions of chapter twenty-nine-a of this code to establish designated geographic regions of the state where the provisions of this section are applicable and to establish standards for drilling horizontal wells in naturally occurring karst terrain. For horizontal wells drilled into naturally occurring karst terrain in such designated geographic regions, the rules shall, at a minimum:

(1) Require operators to perform certain predrilling testing to identify the location of caves and other voids, faults and relevant features in the strata and the location of surface features prevalent in naturally occurring karst terrain such as sink holes; and

(2) Provide any other requirements deemed necessary by the secretary to protect the unique characteristics of naturally occurring karst terrain, which requirements may include baseline water testing within an established distance from a drilling site.

(c) Nothing in this section allows the department to prevent drilling in naturally occurring karst terrain.

§22-6A-4. Definitions.

(a) All definitions set forth in article six of this chapter apply when those defined terms are used in this article, unless the context in which the term is used clearly requires a different meaning.

(b) Unless the context in which the term used clearly requires a different meaning, as used in this article:

(1) "Best management practices" means schedules of activities, prohibitions of practices, maintenance procedures and other management practices established by the department to prevent or reduce pollution of waters of this state. For purposes of this article, best management practices also includes those practices and procedures set out in the Erosion and Sediment Control Manual of the Office of Oil and Gas;

(2) "Department" means the Department of Environmental Protection;

(3) "Flowback Recycle Pit" means a pit used for the retention of flowback and freshwater and into which no other wastes of any kind are placed;

(4) "Freshwater Impoundment" means an impoundment used for the retention of fresh water and into which no wastes of any kind are placed;

(5) "Horizontal drilling" means a method of drilling a well for the production of natural gas that is intended to maximize the length

of wellbore that is exposed to the formation and in which the wellbore is initially vertical but is eventually curved to become horizontal, or nearly horizontal, to parallel a particular geologic formation;

(6) "Horizontal well" means any well site, other than a coalbed methane well, drilled using a horizontal drilling method, and which disturbs three acres or more of surface, excluding pipelines, gathering lines and roads, or utilizes more than two hundred ten thousand gallons of water in any thirty day period;

(7) "Impoundment" means a man-made excavation or diked area for the retention of fluids;

(8) "Karst terrain" means a terrain, generally underlain by limestone or dolomite, in which the topography is formed chiefly by the dissolving of rock, and which may be characterized by sinkholes, sinking streams, closed depressions, subterranean drainage and caves;

(9) "Perennial stream" means a stream or portion of a stream that flows year-round, is considered a permanent stream and for which base flow is maintained by ground-water discharge to the streambed due to the ground-water elevation adjacent to the stream being higher than the elevation of the streambed;

(10) "Pit" means a man-made excavation or diked area that contains or is intended to contain an accumulation of process waste fluids, drill cuttings or any other liquid substance generated in

the development of a horizontal well and which could impact surface or groundwater;

(11) "Secretary" means the Secretary of the Department of Environmental Protection as established in article one of this chapter or other person to whom the secretary has delegated authority or duties pursuant to sections six or eight, article one of this chapter; and

(12) "Water purveyor" means any person engaged in the business of selling water to another and who is regulated by the Bureau for Public Health pursuant to title sixty-four, series three of the West Virginia Code of State Rules.

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

(a) To the extent that horizontal wells governed by this article are similar to conventional oil and gas wells regulated under article six of this chapter, the following sections of article six of this chapter are hereby incorporated by reference in this article:

(1) The provisions of section three, article six of this chapter relating to the findings and orders of inspectors concerning violations, the determination of reasonable time for abatement, extensions of time for abatement, special inspections and notice of findings and orders;

(2) The provisions of section four, article six of this chapter

providing for the review of findings and orders by the secretary, special inspections and applications for annulment or revision of orders by the secretary;

(3) The provisions of section five, article six of this chapter relating to the requirements for findings, orders and notices, notice to the operator of findings and orders and judicial review of final orders of the secretary;

(4) The provisions of section seven, article six of this chapter relating to the issuance of water pollution control permits, the powers and duties of the secretary related thereto and penalties for violations of the same;

(5) The provisions of section eight, article six of this chapter relating to the prohibition of permits for wells on flat well royalty leases and requirements for permits;

(6) The provisions of section twelve, article six of this chapter pertaining to plats prerequisite to drilling or fracturing wells, the preparation and contents thereof, notice furnished to coal operators, owners or lessees, the issuance of permits and required performance bonds, with the following exceptions:

(A) Under subsection (a), section twelve, article six of this chapter, the plat also shall identify all surface tract boundaries within the scope of the plat proposed to be crossed by the horizontal lateral of the horizontal well and the proposed path of such

horizontal lateral, and

(B) Under subsection (b), section twelve, article six of this chapter, any reference to a time period shall be thirty days in lieu of fifteen days;

(7) The provisions of section thirteen, article six of this chapter providing for notice of the operator's intention to fracture wells, with the exception that under the third paragraph of section thirteen, article six of this chapter, the applicable periods shall be thirty days in lieu of fifteen days;

(8) The provisions of section fifteen, article six of this chapter pertaining to objections to proposed deep well drilling sites above seam or seams of coal, with the exception that the applicable time for filing objections is within thirty days of receipt by the secretary of the required plat and/or notice in lieu of fifteen days;

(9) The provisions of section seventeen, article six of this chapter pertaining to drilling of shallow gas wells, notice to be provided to the chair of the review board, orders issued by the review board and permits issued for such drilling, with the exception that the applicable time for filing objections is thirty days from the date of receipt by the secretary of the required plat and notice in lieu of fifteen days;

(10) The provisions of section eighteen, article six of this chapter providing for protective devices for when a well penetrates

one or more workable coal beds and when gas is found beneath or between workable coal beds;

(11) The provisions of section nineteen, article six of this chapter providing for protective devices during the life of the well and for dry or abandoned wells;

(12) The provisions of section twenty, article six of this chapter providing for protective devices when a well is drilled through the horizon of a coalbed from which the coal has been removed;

(13) The provisions of section twenty-one, article six of this chapter requiring the installation of fresh water casings;

(14) The provisions of section twenty-two, article six of this chapter relating to the filing of a well completion log and the contents thereof, confidentiality and permitted use and the secretary's authority to promulgate rules;

(15) The provisions of section twenty-seven, article six of this chapter regarding a cause of action for damages caused by an explosion;

(16) The provisions of section twenty-eight, article six of this chapter relating to supervision by the secretary over drilling and reclamation operations, the filing of complaints, hearings on the same and appeals;

(17) The provisions of section twenty-nine, article six of this chapter providing for the Operating Permit and Processing Fund, the

oil and gas reclamation fund and associated fees, with the exception that in the first paragraph of subsection (a), section twenty-nine, article six of this chapter, the fees to be credited to the Oil and Gas Operating Permit and Processing Fund are the permit fees collected pursuant to section seven of this article;

(18) The provisions of section thirty-one, article six of this chapter providing for preventing waste of gas, plans of operation for wasting gas in the process of producing oil and the secretary's rejection thereof;

(19) The provisions of section thirty-two, article six of this chapter pertaining to the right of an adjacent owner or operator to prevent waste of gas and the recovery of costs;

(20) The provisions of section thirty-three, article six of this chapter relating to circuit court actions to restrain waste;

(21) The provisions of section thirty-six, article six of this chapter providing for the declaration of oil and gas notice by owners and lessees of coal seams and setting out the form of such notice;

(22) The provisions of section thirty-nine, article six of this chapter relating to petitions for injunctive relief; and

(23) The provisions of section forty, article six of this chapter relating to appeals from orders issuing or refusing to issue a permit to drill or fracture, and the procedure therefore.

(b) Notwithstanding any other provision of this code to the

contrary, no provision of article six of this chapter shall apply to horizontal wells subject to this article except as expressly incorporated by reference in this article. Any conflict between the provisions of article six and the provisions of this article shall be resolved in favor of this article.

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

(a) The secretary is vested with jurisdiction over all aspects of this article, including, but not limited to, the following powers and duties:

(1) All powers and duties conferred upon the secretary pursuant to article six, chapter twenty-two of this code;

(2) To control and exercise regulatory authority over all gas operations regulated by this article;

(3) To utilize any oil and gas inspectors or other employees of the department in the enforcement of the provisions of this article;

(4) To propose any necessary legislative rules, in accordance with the provisions of chapter twenty-nine-a of this code to implement the provisions of this article;

(5) To make investigations and inspections necessary to ensure compliance with the provisions of this article;

(b) Except for the duties and obligations conferred by statute

upon the shallow gas well review board pursuant to article eight, chapter twenty-two-c of this code, the coalbed methane review board pursuant to article twenty-one of this chapter, and the oil and gas conservation commission pursuant to article nine, chapter twenty-two-c of this code, the secretary has sole and exclusive authority to regulate the permitting, location, spacing, drilling, fracturing, stimulation, well completion activities, operation, any and all other drilling and production processes, plugging and reclamation of oil and gas wells and production operations within the state.

(c) The secretary shall, on a monthly basis, make a written report to the Governor disclosing, for all well work permits issued in a particular month, the average number of days elapsed between the date on which a complete application for a well work permit was filed and the date on which such well work permit was issued. This report shall be posted to the website required to be established and maintained pursuant to section twenty-one of this article.

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

(a) It is unlawful for any person to commence any well work,

including site preparation work which involves any disturbance of land, for a horizontal well without first securing from the secretary a well work permit pursuant to this article.

(b) Every permit application filed under this section shall be on a form as may be prescribed by the secretary, shall be verified and shall contain the following information:

(1) The names and addresses of (i) the well operator, (ii) the agent required to be designated under subsection (h) of this section and (iii) every person whom the applicant shall notify under any section of this article, together with a certification and evidence that a copy of the application and all other required documentation has been delivered to all such persons;

(2) The names and addresses of every coal operator operating coal seams under the tract of land on which the well is or may be located, and the coal seam owner of record and lessee of record required to be given notice by subdivision (6), subsection (a), section five of this article, if any, if said owner or lessee is not yet operating said coal seams;

(3) The number of the well or such other identification as the secretary may require;

(4) The well work for which a permit is requested;

(5) The approximate total depth to which the well is to be drilled or deepened, or the actual depth if the well has been drilled;

the proposed angle and direction of the well; the actual depth or the approximate depth at which the well to be drilled deviates from vertical, the angle and direction of the nonvertical well bore until the well reaches its total target depth or its actual final depth and the length and direction of any actual or proposed horizontal lateral or well bore;

(6) Each formation in which the well will be completed if applicable;

(7) A description of any means used to stimulate the well;

(8) If the proposed well work will require casing or tubing to be set, the entire casing program for the well, including the size of each string of pipe, the starting point and depth to which each string is to be set and the extent to which each such string is to be cemented;

(9) If the proposed well work is to convert an existing well, all information required by this section, all formations from which production is anticipated and any plans to plug any portion of the well;

(10) If the proposed well work is to plug or replug the well, all information necessary to demonstrate compliance with the legislative rules promulgated by the secretary in accordance with section thirteen of this article;

(11) If the proposed well work is to stimulate a horizontal well,

all information necessary to demonstrate compliance with the requirements of subdivision (7), subsection (a), section five of this article;

(12) The erosion and sediment control plan required under subsection (c) of this section for applications for permits to drill;

(13) A well site safety plan to address proper safety measures to be employed for the protection of persons on the site as well as the general public. The plan shall encompass all aspects of the operation, including the actual well work for which the permit was obtained, completion activities and production activities, and shall provide an emergency point of contact for the well operator. The well operator shall provide a copy of the well site safety plan to the local emergency planning committee established pursuant to section seven, article five-a, chapter fifteen of this code, for the emergency planning district in which the well work will occur at least seven days before commencement of well work or site preparation work that involves any disturbance of land;

(14) A certification from the operator that (i) it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a result of giving the surface owner notice of entry to survey pursuant to subsection (a),

section ten of this article; or (iii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and

(15) Any other relevant information which the secretary may reasonably require.

(c)(1) An erosion and sediment control plan shall accompany each application for a well work permit under this article. The plan shall contain methods of stabilization and drainage, including a map of the project area indicating the amount of acreage disturbed. The erosion and sediment control plan shall meet the minimum requirements of the West Virginia Erosion and Sediment Control Manual as adopted and from time to time amended by the department. The erosion and sediment control plan shall become part of the terms and conditions of any well work permit that is issued pursuant to this article and the provisions of the plan shall be carried out where applicable in the operation. The erosion and sediment control plan shall set out the proposed method of reclamation which shall comply with the requirements of section fourteen of this article.

(2) For well sites that disturb three acres or more of surface, excluding pipelines, gathering lines and roads, the erosion and sediment control plan submitted in accordance with this section shall be certified by a registered professional engineer.

(d) For well sites that disturb three acres or more of surface,

excluding pipelines, gathering lines and roads, the operator shall submit a site construction plan that shall be certified by a registered professional engineer and contains information that the secretary may require by rule.

(e) In addition to the other requirements of this section, if the drilling, fracturing or stimulating of the horizontal well requires the use of water obtained by withdrawals from waters of this state in amounts that exceed two hundred ten thousand gallons during any thirty day period, the application for a well work permit shall include a water management plan, which may be submitted on an individual well basis or on a watershed basis, and which shall include the following information:

(1) The type of water source, such as surface or groundwater, the county of each source to be used by the operation for water withdrawals, and the latitude and longitude of each anticipated withdrawal location;

(2) The anticipated volume of each water withdrawal;

(3) The anticipated months when water withdrawals will be made;

(4) The planned management and disposition of wastewater after completion from fracturing, refracturing, stimulation and production activities;

(5) A listing of the anticipated additives that may be used in water utilized for fracturing or stimulating the well. Upon well

completion, a listing of the additives that were actually used in the fracturing or stimulating of the well shall be submitted as part of the completion log or report required by subdivision (14), subsection (a), section five of this article;

(6) For all surface water withdrawals, a water management plan that includes the information requested in subdivisions (1) through (5) of this subsection and the following:

(A) Identification of the current designated and existing water uses, including any public water intakes within one mile downstream of the withdrawal location;

(B) For surface waters, a demonstration, using methods acceptable to the secretary, that sufficient in-stream flow will be available immediately downstream of the point of withdrawal. A sufficient in-stream flow is maintained when a pass-by flow that is protective of the identified use of the stream is preserved immediately downstream of the point of withdrawal; and

(C) Methods to be used for surface water withdrawal to minimize adverse impact to aquatic life; and

(7) This subsection is intended to be consistent with and does not supersede, revise, repeal or otherwise modify articles eleven, twelve or twenty-six of this chapter and does not revise, repeal or otherwise modify the common law doctrine of riparian rights in West Virginia law.

(f) An application may propose and a permit may approve two or more activities defined as well work, however, a separate permit shall be obtained for each horizontal well drilled.

(g) The application for a permit under this section shall be accompanied by the applicable bond as required by section fifteen of this article, the applicable plat required by subdivision (6), subsection (a), section five of this article and a permit fee of \$10,000 for the initial horizontal well drilled at a location and a permit fee of \$5,000 for each additional horizontal well drilled on a single well pad at the same location.

(h) The well operator named in the application shall designate the name and address of an agent for the operator who is the attorney-in-fact for the operator and who is a resident of the State of West Virginia upon whom notices, orders or other communications issued pursuant to this article or article eleven of this chapter may be served, and upon whom process may be served. Every well operator required to designate an agent under this section shall, within five days after the termination of the designation, notify the secretary of the termination and designate a new agent.

(i) The well owner or operator shall install the permit number as issued by the secretary and a contact telephone number for the operator in a legible and permanent manner to the well upon completion of any permitted work. The dimensions, specifications, and manner

of installation shall be in accordance with the rules of the secretary.

(j) The secretary may waive the requirements of this section and sections eight, ten, eleven and twenty-four of this article in any emergency situation, if the secretary deems the action necessary. In such case the secretary may issue an emergency permit which is effective for not more than thirty days, unless reissued by the secretary.

(k) The secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

(1) In the event the secretary finds that a substantial violation has occurred and that the operator has failed to abate or seek review of the violation in the time prescribed, the secretary may suspend the permit on which said violation exists, after which

suspension the operator shall forthwith cease all well work being conducted under the permit. However, the secretary may reinstate the permit without further notice, at which time the well work may be continued. The secretary shall make written findings of any such suspension and may enforce the same in the circuit courts of this state. The operator may appeal a suspension pursuant to the provisions of subdivision (23), subsection (a), section five of this article. The secretary shall make a written finding of any such determination.

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

(a) The secretary shall review each application for a well work permit and shall determine whether or not a permit is issued.

(b) No permit may be issued less than thirty days after the filing date of the application for any well work except plugging or replugging; and no permit for plugging or replugging may be issued less than five days after the filing date of the application except a permit for plugging or replugging a dry hole: *Provided*, That if the applicant certifies that all persons entitled to notice of the application under the provisions of subsection (b), section ten of this article have been served in person or by certified mail, return receipt requested, with a copy of the well work application, including the erosion and sediment control plan, if required, and

the well plat, and further files written statements of no objection by all such persons, the secretary may issue the well work permit at any time.

(c) Prior to the issuance of any permit, the secretary shall ascertain from the Executive Director of Workforce West Virginia and the Insurance Commissioner whether the applicant is in default pursuant to the provisions of section six-c, article two, chapter twenty-one-a of this code, and in compliance with section five, article two, chapter twenty-three of this code, with regard to any required subscription to the Unemployment Compensation Fund or mandatory Workers' Compensation insurance, the payment of premiums and other charges to the fund, the timely filing of payroll reports and the maintenance of adequate deposits. If the applicant is delinquent or defaulted, or has been terminated by the executive director or the Insurance Commissioner, the permit may not be issued until the applicant returns to compliance or is restored by the executive director or the Insurance Commissioner under a reinstatement agreement: *Provided*, That in all inquiries the Executive Director of Workforce West Virginia and the Insurance Commissioner shall make response to the Department of Environmental Protection within fifteen calendar days; otherwise, failure to respond timely is considered to indicate the applicant is in compliance and the failure will not be used to preclude issuance of

the permit.

(d) The secretary may cause such inspections to be made of the proposed well work location as necessary to assure adequate review of the application. The permit may not be issued, or may be conditioned including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

(1) The proposed well work will constitute a hazard to the safety of persons;

(2) The plan for soil erosion and sediment control is not adequate or effective;

(3) Damage would occur to publicly owned lands or resources;
or

(4) The proposed well work fails to protect fresh water sources or supplies.

(e) In addition to the considerations set forth in subsection (d) of this section, in determining whether a permit should be issued, issued with conditions, or denied, the secretary shall determine that:

(1) The well location restrictions of section twelve of this article have been satisfied, unless the requirements have been waived by written consent of the surface owner or the secretary has granted a variance to the restrictions, each in accordance with section

twelve of this article;

(2) The water management plan submitted to the secretary, if required by subdivision (e), section seven of this article, has been received and approved.

(f) The secretary shall promptly review all written comments filed by persons entitled to notice pursuant to subsection (b), section ten of this article. If after review of the application and all written comments received from persons entitled to notice pursuant to subsection (b), section ten of this article, the application for a well work permit is approved, and no timely objection has been filed with the secretary by the coal operator operating coal seams beneath the tract of land, or the coal seam owner or lessee, if any, if said owner or lessee is not yet operating said coal seams, or made by the secretary under the provisions of section ten and eleven of this article, the permit shall be issued, with conditions, if any. This section does not supersede the provisions of section seven or subdivisions (6) through (9), subsection (a), section five of this article.

(g) Each permit issued by the secretary pursuant to this article shall require the operator at a minimum to:

(1) Plug all wells in accordance with the requirements of this article and the rules promulgated pursuant thereto when the wells become abandoned;

(2) With respect to disposal of cuttings at the well site, all drill cuttings and associated drilling mud generated from horizontal well sites shall be disposed of in an approved solid waste facility, or if the surface owner consents, the drill cuttings and associated drilling mud may be managed on-site in a manner approved by the secretary;

(3) Grade, terrace and plant, seed or sod the area disturbed that is not required in production of the horizontal well where necessary to bind the soil and prevent substantial erosion and sedimentation;

(4) Take action in accordance with industry standards to minimize fire hazards and other conditions which constitute a hazard to health and safety of the public;

(5) Protect the quantity and the quality of water in surface and groundwater systems both during and after drilling operations and during reclamation by: (A) Withdrawing water from surface waters of the state by methods deemed appropriate by the secretary, so as to maintain sufficient in-stream flow immediately downstream of the withdrawal location. In no case shall an operator withdraw water from ground or surface waters at volumes beyond which the waters can sustain; (B) Casing, sealing or otherwise managing wells to keep returned fluids from entering ground and surface waters; (C) Conducting oil and gas operations so as to prevent, to the extent possible using the best management practices, additional

contributions of suspended or dissolved solids to streamflow or runoff outside the permit area, but in no event shall the contributions be in excess of requirements set by applicable state or federal law; and (D) Registering all water supply wells drilled and operated by the operator with the Office of Oil and Gas. All drinking water wells within one thousand five hundred feet of a water supply well shall be flow and quality tested by the operator upon request of the drinking well owner prior to operating the water supply well. The secretary shall propose legislative rules to identify appropriate methods for testing water flow and quality.

(6) In addition to the other requirements of this subsection, an operator proposing to drill any horizontal well requiring the withdrawal of more than two hundred ten thousand gallons in a thirty day period shall have the following requirements added to its permit:

(A) Identification of water withdrawal locations. Within forty-eight hours prior to the withdrawal of water, the operator shall identify to the department the location of withdrawal by latitude and longitude and verify that sufficient flow exists to protect designated uses of the stream. The operator shall use methods deemed appropriate by the secretary to determine if sufficient flow exists to protect designated uses of the stream.

(B) Signage for water withdrawal locations. All water withdrawal locations and facilities identified in the water

management plan shall be identified with a sign that identifies that the location is a water withdrawal point, the name and telephone number of the operator and the permit numbers(s) for which the water withdrawn will be utilized.

(C) Recordkeeping and reporting. For all water used for hydraulic fracturing of horizontal wells and for flowback water from hydraulic fracturing activities and produced water from production activities from horizontal wells, an operator shall comply with the following record keeping and reporting requirements:

(i) For production activities, the following information shall be recorded and retained by the well operator:

(I) The quantity of flowback water from hydraulic fracturing the well;

(II) The quantity of produced water from the well; and

(III) The method of management or disposal of the flowback and produced water.

(ii) For transportation activities, the following information shall be recorded and maintained by the operator:

(I) The quantity of water transported;

(II) The collection and delivery or disposal locations of water;
and

(III) The name of the water hauling company.

(iii) The information maintained pursuant to this subdivision

shall be available for inspection by the department along with other required permits and records and maintained for three years after the water withdrawal activity.

(iv) This subdivision is intended to be consistent with and does not supersede, revise, repeal or otherwise modify articles eleven, twelve or twenty-six of this chapter and does not revise, repeal or otherwise modify the common law doctrine of riparian rights in West Virginia law.

(h) The secretary shall mail a copy of the permit as issued or a copy of the order denying a permit to any person entitled to submit written comments pursuant to subsection (a), section eleven of this article and who requested a copy.

(i) Upon the issuance of any permit pursuant to the provisions of this article, the secretary shall transmit a copy of the permit to the office of the assessor for the county in which the well is located.

§22-6A-9. Certificate of approval required for large pits or 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.

(a) The Legislature finds that large impoundments and pits (i.e. impoundments or pits with a capacity of two hundred ten thousand

gallons or more) not associated with a specific well work permit must be properly regulated and controlled. It is the intent of the Legislature by this section to provide for the regulation and supervision of large impoundments or pits not associated with a well work permit. This section does not apply to large pits or impoundments authorized under a well work permit.

(b) It is unlawful for any person to place, construct, enlarge, alter, repair, remove or abandon any freshwater impoundment or pit with capacity of two hundred ten thousand gallons or more used in association with any horizontal well operation until he or she has first secured from the secretary a certificate of approval for the same: *Provided*, That routine repairs that do not affect the safety of the impoundment are not subject to the application and approval requirements. A separate application for a certificate of approval shall be submitted by a person for each impoundment he or she desires to place, construct, enlarge, alter, repair, remove or abandon, but one application may be valid for more than one impoundment that supports one or more well pads.

(c) The application fee for placement, construction, enlargement, alteration, repair or removal of an impoundment pursuant to this section is \$300, and the fee shall accompany the application for certificate of approval. Operators holding certificates of approval shall be assessed an annual registration

fee of \$100, which is valid for more than one impoundment that supports one or more well pads.

(d) Any certificate of approval required by this section shall be issued or denied no later than sixty days from the submission of an application containing the information required by this section. However, if the application for a certificate of approval is submitted with the application for a horizontal well permit, the certificate shall be issued or denied no later than thirty days from the submission of the permit application.

(e) The initial term of a certificate of approval issued pursuant to this section is one year. Existing certificates of approval shall be extended for one year upon receipt of the annual registration fee, an inspection report, a monitoring and emergency action plan, and a maintenance plan: *Provided*, That where an approved, up-to-date inspection report, monitoring and emergency action plan, and maintenance plan are on file with the department, and where no outstanding violation of the requirements of the certificate of approval or any plan submitted pursuant to this article related to the impoundment exist, then the certificate of approval shall be extended without resubmission of the foregoing documents upon receipt of the annual registration fee.

(f) Every application for a certificate of approval shall be made in writing on a form prescribed by the secretary and shall be

signed and verified by the applicant. The application shall include a monitoring and emergency action plan and a maintenance plan, the required contents of which shall be established by the secretary by legislative rule. The application shall contain and provide information that may reasonably be required by the secretary to administer the provisions of this article.

(g) Plans and specifications for the placement, construction, erosion and sediment control, enlargement, alteration, repair or removal and reclamation of impoundments shall be the charge of a registered professional engineer licensed to practice in West Virginia. Any plans or specifications submitted to the department shall bear the seal of a registered professional engineer.

(h) Each certificate of approval issued by the secretary pursuant to the provisions of this article may contain other terms and conditions the secretary prescribes.

(i) The secretary may revoke or suspend any certificate of approval whenever the secretary determines that the impoundment for which the certificate was issued constitutes an imminent danger to human life or property. If necessary to safeguard human life or property, the secretary may also amend the terms and conditions of any certificate by issuing a new certificate containing the revised terms and conditions.

(1) Before any certificate of approval is amended, suspended

or revoked by the secretary without the consent of the operator holding the certificate, the secretary shall hold a hearing in accordance with the provisions of article five, chapter twenty-nine-a of this code.

(2) Any person adversely affected by an order entered following this hearing has the right to appeal to the Environmental Quality Board pursuant to the provisions of article one, chapter twenty-two-b of this code.

(j) Upon expiration of the certificate of approval, the operator shall within six months, or upon its revocation by the secretary, the operator shall within sixty days, fill all impoundments that are not required or allowed by state or federal law or rule or agreement between the operator and the surface owner allowing the impoundment to remain open for the use and benefit of the surface owner and reclaim the site in accordance with the approved erosion and sediment control plan.

(k) This section does not apply to:

(1) Farm ponds constructed by the operator with the written consent of the surface owner, which will be used after completion of the drilling activity primarily for agricultural purposes, including without limitation livestock watering, irrigation, retention of animal wastes and fish culture. Any impoundment that is intended to be left permanent as a farm pond under this subdivision

shall meet the requirements set forth by the United States Department of Agriculture's Natural Resources Conservation Service "Conservation Practice Standard - Ponds" (Code 378).

(2) Farm ponds subject to certificates of approval under article fourteen of this chapter.

(1) The secretary is authorized to propose rules for legislative approval in accordance with the provisions of article three, chapter twenty-nine-a of this code, necessary to effectuate the provisions of this section.

§22-6A-10. Notice to property owners.

(a) Prior to filing a permit application, the operator shall provide notice of planned entry on to the surface tract to conduct any plat surveys required pursuant to this article. Such notice shall be provided at least seven days but no more than forty-five days prior to such entry to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams beneath such tract that has filed a declaration pursuant to section thirty-six, article six, chapter twenty-two of this code; and (3) any owner of minerals underlying such tract in the county tax records. The notice shall include a statement that copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, which statement shall include contact information, including the address for a web page on the Secretary's website, to enable the surface owner to obtain copies from the secretary.

(b) No later than the filing date of the application, the

applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons:

(1) The owners of record of the surface of the tract on which the well is or is proposed to be located;

(2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article;

(3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located is known to be underlain by one or more coal seams;

(4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article;

(5) Any surface owner or water purveyor who is known to the

applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and

(6) The operator of any natural gas storage field within which the proposed well work activity is to take place.

(c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code.

(2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner.

(d) With respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, notification shall be made on forms and in a manner prescribed by the secretary sufficient to identify, for those persons, the rights afforded them under sections eleven and twelve of this article, and the opportunity for testing their water well.

(e) Prior to filing an application for a permit for a horizontal well under this article, the applicant shall publish in the county

in which the well is located or is proposed to be located a Class II legal advertisement as described in section two, article three, chapter fifty-nine of this code, containing notice of the public website required to be established and maintained pursuant to section twenty-one of this article and language indicating the ability of the public to submit written comments on the proposed permit, with the first publication date being at least ten days prior to the filing of the permit application. The secretary shall consider, in the same manner required by subsection (f), section eight of this article and subdivision one, subsection (c), section eleven of this article, written comments submitted in response to the legal advertisement received by the secretary within thirty days following the last required publication date: *Provided*, That such parties submitting written comments pursuant to this subsection are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and incorporated into this article by section five of this article.

(f) Materials served upon persons described in subsection (b) of this section shall contain a statement of the time limits for filing written comments, who may file written comments, the name and address of the secretary for the purpose of filing the comments and obtaining additional information, and a statement that the persons

may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

(g) Any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application.

(h) The surface owners described in subdivisions (1), (2) and (4), subsection (b) of this section, and the coal owner, operator or lessee described in subdivision (3) of that subsection is also entitled to receive notice within seven days but no less than two days before commencement that well work or site preparation work that involves any disturbance of land is expected to commence.

(i) Persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments.

(j) (1) Prior to conducting any seismic activity for seismic exploration for natural gas to be extracted using horizontal drilling

methods, the company or person performing the activity shall provide notice to Miss Utility of West Virginia Inc. and to all surface owners, coal owners and lessees, and natural gas storage field operators on whose property blasting, percussion or other seismic-related activities will occur.

(2) The notice shall be provided at least three days prior to commencement of the seismic activity.

(3) The notice shall also include a reclamation plan in accordance with the erosion and sediment control manual that provides for the reclamation of any areas disturbed as a result of the seismic activity, including filling of shotholes used for blasting.

(4) Nothing in this subsection decides questions as to whether seismic activity may be secured by mineral owners, surface owners or other ownership interests.

§22-6A-10a. Method of Delivery of Notice.

Notwithstanding any provision of this article to the contrary, all notices required by this article shall be delivered by the method set forth in subsection (b), section ten of this article, which notice shall provide that further information may be obtained from the department's website.

§22-6A-11. Procedure for filing written comments; procedures for considering objections and comments; issues to be considered; and newspaper notice.

(a) All persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary.

(b) The applicant shall tender proof of and certify to the secretary that the notice requirements of section ten of this article have been completed by the applicant. The certification of notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

(c) (1) The secretary shall promptly review all written comments filed by the persons entitled to notice under subsection (b), section ten of this article. The secretary shall notify the applicant of the character of the written comments submitted no later than fifteen days after the close of the comment period.

(2) Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and

proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

(3) The secretary shall retain all applications, plats and other documents filed with the secretary, any proposed revisions thereto, all notices given and proof of service thereof and all orders issued and all permits issued. Subject to the provisions of article one, chapter twenty-nine-b of this code, the record prepared by the secretary is open to inspection by the public.

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

(a) Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior

to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements.

(b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No wellpad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows:

(1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir.

(2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake.

(3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary.

(c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section.

(d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted or has an application pending prior to the effective date of this article.

(e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding

occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

§22-6A-13. Plugging of horizontal wells.

The secretary shall propose legislative rules for promulgation to govern the procedures for plugging horizontal wells, including rules relating to the methods of plugging the wells and the notices required to be provided in connection with plugging the wells.

§22-6A-14. Reclamation requirements.

(a) The operator of a horizontal well shall reclaim the land surface within the area disturbed in siting, drilling, completing or producing the well in accordance with the following requirements:

(1) Except as provided elsewhere in this article, within six months after a horizontal well is drilled and completed on a well pad designed for a single horizontal well, the operator shall fill all the pits and impoundments that are not required or allowed by state or federal law or rule or agreement between the operator and the surface owner that allows the impoundment to remain open for the use and benefit of the surface owner (i.e. a farm pond as described in section nine of this article) and remove all concrete bases,

drilling supplies and drilling equipment: *Provided*, That impoundments or pits for which certificates have been approved pursuant to section nine of this article shall be reclaimed at a time and in a manner as provided in the applicable certificate and section nine. Within that six-month period, the operator shall grade or terrace and plant, seed or sod the area disturbed that is not required in production of the horizontal well in accordance with the erosion and sediment control plan. No pit may be used for the ultimate disposal of salt water. Salt water and oil shall be periodically drained or removed and properly disposed of from any pit that is retained so the pit is kept reasonably free of salt water and oil. Pits may not be left open permanently.

(2) For well pads designed to contain multiple horizontal wells, partial reclamation shall begin upon completion of the construction of the well pad. For purposes of this section, the term partial reclamation means grading or terracing and planting, or seeding the area disturbed that is not required in drilling, completing or producing any of the horizontal wells on the well pad in accordance with the erosion and sediment control plan. This partial reclamation satisfies the reclamation requirements of this section for a maximum of twenty-four months between the drilling of horizontal wells on a well pad designed to contain multiple horizontal wells: *Provided*, That the maximum aggregate period in

which partial reclamation satisfies the reclamation requirements of this section is five years from completion of the construction of the well pad. Within six months after the completion of the final horizontal well on the pad or the expiration of the five-year maximum aggregate partial reclamation period, whichever occurs first, the operator shall complete final reclamation of the well pad as set forth in this subsection.

(3) Within six months after a horizontal well that has produced oil or gas is plugged or after the plugging of a dry hole, the operator shall remove all production and storage structures, supplies and equipment and any oil, salt water and debris and fill any remaining excavations. Within that six-month period, the operator shall grade or terrace and plant, seed or sod the area disturbed where necessary to bind the soil and prevent substantial erosion and sedimentation.

(4) The operator shall reclaim the area of land disturbed in siting, drilling, completing or producing the horizontal well in accordance with the erosion and sediment control plans approved by the secretary or the secretary's designee pursuant to this article.

(b) The secretary, upon written application by an operator showing reasonable cause, may extend the period within which reclamation must be completed, but not to exceed a further six-month period. If the secretary refuses to approve a request for extension, the refusal shall be by order, which may be appealed pursuant to the

provisions of subdivision twenty-three, subsection (a), section five of this article.

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

(a) No permit may be issued pursuant to this article unless a bond as described in subsection (d) of this section which is required for a particular activity by this article is or has been furnished as provided in this section.

(b) A separate bond as described in subsection (d) of this section may be furnished for each horizontal well drilled. Each of these bonds shall be in the sum of \$50,000 payable to the State of West Virginia, conditioned on full compliance with all laws, rules relating to the drilling, redrilling, deepening, casing and stimulating of horizontal wells and to the plugging, abandonment and reclamation of horizontal wells and for furnishing reports and information required by the secretary.

(c) When an operator makes or has made application for permits to drill or stimulate a number of horizontal wells, the operator may, in lieu of furnishing a separate bond, furnish a blanket bond in the sum of \$250,000 payable to the State of West Virginia, and conditioned as provided in subsection (b) of this section.

(d) The form of the bond required by this article shall be approved by the secretary and may include, at the option of the operator, surety bonding, collateral bonding, including cash and

securities, letters of credit, establishment of an escrow account, self-bonding or a combination of these methods. If collateral bonding is used, the operator may elect to deposit cash, or collateral securities or certificates as follows: Bonds of the United States or its possessions, of the federal land bank, or of the homeowners' loan corporation; full faith and credit general obligation bonds of the State of West Virginia or other states or of any county, district or municipality of the State of West Virginia or other states; or certificates of deposit in a bank in this state, which certificates shall be in favor of the department. The cash deposit or market value of the securities or certificates shall be equal to or greater than the amount of the bond. The secretary shall, upon receipt of any deposit of cash, securities or certificates, promptly place the same with the Treasurer of the State of West Virginia whose duty it is to receive and hold them in the name of the state in trust for the purpose of which the deposit is made when the permit is issued. The operator is entitled to all interest and income earned on the collateral securities filed by the operator. The operator making the deposit is entitled from time to time to receive from the State Treasurer, upon the written approval of the secretary, the whole or any portion of any cash, securities or certificates so deposited, upon depositing with the State Treasurer in lieu thereof, cash or other securities or certificates of the classes herein specified

having value equal to or greater than the amount of the bond.

(e) When an operator has furnished a separate bond from a corporate bonding or surety company to drill, fracture or stimulate a horizontal well and the well produces oil or gas or both, its operator may deposit with the secretary cash from the sale of the oil or gas or both until the total deposited is \$50,000. When the sum of the cash deposited is \$50,000, the separate bond for the well shall be released by the secretary. Upon receipt of that cash, the secretary shall immediately deliver that amount to the State Treasurer, who shall hold the cash in the name of the state in trust for the purpose for which the bond was furnished and the deposit was made. The operator is entitled to all interest and income which may be earned on the cash deposited so long as the operator is in full compliance with all laws and rules relating to the drilling, redrilling, deepening, casing, plugging, abandonment and reclamation of the well for which the cash was deposited and so long as the operator has furnished all reports and information required by the secretary. The secretary may establish procedures under which an operator may substitute a new bond for an existing bond or provide a new bond under certain circumstances specified in a legislative rule promulgated in accordance with chapter twenty-nine-a of this code.

(f) Any separate bond furnished for a particular well prior to

the effective date of this article continues to be valid for all work on the well permitted prior to the effective date of this article; but no permit may be issued on such a particular well without a bond complying with the provisions of this section. Any blanket bond furnished prior to the effective date of this article shall be replaced with a new blanket bond conforming to the requirements of this section, at which time the prior bond is discharged by operation of law; and if the secretary determines that any operator has not furnished a new blanket bond, the secretary shall notify the operator by registered mail or by any method of delivery that requires a receipt or signature confirmation of the requirement for a new blanket bond, and failure to submit a new blanket bond within sixty days after receipt of the notice from the secretary works a forfeiture under subsection (i) of this section of the blanket bond furnished prior to the effective date of this article.

(g) Any such bond shall remain in force until released by the secretary, and the secretary shall release the same upon satisfaction that the conditions thereof have been fully performed. Upon the release of that bond, any cash or collateral securities deposited shall be returned by the secretary to the operator who deposited it.

(h) (1) Whenever the right to operate a well is assigned or otherwise transferred, the assignor or transferor shall notify the department of the name and address of the assignee or transferee by

registered mail or by any method of delivery that requires a receipt or signature confirmation not later than thirty days after the date of the assignment or transfer. No assignment or transfer by the owner relieves the assignor or transferor of the obligations and liabilities unless and until the assignee or transferee files with the department the well name and the permit number of the subject well, the county and district in which the subject well is located, the names and addresses of the assignor or transferor, and assignee or transferee, a copy of the instrument of assignment or transfer accompanied by the applicable bond, cash, collateral security or other forms of security described in this section, and the name and address of the assignee's or transferee's designated agent if the assignee or transferee would be required to designate an agent under this article if the assignee or transferee were an applicant for a permit under this article. Every well operator required to designate an agent under this section shall, within five days after the termination of the designation, notify the department of the termination and designate a new agent.

(2) Upon compliance with the requirements of this section by the assignor or transferor and assignee or transferee, the secretary shall release the assignor or transferor from all duties and requirements of this article and shall give written notice of release to the assignor or transferor of any bond and return to the assignor

or transferor any cash or collateral securities deposited pursuant to this section.

(i) If any of the requirements of this article or rules promulgated pursuant thereto or the orders of the secretary has not been complied with within the time limit set by any notice of violation issued pursuant to this article, the performance bond shall then be forfeited.

(j) When any bond is forfeited pursuant to the provisions of this article or rules promulgated pursuant thereto, the secretary shall collect the forfeiture without delay.

(k) All forfeitures shall be deposited in the Treasury of the State of West Virginia in the Oil and Gas Reclamation Fund as defined in section twenty-nine, article six of this chapter.

§22-6A-16. Compensation of surface owners for drilling operations.

(a) The provisions of article seven of this chapter do not apply to horizontal wells governed by this article. In lieu thereof, the provisions of article six-b of this chapter shall provide for the compensation of surface owners for damage caused by drilling horizontal wells.

(b) At least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal

well: *Provided*, That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: *Provided, however*, That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

(c) No later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include:

- (1) A copy of this code section;
- (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and
- (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter.

(d) The notices required by this section shall be given to the

surface owner at the address listed in the records of the sheriff at the time of notice.

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

In addition to any compensation owed by the operator to the surface owner pursuant to the provisions of article six-b of this chapter, the operator shall pay the surface owner a one-time payment of \$2,500 to compensate for payment of real property taxes for surface lands and surrounding lands that are encumbered or disturbed by construction or operation of the horizontal well pad regardless of how many wells are drilled on a single pad or how many permits are issued for the pad.

§22-6A-18. Civil action for contamination or deprivation of fresh water source or supply; presumption; water rights and replacement; waiver of replacement.

(a) Nothing in this article affects in any way the rights of any person to enforce or protect, under applicable law, the person's interest in water resources affected by an oil or gas operation.

(b) Unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or

gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply.

(c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses:

(1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test.

(2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test.

(3) The water supply is not within one thousand five hundred feet of the well.

(4) The pollution occurred more than six months after completion of drilling or alteration activities.

(5) The pollution occurred as the result of some cause other than the drilling or alteration activity.

(d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary.

(e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner.

(f) The secretary may order the operator conducting the oil or gas operation to:

(1) Provide an emergency drinking water supply within twenty-four hours;

(2) Provide temporary water supply within seventy-two hours;

(3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and

(4) Pay all reasonable costs incurred by the real property owner in securing a water supply.

(g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court.

(h) The secretary shall propose rules for legislative approval in accordance with the provisions of article three, chapter twenty-nine-a of this code to implement the requirements of this section.

(i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

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

(a) Any person or persons, firm, partnership, partnership association or corporation who willfully violates any provision of this article or any rule or order promulgated under this article or any permit issued pursuant to this article is subject to a civil penalty not exceeding \$5,000. Each day a violation continues after notice by the department constitutes a separate offense. The penalty shall be recovered by a civil action brought by the department, in the name of the state, before the circuit court of the county in which

the subject well or facility is located. All the civil penalties collected shall be credited to the General Fund of the state.

(b) Notwithstanding the provisions of subsection (a) and (c) of this section, any person or persons, firm, partnership, partnership association or corporation who willfully disposes of waste fluids, drill cuttings or any other liquid substance generated in the development of a horizontal well in violation of this article or any rule or order promulgated under this article or in violation of any other state or federal statutes, rules or regulations, and which disposal was found to have had a significant adverse environmental impact on surface or groundwater by the secretary, is subject to a civil penalty not exceeding \$100,000. The penalty shall be recovered by a civil action brought by the department, in the name of the state, before the circuit court of the county in which the subject well or facility is located. All the civil penalties collected shall be credited to the General Fund of the state.

(c) Notwithstanding the provisions of subsections (a) and (b) of this section, any person or persons, firm, partnership, partnership association or corporation willfully violating any of the provisions of this article which prescribe the manner of drilling and casing or plugging and filling any well or which prescribe the methods of conserving gas from waste, shall be guilty of a misdemeanor, and, upon conviction thereof shall be punished by a fine not exceeding five thousand dollars, or imprisonment in jail not exceeding twelve months, or both, in the discretion of the

court, and prosecution under this section may be brought in the name of the State of West Virginia in the court exercising criminal jurisdiction in the county in which the violation of such provisions of the article or terms of such order was committed, and at the instance and upon the relation of any citizens of this state.

(d) Any person who intentionally misrepresents any material fact in an application, record, report, plan or other document filed or required to be maintained under the provisions of this article or any rules promulgated by the secretary under this article shall be fined not less than \$1,000 nor more than \$10,000.

§22-6A-20. Division of Highways certification.

As part of the permit application for horizontal wells, the operator shall submit a letter of certification from the Division of Highways that the operator has, pursuant to the Division of Highways Oil and Gas Road Policy, entered into an agreement with the Division of Highways pertaining to the state local service roads associated with the proposed well work set forth in the permit application or has certified that no such agreement is required by the Oil and Gas Road Policy and the reasons therefor.

§22-6A-21. Establishment of public website information and electronic notification registry regarding horizontal well permit applications.

(a) No later than ninety days after the effective date of this article, the secretary shall establish resources on the department's

public website which will list searchable information related to all horizontal well applications filed in this state, including information sufficient to identify the county and approximate location of each horizontal well for which a permit application is filed, the referenced well application number, date of application, name of the applicant, and any written comments submitted by the public.

(b) The secretary shall also establish a registration and e-notification process by which individuals, corporations and agencies may register to receive electronic notice of horizontal well applications filings and notices, by county of interest. Once established, individuals, agencies and corporations interested who are properly registered to receive e-notices of filings and actions on horizontal well permits shall receive electronic notifications of applications and notices of permits issued for horizontal drilling in their designated county or counties of interest.

§22-6A-22. Air quality study and rulemaking.

The secretary shall, by July 1, 2013, report to the Legislature on the need, if any, for further regulation of air pollution occurring from well sites, including the possible health impacts, the need for air quality inspections during drilling, the need for inspections of compressors, pits and impoundments, and any other potential air quality impacts that could be generated from this type of drilling

activity that could harm human health or the environment. If he or she finds that specialized permit conditions are necessary, the secretary shall promulgate legislative rules establishing these new requirements.

§22-6A-23. Impoundment and pit safety study; rulemaking.

The secretary shall, by January 1, 2013, report to the Legislature on the safety of pits and impoundments utilized pursuant to section nine of this article including an evaluation of whether testing and special regulatory provision is needed for radioactivity or other toxins held in the pits and impoundments. Upon a finding that greater monitoring, safety and design requirements or other specialized permit conditions are necessary, the secretary shall propose for promulgation legislative rules establishing these new requirements.

§22-6A-24. Casing and cement standards.

(a) The operator may only drill through fresh groundwater zones in a manner that will minimize any disturbance of the zones. Further, the operator shall construct the well and conduct casing and cementing activities for all horizontal wells in a manner that will provide for control of the well at all times, prevent the migration of gas and other fluids into the fresh groundwater and coal seams, and prevent pollution of or diminution of fresh groundwater.

(b) The secretary shall propose legislative and emergency rules

in accordance with the provisions of article three, chapter twenty-nine-a of this code to carry out the purposes of this section.

(c) Rules promulgated by the secretary pursuant to this section shall include provisions to accomplish the following:

- (1) Effective control of the horizontal well by the operator;
- (2) Prevention of the migration of gas or other fluids into sources of fresh groundwater or into coal seams;
- (3) Prevention of pollution of or diminution of fresh groundwater;
- (4) Prevention of blowouts, explosions, or fires; and
- (5) Appropriate disposition of brines and discharges from the drilling or operation of horizontal well.

(d) Procedures for the filing, approval, and revision of casing program:

(1) The operator shall prepare a casing program demonstrating how the horizontal well is to be drilled, cased, and cemented. The program shall comply with rules promulgated by the secretary.

(2) The rules regarding the casing program shall require the following information:

(A) The anticipated depth and thickness of any producing formation, expected pressures, anticipated fresh groundwater zones, and the method or information by which the depth of the deepest fresh groundwater was determined;

(B) The diameter of the borehole;

(C) The casing type, whether the casing to be utilized is new or used, and the depth, diameter, wall thickness, and burst pressure rating for the casing;

(D) The cement type, yield, additives, and estimated amount of cement to be used;

(E) The estimated location of centralizers;

(F) The proposed borehole conditioning procedures; and

(G) Any alternative methods or materials required by the secretary as a condition of the well work permit.

(3) A copy of casing program shall be kept at the well site.

(4) Supervisory oil and gas inspectors and oil and gas inspectors may approve revisions to previously approved casing programs when conditions encountered during the drilling process so require: *Provided, That* any revisions to casing programs approved by inspectors as aforesaid shall ensure that the revised casing programs are at least as protective of the environment as the casing and cementing standards required by this section. Any revisions to the casing program made as a result of on-site modifications shall be documented in the program by the inspector approving the modification. The person making any revisions to the program shall initial and date the revisions and make the revised program available for inspection by the department.

(e) The rules promulgated by the secretary shall provide procedures for the following:

(1) Appropriate installation and use of conductor pipe, which shall be installed in a manner that prevents the subsurface infiltration of surface water or fluids;

(2) Installation of the surface and coal protection casing including remedial procedures addressing lost circulation during surface or coal casing;

(3) Installation of intermediate production casing;

(4) Correction of defective casing and cementing, including requirements that the operator report the defect to the secretary within twenty-four hours of discovery by the operator;

(5) Investigation of natural gas migration, including requirements that the operator promptly notify the secretary and conduct an investigation of the incident; and

(6) Any other procedure or requirements considered necessary by the secretary.

(f) *Minimum casing standards.*

(1) All casing installed in the well, whether new or used, shall have a pressure rating that exceeds the anticipated maximum pressure to which the casing will be exposed and meet appropriate nationally recognized standards.

(2) The casing shall be of sufficient quality and condition to

withstand the effects of tension and maintain its structural integrity during installation, cementing, and subsequent drilling and production operations.

(3) Centralizers shall be used, with the proper spacing for such well, during the casing installation to ensure that the casing is centered in the hole.

(4) Casing may not be disturbed for a period of at least eight hours after the completion of cementing operations.

(5) No gas or oil production or pressure may exist on the surface casing or the annulus or the coal protection casing annulus.

(g) *Minimum cement standards.*

(1) All cement used in the well must meet the appropriate nationally recognized standards and must secure the casing to the wellbore, isolate the wellbore from all fluids, contain all pressures during all phases of drilling and operation of the well, and protect the casing from corrosion and degradation.

(2) Cement used in conjunction with surface and coal protection casing must provide zonal isolation in the casing annulus.

(h) Notwithstanding the minimum casing and cementing standards set forth in subsections (f) and (g) of this section, the secretary may:

(1) Revise the casing and cementing standards applicable to horizontal wells from time to time through the legislative rulemaking

process so long as the revised casing and cementing standards are at least as protective of the environment; and

(2) Approve alternative casing programs submitted with applications for well work permits so long as the secretary determines that the casing program submitted with the application is at least as protective of the environment as the casing and cementing standards required by this section.

**ARTICLE 6B. OIL AND GAS HORIZONTAL WELL PRODUCTION DAMAGE
COMPENSATION.**

§22-6B-1. Legislative findings and purpose; applicability.

(a) The Legislature finds the following:

(1) Exploration for and development of oil and gas reserves in this state must coexist with the use, agricultural or otherwise, of the surface of certain land and that each constitutes a right equal to the other.

(2) The surface owner of lands on which horizontal wells are drilled shall be compensated for damages to the surface of the land pursuant to the provisions of this article.

(b) The Legislature declares that the public policy of this state shall be that the compensation and damages provided in this article for surface owners may not be diminished by any provision in a deed, lease or other contract of conveyance entered into after December 31, 2011.

(c) It is the purpose of this article to provide Constitutionally permissible protection and compensation to surface owners of lands on which horizontal wells are drilled from the burden resulting from drilling operations commenced after January 1, 2012. This article is to be interpreted in the light of the legislative intent expressed herein. This article shall be interpreted to benefit surface owners, regardless of whether the oil and gas mineral estate was separated from the surface estate and regardless of who executed the document which gave the oil and gas developer the right to conduct drilling operations on the land. Section four of this article shall be interpreted to benefit all persons.

(d) The provisions of this article apply to any natural gas well, other than a coalbed methane well, drilled using a horizontal drilling method, and which disturbs three acres or more of surface, excluding pipelines, gathering lines and roads or uses more than two hundred ten thousand gallons of water in any thirty-day period. Article seven of this chapter does not apply to any damages associated with the drilling of a horizontal well.

§22-6B-2. Definitions.

In this article:

(1) "Drilling operations" means the actual drilling or redrilling of a horizontal well commenced subsequent to the effective date of this article, and the related preparation of the drilling

site and access road, which requires entry, upon the surface estate;

(2) "Horizontal drilling" means a method of drilling a well for the production of natural gas that is intended to maximize the length of wellbore that is exposed to the formation and in which the wellbore is initially vertical but is eventually curved to become horizontal, or nearly horizontal, to parallel a particular geologic formation;

(3) "Horizontal well" means any well site, other than a coalbed methane well, drilled using a horizontal drilling method, and which disturbs three acres or more of surface, excluding pipelines, gathering lines and roads, or uses more than two hundred ten thousand gallons of water in any thirty-day period;

(4) "Oil and gas developer" means the person who secures the drilling permit required by article six-a of this chapter;

(5) "Person" means any natural person, corporation, firm, partnership, partnership association, venture, receiver, trustee, executor, administrator, guardian, fiduciary or other representative of any kind, and includes any government or any political subdivision or agency thereof;

(6) "Surface estate" means an estate in or ownership of the surface of a particular tract of land overlying the oil or gas leasehold being developed; and

(7) "Surface owner" means a person who owns an estate in fee in the surface of land, either solely or as a co-owner.

§22-6B-3. Compensation of surface owners for drilling operations.

(a) The oil and gas developer is obligated to pay the surface owner compensation for:

(1) Lost income or expenses incurred as a result of being unable to dedicate land actually occupied by the driller's operation, or to which access is prevented by the drilling operation, to the uses to which it was dedicated prior to commencement of the activity for which a permit was obtained, measured from the date the operator enters upon the land and commences drilling operations until the date reclamation is completed;

(2) The market value of crops, including timber, destroyed, damaged or prevented from reaching market;

(3) Any damage to a water supply in use prior to the commencement of the permitted activity;

(4) The cost of repair of personal property up to the value of replacement by personal property of like age, wear and quality; and

(5) The diminution in value, if any, of the surface lands and other property after completion of the surface disturbance done pursuant to the activity for which the permit was issued determined according to the market value of the actual use made thereof by the surface owner immediately prior to the commencement of the permitted activity.

The amount of damages may be determined by any formula mutually

agreeable between the surface owner and the oil and gas developer.

(b) Any reservation or assignment of the compensation provided in this section apart from the surface estate except to a tenant of the surface estate is prohibited.

(c) In the case of surface lands owned by more than one person as tenants in common, joint tenants or other co-ownership, any claim for compensation under this article shall be for the benefit of all co-owners. The resolution of a claim for compensation provided in this article operates as a bar to the assertion of additional claims under this section arising out of the same drilling operations.

§22-6B-4. Common law right of action preserved; offsets.

(a) Nothing in section three or elsewhere in this article diminishes in any way the common law remedies, including damages, of a surface owner or any other person against the oil and gas developer for the unreasonable, negligent or otherwise wrongful exercise of the contractual right, whether express or implied, to use the surface of the land for the benefit of the developer's mineral interest.

(b) An oil and gas developer is entitled to offset compensation agreed to be paid or awarded to a surface owner under section three of this article against any damages sought by or awarded to the surface owner through the assertion of common law remedies respecting the surface land actually occupied by the same drilling operation.

(c) An oil and gas developer is entitled to offset damages agreed to be paid or awarded to a surface owner through the assertion of common-law remedies against compensation sought by or awarded to the surface owner under section three of this article respecting the surface land actually occupied by the same drilling operation.

§22-6B-5. Notification of claim.

Any surface owner, to receive compensation under section three of this article, shall notify the oil and gas developer of the damages sustained by the person within two years after the date that the oil and gas developer files notice that final reclamation is commencing under section fourteen, article six-a of this chapter. The notice of reclamation shall be given to surface owners by registered or certified mail, return receipt requested, and is complete upon mailing. If more than three tenants in common or other co-owners hold interests in the lands, the oil and gas developer may give the notice to the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code or publish in the county in which the well is located or to be located a Class II legal advertisement as described in section two, article three, chapter fifty-nine of this code, containing the notice and information the secretary prescribes by rule.

§22-6B-6. Agreement; offer of settlement.

Unless the parties provide otherwise by written agreement, within sixty days after the oil and gas developer received the notification of claim specified in section five of this article, the oil and gas developer shall either make an offer of settlement to the surface owner seeking compensation, or reject the claim. The surface owner may accept or reject any offer so made: *Provided*, That the oil and gas developer may make a final offer within seventy-five days after receiving the notification of claim specified in section five of this article.

§22-6B-7. Rejection; legal action; arbitration; fees and costs.

(a) (1) Unless the oil and gas developer has paid the surface owner a negotiated settlement of compensation within seventy-five days after the date the notification of claim was mailed under section five of this article, the surface owner may, within eighty days after the notification mail date, either (i) Bring an action for compensation in the circuit court of the county in which the well is located; or (ii) elect instead, by written notice delivered by personal service or by certified mail, return receipt requested, to the designated agent named by the oil and gas developer under the provisions of section seven, article six-a of this chapter, to have his, her or its compensation finally determined by binding arbitration pursuant to article ten, chapter fifty-five of this code.

(2) Settlement negotiations, offers and counter-offers between

the surface owner and the oil and gas developer are not admissible as evidence in any arbitration or judicial proceeding authorized under this article, or in any proceeding resulting from the assertion of common law remedies.

(b) The compensation to be awarded to the surface owner shall be determined by a panel of three disinterested arbitrators. The first arbitrator shall be chosen by the surface owner in the party's notice of election under this section to the oil and gas developer; the second arbitrator shall be chosen by the oil and gas developer within ten days after receipt of the notice of election; and the third arbitrator shall be chosen jointly by the first two arbitrators within twenty days thereafter. If they are unable to agree upon the third arbitrator within twenty days, then the two arbitrators shall immediately submit the matter to the court under the provisions of section one, article ten, chapter fifty-five of this code, so that, among other things, the third arbitrator can be chosen by the judge of the circuit court of the county in which the surface estate lies.

(c) The following persons are considered interested and may not be appointed as arbitrators: Any person who is personally interested in the land on which horizontal drilling is being performed or has been performed, or in any interest or right therein, or in the compensation and any damages to be awarded therefor, or who is related by blood or marriage to any person having such personal interest,

or who stands in the relation of guardian and ward, master and servant, principal and agent, or partner, real estate broker, or surety to any person having such personal interest, or who has enmity against or bias in favor of any person who has such personal interest or who is the owner of, or interested in, the land or the oil and gas development of the land. A person is not considered interested or incompetent to act as arbitrator by reason of being an inhabitant of the county, district or municipal corporation in which the land is located, or holding an interest in any other land therein.

(d) The panel of arbitrators shall hold hearings and take testimony and receive exhibits necessary to determine the amount of compensation to be paid to the surface owner. However, no award of compensation may be made to the surface owner unless the panel of arbitrators has first viewed the surface estate in question. A transcript of the evidence may be made but is not required.

(e) Each party shall pay the compensation of the party's arbitrator and one half of the compensation of the third arbitrator, or each party's own court costs as the case may be.

§22-6B-8. Application of article.

The remedies provided by this article do not preclude any person from seeking other remedies allowed by law.

**CHAPTER 22C. ENVIRONMENTAL RESOURCES; BOARDS, AUTHORITIES,
COMMISSIONS AND COMPACTS.**

ARTICLE 8. SHALLOW GAS WELL REVIEW BOARD.

§22C-8-2. Definitions.

As used in this article:

(1) "Board" means the Shallow Gas Well Review Board provided for in section four of this article;

(2) "Chair" means the chair of the Shallow Gas Well Review Board provided for in section four of this article;

(3) "Coal operator" means any person who proposes to or does operate a coal mine;

(4) "Coal seam" and "workable coal bed" are interchangeable terms and mean any seam of coal twenty inches or more in thickness, unless a seam of less thickness is being commercially worked, or can in the judgment of the division foreseeably be commercially worked and will require protection if wells are drilled through it;

(5) "Commission" means the Oil and Gas Conservation Commission provided for in section four, article nine of this chapter;

(6) "Commissioner" means the Oil and Gas Conservation Commissioner provided for in section four, article nine of this chapter;

(7) "Correlative rights" means the reasonable opportunity of each person entitled thereto to recover and receive without waste the gas in and under a tract or tracts, or the equivalent thereof;

(8) "Deep well" means any well other than a shallow well or

coalbed methane well, drilled to a formation below the top of the uppermost member of the "Onondaga Group";

(9) "Division" means the state Department of Environmental Protection provided for in chapter twenty-two of this code;

(10) "Director" means the Secretary of the Department of Environmental Protection as established in article one, chapter twenty-two of this code or other person to whom the secretary delegates authority or duties pursuant to sections six or eight, article one, chapter twenty-two of this code;

(11) "Drilling unit" means the acreage on which the board decides one well may be drilled under section ten of this article;

(12) "Gas" means all natural gas and all other fluid hydrocarbons not defined as oil in subdivision (15) of this section;

(13) "Gas operator" means any person who owns or has the right to develop, operate and produce gas from a pool and to appropriate the gas produced therefrom either for that person or for that person and others. In the event that there is no gas lease in existence with respect to the tract in question, the person who owns or has the gas rights therein is considered a "gas operator" to the extent of seven-eighths of the gas in that portion of the pool underlying the tract owned by such person, and a "royalty owner" to the extent of one-eighth of the gas;

(14) "Just and equitable share of production" means, as to each

person, an amount of gas in the same proportion to the total gas production from a well as that person's acreage bears to the total acreage in the drilling unit;

(15) "Oil" means natural crude oil or petroleum 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 underground reservoir;

(16) "Owner" when used with reference to any coal seam, includes any person or persons who own, lease or operate the coal seam;

(17) "Person" means any natural person, corporation, firm, partnership, partnership association, venture, receiver, trustee, executor, administrator, guardian, fiduciary or other representative of any kind, and includes any government or any political subdivision or any agency thereof;

(18) "Plat" means a map, drawing or print showing the location of one or more wells or a drilling unit;

(19) "Pool" means an underground accumulation of gas in a single and separate natural reservoir (ordinarily a porous sandstone or limestone). It is characterized by a single natural-pressure system so that production of gas from one part of the pool tends to or does affect the reservoir pressure throughout its extent. A pool is bounded by geologic barriers in all directions, such as geologic

structural conditions, impermeable strata, and water in the formation, so that it is effectively separated from any other pools which may be present in the same district or in the same geologic structure;

(20) "Royalty owner" means any owner of gas in place, or gas rights, to the extent that such owner is not a gas operator as defined in subdivision (13) of this section;

(21) "Shallow well" means any gas well other than a coalbed methane well, drilled no deeper than one hundred feet below the top of the "Onondaga Group": *Provided*, That in no event may the "Onondaga Group" formation or any formation below the "Onondaga Group" be produced, perforated or stimulated in any manner;

(22) "Tracts comprising a drilling unit" means that all separately owned tracts or portions thereof which are included within the boundary of a drilling unit;

(23) "Well" means any shaft or hole sunk, drilled, bored or dug into the earth or into underground strata for the extraction, injection or placement of any liquid or gas, or any shaft or hole sunk or used in conjunction with the extraction, injection or placement. The term "well" does not include any shaft or hole sunk, drilled, bored or dug into the earth for the sole purpose of core drilling or pumping or extracting therefrom potable, fresh or usable water for household, domestic, industrial, agricultural or public

use; and

(24) "Well operator" means any person who proposes to or does locate, drill, operate or abandon any well.

ARTICLE 9. OIL AND GAS CONSERVATION.

§22C-9-2. Definitions.

(a) As used in this article:

(1) "Commission" means the Oil and Gas Conservation Commission and "commissioner" means the Oil and Gas Conservation Commissioner as provided for in section four of this article;

(2) "Director" means the Secretary of the Department of Environmental Protection and "chief" means the Chief of the Office of Oil and Gas;

(3) "Person" means any natural person, corporation, partnership, receiver, trustee, executor, administrator, guardian, fiduciary or other representative of any kind, and includes any government or any political subdivision or any agency thereof;

(4) "Operator" means any owner of the right to develop, operate and produce oil and gas from a pool and to appropriate the oil and gas produced therefrom, either for that person or for that person and others; in the event that there is no oil and gas lease in existence with respect to the tract in question, the owner of the oil and gas rights therein is the "operator" to the extent of seven-eighths of the oil and gas in that portion of the pool

underlying the tract owned by such owner, and as "royalty owner" as to one-eighth interest in such oil and gas; and in the event the oil is owned separately from the gas, the owner of the substance being produced or sought to be produced from the pool is the "operator" as to that pool;

(5) "Royalty owner" means any owner of oil and gas in place, or oil and gas rights, to the extent that the owner is not an operator as defined in subdivision (4) of this section;

(6) "Independent producer" means a producer of crude oil or natural gas whose allowance for depletion is determined under Section 613A of the federal Internal Revenue Code in effect on July 1, 1997;

(7) "Oil" means natural crude oil or petroleum 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 underground reservoir;

(8) "Gas" means all natural gas and all other fluid hydrocarbons not defined as oil in subdivision (7) of this section;

(9) "Pool" means an underground accumulation of petroleum or gas in a single and separate reservoir (ordinarily a porous sandstone or limestone). It is characterized by a single natural-pressure system so that production of petroleum or gas from one part of the pool affects the reservoir pressure throughout its extent. A pool

is bounded by geologic barriers in all directions, such as geologic structural conditions, impermeable strata, and water in the formations, so that it is effectively separated from any other pools that may be presented in the same district or on the same geologic structure;

(10) "Well" means any shaft or hole sunk, drilled, bored or dug into the earth or underground strata for the extraction of oil or gas;

(11) "Shallow well" means any well other than a coalbed methane well, drilled no deeper than one hundred feet below the top of the "Onondaga Group": *Provided*, That in no event may the "Onondaga Group" formation or any formation below the "Onondaga Group" be produced, perforated or stimulated in any manner;

(12) "Deep well" means any well, other than a shallow well or coalbed methane well, drilled to a formation below the top of the uppermost member of the "Onondaga Group;"

(13) "Drilling unit" means the acreage on which one well may be drilled;

(14) "Waste" means and includes:

(A) Physical waste, as that term is generally understood in the oil and gas industry;

(B) The locating, drilling, equipping, operating or producing of any oil or gas well in a manner that causes, or tends to cause,

a reduction in the quantity of oil or gas ultimately recoverable from a pool under prudent and proper operations, or that causes or tends to cause unnecessary or excessive surface loss of oil or gas; or

(C) The drilling of more deep wells than are reasonably required to recover efficiently and economically the maximum amount of oil and gas from a pool. Waste does not include gas vented or released from any mine areas as defined in section two, article one, chapter twenty-two-a of this code or from adjacent coal seams which are the subject of a current permit issued under article two of chapter twenty-two-a of this code: *Provided*, That this exclusion does not address ownership of the gas;

(15) "Correlative rights" means the reasonable opportunity of each person entitled thereto to recover and receive without waste the oil and gas in and under his tract or tracts, or the equivalent thereof; and

(16) "Just and equitable share of production" means, as to each person, an amount of oil or gas or both substantially equal to the amount of recoverable oil and gas in that part of a pool underlying the person's tract or tracts.

(b) Unless the context clearly indicates otherwise, the use of the word "and" and the word "or" are interchangeable, as, for example, "oil and gas" means oil or gas or both."