Horizontal Gas Wells

This Act establishes requirements for permits and regulatory rules governing drilling horizontal wells in the state. Specifically, it:

- requires permits for horizontal wells;
- establishes permit application requirements and contents for drilling horizontal wells;
- establishes application requirements and payment of fees;
- requires emergency and legislative rules pertaining to drilling such wells in karst formations;
- authorizes rules governing large pits and impoundment;
- addresses providing notice to property owners entering their property to survey or to conduct seismic activity related to such wells;
- provides for public notice and comments about proposed wells;
- establishes well location restrictions;
- requires a report to the legislature about noise, light dust and volatile organic compounds related to such wells;
- addresses guidelines and procedures to control and mitigate noise, light, dust and volatile organic compounds in relation to horizontal drilling activities;
- requires rules for plugging and abandonment of horizontal wells;
- establishes reclamation requirements;
- requires performance bonds or other security;
- provides for compensation for certain damages to certain surface owners;
- provides for reimbursement of property taxes to surface owners;
- provides for civil action, rebuttable presumption and relief for water contamination or deprivation;
- addresses water rights and replacement procedures;
- creates an Oil and Gas Horizontal Well Production Damage Compensation Act;
- defines terms; conditions and parameters for compensating surface owners for drilling operations;
- preserves common law right of action and providing offset for compensation or damages paid.

Submitted as:
West Virginia
HB 401 (Chapter 1, Acts, 4th Extraordinary Session, 2011)
Status: Enacted into law in 2011.

Suggested State Legislation

(Title, enacting clause, etc.)

Section 1. [Short Title.] This Act shall be cited as “The Horizontal Well Act.”

Section 2. [Definitions.] Unless the context clearly requires a different meaning, as used in this Act:

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 Act, best management practices also
include those practices and procedures set out in the [Erosion and Sediment Control Manual of the
office of oil and gas];

(2) “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;

(3) “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];

(4) “Department” means the [department of environmental protection];

(5) “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;

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

(7) “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;

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

(9) “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;

(10) “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;

(11) “Impoundment” means a man-made excavation or diked area for the retention of fluids;

(12) “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;

(13) “Oil and gas developer” means the person who secures the drilling permit required by
[insert citation];

(14) “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;

(15) “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;

(16) “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;

(17) “Secretary” means the [secretary of the department of environmental protection] as or
other person to whom the [secretary] has delegated authority or duties pursuant to [insert citation];

and

(18) “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

2014 Suggested State Legislation 133
(19) “Surface owner” means a person who owns an estate in fee in the surface of land, either solely or as a co-owner.

(20) “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 [insert citation].

Section 3. [Horizontal Well Location Restrictions.]

(a) Horizontal 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 by this Act or a notice of intent to drill a horizontal well was provided pursuant to this Act, 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 people 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 well pad 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 Act.

(e) The [secretary] shall, by [date], 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.

Section 4. [Horizontal Well Work Permits.]

(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 Act.

(b) 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 Act. 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 [insert citation].
(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].
(4) 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 Act 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 this Act, and the well plat to each of the following:

(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 this Act.
(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 this Act;
(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.

(d) 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 [insert citation].

(2) Notwithstanding any provision of this Act to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner.
(e) With respect to surface landowners or water purveyors, notification shall be made on forms and in a manner prescribed by the [secretary] sufficient to identify, for those people, the rights afforded them under [this Act], and the opportunity for testing their water well.

(f) Prior to filing an application for a permit for a horizontal well under this Act, 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 [insert citation], containing notice of the public website required to be established and maintained pursuant to this Act 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 [insert citation], 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 [insert citation].

(g) Materials served upon people 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 people qualified to test water.

(h) Any person entitled to submit written comments to the [secretary] pursuant to [this Act] 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.

(i) The surface owners, and the coal owner, operator or lessee described in this section 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.

(j) 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.

(k) (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 [insert utilities] 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 shot holes 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.

(l) Notwithstanding any provision of this Act to the contrary, all notices required by this Act shall be delivered by the method set forth in [insert citation] which notice shall provide that further information may be obtained from the [department’s] website.

(m) The applicant shall tender proof of and certify to the [secretary] that the notice requirements of section of this Act 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.
(n) All persons receiving notice under this section 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].

(o) (1) The [secretary] shall promptly review all written comments filed by the people 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.

Section 5. [Horizontal Well Permits.]

(a) 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 the well operator, the agent required to be designated under subsection (h) of this section and 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 [insert citation], 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 non-vertical 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 people 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 [insert citation], 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 Act. 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 [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 [insert citation].

(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 [insert citation] and does not revise, repeal or otherwise modify the common law doctrine of riparian rights in this state.

(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 [insert citation] 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 this state upon whom notices, orders or other communications issued pursuant to this Act or [insert citation] 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) 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.

Section 6. [Secretary of Department of Environmental Protection; Powers and Duties.]

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

(1) All powers and duties conferred upon the [secretary] pursuant to [insert citation]

(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 [insert citation], 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.

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

(e) The [secretary] shall promptly review all written comments filed by persons entitled to notice pursuant to [insert citation]. If after review of the application and all written comments received from people entitled to notice pursuant to [insert citation], 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 [insert citation], 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.

(f) 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 people entitled to notice of the application under the provisions of [insert citation] 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.

(g) 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.

(h) 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 [insert state], 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].

(i) 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 [insert state], and conditioned as provided in subsection (b) of this section.

(j) 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 [insert state] or other states or of any county, district or municipality of the [insert state] 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 [insert state] 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.

(k) 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.

(l) 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.

(m) 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.

(n) (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.

(o) 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.

(p) 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.

(q) All forfeitures shall be deposited in the Treasury of the [insert state] in the Oil and Gas
Reclamation Fund as defined in section twenty-nine, article six of this chapter.

(r) Prior to the issuance of any permit, the [secretary] shall ascertain from the [insert agency]
and the [insurance commissioner] whether the applicant is in default pursuant to the provisions of
insert citation], and in compliance 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 [insert agency] or
the [insurance commissioner], the permit may not be issued until the applicant returns to compliance
or is restored by the [insert agency] or the [insurance commissioner] under a reinstatement
agreement, provided that in all inquiries, the [insert agency] 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.

(s) 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.

(t) 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 [insert citation] 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 [insert citation];
(2) The water management plan submitted to the [secretary], if required by [insert citation], has been received and approved.

(u) Each permit issued by the [secretary] pursuant to this Act 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 [insert citation] and does not revise, repeal or otherwise modify the common law doctrine of riparian rights in state law.

(v) 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 [insert citation] and who requested a copy.

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

(x) 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].

(y) The [secretary] may waive the requirements of [insert citation] 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].

(z) 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 Act, 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.

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 this Act. The [secretary] shall make a written finding of any such determination.
Section 7. [Casing and Cement Standards.]

(a) An 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

(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.

Section 8. [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] of environmental protection 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 Act, the [secretary] of environmental protection, in consultation with the state geologist, shall propose emergency and legislative rules in accordance with the provisions of [insert citation] 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] of environmental protection] 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 of environmental protection] to prevent drilling in naturally occurring karst terrain.

Section 9. [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.

Section 10. [Plugging 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.

Section 11. [Certificates required for large pits or impoundment construction; annual
registration fees; application and terms; and other requirements.]

(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 [insert state]. 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 [insert citation]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.

(l) The secretary is authorized to propose rules for legislative approval in accordance with the provisions of [insert citation], necessary to effectuate the provisions of this section.

Section 12. [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.

Section 13. [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.

(d) Nothing in [insert citation] 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.

(e) An oil and gas developer is entitled to offset compensation agreed to be paid or awarded to a surface owner under [insert citation] 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.

(f) 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.

Section 14. [Compensation of surface owners for drilling operations; notification of claim.]

Any surface owner, to receive compensation under this Act, 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 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 [insert citation] or publish in the county
in which the well is located or to be located a Class II legal advertisement as described in [insert
citation], containing the notice and information the [secretary] prescribes by rule.

Section 15. [Agreement; offer of settlement.]
(a) Unless the parties provide otherwise by written agreement, within sixty days after the oil
and gas developer received the notification of claim specified in this Act, 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.
(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 [insert citation] 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.

Section 16. [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
[insert citation] 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 [insert citation], to have his, her or its compensation finally determined by binding
arbitration pursuant to [insert citation].

2014 Suggested State Legislation 151
(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 judiciary 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 [insert citation], 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.

Section 17. [Application of article.]
The remedies provided by this article do not preclude any person from seeking other remedies allowed by law.

Section 18. [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.

Section 19. [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 pre-alteration water well test.

(2) The landowner or water purveyor refused to allow the operator access to the
property to conduct a predrilling or pre-alteration 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
pre-alteration 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.

Section 20. [Air quality study and rulemaking.]

The [secretary] shall, by [insert date], 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.

Section 21. [Report to legislature.]
To assist in maximizing the economic opportunities available with horizontal drilling, the[council] established under the Act 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 this state, which
shall include:
   (A) The total number of jobs created;
   (B) The total payroll of all jobs created;
   (C) The average salary per job type;
   (D) The number of employees domiciled in this state;
   (E) An estimate of the total economic impact;
   (F) 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;
   (G) A review of number of jobs created for minorities based on race, ethnicity and
gender;
   (H) A review of number of jobs created for individuals re-employed from the state’s
   unemployment rosters;
   (I) A review of number of jobs created for returning veterans; and
   (J) A review of number of jobs created for legal residents and non-state residents.
   (K) To the extent permitted by federal law, and to the extent necessary for the[council] to comply with this section, the council, the Division of Labor, House and the Office of the
Insurance Commissioner may enter into agreements providing for the sharing of job data and related
information.

Section 22. [Impoundment and pit safety study; rulemaking.]
The[secretary] shall, by [insert date], 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.

Section 23. [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, 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 [insert state] 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.