

# 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 enter 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 \(Chapter 1, Acts, 4<sup>th</sup> Extraordinary Session, 2011\)](#)

Status: Enacted into law in 2011.

## Suggested State Legislation

(Title, enacting clause, etc.)

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

2

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

5           (1) “Best management practices” means schedules of activities, prohibitions of practices,  
6 maintenance procedures and other management practices established by the [department] to prevent

1 or reduce pollution of waters of this state. For purposes of this Act, best management practices also  
2 include those practices and procedures set out in the [Erosion and Sediment Control Manual of the  
3 office of oil and gas];

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

6 (3) “Deep well” means any well other than a shallow well or coalbed methane well, drilled to  
7 a formation below the top of the uppermost member of the [Onondaga Group];

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

9 (5) “Drilling operations” means the actual drilling or re-drilling of a horizontal well  
10 commenced subsequent to the effective date of this article, and the related preparation of the drilling  
11 site and access road, which requires entry, upon the surface estate;

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

14 (7) “Flowback Recycle Pit” means a pit used for the retention of flowback and freshwater  
15 and into which no other wastes of any kind are placed;

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

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

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

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

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

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

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

36 (15) “Person” means any natural person, corporation, firm, partnership, partnership  
37 association, venture, receiver, trustee, executor, administrator, guardian, fiduciary or other  
38 representative of any kind, and includes any government or any political subdivision or agency  
39 thereof;

40 (16) “Pit” means a man-made excavation or diked area that contains or is intended to contain  
41 an accumulation of process waste fluids, drill cuttings or any other liquid substance generated in the  
42 development of a horizontal well and which could impact surface or groundwater;

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

46 (18) “Surface estate” means an estate in or ownership of the surface of a particular tract of  
47 land overlying the oil or gas leasehold being developed; and

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

3 (20) “Water purveyor” means any person engaged in the business of selling water to another  
4 and who is regulated by the [Bureau for Public Health] pursuant to [insert citation].  
5

6 Section 3. [*Horizontal Well Location Restrictions.*]

7 (a) Horizontal wells may not be drilled within [two hundred fifty feet measured horizontally]  
8 from any existing water well or developed spring used for human or domestic animal consumption.  
9 The center of well pads may not be located within [six hundred twenty-five feet] of an occupied  
10 dwelling structure, or a building [two thousand five hundred square feet or larger] used to house or  
11 shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed  
12 springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of  
13 planned entry for surveying or staking as provided by this Act or a notice of intent to drill a  
14 horizontal well was provided pursuant to this Act, whichever occurs first, and to any dwelling under  
15 construction prior to that date. This limitation may be waived by written consent of the surface  
16 owner transmitted to the [department] and recorded in the real property records maintained by the  
17 clerk of the county commission for the county in which such property is located. Furthermore, the  
18 well operator may be granted a variance by the [secretary] from these distance restrictions upon  
19 submission of a plan which identifies the sufficient measures, facilities or practices to be employed  
20 during well site construction, drilling and operations. The variance, if granted, shall include terms  
21 and conditions the [department] requires to ensure the safety and protection of affected people and  
22 property. The terms and conditions may include insurance, bonding and indemnification, as well as  
23 technical requirements.

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

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

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

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

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

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

45 (e) The [secretary] shall, by [date], report to the [Legislature] on the noise, light, dust and  
46 volatile organic compounds generated by the drilling of horizontal wells as they relate to the well  
47 location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding,  
48 if any, by the [secretary] that the well location restrictions regarding occupied dwelling structures are  
49 inadequate or otherwise require alteration to address the items examined in the study required by this

1 subsection, the [secretary] shall have the authority to propose for promulgation legislative rules  
2 establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile  
3 organic compounds relating to drilling horizontal wells, including reasonable means of mitigating  
4 such factors, if necessary.

5  
6 Section 4. [*Horizontal Well Work Permits.*]

7 (a) It is unlawful for any person to commence any well work, including site preparation work  
8 which involves any disturbance of land, for a horizontal well without first securing from the  
9 [secretary] a well work permit pursuant to this Act.

10 (b) Prior to filing a permit application, the operator shall provide notice of planned entry on  
11 to the surface tract to conduct any plat surveys required pursuant to this Act. Such notice shall be  
12 provided at least [seven days but no more than forty-five days] prior to such entry to:

13 (1) The surface owner of such tract;

14 (2) To any owner or lessee of coal seams beneath such tract that has filed a  
15 declaration pursuant to [insert citation].

16 (3) Any owner of minerals underlying such tract in the county tax records. The notice  
17 shall include a statement that copies of the state [*Erosion and Sediment Control Manual*] and the  
18 statutes and rules related to oil and gas exploration and production may be obtained from the  
19 [secretary], which statement shall include contact information, including the address for a web page  
20 on the [secretary's] website, to enable the surface owner to obtain copies from the [secretary].

21 (c) No later than the filing date of the application, the applicant for a permit for any well  
22 work or for a certificate of approval for the construction of an impoundment or pit as required by this  
23 Act shall deliver, by personal service or by registered mail or by any method of delivery that requires  
24 a receipt or signature confirmation, copies of the application, the erosion and sediment control plan  
25 required by this Act, and the well plat to each of the following:

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

28 (2) The owners of record of the surface tract or tracts overlying the oil and gas  
29 leasehold being developed by the proposed well work, if the surface tract is to be used for roads or  
30 other land disturbance as described in the erosion and sediment control plan submitted pursuant to  
31 this Act.

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

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

38 (5) Any surface owner or water purveyor who is known to the applicant to have a  
39 water well, spring or water supply source located within one thousand five hundred feet of the center  
40 of the well pad which is used to provide water for consumption by humans or domestic animals; and

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

43 (d) (1) If more than [three tenants in common] or other co-owners of interests described  
44 in subsection (b) of this section hold interests in the lands, the applicant may serve the documents  
45 required upon the person described in the records of the sheriff required to be maintained pursuant to  
46 [insert citation].

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

1 (e) With respect to surface landowners or water purveyors, notification shall be made on  
2 forms and in a manner prescribed by the [secretary] sufficient to identify, for those people, the rights  
3 afforded them under [this Act], and the opportunity for testing their water well.

4 (f) Prior to filing an application for a permit for a horizontal well under this Act, the applicant  
5 shall publish in the county in which the well is located or is proposed to be located a [Class II legal  
6 advertisement] as described in [insert citation], containing notice of the public website required to be  
7 established and maintained pursuant to this Act and language indicating the ability of the public to  
8 submit written comments on the proposed permit, with the first publication date being at least [ten  
9 days] prior to the filing of the permit application. The [secretary] shall consider, in the same manner  
10 required by [insert citation], written comments submitted in response to the legal advertisement  
11 received by the [secretary] within [thirty days] following the last required publication date, provided  
12 that such parties submitting written comments pursuant to this subsection are not entitled to  
13 participate in the processes and proceedings that exist under [insert citation].

14 (g) Materials served upon people described in subsection (b) of this section shall contain a  
15 statement of the time limits for filing written comments, who may file written comments, the name  
16 and address of the [secretary] for the purpose of filing the comments and obtaining additional  
17 information, and a statement that the persons may request, at the time of submitting written  
18 comments, notice of the permit decision and a list of people qualified to test water.

19 (h) Any person entitled to submit written comments to the [secretary] pursuant to [this Act]  
20 shall also be entitled to receive from the [secretary] a copy of the permit as issued or a copy of the  
21 order modifying or denying the permit if the person requests receipt of them as a part of the written  
22 comments submitted concerning the permit application.

23 (i) The surface owners, and the coal owner, operator or lessee described in this section is also  
24 entitled to receive notice within [seven days but no less than two days] before commencement that  
25 well work or site preparation work that involves any disturbance of land is expected to commence.

26 (j) Persons entitled to notice pursuant to subsection (b) of this section may contact the  
27 [department] to ascertain the names and locations of water testing laboratories in the subject area  
28 capable and qualified to test water supplies in accordance with standard accepted methods. In  
29 compiling that list of names the [department] shall consult with the state [bureau for public health]  
30 and local health departments.

31 (k) (1) Prior to conducting any seismic activity for seismic exploration for natural gas to  
32 be extracted using horizontal drilling methods, the company or person performing the activity shall  
33 provide notice to [insert utilities] and to all surface owners, coal owners and lessees, and natural gas  
34 storage field operators on whose property blasting, percussion or other seismic-related activities will  
35 occur.

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

38 (3) The notice shall also include a reclamation plan in accordance with the [*Erosion*  
39 *and Sediment Control Manual*] that provides for the reclamation of any areas disturbed as a result of  
40 the seismic activity, including filling of shot holes used for blasting.

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

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

46 (m) The applicant shall tender proof of and certify to the [secretary] that the notice  
47 requirements of section of this Act have been completed by the applicant. The certification of notice  
48 to the person may be made by affidavit of personal service, the return receipt card or other postal  
49 receipt for certified mailing.

1 (n) All persons receiving notice under this section may file written comments with the  
2 [secretary] as to the location or construction of the applicant's proposed well work within [thirty  
3 days] after the application is filed with the [secretary].

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

8 (2) Any objections of the affected coal operators and coal seam owners and lessees  
9 shall be addressed through the processes and procedures that exist under sections fifteen, seventeen  
10 and forty, article six of this chapter, as applicable and as incorporated into this article by section five  
11 of this article. The written comments filed by the parties entitled to notice under subdivisions (1),  
12 (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the [secretary] in  
13 the permit issuance process, but the parties are not entitled to participate in the processes and  
14 proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as  
15 applicable and as incorporated into this article by section five of this article.

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

20  
21 Section 5. [*Horizontal Well Permits.*]

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

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

28 (2) The names and addresses of every coal operator operating coal seams under the  
29 tract of land on which the well is or may be located, and the coal seam owner of record and lessee of  
30 record required to be given notice by [insert citation], if any, if said owner or lessee is not yet  
31 operating said coal seams;

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

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

34 (5) The approximate total depth to which the well is to be drilled or deepened, or the  
35 actual depth if the well has been drilled; the proposed angle and direction of the well; the actual  
36 depth or the approximate depth at which the well to be drilled deviates from vertical, the angle and  
37 direction of the non-vertical well bore until the well reaches its total target depth or its actual final  
38 depth and the length and direction of any actual or proposed horizontal lateral or well bore;

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

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

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

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

47 (10) If the proposed well work is to plug or replug the well, all information necessary

1 to demonstrate compliance with the legislative rules promulgated by the [secretary] in accordance  
2 with section thirteen of this article;

3 (11) If the proposed well work is to stimulate a horizontal well, all information  
4 necessary to demonstrate compliance with the requirements of subdivision (7), subsection (a),  
5 section five of this article;

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

8 (13) A well site safety plan to address proper safety measures to be employed for the  
9 protection of people on the site as well as the general public. The plan shall encompass all aspects of  
10 the operation, including the actual well work for which the permit was obtained, completion  
11 activities and production activities, and shall provide an emergency point of contact for the well  
12 operator. The well operator shall provide a copy of the well site safety plan to the [local emergency  
13 planning committee] established pursuant [insert citation], for the emergency planning district in  
14 which the well work will occur at least seven days before commencement of well work or site  
15 preparation work that involves any disturbance of land;

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

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

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

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

35 (d) For well sites that disturb three acres or more of surface, excluding pipelines, gathering  
36 lines and roads, the operator shall submit a site construction plan that shall be certified by a  
37 registered professional engineer and contains information that the [secretary] may require by rule.

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

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

47 (2) The anticipated volume of each water withdrawal;

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

49 (4) The planned management and disposition of wastewater after completion from

1 fracturing, refracturing, stimulation and production activities;

2 (5) A listing of the anticipated additives that may be used in water utilized for  
3 fracturing or stimulating the well. Upon well completion, a listing of the additives that were actually  
4 used in the fracturing or stimulating of the well shall be submitted as part of the completion log or  
5 report required by subdivision (14), subsection (a), section five of this article;

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

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

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

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

16 (7) This subsection is intended to be consistent with and does not supersede, revise,  
17 repeal or otherwise modify [insert citation] and does not revise, repeal or otherwise modify the  
18 common law doctrine of riparian rights in this state.

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

21 (g) The application for a permit under this section shall be accompanied by the applicable  
22 bond as required by [insert citation] and a permit fee of [\$10,000] for the initial horizontal well  
23 drilled at a location and a permit fee of [\$5,000] for each additional horizontal well drilled on a  
24 single well pad at the same location.

25 (h) The well operator named in the application shall designate the name and address of an  
26 agent for the operator who is the attorney-in-fact for the operator and who is a resident of this state  
27 upon whom notices, orders or other communications issued pursuant to this Act or [insert citation]  
28 may be served, and upon whom process may be served. Every well operator required to designate an  
29 agent under this section shall, within [five days] after the termination of the designation, notify the  
30 [secretary] of the termination and designate a new agent.

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

37  
38 Section 6. [*Secretary of Department of Environmental Protection; Powers and Duties.*]

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

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

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

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

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



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

3 (b) Except for the duties and obligations conferred by statute upon the shallow gas well  
4 review board pursuant to article eight, chapter twenty-two-c of this code, the coalbed methane  
5 review board pursuant to article twenty-one of this chapter, and the oil and gas conservation  
6 commission pursuant to [insert citation], the [secretary] has sole and exclusive authority to regulate  
7 the permitting, location, spacing, drilling, fracturing, stimulation, well completion activities,  
8 operation, any and all other drilling and production processes, plugging and reclamation of oil and  
9 gas wells and production operations within the state.

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

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

17 (e) The [secretary] shall promptly review all written comments filed by persons entitled to  
18 notice pursuant to [insert citation]. If after review of the application and all written comments  
19 received from people entitled to notice pursuant to [insert citation], the application for a well work  
20 permit is approved, and no timely objection has been filed with the [secretary] by the coal operator  
21 operating coal seams beneath the tract of land, or the coal seam owner or lessee, if any, if said owner  
22 or lessee is not yet operating said coal seams, or made by the [secretary] under the provisions of  
23 [insert citation], the permit shall be issued, with conditions, if any. This section does not supersede  
24 the provisions of section seven or subdivisions (6) through (9), subsection (a), section five of this  
25 article.

26 (f) No permit may be issued less than [thirty days] after the filing date of the application for  
27 any well work except plugging or replugging; and no permit for plugging or replugging may be  
28 issued less than [five days] after the filing date of the application except a permit for plugging or  
29 replugging a dry hole, provided, that if the applicant certifies that all people entitled to notice of the  
30 application under the provisions of [insert citation] have been served in person or by certified mail,  
31 return receipt requested, with a copy of the well work application, including the erosion and  
32 sediment control plan, if required, and the well plat, and further files written statements of no  
33 objection by all such persons, the [secretary] may issue the well work permit at any time.

34  
35 (g) No permit may be issued pursuant to this article unless a bond as described in subsection  
36 (d) of this section which is required for a particular activity by this article is or has been furnished as  
37 provided in this section.

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

44 (i) When an operator makes or has made application for permits to drill or stimulate a  
45 number of horizontal wells, the operator may, in lieu of furnishing a separate bond, furnish a blanket  
46 bond in the sum of \$250,000 payable to the State of [insert state], and conditioned as provided in  
47 subsection (b) of this section.

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

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

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

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

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

46 (n) (1) Whenever the right to operate a well is assigned or otherwise transferred, the  
47 assignor or transferor shall notify the department of the name and address of the assignee or  
48 transferee by registered mail or by any method of delivery that requires a receipt or signature

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

12 (2) Upon compliance with the requirements of this section by the assignor or  
13 transferor and assignee or transferee, the [secretary] shall release the assignor or transferor from all  
14 duties and requirements of this article and shall give written notice of release to the assignor or  
15 transferor of any bond and return to the assignor or transferor any cash or collateral securities  
16 deposited pursuant to this section.

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

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

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

24 (r) Prior to the issuance of any permit, the [secretary] shall ascertain from the [insert agency]  
25 and the [insurance commissioner] whether the applicant is in default pursuant to the provisions of  
26 [insert citation], and in compliance with regard to any required subscription to the [Unemployment  
27 Compensation Fund] or mandatory [Workers' Compensation insurance], the payment of premiums  
28 and other charges to the fund, the timely filing of payroll reports and the maintenance of adequate  
29 deposits. If the applicant is delinquent or defaulted, or has been terminated by the [insert agency] or  
30 the [insurance commissioner], the permit may not be issued until the applicant returns to compliance  
31 or is restored by the [insert agency] or the [insurance commissioner] under a reinstatement  
32 agreement, provided that in all inquiries, the [insert agency] and the [insurance commissioner] shall  
33 make response to the [department of environmental protection] within [fifteen calendar days];  
34 otherwise, failure to respond timely is considered to indicate the applicant is in compliance and the  
35 failure will not be used to preclude issuance of the permit.

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

- 40 (1) The proposed well work will constitute a hazard to the safety of persons;
- 41 (2) The plan for soil erosion and sediment control is not adequate or effective;
- 42 (3) Damage would occur to publicly owned lands or resources; or
- 43 (4) The proposed well work fails to protect fresh water sources or supplies.

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

47 (1) The well location restrictions of [insert citation] have been satisfied, unless the  
48 requirements have been waived by written consent of the surface owner or the [secretary] has  
49 granted a variance to the restrictions, each in accordance with [insert citation];

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

3 (u) Each permit issued by the [secretary] pursuant to this Act shall require the operator at a  
4 minimum to:

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

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

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

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

16 (5) Protect the quantity and the quality of water in surface and groundwater systems  
17 both during and after drilling operations and during reclamation by:

18 (A) Withdrawing water from surface waters of the state by methods deemed  
19 appropriate by the [secretary], so as to maintain sufficient in-stream flow immediately downstream of  
20 the withdrawal location. In no case shall an operator withdraw water from ground or surface waters  
21 at volumes beyond which the waters can sustain;

22 (B) Casing, sealing or otherwise managing wells to keep returned fluids from  
23 entering ground and surface waters;

24 (C) Conducting oil and gas operations so as to prevent, to the extent possible  
25 using the best management practices, additional contributions of suspended or dissolved solids to  
26 streamflow or runoff outside the permit area, but in no event shall the contributions be in excess of  
27 requirements set by applicable state or federal law; and

28 (D) Registering all water supply wells drilled and operated by the operator  
29 with the [Office of Oil and Gas]. All drinking water wells within [one thousand five hundred feet] of  
30 a water supply well shall be flow and quality tested by the operator upon request of the drinking well  
31 owner prior to operating the water supply well. The [secretary] shall propose legislative rules to  
32 identify appropriate methods for testing water flow and quality.

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

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

41 (B) Signage for water withdrawal locations. All water withdrawal locations  
42 and facilities identified in the water management plan shall be identified with a sign that identifies  
43 that the location is a water withdrawal point, the name and telephone number of the operator and the  
44 permit numbers(s) for which the water withdrawn will be utilized.

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

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

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

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

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

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

10 (I) The quantity of water transported;

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

13 (III) The name of the water hauling company.

14 (iii) The information maintained pursuant to this subdivision shall be  
15 available for inspection by the [department] along with other required permits and records and  
16 maintained for three years after the water withdrawal activity.

17 (iv) This subdivision is intended to be consistent with and does not  
18 supersede, revise, repeal or otherwise [insert citation] and does not revise, repeal or otherwise  
19 modify the common law doctrine of riparian rights in state law.

20 (v) The [secretary] shall mail a copy of the permit as issued or a copy of the order denying a  
21 permit to any person entitled to submit written comments pursuant to subsection [insert citation] and  
22 who requested a copy.

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

26 (x) The well owner or operator shall install the permit number as issued by the [secretary]  
27 and a contact telephone number for the operator in a legible and permanent manner to the well upon  
28 completion of any permitted work. The dimensions, specifications, and manner of installation shall  
29 be in accordance with the rules of the [secretary].

30 (y) The [secretary] may waive the requirements of [insert citation] in any emergency  
31 situation, if the [secretary] deems the action necessary. In such case the secretary may issue an  
32 emergency permit which is effective for not more than [thirty days], unless reissued by the  
33 [secretary].

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

41 In the event the [secretary] finds that a substantial violation has occurred and that the  
42 operator has failed to abate or seek review of the violation in the time prescribed, the [secretary] may  
43 suspend the permit on which said violation exists, after which suspension the operator shall  
44 forthwith cease all well work being conducted under the permit. However, the [secretary] may  
45 reinstate the permit without further notice, at which time the well work may be continued. The  
46 [secretary] shall make written findings of any such suspension and may enforce the same in the  
47 circuit courts of this state. The operator may appeal a suspension pursuant to the provisions of this  
48 Act. The [secretary] shall make a written finding of any such determination.

49

1 Section 7. [*Casing and Cement Standards.*]

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

7 (b) The [secretary] shall propose legislative and emergency rules in accordance with the  
8 provisions of article three, chapter twenty-nine-a of this code to carry out the purposes of this  
9 section.

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

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

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

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

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

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

27 (B) The diameter of the borehole;

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

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

32 (E) The estimated location of centralizers;

33 (F) The proposed borehole conditioning procedures; and

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

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

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

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

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

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

3 (3) Installation of intermediate production casing;

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

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

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

9 (f) Minimum casing standards.

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

13 (2) The casing shall be of sufficient quality and condition to withstand the effects of  
14 tension and maintain its structural integrity during installation, cementing, and subsequent drilling  
15 and production operations.

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

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

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

22 (g) Minimum cement standards.

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

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

29 (h) Notwithstanding the minimum casing and cementing standards set forth in subsections

30 (1) Revise the casing and cementing standards applicable to horizontal wells from  
31 time to time through the legislative rulemaking process so long as the revised casing and cementing  
32 standards are at least as protective of the environment; and

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

37  
38 Section 8. [*Karst Terrain; Rulemaking.*]

39 (a) Because drilling horizontal wells in naturally occurring karst terrain may require  
40 precautions not necessary in other parts of the state, the [secretary] of environmental protection] may  
41 require additional safeguards to protect this geological formation. When drilling horizontal wells in  
42 naturally occurring karst terrain, such additional safeguards may include changing proposed well  
43 locations to avoid damage to water resources, special casing programs, and additional or special  
44 review of drilling procedures.

45 (b) In order to carry out the purposes of this Act, the [secretary] of environmental protection],  
46 in consultation with the state geologist, shall propose emergency and legislative rules in accordance  
47 with the provisions of [insert citation] to establish designated geographic regions of the state where  
48 the provisions of this section are applicable and to establish standards for drilling horizontal wells in

1 naturally occurring karst terrain. For horizontal wells drilled into naturally occurring karst terrain in  
2 such designated geographic regions, the rules shall, at a minimum:

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

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

10 (c) Nothing in this section allows the [department of environmental protection] to prevent  
11 drilling in naturally occurring karst terrain.

12  
13 Section 9. [*Reclamation requirements.*]

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

16 (1) Except as provided elsewhere in this article, within six months after a horizontal  
17 well is drilled and completed on a well pad designed for a single horizontal well, the operator shall  
18 fill all the pits and impoundments that are not required or allowed by state or federal law or rule or  
19 agreement between the operator and the surface owner that allows the impoundment to remain open  
20 for the use and benefit of the surface owner (i.e. a farm pond as described in section nine of this  
21 article) and remove all concrete bases, drilling supplies and drilling equipment: Provided, That  
22 impoundments or pits for which certificates have been approved pursuant to section nine of this  
23 article shall be reclaimed at a time and in a manner as provided in the applicable certificate and  
24 section nine. Within that six -month period, the operator shall grade or terrace and plant, seed or sod  
25 the area disturbed that is not required in production of the horizontal well in accordance with the  
26 erosion and sediment control plan. No pit may be used for the ultimate disposal of salt water. Salt  
27 water and oil shall be periodically drained or removed and properly disposed of from any pit that is  
28 retained so the pit is kept reasonably free of salt water and oil. Pits may not be left open  
29 permanently.

30 (2) For well pads designed to contain multiple horizontal wells, partial reclamation  
31 shall begin upon completion of the construction of the well pad. For purposes of this section, the  
32 term partial reclamation means grading or terracing and planting, or seeding the area disturbed that is  
33 not required in drilling, completing or producing any of the horizontal wells on the well pad in  
34 accordance with the erosion and sediment control plan. This partial reclamation satisfies the  
35 reclamation requirements of this section for a maximum of twenty-four months between the drilling  
36 of horizontal wells on a well pad designed to contain multiple horizontal wells, provided that the  
37 maximum aggregate period in which partial reclamation satisfies the reclamation requirements of  
38 this section is five years from completion of the construction of the well pad. Within six months after  
39 the completion of the final horizontal well on the pad or the expiration of the five-year maximum  
40 aggregate partial reclamation period, whichever occurs first, the operator shall complete final  
41 reclamation of the well pad as set forth in this subsection.

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



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

4 (b) The [secretary], upon written application by an operator showing reasonable cause, may  
5 extend the period within which reclamation must be completed, but not to exceed a further six-  
6 month period. If the [secretary] refuses to approve a request for extension, the refusal shall be by  
7 order, which may be appealed pursuant to the provisions of subdivision twenty-three, subsection (a),  
8 section five of this article.

9  
10 Section 10. [*Plugging horizontal wells.*]

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

14  
15 Section 11. [*Certificates required for large pits or impoundment construction; annual  
16 registration fees; application and terms; and other requirements.*]

17 (a) The Legislature finds that large impoundments and pits (i.e. impoundments or pits with a  
18 capacity of two hundred ten thousand gallons or more) not associated with a specific well work  
19 permit must be properly regulated and controlled. It is the intent of the Legislature by this section to  
20 provide for the regulation and supervision of large impoundments or pits not associated with a well  
21 work permit. This section does not apply to large pits or impoundments authorized under a well  
22 work permit.

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

31 (c) The application fee for placement, construction, enlargement, alteration, repair or removal  
32 of an impoundment pursuant to this section is \$300, and the fee shall accompany the application for  
33 certificate of approval. Operators holding certificates of approval shall be assessed an annual  
34 registration fee of \$100, which is valid for more than one impoundment that supports one or more  
35 well pads.

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

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

1 (f) Every application for a certificate of approval shall be made in writing on a form  
2 prescribed by the secretary and shall be signed and verified by the applicant. The application shall  
3 include a monitoring and emergency action plan and a maintenance plan, the required contents of  
4 which shall be established by the secretary by legislative rule. The application shall contain and  
5 provide information that may reasonably be required by the secretary to administer the provisions of  
6 this article.

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

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

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

18 (1) Before any certificate of approval is amended, suspended or revoked by the  
19 secretary without the consent of the operator holding the certificate, the secretary shall hold a  
20 hearing in accordance with the provisions of article five, chapter twenty-nine-a of this code.

21 (2) Any person adversely affected by an order entered following this hearing has the  
22 right to appeal to the Environmental Quality Board pursuant to the provisions of [insert citation]of  
23 this code.

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

29 (k) This section does not apply to:

30 (1) Farm ponds constructed by the operator with the written consent of the surface  
31 owner, which will be used after completion of the drilling activity primarily for agricultural  
32 purposes, including without limitation livestock watering, irrigation, retention of animal wastes and  
33 fish culture. Any impoundment that is intended to be left permanent as a farm pond under this  
34 subdivision shall meet the requirements set forth by the United States Department of Agriculture's  
35 Natural Resources Conservation Service "Conservation Practice Standard - Ponds" (Code 378).

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

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

40  
41 Section 12. *[Establishment of public website information and electronic notification registry*  
42 *regarding horizontal well permit applications.]*

43 (a) No later than ninety days after the effective date of this article, the [secretary] shall  
44 establish resources on the department's public website which will list searchable information related  
45 to all horizontal well applications filed in this state, including information sufficient to identify the  
46 county and approximate location of each horizontal well for which a permit application is filed, the  
47 referenced well application number, date of application, name of the applicant, and any written  
48 comments submitted by the public.

1 (b) The [secretary] shall also establish a registration and e-notification process by which  
2 individuals, corporations and agencies may register to receive electronic notice of horizontal well  
3 applications filings and notices, by county of interest. Once established, individuals, agencies and  
4 corporations interested who are properly registered to receive e-notices of filings and actions on  
5 horizontal well permits shall receive electronic notifications of applications and notices of permits  
6 issued for horizontal drilling in their designated county or counties of interest.  
7

8 Section 13. [*Compensation of surface owners for drilling operations.*]

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

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

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

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

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

21 (5) The diminution in value, if any, of the surface lands and other property after  
22 completion of the surface disturbance done pursuant to the activity for which the permit was issued  
23 determined according to the market value of the actual use made thereof by the surface owner  
24 immediately prior to the commencement of the permitted activity. The amount of damages may be  
25 determined by any formula mutually agreeable between the surface owner and the oil and gas  
26 developer.

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

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

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

38 (e) An oil and gas developer is entitled to offset compensation agreed to be paid or awarded  
39 to a surface owner under [insert citation] of this article against any damages sought by or awarded to  
40 the surface owner through the assertion of common law remedies respecting the surface land actually  
41 occupied by the same drilling operation.

42 (f) An oil and gas developer is entitled to offset damages agreed to be paid or awarded to a  
43 surface owner through the assertion of common-law remedies against compensation sought by or  
44 awarded to the surface owner under section three of this article respecting the surface land actually  
45 occupied by the same drilling operation.  
46

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

48 Any surface owner, to receive compensation under this Act, shall notify the oil and gas  
49 developer of the damages sustained by the person within two years after the date that the oil and gas

1 developer files notice that final reclamation is commencing under of this chapter. The notice of  
2 reclamation shall be given to surface owners by registered or certified mail, return receipt requested,  
3 and is complete upon mailing. If more than three tenants in common or other co-owners hold  
4 interests in the lands, the oil and gas developer may give the notice to the person described in the  
5 records of the sheriff required to be maintained pursuant to [insert citation] or publish in the county  
6 in which the well is located or to be located a Class II legal advertisement as described in [insert  
7 citation], containing the notice and information the [secretary] prescribes by rule.  
8

9 Section 15. [*Agreement; offer of settlement.*]

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

16 (b) At least ten days prior to filing a permit application, an operator shall, by certified mail  
17 return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the  
18 surface owner's land for the purpose of drilling a horizontal well: Provided, That notice given  
19 pursuant to [insert citation] of this article satisfies the requirements of this subsection as of the date  
20 the notice was provided to the surface owner: Provided, however, That the notice requirements of  
21 this subsection may be waived in writing by the surface owner. The notice, if required, shall include  
22 the name, address, telephone number, and if available, facsimile number and electronic mail address  
23 of the operator and the operator's authorized representative.

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

28 (1) A copy of this code section;

29 (2) The information required to be provided by subsection (b), section ten of this  
30 article to a surface owner whose land will be used in conjunction with the drilling of a horizontal  
31 well; and

32 (3) A proposed surface use and compensation agreement containing an offer of  
33 compensation for damages to the surface affected by oil and gas operations to the extent the damages  
34 are compensable under article six-b of this chapter.

35 (d) The notices required by this section shall be given to the surface owner at the address  
36 listed in the records of the sheriff at the time of notice.  
37

38 Section 16. [*Rejection; legal action; arbitration; fees and costs.*]

39 (a) (1) Unless the oil and gas developer has paid the surface owner a negotiated settlement of  
40 compensation within seventy-five days after the date the notification of claim was mailed under  
41 [insert citation] of this article, the surface owner may, within eighty days after the notification mail  
42 date, either:

43 (i) Bring an action for compensation in the circuit court of the county in which the  
44 well is located; or

45 (ii) elect instead, by written notice delivered by personal service or by certified mail,  
46 return receipt requested, to the designated agent named by the oil and gas developer under the  
47 provisions of [insert citation], to have his, her or its compensation finally determined by binding  
48 arbitration pursuant to [insert citation].

1 (2) Settlement negotiations, offers and counter-offers between the surface owner and  
2 the oil and gas developer are not admissible as evidence in any arbitration or judiciary proceeding  
3 authorized under this article, or in any proceeding resulting from the assertion of common law  
4 remedies.

5 (b) The compensation to be awarded to the surface owner shall be determined by a panel of  
6 three disinterested arbitrators. The first arbitrator shall be chosen by the surface owner in the party's  
7 notice of election under this section to the oil and gas developer; the second arbitrator shall be  
8 chosen by the oil and gas developer within ten days after receipt of the notice of election; and the  
9 third arbitrator shall be chosen jointly by the first two arbitrators within twenty days thereafter. If  
10 they are unable to agree upon the third arbitrator within twenty days, then the two arbitrators shall  
11 immediately submit the matter to the court under the provisions of [insert citation], so that, among  
12 other things, the third arbitrator can be chosen by the judge of the circuit court of the county in  
13 which the surface estate lies.

14 (c) The following persons are considered interested and may not be appointed as arbitrators:  
15 Any person who is personally interested in the land on which horizontal drilling is being performed  
16 or has been performed, or in any interest or right therein, or in the compensation and any damages to  
17 be awarded therefor, or who is related by blood or marriage to any person having such personal  
18 interest, or who stands in the relation of guardian and ward, master and servant, principal and agent,  
19 or partner, real estate broker, or surety to any person having such personal interest, or who has  
20 enmity against or bias in favor of any person who has such personal interest or who is the owner of,  
21 or interested in, the land or the oil and gas development of the land. A person is not considered  
22 interested or incompetent to act as arbitrator by reason of being an inhabitant of the county, district  
23 or municipal corporation in which the land is located, or holding an interest in any other land therein.

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

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

30  
31 Section 17. [*Application of article.*]

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

34  
35 Section 18. [*Reimbursement of property taxes of encumbered properties.*]

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

42  
43 Section 19. [*Civil action for contamination or deprivation of fresh water source or supply;  
44 presumption; water rights and replacement; waiver of replacement.*]

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

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

1 the drilling and the oil or gas well or either was the proximate cause of the contamination or  
2 deprivation of the fresh water source or supply.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

43  
44 Section 20. *[Air quality study and rulemaking.]*

45 The [secretary] shall, by [insert date], report to the Legislature on the need, if any, for further  
46 regulation of air pollution occurring from well sites, including the possible health impacts, the need  
47 for air quality inspections during drilling, the need for inspections of compressors, pits and  
48 impoundments, and any other potential air quality impacts that could be generated from this type of

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

4  
5 Section 21. *[Report to legislature.]*

6 To assist in maximizing the economic opportunities available with horizontal drilling, the  
7 [council] established under the Act shall make a report to the [Joint Committee on Government and  
8 Finance and the Legislative Oversight Commission on Education Accountability] on or before  
9 [November 1 of each year through 2016], detailing a comprehensive review of the direct and indirect  
10 economic impact of employers engaged in the production of horizontal wells in this state, which  
11 shall include:

- 12 (A) The total number of jobs created;
- 13 (B) The total payroll of all jobs created;
- 14 (C) The average salary per job type;
- 15 (D) The number of employees domiciled in this state;
- 16 (E) An estimate of the total economic impact;
- 17 (F) The council's recommendations for the establishment of an overall workforce  
18 investment public education agenda with goals and benchmarks toward maximizing job creation  
19 opportunities in the state;
- 20 (G) A review of number of jobs created for minorities based on race, ethnicity and  
21 gender;
- 22 (H) A review of number of jobs created for individuals re-employed from the state's  
23 unemployment rosters;
- 24 (I) A review of number of jobs created for returning veterans; and
- 25 (J) A review of number of jobs created for legal residents and non-state residents.
- 26 (K) To the extent permitted by federal law, and to the extent necessary for the  
27 [council] to comply with this section, the council, the Division of Labor, House and the Office of the  
28 Insurance Commissioner may enter into agreements providing for the sharing of job data and related  
29 information.

30  
31 Section 22. *[Impoundment and pit safety study; rulemaking.]*

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

38  
39 Section 23. *[Offenses; civil and criminal penalties.]*

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

47 (b) Notwithstanding the provisions of subsection (a) and (c) of this section, any person, firm,  
48 partnership, partnership association or corporation who willfully disposes of waste fluids, drill  
49 cuttings or any other liquid substance generated in the development of a horizontal well in violation

1 of this article or any rule or order promulgated under this article or in violation of any other state or  
2 federal statutes, rules or regulations, and which disposal was found to have had a significant adverse  
3 environmental impact on surface or groundwater by the [secretary], is subject to a civil penalty not  
4 exceeding \$100,000. The penalty shall be recovered by a civil action brought by the department, in  
5 the name of the state, before the circuit court of the county in which the subject well or facility is  
6 located. All the civil penalties collected shall be credited to the General Fund of the state.

7 (c) Notwithstanding the provisions of subsections (a) and (b) of this section, any person or  
8 persons, firm, partnership, partnership association or corporation willfully violating any of the  
9 provisions of this article which prescribe the manner of drilling and casing or plugging and filling  
10 any well or which prescribe the methods of conserving gas from waste, shall be guilty of a  
11 misdemeanor, and, upon conviction thereof shall be punished by a fine not exceeding five thousand  
12 dollars, or imprisonment in jail not exceeding twelve months, or both, in the discretion of the court,  
13 and prosecution under this section may be brought in the name of the [insert state] in the court  
14 exercising criminal jurisdiction in the county in which the violation of such provisions of the article  
15 or terms of such order was committed, and at the instance and upon the relation of any citizens of  
16 this state.

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