

WEST VIRGINIA LEGISLATURE

2024 REGULAR SESSION

Introduced

House Bill 4966

By Delegates Summers, Anderson, Zatezalo,
Barnhart, Cooper, Heckert, Riley, Fehrenbacher,
Street, and Foggin

[Introduced January 22, 2024; Referred to the
Committee on Energy and Manufacturing]

1 A BILL to amend and reenact §22-6-24 of the Code of West Virginia, 1931, as amended, relating to
 2 allowing for the plugging of oil and gas wells using subsurface monuments to reduce the
 3 burden on surface owner property.

Be it enacted by the Legislature of West Virginia:

**ARTICLE 6. OFFICE OF OIL AND GAS; OIL AND GAS WELLS; ADMINISTRATION;
 ENFORCEMENT.**

§22-6-24. Methods of plugging well.

1 Upon the abandonment or cessation of the operation of any well drilled for natural gas or
 2 petroleum, or drilled or converted for the introduction of pressure, whether liquid or gas, or for the
 3 introduction of liquid for the purposes provided for in section twenty-five of this article or for the
 4 disposal of pollutants or the effluent therefrom the well operator, at the time of such abandonment
 5 or cessation, shall fill and plug the well in the following manner:

6 (a) Where the well does not penetrate workable coal beds, it shall either be filled with mud,
 7 clay or other nonporous material from the bottom of the well to a point twenty feet above the top of
 8 its lowest oil, gas or water-bearing stratum; or a permanent bridge shall be anchored thirty feet
 9 below its lowest oil, gas or water-bearing stratum, and from such bridge it shall be filled with mud,
 10 clay or other nonporous material to a point twenty feet above such stratum; at this point there shall
 11 be placed a plug of cement or other suitable material which will completely seal the hole. Between
 12 this sealing plug and a point twenty feet above the next higher oil, gas or water-bearing stratum,
 13 the hole shall be filled, in the manner just described; and at such point there shall be placed
 14 another plug of cement or other suitable material which will completely seal the hole. In like
 15 manner the hole shall be filled and plugged, with reference to each of its oil, gas or water-bearing
 16 strata. However, whenever such strata are not widely separated and are free from water, they may
 17 be grouped and treated as a single sand, gas or petroleum horizon, and the aforesaid filling and
 18 plugging be performed as though there were but one horizon. After the plugging of all oil, gas or

19 water-bearing strata, as aforesaid, a cement plug shall be placed approximately ten feet below the
20 bottom of the largest casing in the well; from this point to the surface the well shall be filled with
21 mud, clay or other nonporous material, except that a final cement plug shall be installed from a
22 point one hundred feet below the surface to a point no less than 30" and no greater than 36" below
23 final grade elevation. Any remaining casing must be cut-off at the top of the cement and an
24 underground marker must be installed on the well. The marker must be a square steel plate a
25 minimum of one square foot in size containing the inscription of the well API number and be
26 permanently affixed to the top of the well. The permittee must file or cause to be filed in the county
27 clerk's office of the county in which the well is situated, location information for the plugged well as
28 described in sections 14 and 23 of this article, showing the location of the plugged well so that the
29 well may be located by subsequent purchasers of the property or other persons in perpetuity. The
30 information filed with the county clerk, along with proof of filing, must be submitted to the Office of
31 Oil and Gas with the plugging affidavit required under section 23 of this article. As an alternative to
32 the marker being below final grade elevation, the owner of the surface where the well is situated or
33 the owner of the coal penetrated by the well, may request installation of a monument above final
34 grade elevation. Such monument will be installed in a manner determined by the Office of Oil and
35 Gas. Such request (forms for which shall be provided by the Secretary) must be filed in writing with
36 the Secretary prior to the scheduled plugging of the well and must include the API number of the
37 well to be plugged and the name and address of the well operator. At the time such request is filed
38 with the Secretary, a copy of such request must also be mailed by registered or certified mail to the
39 well operator named in the request. In case any of the oil or gas-bearing strata in a well shall have
40 been shot, thereby creating cavities which cannot readily be filled in the manner above described,
41 the well operator shall, in addition to the foregoing, follow either of the following methods:
42 (1) Should the stratum which has been shot be the lowest one in the well, there shall be
43 placed, at the nearest suitable point, but not less than twenty feet above the stratum, a plug of
44 cement or other suitable material which will completely seal the hole. In the event, however, that

45 the shooting has been done above one or more oil or gas-bearing strata in the well, plugging in the
46 manner specified shall be done at the nearest suitable point, but not less than twenty feet below
47 and above the stratum shot; or

48 (2) When such cavity shall be in the lowest oil or gas-bearing stratum in the well, a liner
49 shall be placed which shall extend from below the stratum to a suitable point, but not less than
50 twenty feet above the stratum in which shooting has been done. In the event, however, that the
51 shooting has been done above one or more oil or gas-bearing strata in the well, the liner shall be
52 so placed that it will extend not less than twenty feet above, nor less than twenty feet below, the
53 stratum in which shooting has been done. Following the placing of the liner in the manner here
54 specified it shall be compactly filled with cement, mud, clay or other nonporous sealing material.

55 (b) Where the well penetrates one or more workable coal beds and a coal protection string
56 of casing has been circulated and cemented into the surface, the well shall be filled and securely
57 plugged in the manner provided in subdivision (a) of this section, except that expanding cement
58 shall be used instead of regular hydraulic cement, to a point approximately one hundred feet below
59 the bottom of the coal protection string of casing. From the point the well shall be plugged
60 according to the provisions in paragraph (1) or (2) below:

61 (1) A two hundred foot plug of expanding cement shall be placed in the well. From this
62 point, the well shall be filled with mud, clay or other nonporous material to a point one hundred feet
63 below the surface and a plug of cement shall be placed from the point one hundred feet below the
64 surface to ~~the surface with a monument installed therein extending thirty inches above ground~~
65 level a point no less than 30" and no greater than 36" below final grade elevation. Any remaining
66 casing must be cut-off at the top of the cement and an underground marker must be installed on
67 the well. The marker must be a square steel plate a minimum of one square foot in size containing
68 the inscription of the well API number and be permanently affixed to the top of the well. The
69 permittee must file or cause to be filed in the county clerk's office of the county in which the well is
70 situated, location information for the plugged well as described in section 23 of this article, showing

71 the location of the plugged well so that the well may be located by subsequent purchasers of the
72 property or other persons in perpetuity. The information filed with the county clerk, along with proof
73 of filing, must be submitted to the Office of Oil and Gas with the plugging affidavit required under
74 sections 14 and 23 of this article. As an alternative to the marker being below final grade elevation,
75 the owner of the surface where the well is situated or the owner of the coal penetrated by the well,
76 may request installation of a monument above final grade elevation. Such monument will be
77 installed in a manner determined by the Office of Oil and Gas. Such request (forms for which shall
78 be provided by the Secretary) must be filed in writing with the Secretary prior to the scheduled
79 plugging of the well and must include the API number of the well to be plugged and the name and
80 address of the well operator. At the time such request is filed with the Secretary, a copy of such
81 request must also be mailed by registered or certified mail to the well operator named in the
82 request.

83 (2) A one hundred foot plug of expanding cement shall be placed in the well so that the top
84 of such plug is located at a point just below the coal protection string of casing. After such plug has
85 been securely placed in the well, the coal protection string of casing shall be emptied of liquid from
86 the surface to a point one hundred feet below the lowest workable coal bed or to the bottom of the
87 coal protection string of casing, whichever is shallower. A vent or other device approved by the
88 secretary shall then be installed on the top of the coal protection string of casing in such a manner
89 that will prevent liquids and solids from entering the well but will permit ready access to the full
90 internal diameter of the coal protection string of casing when required. The coal protection string of
91 casing and the vent or other device approved by the secretary shall extend, when finally in place, a
92 distance of not less than thirty inches above ground level and shall be permanently marked with
93 the well number assigned by the secretary;

94 (c) Where the well penetrates one or more workable coal beds and a coal protection string
95 of casing has not been circulated and cemented into the surface, the well shall be filled and
96 securely plugged in the manner provided in subsection (a) of this section to a point fifty feet below

97 the lowest workable coal bed. Thereafter, a plug of cement shall be placed in the well at a point not
98 less than forty feet below the lowest workable coal bed. After the cement plug has been securely
99 placed in the well, the well shall be filled with cement to a point twenty feet above the lowest
100 workable coal bed. From this point the well shall be filled with mud, clay or other nonporous
101 material to a point forty feet beneath the next overlying workable coal bed, if such there be, and the
102 well shall then be filled with cement from this point to a point twenty feet above such workable coal
103 bed, and similarly, in case there are more overlying workable coal beds. After the filling and
104 plugging of the well to a point above the highest workable coal bed, filling and plugging of the well
105 shall continue in the manner provided in subsection (a) of this section to a point one hundred feet
106 below the surface, and a plug of cement shall be installed from the point one hundred feet below
107 the surface ~~to the surface with a monument installed therein extending thirty inches above ground~~
108 ~~level~~ a point no less than 30" and no greater than 36" below final grade elevation. Any remaining
109 casing must be cut-off at the top of the cement and an underground marker must be installed on
110 the well. The marker must be a square steel plate a minimum of one square foot in size containing
111 the inscription of the well API number and be permanently affixed to the top of the well. The
112 permittee must file or cause to be filed in the county clerk's office of the county in which the well is
113 situated, location information for the plugged well as described in section 23 of this article, showing
114 the location of the plugged well so that the well may be located by subsequent purchasers of the
115 property or other persons in perpetuity. The information filed with the county clerk, along with proof
116 of filing, must be submitted to the Office of Oil and Gas with the plugging affidavit required under
117 sections 14 and 23 of this article. As an alternative to the marker being below final grade elevation,
118 the owner of the surface where the well is situated or the owner of the coal penetrated by the well,
119 may request installation of a monument above final grade elevation. Such monument will be
120 installed in a manner determined by the Office of Oil and Gas. Such request (forms for which shall
121 be provided by the Secretary) must be filed in writing with the Secretary prior to the scheduled
122 plugging of the well and must include the API number of the well to be plugged and the name and

123 address of the well operator. At the time such request is filed with the Secretary, a copy of such
124 request must also be mailed by registered or certified mail to the well operator named in the
125 request;

126 (d)(1) Where the well penetrates one or more workable coal beds and a coal protection
127 string of casing has not been circulated and cemented into the surface, a coal operator or coal
128 seam owner may request that the well be plugged in the manner provided in subdivision (3) of this
129 subsection rather than by the method provided in subsection (c) of this section. Such request
130 (forms for which shall be provided by the secretary) must be filed in writing with the secretary prior
131 to the scheduled plugging of the well, and must include the number of the well to be plugged and
132 the name and address of the well operator. At the time such request is filed with the secretary, a
133 copy of such request must also be mailed by registered or certified mail to the well operator named
134 in the request.

135 (2) Upon receipt of such request, the secretary shall issue an order staying the plugging of
136 the well and shall promptly determine the cost of plugging the well in the manner provided in
137 subdivision (3) of this subsection and the cost of plugging the well in the manner provided in
138 subsection (c) of this section. In making such determination, the secretary shall take into
139 consideration any agreement previously made between the well operator and the coal operator or
140 coal seam owner making the request. If the secretary determines that the cost of plugging the well
141 in the manner provided in subsection (c) of this section exceeds the cost of plugging the well in the
142 manner provided in subdivision (3) of this subsection, the secretary shall grant the request of the
143 coal operator or owner and shall issue an order requiring the well operator to plug the well in the
144 manner provided in subdivision (3) of this subsection. If the secretary determines that the cost of
145 plugging the well in the manner provided in subsection (c) of this section is less than the cost of
146 plugging the well in the manner provided in subdivision (3) of this subsection, the secretary shall
147 request payment into escrow of the difference between the determined costs by the coal operator
148 or coal seam owner making the request. Upon receipt of satisfactory notice of such payment, or

149 upon receipt of notice that the well operator has waived such payment, the secretary shall grant
150 the request of the coal operator or coal seam owner and shall issue an order requiring the well
151 operator to plug the well in the manner provided in subdivision (3) of this subsection. If satisfactory
152 notice of payment into escrow, or notice that the well operator has waived such payment, is not
153 received by the secretary within fifteen days after the request for payment into escrow, the
154 secretary shall issue an order permitting the plugging of the well in the manner provided in
155 subsection (c) of this section. Copies of all orders issued by the secretary shall be sent by
156 registered or certified mail to the coal operator or coal seam owner making the request and to the
157 well operator. When the escrow agent has received certification from the secretary of the
158 satisfactory completion of the plugging work and the reimbursable extra cost thereof (that is, the
159 difference between the secretary's determination of plugging cost in the manner provided in
160 subsection (c) of this section and the well operator's actual plugging cost in the manner provided in
161 subdivision (3) of this subsection), the escrow agent shall pay the reimbursable sum to the well
162 operator or the well operator's nominee from the payment into escrow to the extent available. The
163 amount by which the payment into escrow exceeds the reimbursable sum plus the escrow agent's
164 fee, if any, shall be repaid to the coal owner. If the amount paid to the well operator or the well
165 operator's nominee is less than the actual reimbursable sum, the escrow agent shall inform the
166 coal owner, who shall pay the deficiency to the well operator or the well operator's nominee within
167 thirty days. If the coal operator breaches this duty to pay the deficiency, the well operator shall
168 have a right of action and be entitled to recover damages as if for wrongful conversion of
169 personality, and reasonable attorney fees.

170 (3) Where a request of a coal operator or coal seam owner filed pursuant to subdivision (1)
171 of this subsection has been granted by the secretary, the well shall be plugged in the manner
172 provided in subsection (a) of this section, except that expanding cement shall be used instead of
173 regular hydraulic cement, to a point approximately two hundred feet below the lowest workable
174 coal bed. A one hundred foot plug of expanding cement shall then be placed in the well beginning

175 at the point approximately two hundred feet below the lowest workable coal bed and extending to a
176 point approximately one hundred feet below the lowest workable coal bed. A string of casing with
177 an outside diameter no less than four and one-half inches shall then be run into the well to a point
178 approximately one hundred feet below the lowest workable coal bed and such string of casing
179 shall be circulated and cemented into the surface. The casing shall then be emptied of liquid from
180 a point approximately one hundred feet below the lowest workable coal bed to the surface, and a
181 vent or other device approved by the secretary shall be installed on the top of the string of casing in
182 such a manner that it will prevent liquids and solids from entering the well but will permit ready
183 access to the full internal diameter of the coal protection string of casing when required. The string
184 of casing and the vent or other device approved by the secretary shall extend, when finally in
185 place, a distance of no less than thirty inches above ground level and shall be permanently marked
186 with the well number assigned by the secretary. Notwithstanding the foregoing provisions of this
187 subdivision, if under particular circumstances a different method of plugging is required to obtain
188 the approval of another governmental agency for the safe mining through of said well, the
189 secretary may approve such different method of plugging if he or she finds the same to be as safe
190 for mining through and otherwise adequate to prevent gas or other fluid migration from the oil and
191 gas reservoirs as the method above specified.

192 (e) Notwithstanding anything in this section to the contrary, where the well to be plugged is
193 an abandoned well that has no known responsible party and the well operator is also a coal
194 operator that intends to mine through the well, the well shall, at a minimum, be plugged as
195 provided in subdivisions (1) and (2) of this subsection.

196 (1) The well will be cleaned out and prepared for plugging or replugging as follows:

197 (A) If the total depth of the well is less than four thousand feet, the operator shall
198 completely clean out the well from the surface to at least two hundred feet below the base of the
199 lowest workable coal bed, but the secretary may require cleaning to a greater depth due to
200 excessive pressure within the well. If the total depth of the well is four thousand feet or greater, the

201 operator shall completely clean out the well from the surface to at least four hundred feet below the
202 base of the lowest workable coal bed. The operator shall provide to the secretary all information it
203 possesses concerning the geological nature of the strata and the pressure of the well, and shall
204 remove all material from the entire diameter of the well, wall to wall;

205 (B) The operator shall prepare down-hole logs for each well. The logs shall consist of a
206 caliper survey and log(s) suitable for determining the top, bottom, and thickness of all coal seams
207 and potential hydrocarbon-producing strata, as well as the location for a bridge plug. The secretary
208 may approve the use of a down-hole camera survey in lieu of down-hole logs. In addition, the
209 owner shall maintain a journal that describes the depth of each material encountered; the nature of
210 each material encountered; the bit size and type used to drill each portion of the hole; the length
211 and type of each material used to plug the well; the length of casing(s) removed, perforated or
212 ripped, or left in place; any sections where casing was cut or milled; and any other pertinent
213 information concerning cleaning and sealing the well. The operator shall maintain all invoices,
214 work orders, and other records relating to all work on the well as part of the journal and provide to
215 the secretary upon request;

216 (C) When cleaning, the operator shall make a diligent effort to remove all the casing in the
217 well. If it is not possible to remove all the casing, then the operator shall take appropriate steps to
218 ensure that the annulus between the casing and between the casings and the well walls are filled
219 with expanding cement, with a minimum five tenths of one percent expansion upon setting, and
220 contain no voids. If the casing cannot be removed, it must be cut or milled at all workable coal bed
221 levels. Any casing which remains shall be perforated or ripped. If the total depth of the well is less
222 than four thousand feet, perforations or rips are required every fifty feet from two hundred feet
223 below the base of the lowest mineable coal bed up to one hundred feet above the uppermost
224 workable coal bed. If the total depth of the well is four thousand feet or greater, perforations or rips
225 are required every fifty feet from four hundred feet below the base of the lowest workable coal bed
226 up to one hundred feet above the uppermost workable coal bed. If the operator, using a casing

227 bond log, demonstrates to the satisfaction of the secretary that all annuli in the well are already
228 adequately sealed with cement, then the operator shall not be required to perforate or rip the
229 casing. When multiple casing and tubing strings are present in the workable coal bed, any casing
230 which remains shall be ripped or perforated and filled with expanding cement in accordance with
231 this paragraph. The operator shall maintain a casing bond log for each casing and tubing string if
232 used in lieu of ripping or perforating multiple strings;

233 (D) If the secretary concludes that the completely cleaned well emits excessive amounts of
234 gas, the operator must place a mechanical bridge plug in the well. If the total depth of the well is
235 less than four thousand feet, the mechanical bridge plug shall be placed in a competent stratum at
236 least two hundred feet below the base of the lowest workable coal bed, but above the top of the
237 uppermost hydrocarbon-producing stratum. If the total depth of the well is four thousand feet or
238 greater, the mechanical bridge plug shall be placed in a competent stratum at least four hundred
239 feet below the base of the lowest mineable coal bed, but above the top of the uppermost
240 hydrocarbon-producing stratum: *Provided*, That the secretary may require a greater distance to
241 set the mechanical bridge plug, regardless of the total depth of the well, based upon excessive
242 pressure within the well. The operator shall provide the secretary with all information the operator
243 possesses concerning the geologic nature of the strata and pressure of the well. If it is not possible
244 to set a mechanical bridge plug, an appropriately sized packer may be used; and

245 (E) If the upper-most hydrocarbon-producing stratum is within three hundred feet of the
246 base of the lowest workable coal bed, the operator shall properly place mechanical bridge plugs as
247 described in paragraph (D) of this subdivision to isolate the hydrocarbon-producing stratum from
248 the expanding cement plug. Nevertheless, if the total depth of the well is less than four thousand
249 feet, the operator shall place a minimum of two hundred feet of expanding cement below the
250 lowest workable coal bed. If the total depth of the well is four thousand feet or greater, the operator
251 shall place a minimum of four hundred feet of expanding cement below the lowest mineable coal
252 bed: *Provided*, That the secretary may require a greater distance to set the mechanical bridge

253 plug, regardless of the total depth of the well, based upon excessive pressure within the well.

254 (2) After the well is completely cleaned pursuant to subdivision one of this subsection, the
255 operator shall plug or replug the well to ~~the surface~~ a point no less than 30" and no greater than 36"
256 below final grade elevation as follows:

257 If the total depth of the well is less than four thousand feet, the operator shall pump
258 expanding cement slurry down the well to form a plug which runs from at least two hundred feet
259 below the base of the lowest workable coal bed to a point no less than 30" and no greater than 36"
260 below final grade elevation. If the total depth of the well is four thousand feet or greater, the
261 operator shall pump expanding cement slurry down the well to form a plug which runs from at least
262 four hundred feet below the base of the lowest workable coal bed to a point no less than 30" and no
263 greater than 36" below final grade elevation. In both instances, any remaining casing must be cut-
264 off at the top of the cement and an underground marker must be installed on the well. The marker
265 must be a square steel plate a minimum of one square foot in size containing the inscription of the
266 well API number and be permanently affixed to the top of the well. The permittee must file or cause
267 to be filed in the county clerk's office of the county in which the well is situated, location information
268 for the plugged well as described in sections 14 and 23 of this article, showing the location of the
269 plugged well so that the well may be located by subsequent purchasers of the property or other
270 persons in perpetuity. The information filed with the county clerk, along with proof of filing, must be
271 submitted to the Office of Oil and Gas with the plugging affidavit required under section 23 of this
272 article. As an alternative to the marker being below final grade elevation, the owner of the surface
273 where the well is situated or the owner of the coal penetrated by the well, may request installation
274 of a monument above final grade elevation. Such monument will be installed in a manner
275 determined by the Office of Oil and Gas. Such request (forms for which shall be provided by the
276 Secretary) must be filed in writing with the Secretary prior to the scheduled plugging of the well and
277 must include the API number of the well to be plugged and the name and address of the well
278 operator. At the time such request is filed with the Secretary, a copy of such request must also be

279 mailed by registered or certified mail to the well operator named in the request: *Provided*, That the
280 secretary may, regardless of the total depth of the well, require a lower depth based upon
281 excessive pressure within the well. The expanding cement slurry will be placed in the well under a
282 pressure of at least two hundred pounds per square inch. Portland cement shall be used to fill the
283 area from one hundred feet above the top of the uppermost workable coal seam to the surface:
284 *Provided*, That the secretary may require a higher distance based upon excessive pressure within
285 the well;

286 (f) Any person may apply to the secretary for an order to clean out and replug a previously
287 plugged well in a manner which will permit the safe mining through of such well. Such application
288 shall be filed with the secretary and shall contain the well number, a general description of the well
289 location, the name and address of the owner of the surface land upon which the well is located, a
290 copy of or record reference to a deed, lease or other document which entitles the applicant to enter
291 upon the surface land, a description of the methods by which the well was previously plugged, and
292 a description of the method by which such applicant proposes to clean out and replug the well. At
293 the time an application is filed with the secretary, a copy shall be mailed by registered or certified
294 mail to the owner or owners of the land, and the oil and gas lessee of record, if any, of the site upon
295 which the well is located. If no objection to the replugging of the well is filed by any such landowner
296 or oil and gas lessee within thirty days after the filing of the application, and if the secretary
297 determines that the method proposed for replugging the well will permit the safe mining through of
298 such well, the secretary shall grant the application by an order authorizing the replugging of the
299 well. Such order shall specify the method by which the well shall be replugged, and copies thereof
300 shall be mailed by certified or registered mail to the applicant and to the owner or owners of the
301 land, and the oil and gas lessee, if any, of the site upon which such well is located. If any such
302 landowner or oil and gas lessee objects to the replugging of the well, the secretary shall notify the
303 applicant of such objection. Thereafter, the director shall schedule a hearing to consider the
304 objection, which hearing shall be held after notice by registered or certified mail to the objectors

305 and the applicant. After consideration of the evidence presented at the hearing, the secretary shall
306 issue an order authorizing the replugging of the well if the secretary determines that replugging of
307 the well will permit the safe mining through of such well. Such order shall specify the manner in
308 which the well shall be replugged and copies thereof shall be sent by registered or certified mail to
309 the applicant and objectors. The secretary shall issue an order rejecting the application if the
310 secretary determines that the proposed method for replugging the well will not permit the safe
311 mining through of such well;

312 (g) All persons adversely affected, by a determination or order of the secretary issued
313 pursuant to the provisions of this section shall be entitled to judicial review in accordance with the
314 provisions of articles five and six, chapter twenty-nine-a of this code.

NOTE: The purpose of this bill is to allow for the plugging of oil and gas wells using subsurface monuments to reduce the burden on surface owner property.

Strike-throughs indicate language that would be stricken from a heading or the present law and underscoring indicates new language that would be added.