

COMMITTEE SUBSTITUTE

FOR

Senate Bill No. 603

(By Senators Kirkendoll, Stollings, Miller, Facemire, Cann,
Edgell, Green, D. Hall, McCabe, Unger, Kessler (Mr. President),
Plymale and Jenkins)

[Originating in the Committee on Energy, Industry and Mining;
reported February 18, 2014.]

A BILL to amend and reenact §22A-2-43 of the Code of West Virginia, 1931, as amended, relating to testing for the presence of methane in underground mines; clarifying when handheld testing devices shall be used; requiring automatic de-energization of an extraction apparatus where a machine-mounted methane monitor indicates a methane concentration of one and five-tenths percent; and removing the requirement that the Board of Coal Mine Health and Safety promulgate a legislative rule defining the term “sustained period”.

Be it enacted by the Legislature of West Virginia:

That §22A-2-43 of the Code of West Virginia, 1931, as amended, be amended and reenacted to read as follows:

ARTICLE 2. UNDERGROUND MINES.

§22A-2-43. Actions to detect and respond to excess methane.

1 ~~The following actions are required to detect and respond~~
2 ~~to excess methane:~~

3 (a) ~~Hand-held testing required.~~ Required testing and
4 operational procedures. – Unless otherwise specified herein,
5 testing conducted pursuant to the provisions of this section
6 is to be performed with hand-held testing devices. In any
7 mine, no electrical equipment or permissible diesel-powered
8 equipment may be brought in by the last open crosscut until
9 a qualified person tests for methane. If one percent or more
10 methane is present, the equipment may not be taken into the
11 area until the methane concentration is reduced to less than
12 one percent. Thereafter, subsequent methane examinations
13 shall be made at least every twenty minutes while any

14 electrical or diesel-powered equipment is present and
15 energized.

16 (b) *Location of tests.* – Tests for methane concentrations
17 under this section shall be made at least twelve inches from
18 the roof, face, ribs and floor.

19 (c) *Working places and intake air courses.* –

20 (1) When one percent or more methane is present in a
21 working place or an intake air course, including an air course
22 in which a belt conveyor is located or in an area where
23 mechanized mining equipment is being installed or removed:

24 (A) Except intrinsically safe atmospheric monitoring
25 systems (AMS), electrically powered equipment in the
26 affected area shall be de-energized and other mechanized
27 equipment shall be shut off.

28 (B) Changes or adjustments shall be made at once to the
29 ventilation system to reduce the concentration of methane to
30 less than one percent.

31 (C) No other work shall be permitted in the affected area
32 until the methane concentration is less than one percent.

33 (2) When one and five-tenths percent or more methane is
34 present in a working place or an intake air course, including
35 an air course in which a belt conveyor is located or in an area
36 where mechanized mining equipment is being installed or
37 removed:

38 (A) Except for the mine foreman, assistant mine foreman
39 or individuals authorized by the mine foreman or assistant
40 mine foreman, all individuals shall be withdrawn from the
41 affected area. If a federal or state mine inspector is present
42 in the area of the mine where one and five-tenths percent or
43 more of methane is detected, the federal or state mine
44 inspector and the miners' representative, if any, may remain
45 in the area with the mine foreman, assistant mine foreman or
46 other individuals authorized by the mine foreman or assistant
47 mine foreman.

48 (B) Except for intrinsically safe AMS, electrically
49 powered equipment in the affected area shall be disconnected
50 at the power source.

51 (d) *Return air split.* –

52 (1) When one percent or more methane is present in a
53 return air split between the last working place on a working
54 section and where that split of air meets another split of air
55 or the location at which the split is used to ventilate seals or
56 worked-out areas, changes or adjustments shall be made at
57 once to the ventilation system to reduce the concentration of
58 methane in the return air to less than one percent.

59 (2) When one and five-tenths percent or more methane is
60 present in a return air split between the last working place on
61 a working section and where that split of air meets another
62 split of air or the location where the split is used to ventilate
63 seals or worked-out areas, except for the mine foreman,
64 assistant mine foreman or individuals authorized by the mine
65 or assistant mine foreman, all individuals shall be withdrawn
66 from the affected area. If a federal or state mine inspector is
67 present in the area of the mine where one and five-tenths
68 percent or more of methane is detected, the federal or state

69 mine inspector and the miners' representative, if any, may
70 remain in the area with the mine foreman, assistant mine
71 foreman or other individuals authorized by the mine foreman
72 or assistant mine foreman.

73 (3) Other than intrinsically safe AMS, equipment in the
74 affected area shall be de-energized, electric power shall be
75 disconnected at the power source and other mechanized
76 equipment shall be shut off.

77 (4) No other work shall be permitted in the affected area
78 until the methane concentration in the return air is less than
79 one percent.

80 (e) *Return air split alternative.* –

81 (1) The provisions of this paragraph may apply if:

82 (A) The quantity of air in the split ventilating the active
83 workings is at least twenty-seven thousand cubic feet per
84 minute in the last open crosscut or the quantity specified in
85 the approved ventilation plan, whichever is greater.

86 (B) The methane content of the air in the split is
87 continuously monitored during mining operations by an

88 AMS that gives a visual and audible signal on the working
89 section when the methane in the return air reaches one and
90 five-tenths percent and the methane content is monitored as
91 specified in the approved ventilation plan.

92 (C) Rock dust is continuously applied with a mechanical
93 duster to the return air course during coal production at a
94 location in the air course immediately outby the most inby
95 monitoring point.

96 (2) When one and five-tenths percent or more methane is
97 present in a return air split between a point in the return
98 opposite the section loading point and where that split of air
99 meets another split of air or where the split of air is used to
100 ventilate seals or worked-out areas:

101 (A) Changes or adjustments shall be made at once to the
102 ventilation system to reduce the concentration of methane in
103 the return air below one and five-tenths percent.

104 (B) Except for the mine foreman, assistant mine foreman
105 or individuals authorized by the mine foreman or assistant

106 mine foreman, all individuals shall be withdrawn from the
107 affected area. If a federal or state mine inspector is present
108 in the area of the mine where one and five-tenths percent or
109 more of methane is detected, the federal or state mine
110 inspector and the miners' representative, if any, may remain
111 in the area with the mine foreman, assistant mine foreman or
112 other individuals authorized by the mine foreman or assistant
113 mine foreman.

114 (C) Except for intrinsically safe AMS, equipment in the
115 affected area shall be de-energized, electric power shall be
116 disconnected at the power source and other mechanized
117 equipment shall be shut off.

118 (D) No other work shall be permitted in the affected area
119 until the methane concentration in the return air is less than
120 one and five-tenths percent.

121 (f) *Bleeders and other return air courses.* –

122 The concentration of methane in a bleeder split of air
123 immediately before the air in the split joins another split of

124 air, or in a return air course other than as described in
125 subsections (d) and (e) of this section, shall not exceed two
126 percent.

127 (g) *Machine mounted methane monitors.* –

128 (1) Approved methane monitors shall be installed and
129 maintained on all face cutting machines, continuous miners,
130 longwall face equipment and other mechanized equipment
131 used to extract coal or load coal within the working place.

132 (2) The sensing device for methane monitors on longwall
133 shearing machines shall be installed at the return air end of
134 the longwall face. An additional sensing device also shall be
135 installed on the longwall shearing machine, downwind and
136 as close to the cutting head as practicable. An alternative
137 location or locations for the sensing device required on the
138 longwall shearing machine may be approved in the
139 ventilation plan.

140 (3) The sensing devices of methane monitors shall be
141 installed as close to the working face as practicable.

142 (4) Methane monitors shall be maintained in permissible
143 and proper operating condition and shall be calibrated with
144 a known air-methane mixture at least once every fifteen days
145 and a record of the calibration shall be recorded with ink or
146 indelible pencil by the person performing the calibration in
147 a book prescribed by the director and maintained on the
148 surface. Calibration records shall be retained for inspection
149 for at least one year from the date of the test. To assure that
150 methane monitors are properly maintained and calibrated, the
151 operator shall use persons properly trained in the
152 maintenance, calibration and permissibility of methane
153 monitors to calibrate and maintain the devices.

154 (h) *Automatic de-energization of extraction apparatus.* –

155 When the methane concentration at any machine-
156 mounted methane monitor reaches one percent, the monitor
157 shall give a warning signal. The warning signal device of the
158 methane monitor shall be visible to a person operating the
159 equipment on which the monitor is mounted. The methane

160 monitor shall automatically de-energize the extraction
161 apparatus on the machine on which it is mounted, but not the
162 machine as a whole to facilitate proper mining procedures,
163 when:

164 (1) The methane concentration at any machine-mounted
165 methane monitor reaches one and ~~twenty-five~~ one
166 ~~hundredths~~ five-tenths percent for a sustained period; or

167 (2) The monitor is not operating properly.

168 The machine's extraction apparatus may not again be
169 started in that place until the methane concentration
170 measured by the methane monitor is less than one percent.

171 ~~(i) Compliance schedule for machine refit.~~

172 ~~Within one hundred twenty days of the effective date of~~
173 ~~the amendments to this section, the Board of Coal Mine~~
174 ~~Health and Safety shall promulgate legislative rules pursuant~~
175 ~~to article three, chapter twenty-nine-a of this code~~
176 ~~establishing calibration procedures, defining the term~~
177 ~~"sustained period" for purposes of implementing this section;~~

178 ~~and establishing a compliance schedule setting forth the time~~
179 ~~frame in which all new and existing face cutting machines,~~
180 ~~continuous miners, longwall face equipment and other~~
181 ~~mechanized equipment used to extract coal or load coal~~
182 ~~within the working place shall be refitted with methane~~
183 ~~monitors. Enforcement of subsections (g) and (h) of this~~
184 ~~section shall not commence until after the time frame is~~
185 ~~established by rule.~~

(NOTE: The purpose of this bill is to improve coal mine health and safety in West Virginia. The bill requires automatic de-energization of an extraction apparatus where a machine-mounted methane monitor indicates a methane concentration of one and five-tenths percent. The bill also removes the requirement that the board of Coal Mine Health and Safety promulgate a legislative rule defining the term “sustained period”.

Strike-throughs indicate language that would be stricken from the present law, and underscoring indicates new language that would be added.)