

**Senate Bill No. 603**

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

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[Introduced February 17, 2014; referred to the Committee on  
Energy, Industry and Mining.]  
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A BILL to amend and reenact §22A-2-43 of the Code of West Virginia,  
1931, as amended, relating to 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.**

The following actions are required to detect and respond to  
excess methane. Subsections (a) through (f) pertain to methane  
test with hand-held devices:

1           (a) ~~Hand-held testing required.~~ — In any mine, no electrical  
2 equipment or permissible diesel powered equipment may be brought  
3 in by the last open crosscut until a qualified person tests for  
4 methane. If one percent or more methane is present, the equipment  
5 may not be taken into the area until the methane concentration is  
6 reduced to less than one percent. Thereafter, subsequent methane  
7 examinations shall be made at least every twenty minutes while any  
8 electrical or diesel powered equipment is present and energized.

9           (b) *Location of tests.* -- Tests for methane concentrations  
10 under this section shall be made at least twelve inches from the  
11 roof, face, ribs and floor.

12           (c) *Working places and intake air courses.* --

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

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

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

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

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

5           (A) Except for the mine foreman, assistant mine foreman, or  
6 individuals authorized by the mine foreman or assistant mine  
7 foreman, all individuals shall be withdrawn from the affected area.  
8 If a federal or state mine inspector is present in the area of the  
9 mine where one and five-tenths percent or more of methane is  
10 detected, the federal or state mine inspector and the miners'  
11 representative, if any, may remain in the area with the mine  
12 foreman, assistant mine foreman or other individuals authorized by  
13 the mine foreman or assistant mine foreman.

14           (B) Except for intrinsically safe AMS, electrically powered  
15 equipment in the affected area shall be disconnected at the power  
16 source.

17           (d) *Return air split.*--

18           (1) When one percent or more methane is present in a return  
19 air split between the last working place on a working section and  
20 where that split of air meets another split of air or the location  
21 at which the split is used to ventilate seals or worked-out areas,  
22 changes or adjustments shall be made at once to the ventilation  
23 system to reduce the concentration of methane in the return air to  
24 less than one percent.

1           (2) When one and five-tenths percent or more methane is  
2 present in a return air split between the last working place on a  
3 working section and where that split of air meets another split of  
4 air or the location where the split is used to ventilate seals or  
5 worked-out areas, except for the mine foreman, assistant mine  
6 foreman or individuals authorized by the mine or assistant mine  
7 foreman, all individuals shall be withdrawn from the affected area.  
8 If a federal or state mine inspector is present in the area of the  
9 mine where one and five-tenths percent or more of methane is  
10 detected, the federal or state mine inspector and the miners'  
11 representative, if any, may remain in the area with the mine  
12 foreman, assistant mine foreman or other individuals authorized by  
13 the mine foreman or assistant mine foreman.

14           (3) Other than intrinsically safe AMS, equipment in the  
15 affected area shall be de-energized, electric power shall be  
16 disconnected at the power source and other mechanized equipment  
17 shall be shut off.

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

21           (e) *Return air split alternative.* --

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

23           (A) The quantity of air in the split ventilating the active  
24 workings is at least twenty seven thousand cubic feet per minute in

1 the last open crosscut or the quantity specified in the approved  
2 ventilation plan, whichever is greater.

3 (B) The methane content of the air in the split is  
4 continuously monitored during mining operations by an AMS that  
5 gives a visual and audible signal on the working section when the  
6 methane in the return air reaches one and five-tenths percent and  
7 the methane content is monitored as specified in the approved  
8 ventilation plan.

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

12 (2) When one and five-tenths percent or more methane is  
13 present in a return air split between a point in the return  
14 opposite the section loading point and where that split of air  
15 meets another split of air or where the split of air is used to  
16 ventilate seals or worked-out areas:

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

20 (B) Except for the mine foreman, assistant mine foreman or  
21 individuals authorized by the mine foreman or assistant mine  
22 foreman, all individuals shall be withdrawn from the affected area.  
23 If a federal or state mine inspector is present in the area of the  
24 mine where one and five-tenths percent or more of methane is

1 detected, the federal or state mine inspector and the miners'  
2 representative, if any, may remain in the area with the mine  
3 foreman, assistant mine foreman or other individuals authorized by  
4 the mine foreman or assistant mine foreman.

5 (C) Except for intrinsically safe AMS, equipment in the  
6 affected area shall be de-energized, electric power shall be  
7 disconnected at the power source and other mechanized equipment  
8 shall be shut off.

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

12 (f) Bleeders and other return air courses.--

13 The concentration of methane in a bleeder split of air  
14 immediately before the air in the split joins another split of air,  
15 or in a return air course other than as described in subsections  
16 (d) and (e) of this section, shall not exceed two percent.

17 (g) *Machine mounted methane monitors.* --

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

22 (2) The sensing device for methane monitors on longwall  
23 shearing machines shall be installed at the return air end of the  
24 longwall face. An additional sensing device also shall be

1 installed on the longwall shearing machine, downwind and as close  
2 to the cutting head as practicable. An alternative location or  
3 locations for the sensing device required on the longwall shearing  
4 machine may be approved in the ventilation plan.

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

7 (4) Methane monitors shall be maintained in permissible and  
8 proper operating condition and shall be calibrated with a known  
9 air-methane mixture at least once every fifteen days and a record  
10 of the calibration shall be recorded with ink or indelible pencil  
11 by the person performing the calibration in a book prescribed by  
12 the director and maintained on the surface. Calibration records  
13 shall be retained for inspection for at least one year from the  
14 date of the test. To assure that methane monitors are properly  
15 maintained and calibrated, the operator shall use persons properly  
16 trained in the maintenance, calibration, and permissibility of  
17 methane monitors to calibrate and maintain the devices.

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

19 When the methane concentration at any machine-mounted methane  
20 monitor reaches one percent, the monitor shall give a warning  
21 signal. The warning signal device of the methane monitor shall be  
22 visible to a person operating the equipment on which the monitor is  
23 mounted. The methane monitor shall automatically deenergize the  
24 extraction apparatus on the machine on which it is mounted, but not

1 the machine as a whole to facilitate proper mining procedures,  
2 when:

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

6 (2) The monitor is not operating properly.

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

10 ~~(i) Compliance schedule for machine refit.--~~

11 ~~Within one hundred twenty days of the effective date of the~~  
12 ~~amendments to this section, the board of Coal Mine Health and~~  
13 ~~Safety shall promulgate legislative rules pursuant to article~~  
14 ~~three, chapter twenty-nine-a of this code establishing calibration~~  
15 ~~procedures, defining the term "sustained period" for purposes of~~  
16 ~~implementing this section, and establishing a compliance schedule~~  
17 ~~setting forth the time frame in which all new and existing face~~  
18 ~~cutting machines, continuous miners, longwall face equipment and~~  
19 ~~other mechanized equipment used to extract coal or load coal within~~  
20 ~~the working place shall be refitted with methane monitors.~~  
21 ~~Enforcement of subsections (g) and (h) of this section shall not~~  
22 ~~commence until after the time frame is 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.