

1 COMMITTEE SUBSTITUTE

2 FOR

3 **H. B. 4551**

4
5 By Delegates R. Phillips, Tomblin, Lynch, Sumner, L. Phillips,
6 Skaff, Reynolds, Barker, Eldridge, Marcum and White)

7 (Originating in the Committee on the Judiciary)

8 (February 20, 2014)

9
10 A BILL to amend and reenact §22A-2-43 of the Code of West Virginia,
11 1931, as amended, relating to methane protections in
12 underground mines; requiring automatic de-energization or shut
13 down of equipment when a machine-mounted methane monitor
14 indicates a methane concentration of one and five-tenths (1.5)
15 percent; and striking rulemaking requirement which is no
16 longer necessary.

17 *Be it enacted by the Legislature of West Virginia:*

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

20 **ARTICLE 2. UNDERGROUND MINES.**

21 **§22A-2-43. Actions to detect and respond to excess methane.**

22 The following actions are required to detect and respond to
23 excess methane:

24 (a) *Hand-held testing required* -- In any mine, no electrical
25 equipment or permissible diesel powered equipment may be brought in
26 by the last open crosscut until a qualified person tests for

1 methane. If one percent or more methane is present, the equipment
2 may not be taken into the area until the methane concentration is
3 reduced to less than one percent. Thereafter, subsequent methane
4 examinations shall be made at least every twenty minutes while any
5 electrical or diesel powered equipment is present and energized.

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

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

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

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

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

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

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

26 (A) Except for the mine foreman, assistant mine foreman, or

1 individuals authorized by the mine foreman or assistant mine
2 foreman, all individuals shall be withdrawn from the affected area.
3 If a federal or state mine inspector is present in the area of the
4 mine where one and five-tenths percent or more of methane is
5 detected, the federal or state mine inspector and the miners'
6 representative, if any, may remain in the area with the mine
7 foreman, assistant mine foreman or other individuals authorized by
8 the mine foreman or assistant mine foreman.

9 (B) Except for intrinsically safe AMS, electrically powered
10 equipment in the affected area shall be disconnected at the power
11 source.

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

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

20 (2) When one and five-tenths percent or more methane is
21 present in a return air split between the last working place on a
22 working section and where that split of air meets another split of
23 air or the location where the split is used to ventilate seals or
24 worked-out areas, except for the mine foreman, assistant mine
25 foreman or individuals authorized by the mine or assistant mine
26 foreman, all individuals shall be withdrawn from the affected area.

1 If a federal or state mine inspector is present in the area of the
2 mine where one and five-tenths percent or more of methane is
3 detected, the federal or state mine inspector and the miners'
4 representative, if any, may remain in the area with the mine
5 foreman, assistant mine foreman or other individuals authorized by
6 the mine foreman or assistant mine foreman.

7 (3) Other than intrinsically safe AMS, equipment in the
8 affected area shall be de-energized, electric power shall be
9 disconnected at the power source and other mechanized equipment
10 shall be shut off.

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

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

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

16 (A) The quantity of air in the split ventilating the active
17 workings is at least twenty seven thousand cubic feet per minute in
18 the last open crosscut or the quantity specified in the approved
19 ventilation plan, whichever is greater.

20 (B) The methane content of the air in the split is
21 continuously monitored during mining operations by an AMS that
22 gives a visual and audible signal on the working section when the
23 methane in the return air reaches one and five-tenths percent and
24 the methane content is monitored as specified in the approved
25 ventilation plan.

26 (C) Rock dust is continuously applied with a mechanical duster

1 to the return air course during coal production at a location in
2 the air course immediately outby the most inby monitoring point.

3 (2) When one and five-tenths percent or more methane is
4 present in a return air split between a point in the return
5 opposite the section loading point and where that split of air
6 meets another split of air or where the split of air is used to
7 ventilate seals or worked-out areas:

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

11 (B) Except for the mine foreman, assistant mine foreman or
12 individuals authorized by the mine foreman or assistant mine
13 foreman, all individuals shall be withdrawn from the affected area.
14 If a federal or state mine inspector is present in the area of the
15 mine where one and five-tenths percent or more of methane is
16 detected, the federal or state mine inspector and the miners'
17 representative, if any, may remain in the area with the mine
18 foreman, assistant mine foreman or other individuals authorized by
19 the mine foreman or assistant mine foreman.

20 (C) Except for intrinsically safe AMS, equipment in the
21 affected area shall be de-energized, electric power shall be
22 disconnected at the power source and other mechanized equipment
23 shall be shut off.

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

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

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

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

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

11 (2) The sensing device for methane monitors on longwall
12 shearing machines shall be installed at the return air end of the
13 longwall face. An additional sensing device also shall be
14 installed on the longwall shearing machine, downwind and as close
15 to the cutting head as practicable. An alternative location or
16 locations for the sensing device required on the longwall shearing
17 machine may be approved in the ventilation plan.

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

20 (4) Methane monitors shall be maintained in permissible and
21 proper operating condition and shall be calibrated with a known
22 air-methane mixture at least once every fifteen days and a record
23 of the calibration shall be recorded with ink or indelible pencil
24 by the person performing the calibration in a book prescribed by
25 the director and maintained on the surface. Calibration records
26 shall be retained for inspection for at least one year from the

1 date of the test. To assure that methane monitors are properly
2 maintained and calibrated, the operator shall use persons properly
3 trained in the maintenance, calibration, and permissibility of
4 methane monitors to calibrate and maintain the devices.

5 (h) Automatic de-energization or shut down of equipment. ~~of~~
6 ~~extraction apparatus --~~

7 When the methane concentration at any machine-mounted methane
8 monitor reaches one percent, the monitor shall give a warning
9 signal. The warning signal device of the methane monitor shall be
10 visible to a person operating the equipment on which the monitor is
11 mounted. The methane monitor shall automatically de-energize ~~the~~
12 ~~extraction apparatus on the machine on which it is mounted, but not~~
13 ~~the machine as a whole to facilitate proper mining procedures~~
14 electric equipment or shut down diesel-powered equipment on which
15 it is mounted when:

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

19 (2) The monitor is not operating properly.

20 The machine ~~machine's extraction apparatus~~ may not again be
21 started in that place until the methane concentration measured by
22 the methane monitor is less than one percent.

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

24 ~~Within one hundred twenty days of the effective date of the~~
25 ~~amendments to this section, the Board of Coal Mine Health and~~
26 ~~Safety shall promulgate legislative rules pursuant to article~~

~~1 three, chapter twenty-nine-a of this code establishing calibration
2 procedures, defining the term "sustained period" for purposes of
3 implementing this section, and establishing a compliance schedule
4 setting forth the time frame in which all new and existing face
5 cutting machines, continuous miners, longwall face equipment and
6 other mechanized equipment used to extract coal or load coal within
7 the working place shall be refitted with methane monitors.
8 Enforcement of subsections (g) and (h) of this section shall not
9 commence until after the time frame is established by rule.~~