

WEST VIRGINIA LEGISLATURE  
REGULAR SESSION, 1969

---

**ENROLLED**

SENATE BILL NO. 301

(By Mr. Jackson, Mr. President,  
and Mr. Hedrick)

---

PASSED March 8, ..... 1969

In Effect July 1, 1969 ~~Passage~~ 

FILED IN THE OFFICE  
JOHN D. ROCKEFELLER, IV  
SECRETARY OF STATE

THIS DATE 3-17-69

# 301

**ENROLLED**  
**Senate Bill No. 301**

(By MR. JACKSON, MR. PRESIDENT, and MR. HEDRICK)

---

[Passed March 8, 1969; in effect July 1, 1969.]

---

AN ACT to amend and reenact sections seven-a, seven-b, eight and twenty, article one, chapter twenty-two of the code of West Virginia, one thousand nine hundred thirty-one, as amended; to further amend said article one by adding thereto two new sections, designated sections seven-c and eleven-a; to amend and reenact sections one, two, five, seven, seven-a, eight, eleven, thirteen, twenty-one, twenty-eight, thirty-nine and sixty-one, article two of said chapter; and to further amend said chapter by adding thereto a new article, designated article three, all relating to mine safety instructors; mine inspectors; electrical inspectors, their duties, qualifications and salaries; mine rescue crews; engineers' reports and their contents; coal mine ventila-

tion; mine inspection, movement of mining equipment; mine foremen; signals on haulways; fire bosses; inspection of escapeways; open pit mines, and underground limestone and sandstone mines.

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

That sections seven-a, seven-b, eight and twenty, article one, chapter twenty-two of the code of West Virginia, one thousand nine hundred thirty-one, as amended, be amended and reenacted; that said article one be further amended by adding thereto two new sections, designated sections seven-c and eleven-a; that sections one, two, five, seven, seven-a, eight, eleven, thirteen, twenty-one, twenty-eight, thirty-nine and sixty-one, article two of said chapter be amended and reenacted; and that said chapter be further amended by adding thereto a new article, designated article three, all to read as follows:

**ARTICLE 1. ADMINISTRATION; ENFORCEMENT.**

**§22-1-7a. Mine safety instructors; qualifications; employment; compensation; tenure; oath; bond.**

1 The department shall employ five or more mine safety  
2 instructors. To be eligible for employment as a mine

3 safety instructor the applicant shall be: (1) A citizen of  
4 West Virginia, in good health, not less than twenty-five  
5 nor more than sixty years of age, and of good character,  
6 reputation and temperate habits; and (2) a person who  
7 has had at least five years' experience in first aid and  
8 mine rescue work and who has had practical experience  
9 with dangerous gases found in coal mines, and who has  
10 a practical knowledge of mines, mining methods, mine  
11 ventilation, sound safety practices and applicable mining  
12 laws.

13 In order to qualify for appointment as a mine safety  
14 instructor an eligible applicant shall submit to a written  
15 and oral examination given by the mine inspectors'  
16 examining board. The examination shall relate to the  
17 duties to be performed by a safety instructor and may,  
18 subject to the approval of the mine inspectors' examining  
19 board, be prepared by the director of West Virginia de-  
20 partment of mines.

21 If the board finds after investigation and examination  
22 that the applicant (1) is eligible for appointment and  
23 (2) has passed all oral and written examinations with a

24 grade of at least eighty percent, the board shall add such  
25 applicant's name and grade to a register of qualified  
26 eligible candidates and certify its action to the director  
27 of the department of mines. The director may then ap-  
28 point one of the candidates from the three having the  
29 highest grade.

30 The salary for a mine safety instructor shall be not  
31 less than seventy-two hundred dollars per year and shall  
32 be fixed by the director of the department of mines, who  
33 shall take into consideration ability, performance of  
34 duty, and experience. Such instructor shall devote all  
35 of his time to the duties of his office. No reimbursement  
36 for traveling expenses shall be made except on an itemiz-  
37 ed accounting for such expenses submitted by the instruc-  
38 tor, who shall verify upon oath that such expenses were  
39 actually incurred in the discharge of his official duties.

40 Mine safety instructors serving as such on the effective  
41 date of this section may continue to serve for a pro-  
42 bationary period not exceeding one year and, if eligible,  
43 may qualify for permanent appointment during such  
44 probationary period in accordance with the provisions of

45 this section. Mine safety instructors, before entering upon  
46 the discharge of their duties, shall take and subscribe  
47 to the oath and shall execute a bond in the same penal  
48 sum, with surety approved by the director of the depart-  
49 ment of mines, all as is required by this article in the  
50 case of mine inspectors.

51 Except as expressly provided in this section to the con-  
52 trary, all provisions of this article relating to the eligi-  
53 bility, qualification, appointment, tenure and removal of  
54 mine inspectors shall be applicable to mine safety in-  
55 structors.

**§22-1-7b. Mine inspectors—may be appointed to fill vacancy  
in department; permanent tenure benefits not  
affected.**

1 Notwithstanding any other provisions of law, if a va-  
2 cancy occurs in any appointive position within the de-  
3 partment of mines any mine inspector having permanent  
4 tenure, if qualified, may be appointed to such appointive  
5 position without forfeiting any of the benefits which have  
6 accrued to him because of his permanent tenure as a mine  
7 inspector.

**§22-1-7c. Electrical inspectors; employment; tenure; oath; bond.**

1 The department shall employ five or more electrical in-  
2 spectors. To be eligible for employment as an electrical  
3 inspector the applicant shall be: (1) A citizen and resi-  
4 dent of West Virginia, in good health, not less than twenty-  
5 five nor more than fifty-five years of age, and of good  
6 character, reputation and of temperate habits; and (2)  
7 a person who has had ten years' practical electrical experi-  
8 ence in coal mines or a degree from West Virginia Uni-  
9 versity or other accredited electrical engineering school.

10 In order to qualify for appointment as a mine electrical  
11 inspector, an eligible applicant shall submit to written  
12 and oral examination given by the mine inspectors' ex-  
13 amining board. The examination shall relate to the duties  
14 to be performed by an electrical inspector. If the board  
15 finds after investigation and examination that the appli-  
16 cant (1) is eligible for appointment and (2) has passed  
17 all oral and written examinations with a grade of at least  
18 ninety percent, the board shall add such applicant's name  
19 and grade to a register of qualified eligible candidates

20 and certify its action to the director of the department  
21 of mines. The director may then appoint one of the  
22 candidates from the three having the highest grade.

23 The salary of a mine electrical inspector shall be not  
24 less than eleven thousand four hundred dollars per year  
25 and shall be fixed by the director of the department of  
26 mines, who shall take into consideration ability, per-  
27 formance of duty and experience. No reimbursement for  
28 traveling expenses shall be made except on an itemized  
29 accounting for such expense submitted by the electrical  
30 inspector, who shall verify upon oath that such expenses  
31 were actually incurred in the discharge of his official  
32 duties.

33 Mine electrical inspectors serving as such on the effec-  
34 tive date of this section may continue to serve for a pro-  
35 bation period not exceeding one year and, if eligible, may  
36 qualify for permanent appointment during such proba-  
37 tionary period in accordance with the provisions of this  
38 section. Mine electrical inspectors, before entering upon  
39 the discharge of their duties, shall take and subscribe to  
40 the oath and shall execute a bond in the same penal sum,

41 with surety approved by the director of the department  
42 of mines, all as is required by this article in the case of  
43 mine inspectors.

44 Except as expressly provided in this section to the con-  
45 trary, all provisions of this article relating to the eligi-  
46 bility, qualifications, appointment, tenure and removal of  
47 mine inspectors shall be applicable to mine electrical in-  
48 spectors.

**§22-1-8. Mine inspectors—eligibility for appointment; qualifi-  
cations; salary and expenses; removal.**

1 (a) No person shall be eligible for appointment as a  
2 mine inspector after the effective date of this article  
3 (July 1, 1958) unless, at the time of his probationary ap-  
4 pointment he: (1) Is a citizen of West Virginia, in good  
5 health, not less than thirty nor more than fifty-five years  
6 of age, and of good character, reputation and temperate  
7 habits; (2) has had at least ten years' practical experience  
8 in coal mines, at least five years of which, immediately  
9 preceding his original appointment, shall have been in  
10 mines in this state: *Provided*, That graduation from the  
11 school of mines of West Virginia University or any other

12 accredited college of mining engineering shall be consider-  
13 ed the equivalent of two years' practical experience; (3)  
14 has had practical experience with dangerous gases found  
15 in coal mines; and (4) has a good theoretical and practical  
16 knowledge of mines, mining methods, mine ventilation,  
17 sound safety practices and applicable mining laws.

18 (b) In order to qualify for appointment as a mine in-  
19 spector an eligible applicant shall submit to a written  
20 and oral examination by the mine inspectors' examining  
21 board and furnish such evidence of good health, character  
22 and other facts establishing eligibility as the board may re-  
23 quire. If the board finds after investigation and examina-  
24 tion that an applicant: (1) Is eligible for appointment and  
25 (2) has passed all written and oral examinations, with a  
26 grade of at least ninety percent, the board shall add such  
27 applicant's name and grade to the register of qualified  
28 eligible candidates and certify its action to the director of  
29 the department of mines. No candidate's name shall re-  
30 main in the register for more than three years without re-  
31 qualifying.

32 (c) Salaries of district inspectors shall not be less than  
33 ten thousand four hundred dollars per annum; assistant in-  
34 spectors-at-large not less than eleven thousand dollars per  
35 annum; inspectors-at-large not less than twelve thousand  
36 dollars per annum, and shall receive mileage at the rate of  
37 not less than ten cents for each mile actually traveled in  
38 the discharge of his official duties in a privately-owned  
39 vehicle. Within the limits provided by law, the salary of  
40 each inspector shall be fixed by the director of the depart-  
41 ment of mines, subject to the approval of the mine  
42 inspectors' examining board. In fixing salaries of mine in-  
43 spectors, the director of the department of mines shall  
44 consider ability, performance of duty and experience. No  
45 reimbursement for traveling expenses shall be made ex-  
46 cept upon an itemized account of such expenses submitted  
47 by the inspector, who shall verify, upon oath, that such  
48 expenses were actually incurred in the discharge of his  
49 official duties.

50 (d) A mine inspector, after having received a permanent  
51 appointment shall be removed from office only for physical

52 or mental impairment, incompetency, neglect of duty,  
53 drunkenness, malfeasance in office, or other good cause.

54 Proceedings for the removal of a mine inspector may be  
55 initiated by the director of the department of mines  
56 whenever he has reasonable cause to believe and does  
57 believe that adequate cause exists, warranting removal.  
58 Such a proceeding shall be initiated by a verified petition,  
59 filed with the board by the director of the department  
60 of mines, setting forth with particularity the facts alleged.  
61 Not less than twenty reputable citizens, who are operators  
62 or employees in mines in the state, may petition the direc-  
63 tor of the department of mines for the removal of a mine  
64 inspector. If such petition is verified by at least one of  
65 the petitioners, based on actual knowledge of the affiant,  
66 and alleges facts, which, if true, warrant the removal of  
67 the inspector, the director of the department of mines  
68 shall cause an investigation of the facts to be made. If,  
69 after such investigation, the director finds that there is  
70 substantial evidence which, if true, warrants removal of  
71 the inspector, he shall file a petition with the board re-  
72 questing removal of the inspector.

73 On receipt of a petition by the director of the depart-  
74 ment of mines seeking removal of a mine inspector the  
75 board shall promptly notify the inspector to appear be-  
76 fore it at a time and place designated in said notice,  
77 which time shall be not less than fifteen days thereafter.  
78 There shall be attached to the copy of the notice served  
79 upon the inspector a copy of the petition filed with the  
80 board.

81 At the time and place designated in said notice, the  
82 board shall hear all evidence offered in support of the  
83 petition and on behalf of the inspector. Each witness shall  
84 be sworn and a transcript shall be made of all evidence  
85 taken and proceedings had at any such hearing. No con-  
86 tinuance shall be granted except for good cause shown.

87 The chairman of the board and the director of the de-  
88 partment of mines shall have power to administer oaths  
89 and subpoena witnesses.

90 Any mine inspector who shall wilfully refuse or fail  
91 to appear before the board, or having appeared, shall re-  
92 fuse to answer under oath any relevant question on the  
93 ground that his testimony or answer might incriminate

94 him, or shall refuse to waive immunity from prosecu-  
95 tion on account of any relevant matter about which he  
96 may be asked to testify at any such hearing before the  
97 board, shall forfeit his position.

98 If, after hearing, the board finds that the inspector  
99 should be removed, it shall enter an order to that effect.  
100 The decision of the board shall be final and shall not be  
101 subject to judicial review.

**§22-1-11a. Duties, findings and orders of mine electrical in-  
spectors; special inspections; notice.**

1 In order that the electrical inspector may properly per-  
2 form the duties required of him, he shall devote his whole  
3 time and attention to the duties of his office, and he shall  
4 have the right to enter any coal mine for the purpose of  
5 inspecting electrical equipment, and if he finds during  
6 his inspection any defects in the electrical equipment  
7 which are covered by law and may be detrimental to the  
8 lives or health of the workmen, he shall have the au-  
9 thority to order the operator, in writing, to remedy such  
10 defects within a prescribed time, and to prohibit the con-  
11 tinued operation of such electrical equipment after such  
12 time, unless such defects have been corrected.

13 The electrical inspector shall examine each mine in his  
14 division at least once each year or as often as the director  
15 may deem necessary.

16 It shall be the duty of the electrical inspector after  
17 completing his examination of a mine to prepare a report  
18 describing his findings in said mine in a manner and form  
19 designated by the director. The original report shall be  
20 forwarded to the operator or his representative whose  
21 duty it shall be to post it in some conspicuous place open  
22 to examination by any interested person or persons. The  
23 report shall show the date of inspection, a list of equip-  
24 ment, and any other information that the director may  
25 deem necessary.

**§22-1-20. Mine rescue crews.**

1 The director of the state department of mines is hereby  
2 authorized to have trained and employed at the rescue  
3 stations operated by that department within the state,  
4 such rescue crews as he may deem necessary. Each mem-  
5 ber of a rescue crew shall devote four hours each month  
6 for training purposes, and shall be available at all times  
7 to assist in rescue work at explosions and mine fires.

8 Regular members shall receive for such services the sum  
9 of sixteen dollars per month and captains shall receive  
10 twenty dollars per month, payable on requisition ap-  
11 proved by the director of the department of mines. The  
12 director of the department of mines may remove any  
13 member of a rescue crew at any time.

14 To qualify for membership of a mine rescue crew an  
15 applicant shall: (a) Be not more than fifty years of age;  
16 (b) submit evidence of good health satisfactory to the  
17 director of the department of mines; (c) satisfactorily  
18 complete a course of training prescribed by the director  
19 of the department of mines. Each person so qualifying for  
20 mine rescue operations and passing a physical examina-  
21 tion by a licensed physician shall receive a certificate  
22 evidencing such qualification. Annually thereafter such  
23 person shall submit evidence to the director that he has  
24 been examined by a licensed physician and found phys-  
25 ically fit for mine rescue operations.

26 When engaged in rescue work required by an explo-  
27 sion, fire or other emergency at a mine, all members of  
28 mine rescue teams assigned to rescue operations shall,

29 during the period of their rescue work, be employees of  
30 the operator of the mine where the emergency exists;  
31 shall be compensated by said operator at the rate estab-  
32 lished in the area for such work. In no case shall this  
33 rate be less than the prevailing wage rate in the industry  
34 for the most skilled class of inside mine labor. During  
35 the period of their emergency employment members of  
36 mine rescue teams shall be protected by the workmen's  
37 compensation subscription of such emergency employer.

**ARTICLE 2. COAL MINES.**

**§22-2-1. Definitions.**

1 For the purpose of this article:

2 (1) The term "abandoned workings" shall mean exca-  
3 vation, either caved or sealed, that are deserted and in  
4 which further mining is not intended, and open workings  
5 which are ventilated and not inspected regularly.

6 (2) The term "approved" shall mean in strict com-  
7 pliance with mining law or, in the absence of law, ac-  
8 cepted by a recognized standardizing body or organization  
9 whose approval is generally recognized as authoritative  
10 on the subject.

11 (3) The term "armored cable" shall mean a cable pro-  
12 vided with a wrapping of metal, usually steel wires or  
13 tapes, primarily for the purpose of mechanical protection.

14 (4) The term "assistant mine foreman" shall mean a  
15 person designated to assist the mine foreman in the  
16 supervision of a portion or the whole of a mine or of the  
17 persons employed therein.

18 (5) The term "borehole cable" shall mean a cable  
19 designed for vertical suspension in a borehole or shaft  
20 and used for power circuits in the mines.

21 (6) The term "branch circuit" shall mean any circuit,  
22 alternating current or direct current, connected to and  
23 leading from the main power line.

24 (7) The term "cable" shall mean a stranded conductor  
25 (single conductor cable) or a combination of conductors  
26 insulated from one another (multiple-conductor cable).

27 (8) The term "circuit breaker" shall mean a device for  
28 interrupting a circuit between separable contacts under  
29 normal or abnormal conditions.

30 (9) The term "delta connected" shall mean a power  
31 system in which the windings of transformers or a.c.

32 generators are connected to form a triangular phase re-  
33 lationship, and with the phase conductors connected to  
34 each point of the triangle.

35 (10) The term "drift" shall mean a horizontal or ap-  
36 proximately horizontal opening through strata or in a  
37 coal seam and used for the same purposes as a shaft.

38 (11) The term "excavations and workings" shall mean  
39 any or all parts of a mine excavated or being excavated,  
40 including shafts, slopes, drifts, tunnels, entries, rooms  
41 and working places, whether abandoned or in use.

42 (12) The term "effectively grounded" is an expres-  
43 sion which means grounded through a grounding con-  
44 nection of sufficiently low impedance (inherent or in-  
45 tentiously added or both) so that fault grounds which  
46 may occur cannot build up voltages in excess of  
47 limits established for apparatus, circuits, or systems so  
48 grounded.

49 (13) The term "face equipment" shall mean mobile  
50 or portable mining machinery having electric motors or  
51 accessory equipment normally installed or operated in-  
52 by the last open crosscut in an entry or room.

53 (14) The term "fire boss" shall mean any person desig-  
54 nated to examine a mine for gas and other dangers.  
55 Such person shall have the qualifications required by  
56 this article.

57 (15) The term "flame-resistant cable, portable" shall  
58 mean a portable flame-resistant cable that has passed  
59 the flame tests of the federal bureau of mines.

60 (16) The term "gassy mine" shall mean any mine  
61 in which methane has been ignited, or has been de-  
62 tected with a permissible flame safety lamp, or by labora-  
63 tory analysis of an air sample collected in active workings,  
64 in a perceptible air current, taken not less than twelve  
65 inches from the roof, face and rib, in an amount of twenty-  
66 five hundredths percent or more.

67 (17) The term "grounded (earthed)" shall mean that  
68 the system, circuit, or apparatus referred to is provided  
69 with a ground.

70 (18) The term "ground or grounding conductor (min-  
71 ing)" (also referred to as a safety ground conductor,  
72 safety ground, and frame ground) shall mean a metallic  
73 conductor used to connect the metal frame or enclosure

74 of an equipment, device or wiring system, with a mine  
75 track or other effective grounding medium.

76 (19) The term "high voltage" shall mean voltage hav-  
77 ing a nominal value greater than six hundred fifty volts  
78 between any two ungrounded conductors of the power  
79 system.

80 (20) The term "interested persons" shall include the  
81 operator, members of any mine safety committee at the  
82 mine affected and other duly authorized representatives  
83 of the mine workers, and state mine inspectors.

84 (21) The term "lightning arrestor" shall mean a pro-  
85 tective device for limiting surge voltages on equipment  
86 by discharging or bypassing surge current; it prevents  
87 continued flow of follow current to ground and is capable  
88 of repeating these functions as specified.

89 (22) The term "mechanical working section" shall  
90 mean an area of a mine (1) in which coal is loaded  
91 mechanically, (2) which is comprised of a number of  
92 working places that are generally contiguous and (3)  
93 which is of such size to permit necessary supervision dur-

94 ing the shift operation, including pre-shift and on-shift  
95 examinations and tests required by law.

96 (23) The term "mine" shall include the shafts, slopes,  
97 drifts or inclines connected with excavations penetrating  
98 coal seams or strata, which excavations are ventilated by  
99 one general air current or divisions thereof, and con-  
100 nected by one general system of mine haulage over  
101 which coal may be delivered to one or more points out-  
102 side the mine and the surface structures or equipment  
103 connected therewith which contribute directly or in-  
104 directly to the mining, preparation or handling of coal.

105 (24) The term "mine foreman" shall mean the person  
106 charged with the responsibility of the general supervision  
107 of the underground workings of a mine and the persons  
108 employed therein. He shall hold a certificate of com-  
109 petency for such position issued to him by the department  
110 of mines after taking an examination held by the de-  
111 partment of mines.

112 (25) The term "mine power center or distribution  
113 center" shall mean a combined transformer and distribu-  
114 tion unit complete within a metal enclosure from which  
115 one or more low-voltage power circuits are taken.

116 (26) The term "neutral point" shall mean the connec-  
117 tion point of transformer or generator windings from  
118 which the voltage to ground is nominally zero, and is the  
119 point generally used for system groundings in a wye-  
120 connected a.c. power system.

121 (27) The term "neutral (derived)" shall mean a neutral  
122 point or connection established by the addition of a "zig-  
123 zag" or grounding transformer to a normally ungrounded  
124 delta power system.

125 (28) The term "nongassy mine" shall mean any coal  
126 mine which is not classified as gassy.

127 (29) The term "operator" shall mean any firm, cor-  
128 poration, partnership, or individual operating any coal  
129 mine or part thereof.

130 (30) The term "permissible" shall mean any equip-  
131 ment, device, or explosive, that has been approved as  
132 permissible by the United States bureau of mines, and  
133 meets all requirements, restrictions, exceptions, limita-  
134 tions and conditions attached to such classification by  
135 said bureau.

136 (31) The term "portable (trailing) cable" shall mean

137 a flexible cable or cord used for connecting mobile,  
138 portable or stationary equipment in mines to a trolley  
139 system or other external source of electric energy where  
140 permanent mine wiring is prohibited or is impracti-  
141 cable.

142 (32) The term "shaft" shall mean a vertical opening  
143 through the strata that is or may be used for purposes of  
144 ventilation, drainage and the hoisting and transportation  
145 of men and material, in connection with the mining of  
146 coal.

147 (33) The term "shot firer" shall mean any competent  
148 person having had at least three years' practical experi-  
149 ence in coal mines; who has a knowledge of ventilation,  
150 mine roof and timbering; and who has demonstrated  
151 knowledge of mine gases and the use of a flame safety  
152 lamp, by examination given him by the mine foreman.

153 (34) The term "slope" shall mean a plane or incline  
154 roadway, usually driven to a coal seam from the surface  
155 and used for the same purposes as a shaft.

156 (35) The term "superintendent" shall mean the person

157 who shall have, on behalf of the operator, immediate  
158 supervision of one or more mines.

159 (36) The term "supervisor" shall mean a superin-  
160 tendent, mine foreman, assistant mine foreman, or any  
161 person specifically designated by the superintendent or  
162 mine foreman to supervise work or employees and who  
163 is acting pursuant to such specific designation and in-  
164 structions.

165 (37) The term "wye-connected" shall mean a power  
166 system connection in which one end of each phase winding  
167 of transformers or a.c. generators are connected together  
168 to form a neutral point, and the other ends of the wind-  
169 ings are connected to the phase conductors. A neutral  
170 conductor may or may not be connected to the neutral  
171 point, and the neutral may or may not be grounded.

172 (38) The term "zig-zag transformer (grounding trans-  
173 former)" shall mean a transformer intended primarily  
174 to provide a neutral point for grounding purposes.

175 (39) The term "return air" shall mean a volume of  
176 air that has passed through and ventilated all the work-  
177 ing places in a mine section.

**MINE MAPS**

**§22-2-2. Professional engineer; licensed land surveyor; contents; extensions; availability; traversing; copies; archive; penalties.**

1 The mapping of all coal mines shall be supervised by  
2 a competent engineer or land surveyor. The work of such  
3 engineer or land surveyor shall be supervised by either  
4 a civil engineer or a mining engineer certified by the  
5 board of engineers, which exists by authority of section  
6 three, article thirteen, chapter thirty of this code, or a  
7 licensed land surveyor approved by the board of exam-  
8 iners of land surveyors as provided by section three,  
9 article thirteen-a, chapter thirty of this code. To each  
10 map supervised by the said engineer or land surveyor  
11 there shall be affixed thereto the seal of a certified or pro-  
12 fessional engineer or licensed land surveyor, which shall  
13 be identical to the design authorized by the board of  
14 engineers, as provided in section nine, article thirteen of  
15 the aforesaid chapter thirty of this code or board of ex-  
16 aminers of land surveyors as provided by section eleven,  
17 article thirteen-a, chapter thirty of this code. Further,

18 every map certified shall have the professional engineer's  
19 or land surveyor's signature and certificate, in addition  
20 to his seal, in the following form:

21 "I, the undersigned, hereby certify that this map is cor-  
22 rect and shows all the information, to the best of my  
23 knowledge and belief, required by the laws of this state,  
24 and covers the period ending .....

25 ..... P. E.

26 (Either Civil or Mining)

27 Engineer or Land Surveyor."

28 The operator of every underground coal mine, shall  
29 make, or cause to be made, an accurate map of such mine,  
30 on a scale of not less than one hundred, and not more than  
31 five hundred feet to the inch. The map of such mine shall  
32 show:

33 (1) The shafts, slopes, drifts, tunnels, entries, rooms,  
34 crosscuts and all other excavations;

35 (2) As far as practicable the outline of existing and  
36 extracted pillars shall be designated;

37 (3) The direction of all air currents, using arrows;

38 (4) The abandoned portion or portions of the mine;

39 (5) The outcrop of the coal bed within the bounds of  
40 the property assigned to the mine;

41 (6) The boundary lines of the coal rights assigned to  
42 the mine;

43 (7) The known underground workings in the same coal  
44 bed on the adjoining properties within one thousand  
45 feet of such mine workings and projections;

46 (8) The elevation of the top and bottom of each shaft  
47 and slope, all drifts and the bottom of the coal along the  
48 haulage entries in each set of main and panel entries at  
49 horizontal intervals not exceeding two hundred feet, with  
50 contour lines at not more than twenty feet vertical inter-  
51 vals;

52 (9) The location of the principle streams and bodies of  
53 water on the surface;

54 (10) The location of any impounded bodies of water  
55 inside the mine;

56 (11) The location of all boreholes penetrating the coal  
57 bed mined;

58 (12) The location of all oil and gas wells, high pressure  
59 pipe lines, high voltage power lines and principal roads;  
60 and

61 (13) Where the overburden is less than one hundred  
62 feet, occupied dwellings shall be designated.

63 The operator of every underground coal mine shall  
64 extend, or cause to be extended and filed, on or before  
65 the first day of March and on or before the first day of  
66 September of each year, such mine map thereof to ac-  
67 curately show the progress of the workings as of the  
68 first day of July and the first day of January of each year.

69 A copy of the most recent revision of the map of such  
70 mine shall be available in the mine office for the use of the  
71 state mine inspectors and mine officials. Any employee in  
72 such mine may, in the presence of the mine foreman or an  
73 assistant, examine such map if he has reason to believe  
74 that a working place is in the proximity to other workings  
75 that may contain impounded water or noxious gases.

76 Surveying calculations and mapping of underground  
77 coal mines which are opened or reopened after the effec-  
78 tive date of this section, shall be done by the rectangular  
79 coordinate traversing method and meridians carried  
80 through and tied between at least two parallel entries  
81 of each development panel and panels or workings adja-

82 cent to mine boundaries or abandoned workings. These  
83 surveys shall originate from at least three permanent  
84 survey monuments on the surface of the mine property.  
85 The monuments shall be clearly referenced and described  
86 in the coal mine operator's records. Elevations shall be  
87 tied to either the United States geological survey or the  
88 United States coast and geodetic survey bench mark  
89 system, be clearly referenced and described on such map.

90 Underground coal mines operating on the effective date  
91 of this section, and not using the rectangular coordinate  
92 traversing method shall, within two years of the effective  
93 date of this section, convert to this procedure for survey-  
94 ing calculations and mapping. Meridians shall be carried  
95 through and tied between at least two parallel entries of  
96 each development panel and panels or workings adjacent  
97 to mine boundaries or abandoned workings. These sur-  
98 veys shall originate from at least three permanent sur-  
99 vey monuments on the surface of the mine property.

100 The monuments shall be clearly referenced and described  
101 in the coal mine operator's records. Elevations shall be  
102 tied to either the United States geological survey or the

103 United States coast and geodetic survey bench mark sys-  
104 tem, be clearly referenced and described on such map.

105 The operator of such underground coal mine shall, by  
106 reasonable proof, demonstrate to the director of the de-  
107 partment of mines or his authorized agent, at anytime,  
108 that a diligent search was made for all existing and avail-  
109 able maps and survey data for the workings on the ad-  
110 joining properties. The operator shall further be able to  
111 show proof to the director of the department of mines  
112 or his authorized agent that a suitable method was used  
113 to insure accuracy in the methods used in transposing  
114 other workings to the map of such mine.

115 The operator of every underground coal mine shall,  
116 after the completion of each extension required by this  
117 section, submit by certified mail, a true copy of such coal  
118 mine map to the mine inspector for the district in which  
119 such mine is located. The mine inspector shall not copy,  
120 consent to have copied, nor use the map of any coal mine  
121 for any purpose other than that for which intended by  
122 this article.

123 There shall be an archive of underground coal mine  
124 maps maintained at the office of the director of the de-  
125 partment of mines. The archive shall:

126 (1) Be secured in a fireproof and burglarproof vault;

127 (2) Have an appropriate map identification system;

128 (3) Have adequate map microfilming facilities;

129 (4) Be open to any person having a valid interest in  
130 information that mine maps may provide; and

131 (5) At the discretion of the director, provide, at cost,  
132 a copy of any map for which a person may have a sound  
133 reason to possess.

134 When any underground coal mine is worked out,  
135 abandoned or closed indefinitely the operator of such mine  
136 shall, within fifteen days after the cessation of the produc-  
137 tion of coal, have completed, or cause to have completed,  
138 a final survey of such mine. Not longer than thirty days  
139 after coal production ceased, the operator shall have  
140 extended, or caused to have extended, the map of such  
141 mine to accurately show all excavations in such mine and  
142 a true copy of such mine map sent, by certified mail, to  
143 the archive of underground coal mine maps, office of the

144 director of the department of mines, state capitol, Charles-  
145 ton. Final coal mine maps shall have thereon descriptions  
146 of all survey monuments.

147 Any person having a map or surveying data of any  
148 worked out or abandoned underground coal mine shall  
149 make such map or data available to the department of  
150 mines to copy or reproduce such material.

151 Any person who fails or refuses to discharge any duty  
152 imposed upon him by this section shall be guilty of a  
153 misdemeanor, and, upon conviction thereof, shall be pun-  
154 ished by a fine of not less than five hundred dollars nor  
155 more than one thousand dollars.

#### VENTILATION

##### §22-2-5. Ventilation of mines in general.

1 The operator or mine foreman of every coal mine,  
2 whether worked by shaft, slope or drift, shall provide  
3 and hereafter maintain for every such mine adequate  
4 ventilation. In all mines the quantity of air passing  
5 through the last open crosscut between the intake and  
6 return in any set of entries shall be not less than six  
7 thousand cubic feet of air per minute and as much more

8 as is necessary to dilute and render harmless and carry  
9 away flammable and harmful gases: *Provided*, That the  
10 quantity of air reaching the last crosscut in pillar sec-  
11 tions may be less than six thousand cubic feet per min-  
12 ute if at least six thousand cubic feet of air per minute  
13 is being delivered to the intake of the pillar line. The  
14 air current shall under any conditions have a sufficient  
15 volume and velocity to reduce and carry away smoke  
16 from blasting and any flammable or harmful gases. All  
17 active underground working places in a mine shall be  
18 ventilated by a current of air containing not less than  
19 nineteen and five-tenths percent of oxygen, not more than  
20 one percent of carbon dioxide, and no harmful quantities  
21 of other noxious or poisonous gases.

22 Each working section newly developed in virgin coal  
23 hereafter shall be ventilated by a separate split of air:  
24 *Provided*, That areas already under development and in  
25 areas where physical conditions prevent compliance with  
26 this provision the director of the department of mines  
27 may grant temporary relief from compliance until such  
28 time as physical conditions make compliance possible.

29 The quantity of air reaching the last crosscut shall not  
30 be less than six thousand cubic feet of air per minute  
31 and shall under any conditions have a sufficient volume  
32 and velocity to reduce and carry away smoke and flam-  
33 mable or harmful gases from each working face in the  
34 section.

35 As working places advance, crosscuts for air shall be  
36 made not more than eighty feet apart. Where necessary  
37 to render harmless and carry away noxious or flammable  
38 gases, line brattice or other approved methods of venti-  
39 lation shall be used so as to properly ventilate the face.  
40 All crosscuts between the main intake and return airways  
41 not required for passage of air and equipment shall be  
42 closed with stoppings substantially built with incom-  
43 bustible or fire-resistive material so as to keep working  
44 places well vented: *Provided*, That in mines where it  
45 becomes necessary to provide larger pillars for adequate  
46 roof support, working places shall not be driven more  
47 than two hundred feet without providing a connection  
48 that will allow the free flow of air currents. In such  
49 cases a minimum of twelve thousand cubic feet of air a

50 minute shall be delivered to the last open crosscut and  
51 as much more as is necessary to dilute and render harm-  
52 less and carry away flammable and noxious gases.

53 In special instances for the construction of sidetracks,  
54 haulageways, airways, or openings in shaft bottom or  
55 slope bottom layout where the size and strength of  
56 pillars is important, the director of the department of  
57 mines may issue a permit approving greater distances.  
58 The permit shall specify the conditions under which such  
59 places may be driven.

60 In gassy mines a system of bleeder openings or air  
61 courses designed to provide positive movement of air  
62 through and/or around abandoned or caved areas, suffi-  
63 cient to prevent dangerous accumulation of gas in such  
64 areas and to minimize the effect of variations in atmos-  
65 pheric pressure shall be made a part of pillar recovery  
66 plans projected after the effective date of this article.

67 If a bleeder return is closed as a result of roof falls  
68 or water during pillar recovery operations, pillar oper-  
69 ations may continue without reopening the bleeder re-  
70 turn so long as a minimum of twelve thousand cubic

71 feet of air per minute is delivered to the intake of the  
72 pillar line.

73 Not more than sixty persons shall be permitted to work  
74 in the same air current: *Provided*, That a larger number,  
75 not exceeding eighty persons, may be allowed by the  
76 director of the department of mines where it is impracti-  
77 cable to comply with the foregoing requirements.

78 No operator or mine foreman shall permit any person  
79 to work where he is unable to maintain the quantity and  
80 quality of the air current as heretofore required: *Pro-*  
81 *vided*, That such provisions shall not prohibit the em-  
82 ployment of men to make places of employment safe.

83 The ventilation of any mine shall be so arranged by  
84 means of airlocks, overcasts, or undercasts, that the use  
85 of doors on passageways where men or equipment travel  
86 may be kept to a minimum. Where doors are used in a  
87 gassy mine they shall be erected in pairs so as to provide  
88 a ventilated airlock unless the doors are operated me-  
89 chanically: *Provided*, That such provisions shall not ap-  
90 ply to doors in or between panel or room entries. In  
91 mines not classified as gassy, single doors may be used,

92 provided such doors are closed promptly after men or  
93 equipment have passed through them.

94 Overcasts or undercasts shall be constructed of incom-  
95 bustible material and maintained in good condition.

96 Where practicable, a crosscut shall be provided at or  
97 near the face of each entry or room before such places  
98 are abandoned.

99 Rooms, entries, airways, or other working places shall  
100 not be driven in advance of air currents. Such provisions  
101 shall not prohibit, as the room, entry or aircourse ad-  
102 vances, the "necking" of any place for a distance not  
103 exceeding that actually required for the installation of  
104 mining equipment in use at this location: *Provided,*  
105 That such room necks or entries are kept free of accumu-  
106 lations of methane by use of line brattice or other ade-  
107 quate means.

#### CLASSIFICATION OF MINES AND EXAMINATIONS

##### §22-2-7. Examination of gassy and nongassy mines.

1 In a gassy mine, within four hours immediately pre-  
2 ceding the beginning of a coal-producing shift, and be-  
3 fore any workman in such shift, other than those who

4 may be designated to make the examinations, enters the  
5 underground areas of such mine, a certified foreman or  
6 fire boss, designated by the operator of such mine to do  
7 so, shall make an examination of such areas.

8 In a gassy mine, on a noncoal-producing shift, within  
9 four hours of the time when noncertified men enter the  
10 mine, the areas where they are assigned to work, and  
11 the entrances to adjacent areas shall be examined by a  
12 certified foreman or fire boss for gas and other dangerous  
13 conditions; no uncertified man shall enter any area which  
14 has not been properly examined by a certified foreman  
15 or fire boss; all energized trolley lines and bare feeder  
16 lines along haulageways shall be examined at least once  
17 every eight hours by a certified foreman or fire boss. All  
18 areas not being so examined shall have an approved  
19 danger board posted at the entrance or entrances.

20 In nongassy mines examinations, which shall include  
21 tests for explosive gas or oxygen deficiency made with  
22 an approved flame safety lamp, shall be made at the  
23 same times as are required for a gassy mine. The person  
24 making such examinations unless he be a certified foreman

25 or fire boss shall be competent and certified in the same  
26 manner as is prescribed by the director for certifying mine  
27 foremen and fire bosses.

#### MOVEMENT OF EQUIPMENT

##### §22-2-7a. Movement of mining equipment.

1 Mining equipment being transported or trammed un-  
2 derground, other than ordinary sectional movements,  
3 shall be transported or trammed by qualified personnel  
4 under the supervision of a certified foreman. To avoid  
5 accidental contact with power lines, face equipment shall  
6 be insulated and assemblies removed, if necessary, so as  
7 to provide clearance.

#### MINE FOREMEN

##### §22-2-8. When mine foreman to be employed; qualifications; assistants.

1 In every coal mine where five or more persons are em-  
2 ployed in a period of twenty-four hours, the operator  
3 shall employ a mine foreman who shall be a competent  
4 and practical person, holding a certificate of competency  
5 for such position issued to him by the department of  
6 mines after an examination by such department. In order

7 to receive a certificate of competency to qualify as mine  
8 foreman, he shall at the time he takes the examination,  
9 be a citizen, resident or employed in a mine in this state,  
10 of good moral character and temperate habits, having  
11 had at least three years' experience in the underground  
12 working, ventilation and drainage of coal mines, or be  
13 a graduate of the school of mines of West Virginia Uni-  
14 versity or of another accredited mining engineering  
15 school and have had one years' practical experience in  
16 coal mines: *Provided, however,* That in order to serve  
17 as a mine foreman he shall have had at least five years'  
18 practical experience, and if such service be at a gassy  
19 mine then at least two years of such experience shall  
20 have been in a gassy mine. *Provided further,* That any  
21 person holding a mine foreman's certificate issued by  
22 any other state may act in the capacity of mine foreman  
23 in any mine in this state until the next regular mine  
24 foreman's examination held by the department, but not  
25 to exceed a maximum of ninety days.

26 In mines in which the operations are so extensive that  
27 all the duties devolving upon the mine foreman cannot

28 be discharged by one man, competent persons having  
29 had at least three years' experience in coal mines may be  
30 designated as assistants, who shall act under the mine  
31 foreman's instructions and the mine foreman shall be  
32 responsible for their conduct in the discharge of their  
33 duties under such designation.

**§22-2-11. Signals on haulways; lights at mouth and bottom of  
shaft; operation of cages.**

1 On all haulways, where hauling is done by machinery  
2 of any kind, the mine foreman shall provide for a proper  
3 system of signals, and a conspicuous light or approved  
4 trip reflector on the rear of every trip or train of cars  
5 when in motion in a mine. When hoisting or lowering  
6 of men occurs in the morning before daylight, or in the  
7 evening after darkness, at any mine operated by shaft,  
8 the mine foreman shall provide and maintain at the  
9 shaft mouth a light of stationary character sufficient  
10 to show the landing and all surrounding objects dis-  
11 tinctly and sufficient light of a stationary character shall  
12 be located at the bottom of the shaft so that persons  
13 coming to the bottom may clearly discern the cages and

14 other objects contiguous thereto. The mine foreman shall  
15 require that no cages on which men are riding shall be  
16 lifted or lowered at a rate of speed greater than one  
17 thousand feet per minute, and that no mine cars, either  
18 empty or loaded, shall be hoisted while men are being  
19 lowered or hoisted, and no cage having an unstable self-  
20 dump platform shall be used for the carrying of work-  
21 men unless the same is provided with some device by  
22 which it may be securely locked when men are being  
23 hoisted or lowered into the mine: *Provided, however,*  
24 That during the initial development of a new mine per-  
25 sons may be permitted to ride upon cages carrying empty  
26 cars.

§22-2-13. **Instruction of employees; annual examination of  
persons using flame safety lamps; records of  
examination.**

1 The department of mines shall prescribe and establish  
2 a course of instruction in mine safety and particularly in  
3 dangers incident to such employment in mines and in  
4 mining laws and rules, which course of instruction shall  
5 be successfully completed within twelve weeks after any

6 person shall be first employed as a miner. It shall further  
7 be the duty and responsibility of the department of mines  
8 to see that such course shall be given to all persons as  
9 above provided after their first being employed in any  
10 mine in this state.

11 It shall be the duty of the mine foreman, or the assistant  
12 mine foreman, of every coal mine in this state, to see  
13 that every person employed to work in such mine shall,  
14 before beginning work therein, be instructed in the parti-  
15 cular danger incident to his work in such mine, and be  
16 furnished a copy of the mining laws and rules of such  
17 mine. Every inexperienced person so employed shall work  
18 under the direction of the mine foreman, his assistant, or  
19 such other experienced worker as may be designated by  
20 the mine foreman or assistant, until he is familiar with the  
21 danger incident to his work.

22 Persons whose duties require them to use a flame safety  
23 lamp and other approved methane detectors shall be  
24 examined at least annually as to their competence by a  
25 certified man and a record that such examination was  
26 given, together with pertinent data relating thereto, shall

27 be kept on file by the operator and a copy shall be furn-  
28 ished to the department of mines.

#### FIRE BOSS

##### §22-2-21. When fire boss to be employed; qualifications.

1 Every operator whose mines are classified as grassy,  
2 shall employ a fire boss, who shall hold a certificate of  
3 competency for such position issued to him by the de-  
4 partment of mines after taking an examination held by  
5 the department of mines. In order to receive a certificate  
6 of competency to qualify as a fire boss, he shall at the time  
7 he takes the examination, be a citizen, resident or em-  
8 ployed in a mine in this state, having had at least three  
9 years' experience in the underground working, ventila-  
10 tion and drainage of coal mines, and shall have had at  
11 least two years' experience in mines liberating explo-  
12 sive gas; he shall have such knowledge of methane and  
13 other dangerous gas or gases as to be able to detect the  
14 same with a permissible flame safety lamp; he shall  
15 have a practical knowledge of the subject of ventilation  
16 of mines and the machinery and appliances used for that  
17 purpose; and he shall also be a person of good moral  
18 character and temperate habits.

## ROOF—FACE—RIBS

## §22-2-28. Roof support; use and recovery of roof bolts.

1 Minimum timbering or other roof support methods  
2 suitable to the roof conditions and mining system of each  
3 mine or part of a mine shall be adopted and complied  
4 with. A copy of the adopted roof support plan shall be  
5 posted at the mine and a copy furnished to the district  
6 mine inspector. Additional timbering or supporting shall  
7 be used when and where necessary. It shall be the duty  
8 of the mine foreman or his subordinate supervisors to  
9 instruct all workmen in proper methods of setting tim-  
10 bers or placing roof supports; and, it shall be the duty  
11 of the workmen to comply with the instruction in setting  
12 timbers and roof supports. The roof in all underground  
13 working places, unless self-supporting, shall be secured  
14 to protect employees from falls. Safety posts, jacks, or  
15 temporary crossbars shall be set close to the face when  
16 necessary for safety before other operations are begun  
17 and as needed thereafter. Where roof supports are re-  
18 quired at the working faces, persons shall not advance  
19 beyond supported roof, except those who are assigned

20 to install supports. Timbering or roof support materials  
21 to be used as required in supporting the roof in under-  
22 ground workings shall be delivered at or near the work-  
23 ing faces. In hand loading mines, the miner shall order  
24 timbers and roof support materials at least one day in  
25 advance in order to have in his working place a sufficient  
26 supply for his needs. He shall place his order with his  
27 supervisor stating his requirements. Roof bolts shall not  
28 be used in lieu of conventional timbering unless a per-  
29 mit has been issued by the state department of mines.  
30 Roof bolts shall not be recovered where complete ex-  
31 traction of pillars is attempted; nor shall bolts be re-  
32 moved adjacent to clay veins; nor at the location of other  
33 irregularities that introduce abnormal hazards. Where  
34 roof bolt recovery is practiced, it shall be done only by  
35 reasonable methods approved by the director of the de-  
36 partment of mines. Recovery of roof supports shall not  
37 be done except by experienced persons and only where  
38 adequate temporary support is provided.

39 All unattended underground permanent belt conveyor  
40 drives shall be provided with an automatic spray system

41 or its equivalent for fire protection. Any equipment that  
42 has been installed for a period of one year shall be con-  
43 sidered a permanent installation.

#### ELECTRICITY

##### §22-2-39. General provisions.

1 Operators of coal mines in which electricity is used as  
2 a means of power shall comply with the following pro-  
3 visions:

4 All surface transformers, unless of a construction which  
5 will eliminate shock hazards, or unless installed at least  
6 eight feet above ground, shall be enclosed in a house or  
7 surrounded by a fence at least six feet high. If the enclo-  
8 sure is of metal, it shall be grounded effectively. The gate  
9 or door to the enclosure shall be kept locked at all  
10 times, unless authorized persons are present.

11 Underground transformers purchased after the effective  
12 date of this article, shall be air cooled or cooled with  
13 noninflammable liquid or inert gas.

14 Underground stations containing transformers or cir-  
15 cuit breakers filled with inflammable oil shall be provided  
16 with door sills or their equivalent, which will confine the

17 oil if leakage or explosion occurs, and shall be of fire-  
18 proof construction.

19 Transformers shall be provided with adequate overload  
20 protection.

21 Portable or semiportable battery charging units shall  
22 be operated on a separate split of air: *Provided, That*  
23 such units may be operated on intake air if a minimum  
24 of fifteen thousand cubic feet per minute is circulating  
25 for one tray of batteries and five thousand cubic feet per  
26 minute additional for each tray added. The rate of charg-  
27 ing by such units shall not be less than four hours to  
28 fully charge a tray of batteries.

29 Battery charging stations, motor generator sets, rotary  
30 converters and oil filled transformers and switches, used  
31 underground shall be housed in fireproof buildings venti-  
32 lated by a separate split of air direct to the main return  
33 (rectifiers excepted).

34 All power wires and cables entering a mine shall be  
35 provided with lightning arrestors at points of entry.

36 "Danger—high voltage" signs shall be posted conspicu-  
37 ously on all transformer enclosures, high-potential switch-  
38 boards and other high-potential installations.

39 Circuit breakers or other overload devices shall be  
40 provided to protect power circuits.

41 Insulating platforms of wood, rubber, or other suitable  
42 nonconductive material shall be kept in place at each  
43 switchboard and at stationary machinery where shock  
44 hazards exist.

45 All power wires and cables in hoisting shafts, slopes  
46 and power boreholes shall be properly insulated, pro-  
47 vided with lightning arrestors, substantially installed  
48 and well maintained.

49 All power wires, except training cables, especially de-  
50 signed cable used as electrical conductors to underground-  
51 rectifier or transformer stations, portable power cables  
52 or bare or insulated ground and return wires, shall be  
53 supported on well-installed insulators and shall not con-  
54 tact combustible material, roof or ribs.

55 Trolley and feeder wires shall be installed as follows:  
56 Where installed on permanent haulage, after the effective  
57 date of this article, they shall be: (1) At least six inches  
58 outside the track guage line; (2) provided with cutout  
59 switches at intervals of not more than two thousand feet

60 and near the beginning of all branch lines; and (3) kept  
61 taut and not permitted to touch the roof, rib, or crossbars.  
62 Particular care shall be taken where they pass through  
63 door openings to preclude bare wires from coming in  
64 contact with combustible material.

65 Trolley or bare feeder cables shall be guarded adequ-  
66 ately where it is necessary for men to pass or work under  
67 them regularly unless the wires are more than six and  
68 one half feet above the top of the rail. They shall also  
69 be guarded adequately on both sides of doors, at all  
70 stations designated for the loading and unloading of man  
71 trips, and at sandboxes.

72 After the effective date of this article, in new under-  
73 ground installations of electric face equipment in new  
74 mines the difference in potential between any two points  
75 in the electrical circuits, or between any point in the  
76 electrical circuits and the ground, shall not exceed six  
77 hundred and fifty volts. No provision of this section shall  
78 prohibit the use of higher voltages of alternating current  
79 on service lines to rectifiers, converters, transformers  
80 or switches connected thereto located in areas out by the

81 immediate face regions: *Provided*, That electrically face-  
82 operated equipment used in underground mines may be  
83 operated at higher voltages if the conductor in the trailing  
84 cable is surrounded by a flexible grounded metallic sheath,  
85 ground current is limited by acceptable methods, and the  
86 ground circuit is continuously monitored in a method  
87 approved by the director of the department of mines.

88 In a gassy mine, trolley, feeder wires, mine power cen-  
89 ters, rectifiers and distribution centers shall not extend  
90 beyond the last open crosscut and shall be kept at least  
91 one hundred and fifty feet from open pillar workings.  
92 Trolley wires and feeder wires shall be anchored securely,  
93 insulated, and properly identified at their ends. Metallic  
94 frames, casings, and other enclosures of stationary electric  
95 equipment that can become "alive" through failure of  
96 insulation or by contact with energized parts shall be  
97 grounded effectively.

98 Metal frames, supporting structures and enclosers of  
99 substations or switching station apparatus shall be  
100 grounded effectively.

101 Lightning arrestors suitable for the voltage of the sys-  
102 tem shall be installed on each ungrounded conductor for  
103 each exposed feeder circuit entering the mine.

104 Capacitors used for power factor correction shall be  
105 nonflammable liquid filled. Suitable drain-off resistors or  
106 other means to protect workmen against electric shock  
107 following removal of power shall be provided.

108 Where a.c. to d.c. conversion equipment is used to  
109 supply direct current for shuttle cars or other face-  
110 equipment, adequate electrical protection shall be pro-  
111 vided on either the alternating current side and/or the  
112 direct current side of the conversion equipment.

113 Where both a.c. and d.c. equipment is operating in the  
114 same mine the grounding systems shall not be inter-  
115 connected.

116 The use of "jumpers," as a supplement for feeder or  
117 trolley lines, are permitted if they are installed in the  
118 same manner as the feeder or trolley line and are of ade-  
119 quate capacity.

120 All cables shall be of the approved type and trailing  
121 cables shall be flame resistant.

122 Power circuits servicing alternating current face equip-  
123 ment shall include a neutral grounding circuit, either  
124 direct or derived, the inby end of which shall be connected  
125 only to the equipment machine frame.

126 Each individual alternating current power circuit (trail-  
127 ing cable) furnishing power to mining equipment shall be  
128 protected from short circuits by means of a circuit breaker  
129 which will open all three phases of the circuit simul-  
130 taneously.

131 Where electric motors are operating inside of any coal  
132 mine they shall be provided with correct overload pro-  
133 tection.

134 All unattended underground loading points where  
135 electric driven hydraulic systems are used shall utilize a  
136 fireproof oil or emulsion, unless the electrical wiring and  
137 hydraulic systems are separated.

138 When direct current power cables enter a mine by way  
139 of a borehole, the bottom or area around the borehole  
140 shall be adequately fireproofed.

141 Before major electrical changes are made to permissible  
142 equipment for use in a gassy mine, they shall be approved  
143 by the director of the department of mines.

144 Where installed after the effective date of this section,  
145 high-voltage lines or cables entering a mine shall have  
146 circuit breakers or a similar approved protective device.

147 Diodes or similar devices may be used as an equivalent  
148 frame grounding device.

149 When two or more trailing cables junction to the same  
150 power car or transformer, means shall be provided to  
151 eliminate the possibility of cross-connecting or connecting  
152 to the wrong size breaker.

153 All power transformers shall be provided with adequate  
154 overload protection. A visual and suitable means of dis-  
155 connecting the primary line of the transformers shall be  
156 provided.

157 In new installations made after the effective date of  
158 this section, lightning arrestors shall be connected to a  
159 low resistance grounding medium on the surface which  
160 shall be separated from system and equipment grounds  
161 by a distance of not less than fifty feet.

162 At locations where cables cross regular haulage or  
163 travelways, or where equipment must pass, unless pro-  
164 tected by sufficient height, the cables shall be installed

165 in a trench in the roof, protected by some mechanical  
166 means, or buried at least twelve inches below combustible  
167 material and adequately protected from crushing by the  
168 weight of equipment passing over it.

169 Underground high-voltage main feeder cables shall  
170 extend to high-voltage distribution centers with breakers  
171 or disconnect switches supplying the branch circuits. Dis-  
172 connecting devices shall be incorporated to provide visual  
173 evidence that the circuit is deenergized when the switches  
174 are opened.

175 Permanent high-voltage cables shall be installed only  
176 in well maintained and accessible passageways of the  
177 mine and when installed in haulageways shall be support-  
178 ed on hangers and/or messenger wire supported from  
179 the roof and/or buried. Extra lengths may be stored in  
180 a workmanlike manner, vertically on suitable supports,  
181 or horizontally in a protected location.

182 Circuit breakers and disconnecting switches on high-  
183 voltage circuits underground shall be adequately marked  
184 for identification and location. Where work is to be done  
185 on these circuits or equipment, a positive method shall

186 be provided for removing the power in a manner to pre-  
187 vent it from returning while the men are working.

188 Reverse current protection shall be provided at storage  
189 battery charging stations to prevent the storage batteries  
190 from energizing the power circuits in the event of power  
191 failure.

#### MISCELLANEOUS SAFETY PROVISIONS AND REQUIREMENTS

**§22-2-61. Communication with outlets; safe roadways for  
emergencies; hoisting equipment at shaft outlets;  
escapeways; limitation of section.**

1 No operator or mine foreman of any coal mine shall  
2 employ any person to work in such mine, or permit any  
3 persons to be in the mine for the purpose of working  
4 therein, unless they are in communication with at least  
5 two openings, or outlets, to each seam, separated by  
6 natural strata, such openings to be not less than three  
7 hundred feet apart, if the mine be worked by shaft; if  
8 the mine be worked by shaft and slope, such openings  
9 shall be separated by one hundred feet of natural strata;  
10 and not less than fifty feet apart at the outlets, if worked  
11 by slope or drift; but this requirement of a distance of

12 three hundred feet between openings or outlets to shaft  
13 mines shall not apply where such openings or outlets  
14 have been made prior to the effective date of this article.

15 To each of the outlets there shall be provided from the  
16 interior of the mine a safe and available roadway, prop-  
17 erly drained, which shall at all times, while the mine is  
18 in operation, be kept free from all obstructions that might  
19 prevent travel thereon in case of an emergency. If either  
20 of the outlets be by shaft, it shall be fitted with safe  
21 and available appliances, such as stairs or hoisting ma-  
22 chinery, which shall at all times when men are under-  
23 ground be kept in order and ready for immediate use,  
24 whereby persons employed in the mine may readily  
25 escape in case of accident.

26 There shall be at least two separate and distinct travel-  
27 able passageways, one of which may be the haulageway,  
28 to be designated as escapeways from each working sec-  
29 tion to the surface of every mine. Adequate direction  
30 signs shall be posted, escapeways shall be inspected and  
31 traveled at least once each week by a certified foreman,  
32 fire boss or other competent person, and a written re-  
33 port thereon shall be kept on the surface.

34 This section shall not apply to any mine work while  
35 work is being prosecuted with reasonable diligence in  
36 making communications between outlets, necessary re-  
37 pairs, or removing obstructions, so long as not more than  
38 twenty persons are employed at any one time in the mine;  
39 neither shall it apply to any mine, or part of a mine, in  
40 which a second outlet has been rendered unavailable by  
41 reason of the final robbing of pillars, preparatory to  
42 abandonment, so long as not more than twenty persons  
43 are employed therein at any one time; but before a  
44 limited number of men are so permitted to work, ap-  
45 proval of the necessity therefor shall be obtained from  
46 the department of mines.

**ARTICLE 3. OPEN-PIT MINES, CEMENT MANUFACTURING**

**PLANTS AND UNDERGROUND LIMESTONE AND  
SANDSTONE MINES.**

**§22-3-1. Definitions.**

1 Unless the context in which used clearly requires a  
2 different meaning as used in this article:

3 (a) "Open-pit mine" means an excavation worked  
4 from the surface and open to daylight.

5 (b) "Underground mine" means subterranean work-  
6 ings for the purpose of obtaining a desired material or  
7 materials.

8 (c) "Sand" means waterworn sandstone fragments  
9 transported and deposited by water.

10 (d) "Gravel" means an occurrence of waterworn  
11 pebbles.

12 (e) "Sandstone" means a compacted or cemented sedi-  
13 ment composed chiefly of quartz grains.

14 (f) "Limestone" means a sedimentary rock composed  
15 mostly of calcium carbonate.

16 (g) "Clay" means a natural material of mostly small  
17 fragments of hydrous aluminum silicates and possessing  
18 plastic properties.

19 (h) "Shale" means a laminated sedimentary rock  
20 composed chiefly of small particles of a clay grade.

21 (i) "Iron ore" means a mineral or minerals, and  
22 gangue when treated will yield iron at a profit.

23 (j) "Manganese ore" means a metalliferous mineral  
24 when treated will yield manganese at a profit.

**§22-3-2. Applicability of mining laws.**

1 All provisions of the mining laws of this state intended  
2 for the protection of the health and safety of persons  
3 employed within or at any coal mine and for the protec-  
4 tion of any coal mining property shall extend to all open-  
5 pit mines and any property used in connection there-  
6 with for the mining of underground limestone and sand-  
7 stone mines, insofar as such laws are applicable thereto.

**§22-3-3. Rules and regulations.**

1 The director of the department of mines shall promul-  
2 gate reasonable rules and regulations, in accordance with  
3 and confined to the provisions of chapter twenty-nine-a  
4 of this code, for the effective administration of this article.

**§22-3-4. Monthly report by the operator.**

1 The operator of such mine shall, on or before the end  
2 of each calendar month, file with the director of the de-  
3 partment of mines a report covering the preceding cal-  
4 endar month on forms furnished by the director. Such  
5 reports shall state the number of accidents which have  
6 occurred, the number of persons employed, the days  
7 worked and the actual tonnage mined.

**§22-3-5. Inspectors.**

1 The director of the department of mines shall divide  
2 the state into not more than two mining districts and  
3 assign one inspector to each district. Such inspector shall  
4 be a citizen of West Virginia, in good health, of good  
5 character and reputation, temperate in habits, have a  
6 minimum of five years of practical experience in such  
7 mining operations and at the time of his appointment is  
8 not more than fifty-five years of age. To qualify for ap-  
9 pointment as such an inspector, an eligible applicant  
10 shall submit to a written and oral examination by the  
11 mine inspectors' examining board and furnish such evi-  
12 dence of good health, character and other facts establish-  
13 ing eligibility as the board may require. If the board  
14 finds after investigation and examination that an appli-  
15 cant: (1) Is eligible for appointment and (2) has passed  
16 all written and oral examinations, with a grade of at  
17 least ninety percent, the board shall add such applicant's  
18 name and grade to the register of qualified eligible candi-  
19 dates and certify its action to the director of the depart-  
20 ment of mines. Inspectors serving as such on the effec-

21 tive date of this section may continue to serve for a pro-  
22 bationary period not exceeding one year and, if eligible,  
23 may qualify for permanent appointment during such  
24 probationary period in accordance with the provisions of  
25 this section. No candidate's name shall remain in the  
26 register for more than three years without requalifying.  
27 Such inspector shall have the same tenure accorded a  
28 mine inspector, as provided in subsection (d), section  
29 eight, article one of this chapter and shall be paid not  
30 less than eight thousand four hundred dollars per annum.

**§22-3-6. Penalties.**

1 Any person who fails or refuses to discharge any pro-  
2 vision of this article, rule and regulation promulgated or  
3 order issued pursuant to the provisions of this article,  
4 shall be guilty of a misdemeanor, and, upon conviction  
5 thereof, shall be punished by a fine of not less than one  
6 hundred nor more than one thousand dollars or by im-  
7 prisonment not exceeding six months, or by both.

---

The Joint Committee on Enrolled Bills hereby certifies that the foregoing bill is correctly enrolled.

*William Tompa*  
Chairman Senate Committee

*Clayton C. Paulson*  
Chairman House Committee

Originated in the Senate.

To take effect July 1, 1969.

*Howard Meyer*  
Clerk of the Senate

*C. A. Blankenship*  
Clerk of the House of Delegates

*Lloyd S. Jackson*  
President of the Senate

*Wood R. Borawsky*  
Speaker House of Delegates

The within *approved* this the *17<sup>th</sup>*  
day of *March*, 1969.

*Arch. Shreve, Jr.*  
Governor



PRESENTED TO THE  
GOVERNOR

Date 3/14/69

Time 2:20 p.m.