

WEST VIRGINIA LEGISLATURE

REGULAR SESSION, 1967

ENROLLED

*Com. Sub. for*  
SENATE BILL NO. 281

(By Mr. *Rison* (Mr. President) and  
*Mr. Jackson*)

PASSED *March 7* 1967

In Effect *from* Passage

FILED IN THE OFFICE  
ROBERT D. BAILEY  
SECRETARY OF STATE  
THIS DATE 3-21-67

# 281

**ENROLLED**

MINES AND MINING

COMMITTEE SUBSTITUTE

FOR

**Senate Bill No. 281**

(MR. CARSON [MR. PRESIDENT] and MR. JACKSON

original sponsors)

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[Passed March 7, 1967; in effect from passage.]

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AN ACT to amend and reenact sections five and twenty-one, article one, chapter twenty-two of the code of West Virginia, one thousand nine hundred thirty-one, as amended; to amend and reenact sections one, four, five, thirteen, thirty-seven, thirty-eight, thirty-nine, fifty and sixty-one, article two of said chapter twenty-two; to amend and reenact section five, article six of said chapter twenty-two; to further amend article one of said chapter twenty-two

by adding thereto two new sections, designated sections seven-a and seven-b; and to further amend article two of said chapter twenty-two by adding thereto three new sections, designated sections seven-a, sixty-one-a and sixty-one-b, all relating to coal mine safety and the West Virginia department of mines.

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

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

**ARTICLE 1. ADMINISTRATION; ENFORCEMENT.**

**§22-1-5. Eligibility; salary.**

The director of the department of mines shall be a male  
2 citizen of West Virginia, shall be a competent person of  
3 good repute and temperate habits and shall have had at  
4 least fifteen years' experience underground in coal mines,  
5 at least ten of which shall have been underground in  
6 mines in this state. He shall possess a practical knowledge  
7 of the different systems of working, ventilating and drain-  
8 ing coal mines, and a practical and scientific knowledge  
9 of all noxious and dangerous gases found in such mines.  
10 A diploma in mining engineering from the West Virginia  
11 university school of mines, or any similarly accredited  
12 engineering school shall be counted as two years' work-  
13 ing experience. The director shall devote all of his time  
14 to the duties of his office and shall not be directly or  
15 indirectly interested financially in any mine in this state.  
16 The salary of the director of the department of mines  
17 shall be sixteen thousand dollars per year, and traveling  
18 expenses, which shall be paid out of the state treasury  
19 upon requisition on the state auditor, properly certified by  
20 the director of the department of mines.

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

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 inspector's 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 (2)  
23 has passed all oral and written examinations with a grade  
24 of at least eighty per cent, the board shall add such ap-  
25 plicant's name and grade to a register of qualified eligible  
26 candidates and certify its action to the director of the  
27 department of mines. The director may then appoint one  
28 of the candidates from the three having the highest  
29 grade.

30 The salary for a mine safety instructor shall be not  
31 less than sixty-five hundred dollars nor more than  
32 seventy-two hundred dollars per year and shall be fixed  
33 by the director of the department of mines, who shall  
34 take into consideration ability, performance of duty, and  
35 experience. No reimbursement for traveling expenses  
36 shall be made except on an itemized accounting for such  
37 expenses submitted by the instructor, who shall verify  
38 upon oath that such expenses were actually incurred in  
39 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 probation-

42 ary period not exceeding one year and, if eligible, may  
43 qualify for permanent appointment during such proba-  
44 tionary period in accordance with the provisions of this  
45 section. Mine safety instructors, before entering upon the  
46 discharge of their duties, shall take and subscribe to the  
47 oath and shall execute a bond in the same penal sum, with  
48 surety approved by the director of the department of  
49 mines, all as is required by this article in the case of  
50 mine inspectors.

51 Except as expressly provided in this section to the con-  
52 trary, all provisions of this article relating to the eligibil-  
53 ity, 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 for unexpired term; permanent tenure  
benefits not affected.**

Notwithstanding any other provisions of law, if a  
2 vacancy occurs in any appointive position within the  
3 department of mines any mine inspector having per-  
4 manent tenure, if qualified, may be appointed to fill the

7 [Enr. Mines and Mining Com. Sub. for S. B. No. 281

5 unexpired portion of the term of such appointive position  
6 without forfeiting any of the benefits which have  
7 occurred to him because of his permanent tenure as a  
8 mine inspector.

**§22-1-21. Mine rescue teams.**

It shall be the duty of any mine operator employing  
2 fifty or more employees to have available for mine rescue  
3 work a trained mine rescue team, the members of which  
4 shall work in the general area of the mine. In the event  
5 of any fire, explosion or recovery operations in or about  
6 any mine, the director of the department of mines is here-  
7 by authorized to call and assign any state mine rescue  
8 team for the protection of employees and the preservation  
9 of property. The director also may assign mine rescue  
10 and recovery work to inspectors, instructors, or other  
11 qualified employees of the department of mines as he may  
12 deem desirable.

**ARTICLE 2. COAL MINES.**

**§22-2-1. Definitions.**

For the purpose of this article:

2 (1) The term "abandoned workings" shall mean ex-



3 cavations, either caved or sealed, that are deserted and  
4 in which further mining is not intended, and open work-  
5 ings 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 organiza-  
9 tion whose approval is generally recognized as authori-  
10 tative 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  
17 the 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  
28 for interrupting a circuit between separable contacts  
29 under 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 and  
41 working places, whether abandoned or in use.

42 (12) The term "effectively grounded" is an expression  
43 which means grounded through a grounding connection  
44 of sufficiently low impedance (inherent or intentionally

45 added or both) so that fault grounds which may occur  
46 cannot build up voltages in excess of limits established  
47 for apparatus, circuits, or systems so grounded.

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

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

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

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

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

69 (18) The term “ground or grounding conductor (min-  
70 ing)” (also referred to as a safety ground conductor,  
71 safety ground, and frame ground) shall mean a metallic  
72 conductor used to connect the metal frame or enclosure  
73 of an equipment, device or wiring system, with a mine  
74 track or other effective grounding medium.

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

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

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

88 (22) The term "mechanical working section" shall  
89 mean an area of a mine (1) in which coal is loaded  
90 mechanically, (2) which is comprised of a number of  
91 working places that are generally contiguous and (3)  
92 which is of such size to permit necessary supervision  
93 during the shift operation, including pre-shift and on-shift  
94 examinations and tests required by law.

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

104 (24) The term "mine foreman" shall mean the person  
105 charged with the responsibility of the general super-  
106 vision of the underground workings of a mine and the  
107 persons employed therein. He shall hold a certificate of  
108 competency for such position issued to him by the de-

109 partment of mines after taking an examination held by  
110 the department of mines.

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

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

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

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

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

129 (30) The term "permissible" shall mean any equip-

130 ment, device, or explosive, that has been approved as  
131 permissible by the United States bureau of mines, and  
132 meets all requirements, restrictions exceptions, limita-  
133 tions and conditions attached to such classification by said  
134 bureau.

135 (31) The term "portable (trailing) cable" shall mean  
136 a flexible cable or cord used for connecting mobile, porta-  
137 ble or stationary equipment in mines to a trolley system  
138 or other external source of electric energy where per-  
139 manent mine wiring is prohibited or is impracticable.

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

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

150 (34) The term "slope" shall mean a plane or incline

151 roadway, usually driven to a coal seam from the surface  
152 and used for the same purposes as a shaft.

153 (35) The term "superintendent" shall mean the person  
154 who shall have, on behalf of the operator, immediate  
155 supervision of one or more mines.

156 (36) The term "supervisor" shall mean a superinten-  
157 dent, mine foreman, assistant mine foreman, or any per-  
158 son specifically designated by the superintendent or mine  
159 foreman to supervise work or employees and who is  
160 acting pursuant to such specific designation and instruc-  
161 tions.

162 (37) The term "wye-connected" shall mean a power  
163 system connection in which one end of each phase wind-  
164 ing of transformers or a.c. generators are connected to-  
165 gether to form a neutral point, and the other ends of the  
166 windings are connected to the phase conductors. A neu-  
167 tral conductor may or may not be connected to the neu-  
168 tral point, and the neutral may or may not be grounded.

169 (38) The term "zig-zag transformer (grounding  
170 transformer)" shall mean a transformer intended pri-  
171 marily to provide a neutral point for grounding purposes.



**§22-2-4. Fans.**

The ventilation of mines, the systems for which extend  
2 for more than two hundred feet underground, and which  
3 are opened after the effective date of this article, shall be  
4 produced by a mechanically operated fan or mechanically  
5 operated fans. Ventilation by means of a furnace is pro-  
6 hibited in any mine. The fan or fans shall be kept in con-  
7 tinuous operation, unless written permission to do other-  
8 wise be granted by the director of the department of  
9 mines. In case of accident to a ventilating fan or its ma-  
10 chinery whereby the ventilation of the mine is seriously  
11 interrupted, immediate action shall be taken by the mine  
12 operator or his management personnel, in a gassy mine,  
13 to cut off the power and withdraw the men from the face  
14 regions or other areas of the mine affected. If the ventila-  
15 tion is restored in a reasonable time, the face regions and  
16 other places in the affected areas where gas (methane)  
17 is likely to accumulate, shall be re-examined by a certified  
18 or competent person and if found free of explosive gas,  
19 power may be restored and work resumed. If ventilation  
20 is not restored in a reasonable time, all underground em-

21 ployees shall be removed from the mine or the affected  
22 areas. In mines classified as nongassy, when the ventila-  
23 tion is seriously interrupted by fan stoppage or failure,  
24 immediate action shall be taken by the mine management  
25 to cut off the power and withdraw the men from the face  
26 regions or other areas of the mine affected. If the ventila-  
27 tion is restored within a reasonable time, and face regions  
28 and other places in the affected areas shall be re-examined  
29 by a certified or other competent person, and if found in  
30 safe condition, work may be resumed. If ventilation is not  
31 restored within a reasonable time, all underground em-  
32 ployees shall be removed from the mine or affected areas.  
33 If the ventilation is not restored within thirty minutes in  
34 any mine the men shall be removed from the mine or  
35 affected areas: *Provided*, That in mines liberating gas in  
36 large quantities the men shall be removed from the af-  
37 fected area unless the ventilation has been restored in  
38 fifteen minutes.

39 All main fans installed after the effective date of this  
40 article, shall be located on the surface in fireproof hous-  
41 ings offset not less than fifteen feet from the nearest side

42 of the mine opening, equipped with fireproof air ducts,  
43 provided with explosion doors or a weak wall, and oper-  
44 ated from an independent power circuit. In lieu of the  
45 requirements for the location of fans and pressure-relief  
46 facilities, a fan may be directly in front of, or over, a mine  
47 opening: *Provided*, That such opening is not in direct line  
48 with possible forces coming out of the mine if an explosion  
49 occurs: *Provided, however*, That there is another opening  
50 having a weak-wall stopping or explosion doors that  
51 would be in direct line with forces coming out of the mine.  
52 All main fans shall be provided with pressure-recording  
53 gauges, or water gauges. A daily inspection shall be made  
54 of all main fans and machinery connected therewith by  
55 a competent person and a record kept of the same in a  
56 book prescribed for this purpose, or by adequate facilities  
57 provided to permanently record the performance of the  
58 main fan and to give warning of an interruption to a fan.  
59 Auxiliary blower or exhaust fans may be used to venti-  
60 late shaft-and-slope-sinking operations and their under-  
61 ground connections, rock tunnels being driven between  
62 coal beds or through faults and wants, or in the driving

63 of single entries or rooms by mining equipment in use at  
64 the time of the acquisition of the mine by the operator or  
65 prior to the effective date of this article, or equipment  
66 which may hereafter be developed through technological  
67 progress: *Provided*, That they are powered by permissible  
68 driving units when installed underground, operated con-  
69 tinuously while any work is being performed in the area  
70 being ventilated, and so placed that recirculation of the  
71 air is not possible. The inby end of the tubing, line curtain  
72 or other device shall be kept sufficiently close to the face  
73 to dilute, render harmless and carry away all dangerous  
74 gases.

75 In the event of a fire or explosion in any coal mine the  
76 ventilating fan or fans shall not intentionally be started,  
77 stopped, speed increased or decreased or the direction of  
78 the air current changed without the approval of the gen-  
79 eral mine foreman and, if he is not immediately available,  
80 a representative of the state department of mines. A duly  
81 authorized representative of the employees should be con-  
82 sulted if practical under the circumstances.

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

The operator or mine foreman of every coal mine,  
2 whether worked by shaft, slope or drift, shall provide and  
3 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 thou-  
7 sand cubic feet of air per minute and as much more as is  
8 necessary to dilute and render harmless any carry away  
9 flammable and harmful gases: *Provided*, That the quant-  
10 ity of air reaching the last crosscut in pillar sections may  
11 be less than six thousand cubic feet per minute if at least  
12 six thousand cubic feet of air per minute is being deliver-  
13 ed to the intake of the pillar line. The air current shall  
14 under any conditions have a sufficient volume and velocity  
15 to reduce and carry away smoke from blasting and any  
16 flammable or harmful gases. All active underground work-  
17 ing places in a mine shall be ventilated by a current of  
18 air containing not less than nineteen and five-tenths per  
19 cent of oxygen, not more than one per cent of carbon  
20 dioxide, and no harmful quantities of other noxious or  
21 poisonous gases.

22 Each mechanical working section newly developed in  
23 virgin coal hereafter shall be ventilated by a separate  
24 split of air: *Provided*, That areas already under develop-  
25 ment and in areas where physical conditions prevent  
26 compliance with this provision the director of the depart-  
27 ment of mines may grant temporary relief from com-  
28 pliance until such time as physical conditions make com-  
29 pliance possible. The quantity of air reaching the last  
30 crosscut shall not be less than six thousand cubic feet of  
31 air per minute and shall under any conditions have a  
32 sufficient volume and velocity to reduce and carry away  
33 smoke and flammable or harmful gases from each work-  
34 ing face in the 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 or ventila-  
39 tion shall be used so as to properly ventilate the face. All  
40 crosscuts between the main intake and return airways not  
41 required for passage of air and equipment shall be closed  
42 with stoppings substantially built with incombustible or

43 fire-resistive material so as to keep working places well  
44 vented: *Provided*, That in mines where it becomes neces-  
45 sary to provide larger pillars for adequate roof support,  
46 working places shall not be driven more than two hun-  
47 dred feet without providing a connection that will allow  
48 the free flow of air currents. In such cases a minimum of  
49 twelve thousand cubic feet of air a minute shall be de-  
50 livered to the last open crosscut and as much more as is  
51 necessary to dilute and render harmless and carry away  
52 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 pillars  
56 is important, the director of the department of mines may  
57 issue a permit approving greater distances. The permit  
58 shall specify the conditions under which such places may  
59 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, suf-  
63 ficient to prevent dangerous accumulation of gas in such

64 areas and to minimize the effect of variations in atmo-  
65 spheric 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 or  
68 water during pillar recovery operations, pillar opera-  
69 tions may continue without reopening the bleeder return  
70 so long as a minimum of twelve thousand cubic feet  
71 of air per minute is delivered to the intake of the pillar  
72 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 imprac-  
77 ticable to comply with the foregoing requirements.

78 No operator or mine foreman shall permit any person to  
79 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 employ-  
82 ment 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 of



85 doors on passageways where men or equipment travel may  
86 be kept to a minimum. Where doors are used in a gassy  
87 mine they shall be erected in pairs so as to provide a venti-  
88 lated airlock, unless the doors are operated mechanically:  
89 *Provided*, That such provisions shall not apply to doors  
90 in or between panel or room entries. In mines not classi-  
91 fied as gassy, single doors may be used, provided such  
92 doors are closed promptly after men or equipment have  
93 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 ex-  
103 ceeding that actually required for the installation of  
104 mining equipment in use at this location: *Provided*, That  
105 such room necks or entries are kept free of accumula-

106 tions of methane by use of line brattice or other adequate  
107 means.

**§22-2-7a. Movement of face mining equipment.**

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 where clearance vertically and hori-  
6 zontally is less than ten inches from any power line or  
7 other obstruction, face equipment being transported or  
8 trammed shall be reduced by the removal of such parts  
9 and assemblies as may be necessary to maintain neces-  
10 sary cleance.

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

It shall be the duty of the mine foreman, or the assistant  
2 mine foreman, of every coal mine in this state, to see that  
3 every person employed to work in such mine shall, be-  
4 fore beginning work therein, be instructed in the par-  
5 ticular danger incident to his work in such mine, and be  
6 furnished a copy of the mining laws and rules of such

7 mine. Every inexperienced person so employed shall  
8 work under the direction of the mine foreman, his as-  
9 sistant, or such other experienced worker as may be desig-  
10 nated by the mine foreman or assistant, until he is famil-  
11 iar with the danger incident to his work.

12 Persons whose duties require them to use a flame safety  
13 lamp and other approved methane detectors shall be ex-  
14 amined at least annually as to their competence by a  
15 certified man and a record that such examination was  
16 given, together with pertinent data relating thereto, shall  
17 be kept on file by the operator and a copy shall be fur-  
18 nished to the department of mines.

**§22-2-37. Haulage roads and equipment; shelter holes; pro-  
hibited practices; signals; inspection.**

The roadbed, rails, joints, switches, frogs and other ele-  
2 ments of all haulage roads shall be constructed, installed  
3 and maintained in a manner consistent with speed and  
4 type of haulage operations being conducted to insure safe  
5 operation.

6 Track switches, except room and entry development  
7 switches, shall be provided with properly installed throws,

8 bridle bars and guard rails; switch throws and stands,  
9 where possible, shall be placed on the clearance side.

10 Haulage roads on entries developed after the effective  
11 date of this article shall have a continuous unobstructed  
12 clearance of at least twenty-four inches from the farthest  
13 projection of any moving equipment on the clearance side.

14 On haulage roads where trolley lines are used, the clear-  
15 ance shall be on the side opposite the trolley lines.

16 On the trolley wire or "tight" side, there shall be at  
17 least six inches of clearance from the farthest projection  
18 of any moving equipment. On haulage roads developed  
19 after the effective date of this article, where conditions  
20 permit there shall be a clearance of twelve inches main-  
21 tained on the tight or wire side, but in no instance shall  
22 the clearance be less than six inches.

23 The clearance space on all haulage roads shall be kept  
24 free of loose rock, coal, supplies or other materials:  
25 *Provided*, That not more than twenty-four inches need be  
26 kept free of such obstructions.

27 Ample clearance shall be provided at all points where

28 supplies are loaded or unloaded along haulage roads or  
29 conveyors.

30 Shelter holes shall be provided along haulage entries  
31 driven after the effective date of this article where loco-  
32 motive, rope or animal haulage is used. Such shelter holes  
33 shall be spaced not more than *one hundred feet* apart.  
34 Except where the trolley wire is six feet six inches or  
35 more above the roadbed or guarded effectively at the shel-  
36 ter holes, they shall be on the side of the entry opposite  
37 the trolley wire.

38 Shelter holes made after the effective date of this article  
39 shall be at least five feet in depth, not more than four feet  
40 in width, and as high as the traveling space. Room necks  
41 and crosscuts may be used as shelter holes even though  
42 their width exceeds four feet.

43 Shelter holes shall be kept clear of refuse and other  
44 obstructions.

45 Shelter holes shall be provided at switch throws, and  
46 manually operated permanent doors, except where more  
47 than six feet of clearance is maintained, and at room  
48 switches.

49 No steam locomotive shall be used in mines where men  
50 are actually employed in the extraction of coal, but this  
51 shall not prevent operation of a steam locomotive through  
52 any tunnel haulway or part of a mine that is not in actual  
53 operation and producing coal.

54 Underground equipment powered by internal combus-  
55 tion engines using petroleum products, alcohol, or any  
56 other compound shall not be used in a coal mine unless  
57 such equipment has been approved by the United States  
58 bureau of mines for underground use in coal mines and  
59 only then when this equipment is maintained in com-  
60 pliance with the requirements of the approved schedule.

61 Locomotives, mine cars, supply cars, shuttle cars and all  
62 other haulage equipment shall be maintained in a safe  
63 operating condition. Each locomotive shall be equipped  
64 with a suitable lifting jack and handle. An audible warn-  
65 ing device and headlights shall be provided on each loco-  
66 motive and each shuttle car. All other mobile equipment,  
67 using the face areas of the mine, purchased after the effec-  
68 tive date of this article, shall be provided with a conspicu-  
69 ous light or other effective method, so as to reduce the  
70 possibility of collision.

71 No persons other than those necessary to operate a trip  
72 or car shall ride on any loaded car or on the outside of  
73 any car.

74 The pushing of trips, except for switching purposes, is  
75 prohibited on main haulage roads: *Provided*, That this  
76 does not prohibit the use of a pusher locomotive to assist  
77 the locomotive pulling a trip. Motormen and trip riders  
78 shall use care in handling locomotives and cars. It shall  
79 be their duty to see that there is a conspicuous light on  
80 the front and rear of each trip or train of cars when in  
81 motion: *Provided*, That trip lights need not be used on  
82 cars being shifted to and from loading machines, on cars  
83 being handled at loading heads during gathering oper-  
84 ations at working faces or on trips being pulled by ani-  
85 mals. No persons shall ride on locomotives or loaded cars  
86 unless granted permission by the mine foreman.

87 No motorman, trip rider or brakeman shall get on or off  
88 cars, trips, or locomotives while they are in motion, ex-  
89 cept that a trip rider or brakeman may get on or off the  
90 rear end of a slowly moving trip or the stirrup of a slowly

31 [Enr. Mines and Mining Com. Sub. for S. B. No. 281

91 moving locomotive to throw a switch, align a derail or  
92 open or close a door.

93 Flying or running switches and riding on the front  
94 bumper of a car or locomotive are prohibited. Back poling  
95 shall be prohibited except with precaution to the nearest  
96 turning point (not over eighty feet), or when going up  
97 extremely steep grades and then only at slow speed. The  
98 operator of a shuttle car shall face in the direction of  
99 travel except during the loading operation when he shall  
100 face the loading machine.

101 A system of signals, methods or devices shall be used to  
102 provide protection for trips, locomotives and other equip-  
103 ment coming out onto tracks used by other equipment.  
104 Where a dispatcher is employed to control trips, traffic  
105 under his jurisdiction shall move only at his direction.

106 Motormen shall inspect locomotives and report any me-  
107 chanical defects found to the proper supervisor before a  
108 locomotive is put in operation.

109 A locomotive following another trip shall maintain a  
110 distance of at least three hundred feet from the rear end



111 of the trip ahead unless such locomotive is coupled to the  
112 trip ahead.

**§22-2-38. Transportation of men.**

Man trips shall be pulled (unless self-propelled) at safe  
2 speeds consistent with the condition of roads and type of  
3 equipment used, but not to exceed twelve miles an hour,  
4 except where special substantially covered man-trip cars  
5 are used. Each man trip shall be under the charge of a  
6 certified person or other competent person designated by  
7 a mine foreman or assistant mine foreman. It shall be  
8 operated independently of any loaded trip of coal or other  
9 heavy material, but may transport tools, small machine  
10 parts and supplies. When mine cars are used for man trips  
11 on steep grades, a locomotive shall be used on each end of  
12 the trip.

13 Cars on the man trip shall not be overloaded, and suffi-  
14 cient cars in good mechanical condition shall be provided.

15 Where "drop-bottom" cars are used, special safety pre-  
16 cautions shall be taken.

17 No person shall ride under the trolley wire unless suit-  
18 ably covered man cars are used.

19 Men shall not load or unload before the cars in which  
20 they are to ride, or are riding, come to a full stop. Men  
21 shall proceed in an orderly manner to and from man trips.

22 When belts are used for transporting men, a minimum  
23 clearance of eighteen inches shall be maintained between  
24 the belt and the roof or crossbars, projecting equipment,  
25 cap pieces, overhead cables, wiring and other objects.  
26 Where the height of the coal seam permits, the clearance  
27 shall not be less than twenty-four inches.

28 Unless a greater speed is allowed by special permission  
29 from the director of the department of mines, in which  
30 event the conditions, limitations and rules imposed in con-  
31 nection with the grant of such permission shall be ob-  
32 served, the belt speed shall not exceed two hundred fifty  
33 feet per minute where the minimum overhead clearance  
34 is eighteen inches, or three hundred feet per minute where  
35 the minimum overhead clearance is twenty-four inches,  
36 while men are loading, unloading, or being transported.  
37 A signaling system or method shall be provided for stop-  
38 ping the belt and men shall ride not less than six feet  
39 apart.

40 An assistant mine foreman or some other person desig-  
41 nated by the mine foreman shall supervise the loading  
42 and unloading of belts and man trips. Where men are re-  
43 quired to regularly cross over belts, adequate and safe  
44 facilities shall be provided.

45 Adequate clearance and proper illumination shall be  
46 provided where men board or leave conveyor belts.

**§22-2-39. Electricity; general provisions.**

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 en-  
8 closure is of metal, it shall be grounded effectively. The  
9 gate 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 non-  
13 inflammable 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 fireproof  
18 construction.

19 Transformers shall be provided with adequate overload  
20 protection.

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

41 Insulating platforms of wood, rubber, or other suitable  
42 non-conductive 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, provided  
47 with lightning arrestors, substantially installed and well  
48 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 or  
52 bare or insulated ground and return wires, shall be sup-  
53 ported on well-installed insulators and shall not contact  
54 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 gauge 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 con-  
64 tact with combustible material.

65 Trolley or bare feeder cables shall be guarded ade-  
66 quately where it is necessary for men to pass or work  
67 under them regularly unless the wires are more than six  
68 and one-half feet above the top of the rail. They shall also  
69 be guarded adequately on both sides of doors, at all sta-  
70 tions 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 elec-

76 trical circuits and the ground, shall not exceed six hun-  
77 dred and fifty volts. No provision of this section shall pro-  
78 hibit the use of higher voltages of alternating current on  
79 service lines to rectifiers, converters, transformers or  
80 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 ap-  
87 proved 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 in-

96 sulation or by contact with energized parts shall be  
97 grounded effectively.

98 Metal frames, supporting structures and enclosures of  
99 sub-stations or switching station apparatus shall be  
100 grounded effectively.

101 <sup>u</sup><sub>^</sub>Lighting arrestors suitable for the voltage of the system  
102 shall be installed on each ungrounded conductor for each  
103 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 sup-  
109 ply direct current for shuttle cars or other face equipment,  
110 adequate electrical protection shall be provided on either  
111 the alternating current side and/or the direct current side  
112 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 intercon-  
115 nected.

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 di-  
124 rect 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 permanent belt conveyer  
135 drives shall be provided with an automatic spray system  
136 or its equivalent.

137 All unattended underground loading points where elec-

138 tric driven hydraulic systems are used shall utilize a fire-  
139 proof oil or emulsion, unless the electrical wiring and hy-  
140 draulic systems are separated.

141 When direct current power cables enter a mine by way  
142 of a borehole, the bottom or area around the borehole  
143 shall be adequately fireproofed.

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

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

150 Diodes or similar devices may be used as an equivalent  
151 frame grounding device.

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

156 All power transformers shall be provided with adequate  
157 over-load protection. A visual and suitable means of dis-  
158 connecting the primary line of the transformers shall be  
159 provided.

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

165 At locations where cables cross regular haulage or  
166 travelways, or where equipment must pass, unless pro-  
167 tected by sufficient height, the cables shall be installed in  
168 a trench in the roof, protected by some mechanical means,  
169 or buried at least twelve inches below combustible ma-  
170 terial and adequately protected from crushing by the  
171 weight of equipment passing over it.

172 Underground high-voltage main feeder cables shall ex-  
173 tend to high-voltage distribution centers with breakers or  
174 disconnect switches supplying the branch circuits. Discon-  
175 necting devices shall be incorporated to provide visual  
176 evidence that the circuit is de-energized when the  
177 switches are opened.

178 Permanent high-voltage cables shall be installed only in  
179 well maintained and accessible passageways of the mine  
180 and when installed in haulageways shall be supported on

181 hangers and/or messenger wire supported from the roof  
182 and/or buried. Extra lengths may be stored in a workman-  
183 like manner, vertically on suitable supports, or horizon-  
184 tally in a protected location.

185 Circuit breakers and disconnecting switches on high  
186 voltage circuits underground shall be adequately marked  
187 for identification and location. Where work is to be done  
188 on these circuits or equipment, a positive method shall be  
189 provided for removing the power in a manner to prevent  
190 it from returning while the men are working.

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

**§22-2-50. Procurement of dust-tight electrical equipment; dust  
control; repairs; welding; handrails and toeboards.**

In unusually dusty locations, electric motors, switches  
2 and controls shall be of dust-tight construction, or en-  
3 closed with reasonably dust-tight housings or enclosures.  
4 Open type motors, switches or controls in use at the effec-  
5 tive date of this article in tipples and cleaning plants in

6 unusually dusty locations may be continued in use until  
7 such dust-tight equipment can be procured, or until they  
8 can be provided with reasonably dust-tight housings or  
9 enclosures.

10 Means and methods shall be provided to assure that  
11 structures and the immediate area surrounding the same  
12 shall be reasonably free of coal dust accumulations.

13 Where coal is dumped at or near air intake openings,  
14 reasonable provisions shall be made to prevent dust from  
15 entering the mine.

16 Where repairs are being made to the plant, proper scaf-  
17 folding and proper overhead protection shall be provided  
18 for workmen wherever necessary.

19 Welding shall not be done in dusty atmospheres and  
20 dusty locations shall be well cleaned, and fire-fighting ap-  
21 paratus shall be readily available during welding.

22 Stairways, elevated platforms and runways shall be  
23 equipped with handrails. Railroad car trimmer platforms  
24 are excepted from such requirement.

25 Elevated platforms and stairways shall be provided with  
26 toeboards where necessary, and they shall be kept clear  
27 of refuse and ice and maintained in good repair.

28 Personnel who are required frequently and regularly to  
29 travel on belts or chain conveyors extended to heights of  
30 more than ten feet, shall be provided with adequate space  
31 and protection in order that they may work safely.  
32 Permanent ladders extending more than ten feet shall be  
33 provided with back guards. Walkways around thickeners  
34 that are less than four feet above the walkway shall be  
35 adequately guarded. Employees required to work over  
36 thickeners shall wear a safety harness adequately se-  
37 cured, unless walkways or other suitable safety devices  
38 are provided.

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

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 nat-  
6 ural strata, such openings to be not less than three hun-  
7 dred feet apart, if the mine be worked by shaft; if the

8 mine be worked by shaft and slope, such openings shall  
9 be separated by one hundred feet of natural strata; and  
10 not less than fifty feet apart at the outlets, if worked by  
11 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 have  
14 been made prior to the effective date of this article. To  
15 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 every two weeks by a certified fore-  
32 man fire boss or other competent person, and a written  
33 report 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  
39 mine; neither shall it apply to any mine, or part of a  
40 mine, in which a second outlet has been rendered un-  
41 available by reason of the final robbing of pillars, pre-  
42 paratory to abandonment, so long as not more than  
43 twenty persons are employed therein at any one time;  
44 but before a limited number of men are so permitted  
45 to work, approval of the necessity therefor shall be  
46 obtained from the department of mines.

**§22-2-61a. Coal storage bins; recovery tunnels; coal storage  
piles.**

Coal storage bins hereafter constructed with vertical  
2 sides fifty feet or over in height shall be provided with



3 ventilators and/or louvers to provide adequate venti-  
4 lation. Where roofs are constructed over coal storage  
5 bins, adequate ventilation shall be provided by stacks,  
6 ventilators, louvers or mechanical means.

7 Where cutting or welding is performed at any location  
8 where coal is stored, means of prompt extinguishment  
9 of any fire accidentally started shall be provided, and  
10 the area where cutting or welding is performed shall be  
11 adequately watered down and rock-dusted.

12 A competent person shall test for methane with a  
13 methane detector, prior to and during cutting and weld-  
14 ing operations inside or underneath a coal storage bin.

15 Electric motors, switches and controls for coal storage  
16 bins hereafter acquired shall be of dust-tight construction.

17 Repairs to electric equipment shall not be made when  
18 the surrounding atmosphere contains dangerous amounts  
19 of gas or dust.

20 Where electric lights are used in recovery tunnels of  
21 over one hundred feet in length, the wiring shall be in  
22 rigid conduit and shall be enclosed in waterproof recep-  
23 tacles.

24 An escapeway shall be provided from any recovery  
25 tunnel hereafter constructed, to a safe place on the sur-  
26 face; such escapeway shall be at least thirty inches in  
27 diameter and, where inclined, a ladder shall be provided  
28 to extend the full length of the escapeway to facilitate  
29 emergency exit.

30 Extreme caution shall be exercised by all employees  
31 required to work at or near coal storage piles during  
32 coal recovery operations to avoid injury by coal slides  
33 or by being in or drawn into a chute.

**§22-2-61b. Thermal coal dryers and plants.**

Thermal coal dryer plants shall be hereafter constructed,  
2 maintained and operated in compliance with the follow-  
3 ing provisions:

4 Good housekeeping shall be practiced in and around  
5 thermal dryer plants.

6 Adequate fire fighting facilities shall be provided on all  
7 floors.

8 When welding and cutting operations are to be per-  
9 formed in a dryer structure, the area shall be wetted  
10 down thoroughly and adequate fire-fighting apparatus  
11 shall be readily available during the operation.

12 Only qualified persons shall be permitted to operate  
13 dryers; however, this provision shall not prohibit qualified  
14 persons from training other persons to become qualified  
15 operators.

16 Dryer control panels shall be provided with audible and  
17 visible alarm devices; such devices should be adjusted to  
18 function at somewhat less than maximum dryer tempera-  
19 ture.

20 A by-pass or relief stack equipped with an automatic-  
21 ally operated damper shall be provided for by-passing  
22 gases from the heating units to the outside atmosphere  
23 during emergency or normal shutdown operations.

24 Thermal coal dryers hereafter installed shall not be  
25 enclosed, except that roofs may be used. Whenever it is  
26 deemed necessary to inclose thermal dryers, such equip-  
27 ment shall be in a fireproof structure.

28 Dryer installations and discharge stacks shall be pro-  
29 tected with adequate explosion release vents that open to  
30 the outside atmosphere.

31 Thermal coal dryers shall be located at a safe distance  
32 from tipples, cleaning plants, mine openings and surface

33 buildings, such as oil storage areas, explosives magazines,  
34 and other buildings where coal dust, sparks and flames  
35 are likely to enter and become ignited or otherwise cause  
36 danger of fires.

37 Dryers shall be equipped with quick-response heat con-  
38 trol device which, in the event of superelevated tempera-  
39 tures, will automatically divert the hot inlet gases into a  
40 by-pass stack thereby by-passing the drying chamber and,  
41 at the same time, will stop the fuel being supplied to the  
42 air heater.

43 All dryers, conveyors and other fine coal transporting  
44 machines shall be constructed as dust tight as practicable.  
45 Where necessary, such equipment shall be provided with  
46 removable covers for inspection and cleaning and shall be  
47 provided with vent pipes to the outside atmosphere to  
48 permit the escape of distilled gases.

49 Dryers shall be examined thoroughly after normal and  
50 emergency shutdown for fires and coal dust accumula-  
51 tions.

52 Dryer controls, valves, and mechanical equipment shall  
53 be frequently inspected and no dryer shall be operated  
54 with defective mechanical equipment.

55 The gauges of temperature control instruments shall  
56 be of the recording type.

57 Operating rules suitable for the characteristics of each  
58 dryer system and the materials processed shall be devel-  
59 oped and shall be available at the control panel.

60 Electrical equipment, electrical wiring and lighting fix-  
61 tures shall be of dust-tight construction.

62 Adequate illumination shall be provided.

63 Dryers shall not be operated beyond their rated evapo-  
64 ration capacity.

65 Fluid bed dryers shall be provided with water sprays of  
66 sufficient capacity for use in event of fire.

67 After shutdowns, thermal dryers shall be cleared of  
68 hot coals so as to minimize ignitions on succeeding start-  
69 ups.

70 Thermal coal dryers previously installed in a tipple  
71 or cleaning plant shall be separated where practicable  
72 from other working areas by substantial partitions capa-  
73 ble of providing greater resistance to explosion pres-  
74 sures than an exterior wall or walls.

75 When it is necessary to use extension cables for emer-

76 gency illumination, such lighting devices shall be dust-  
77 tight and adequately guarded. When it becomes neces-  
78 sary to perform work in dryer system bins or any other  
79 dusty areas, permissible cap lamps shall be used for  
80 illumination.

## **ARTICLE 6. CERTIFICATION OF COAL MINERS.**

### **§22-6-5. Examination to be practical; certificates not transfer- able; how certificates to be issued.**

All examinations shall be conducted in the English  
2 language and shall be of a practical nature, so as to de-  
3 termine the competency and qualifications of the appli-  
4 cant to engage in the mining of bituminous coal with  
5 reasonable safety to himself and his fellow employees.  
6 No applicant shall be certified as qualified or competent  
7 who (1) has had less than six months' practical experience  
8 as a miner or as a miner apprentice, or (2) lacks a sound  
9 knowledge of first aid. Evidence of satisfactory comple-  
10 tion of a course of instruction in first aid offered by the  
11 West Virginia department of mines, the federal bureau  
12 of mines or by such other sponsor as the director may  
13 approve, may be received as proof of competence in first  
14 aid without further examination.

15 During this six-months' period the the applicant shall  
16 complete a course in the fundamentals of first aid and in  
17 general mining practices offered by the West Virginia de-  
18 partment of mines or by such other sponsor as the director  
19 may approve.

20 Applicants shall be examined under oath and inspectors  
21 shall have power to administer oaths to all applicants and  
22 witnesses.

23 If the inspector examining the applicant finds the ap-  
24 plicant qualified and competent to be a coal miner, he  
25 shall issue to the applicant a certificate of qualification  
26 and competency in such form as shall be prescribed by  
27 the director, which shall entitle the holder thereof to be  
28 employed and work as a coal miner in any mine in this  
29 state.

30 Certificates shall not be transferable and an attempt to  
31 transfer a certificate shall be deemed a violation of this  
32 article.

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

William Tompa  
Chairman Senate Committee

Clayton C. Davidson  
Chairman House Committee

Originated in the Senate.

To take effect from passage.

Thomas Meyer  
Clerk of the Senate

C. Blankenship  
Clerk of the House of Delegates

Howard E. Carson  
President of the Senate

H. Laban White  
Speaker House of Delegates

The within approved this the 21  
day of March, 1967.

Hullett C. Smith  
Governor



PRESENTED TO THE  
GOVERNOR

Date 3/21/67

Time 2:20pm