WEST VIRGINIA LEGISLATURE
REGULAR SESSION, 1967

ENROLLED

SENATE BILL NO. 2181

(By Mr. 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
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 citizen of West Virginia, shall be a competent person of good repute and temperate habits and shall have had at least fifteen years' experience underground in coal mines, at least ten of which shall have been underground in mines in this state. He shall possess a practical knowledge of the different systems of working, ventilating and draining coal mines, and a practical and scientific knowledge of all noxious and dangerous gases found in such mines. A diploma in mining engineering from the West Virginia university school of mines, or any similarly accredited engineering school shall be counted as two years' working experience. The director shall devote all of his time to the duties of his office and shall not be directly or indirectly interested financially in any mine in this state. The salary of the director of the department of mines shall be sixteen thousand dollars per year, and traveling expenses, which shall be paid out of the state treasury upon requisition on the state auditor, properly certified by 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 instructors. To be eligible for employment as a mine safety instructor the applicant shall be: (1) a citizen of West Virginia, in good health, not less than twenty-five nor more than sixty years of age, and of good character, reputation and temperate habits; and (2) a person who has had at least five years' experience in first aid and mine rescue work and who has had practical experience with dangerous gases found in coal mines, and who has a practical knowledge of mines, mining methods, mine ventilation, sound safety practices and applicable mining laws.

In order to qualify for appointment as a mine safety instructor an eligible applicant shall submit to a written and oral examination given by the mine inspectors' examining board. The examination shall relate to the duties to be performed by a safety instructor and may, subject to the approval of the mine inspector's examining board, be prepared by the director of West Virginia department of mines.
If the board finds after investigation and examination that the applicant (1) is eligible for appointment and (2) has passed all oral and written examinations with a grade of at least eighty per cent, the board shall add such applicant's name and grade to a register of qualified eligible candidates and certify its action to the director of the department of mines. The director may then appoint one of the candidates from the three having the highest grade.

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

Mine safety instructors serving as such on the effective date of this section may continue to serve for a probation-
any period not exceeding one year and, if eligible, may qualify for permanent appointment during such probationary period in accordance with the provisions of this section. Mine safety instructors, before entering upon the discharge of their duties, shall take and subscribe to the oath and shall execute a bond in the same penal sum, with surety approved by the director of the department of mines, all as is required by this article in the case of mine inspectors.

Except as expressly provided in this section to the contrary, all provisions of this article relating to the eligibility, qualification, appointment, tenure and removal of mine inspectors shall be applicable to mine safety instructors.

§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 vacancy occurs in any appointive position within the department of mines any mine inspector having permanent tenure, if qualified, may be appointed to fill the
unexpired portion of the term of such appointive position without forfeiting any of the benefits which have occurred to him because of his permanent tenure as a mine inspector.


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

ARTICLE 2. COAL MINES.

§22-2-1. Definitions.

For the purpose of this article:

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

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

(9) The term "delta connected" shall mean a power system in which the windings of transformers or a.c. generators are connected to form a triangular phase relationship, and with the phase conductors connected to each point of the triangle.

(10) The term "drift" shall mean a horizontal or approximately horizontal opening through strata or in a coal seam and used for the same purposes as a shaft.

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

(12) The term "effectively grounded" is an expression which means grounded through a grounding connection 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 design-
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.
(17) The term "grounded (earthed)" shall mean that the system, circuit, or apparatus referred to is provided with a ground.

(18) The term "ground or grounding conductor (mining)" (also referred to as a safety ground conductor, safety ground, and frame ground) shall mean a metallic conductor used to connect the metal frame or enclosure of an equipment, device or wiring system, with a mine track or other effective grounding medium.

(19) The term "high voltage" shall mean voltage having a nominal value greater than six hundred fifty volts between any two ungrounded conductors of the power system.

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

(21) The term "lightning arrester" shall mean a protective device for limiting surge voltages on equipment by discharging or bypassing surge current; it prevents continued flow of follow current to ground and is capable of repeating these functions as specified.
(22) The term "mechanical working section" shall mean an area of a mine (1) in which coal is loaded mechanically, (2) which is comprised of a number of working places that are generally contiguous and (3) which is of such size to permit necessary supervision during the shift operation, including pre-shift and on-shift examinations and tests required by law.

(23) The term "mine" shall include the shafts, slopes, drifts or inclines connected with excavations penetrating coal seams or strata, which excavations are ventilated by one general air current or divisions thereof, and connected by one general system of mine haulage over which coal may be delivered to one or more points outside the mine and the surface structures or equipment connected therewith which contribute directly or indirectly to the mining, preparation or handling of coal.

(24) The term "mine foreman" shall mean the person charged with the responsibility of the general supervision of the underground workings of a mine and the persons employed therein. He shall hold a certificate of competency for such position issued to him by the de-
[Enr. Mines and Mining Com. Sub. for S. B. No. 281]

department of mines after taking an examination held by
the department of mines.

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

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

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

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

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

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

(31) The term "portable (trailing) cable" shall mean a flexible cable or cord used for connecting mobile, portable or stationary equipment in mines to a trolley system or other external source of electric energy where permanent mine wiring is prohibited or is impracticable.

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

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

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

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

(36) The term "supervisor" shall mean a superintendent, mine foreman, assistant mine foreman, or any person specifically designated by the superintendent or mine foreman to supervise work or employees and who is acting pursuant to such specific designation and instructions.

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

(38) The term "zig-zag transformer (grounding transformer)" shall mean a transformer intended primarily to provide a neutral point for grounding purposes.
§22-2-4. **Fans.**

The ventilation of mines, the systems for which extend for more than two hundred feet underground, and which are opened after the effective date of this article, shall be produced by a mechanically operated fan or mechanically operated fans. Ventilation by means of a furnace is prohibited in any mine. The fan or fans shall be kept in continuous operation, unless written permission to do otherwise be granted by the director of the department of mines. In case of accident to a ventilating fan or its machinery whereby the ventilation of the mine is seriously interrupted, immediate action shall be taken by the mine operator or his management personnel, in a gassy mine, to cut off the power and withdraw the men from the face regions or other areas of the mine affected. If the ventilation is restored in a reasonable time, the face regions and other places in the affected areas where gas (methane) is likely to accumulate, shall be re-examined by a certified or competent person and if found free of explosive gas, power may be restored and work resumed. If ventilation is not restored in a reasonable time, all underground em-
ployees shall be removed from the mine or the affected areas. In mines classified as nongassy, when the ventilation is seriously interrupted by fan stoppage or failure, immediate action shall be taken by the mine management to cut off the power and withdraw the men from the face regions or other areas of the mine affected. If the ventilation is restored within a reasonable time, and face regions and other places in the affected areas shall be re-examined by a certified or other competent person, and if found in safe condition, work may be resumed. If ventilation is not restored within a reasonable time, all underground employees shall be removed from the mine or affected areas.

If the ventilation is not restored within thirty minutes in any mine the men shall be removed from the mine or affected areas: Provided, That in mines liberating gas in large quantities the men shall be removed from the affected area unless the ventilation has been restored in fifteen minutes.

All main fans installed after the effective date of this article, shall be located on the surface in fireproof housings offset not less than fifteen feet from the nearest side
of the mine opening, equipped with fireproof air ducts,
provided with explosion doors or a weak wall, and oper-
ated from an independent power circuit. In lieu of the
requirements for the location of fans and pressure-relief
facilities, a fan may be directly in front of, or over, a mine
opening: Provided, That such opening is not in direct line
with possible forces coming out of the mine if an explosion
occurs: Provided, however, That there is another opening
having a weak-wall stopping or explosion doors that
would be in direct line with forces coming out of the mine.
All main fans shall be provided with pressure-recording
gauges, or water gauges. A daily inspection shall be made
of all main fans and machinery connected therewith by
a competent person and a record kept of the same in a
book prescribed for this purpose, or by adequate facilities
provided to permanently record the performance of the
main fan and to give warning of an interruption to a fan.
Auxiliary blower or exhaust fans may be used to venti-
late shaft-and-slope-sinking operations and their under-
ground connections, rock tunnels being driven between
coal beds or through faults and wants, or in the driving
of single entries or rooms by mining equipment in use at the time of the acquisition of the mine by the operator or prior to the effective date of this article, or equipment which may hereafter be developed through technological progress: Provided, That they are powered by permissible driving units when installed underground, operated continuously while any work is being performed in the area being ventilated, and so placed that recirculation of the air is not possible. The inby end of the tubing, line curtain or other device shall be kept sufficiently close to the face to dilute, render harmless and carry away all dangerous gases.

In the event of a fire or explosion in any coal mine the ventilating fan or fans shall not intentionally be started, stopped, speed increased or decreased or the direction of the air current changed without the approval of the general mine foreman and, if he is not immediately available, a representative of the state department of mines. A duly authorized representative of the employees should be consulted if practical under the circumstances.
§22-2-5. Ventilation of mines in general.

The operator or mine foreman of every coal mine, whether worked by shaft, slope or drift, shall provide and hereafter maintain for every such mine adequate ventilation. In all mines the quantity of air passing through the last open crosscut between the intake and return in any set of entries shall be not less than six thousand cubic feet of air per minute and as much more as is necessary to dilute and render harmless any carry away flammable and harmful gases: Provided, That the quantity of air reaching the last crosscut in pillar sections may be less than six thousand cubic feet per minute if at least six thousand cubic feet of air per minute is being delivered to the intake of the pillar line. The air current shall under any conditions have a sufficient volume and velocity to reduce and carry away smoke from blasting and any flammable or harmful gases. All active underground working places in a mine shall be ventilated by a current of air containing not less than nineteen and five-tenths per cent of oxygen, not more than one per cent of carbon dioxide, and no harmful quantities of other noxious or poisonous gases.
Each mechanical working section newly developed in virgin coal hereafter shall be ventilated by a separate split of air: Provided, That areas already under development and in areas where physical conditions prevent compliance with this provision the director of the department of mines may grant temporary relief from compliance until such time as physical conditions make compliance possible. The quantity of air reaching the last crosscut shall not be less than six thousand cubic feet of air per minute and shall under any conditions have a sufficient volume and velocity to reduce and carry away smoke and flammable or harmful gases from each working face in the section.

As working places advance, crosscuts for air shall be made not more than eighty feet apart. Where necessary to render harmless and carry away noxious of flammable gases, line brattice or other approved methods or ventilation shall be used so as to properly ventilate the face. All crosscuts between the main intake and return airways not required for passage of air and equipment shall be closed with stoppings substantially built with incombustible or
fire-resistive material so as to keep working places well
vented: Provided, That in mines where it becomes necessary to provide larger pillars for adequate roof support, working places shall not be driven more than two hundred feet without providing a connection that will allow the free flow of air currents. In such cases a minimum of twelve thousand cubic feet of air a minute shall be delivered to the last open crosscut and as much more as is necessary to dilute and render harmless and carry away flammable and noxious gases.

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

In gassy mines a system of bleeder openings or air courses designed to provide positive movement of air through and/or around abandoned or caved areas, sufficient to prevent dangerous accumulation of gas in such
areas and to minimize the effect of variations in atmospheric pressure shall be made a part of pillar recovery plans projected after the effective date of this article. If a bleeder return is closed as a result of roof falls or water during pillar recovery operations, pillar operations may continue without reopening the bleeder return so long as a minimum of twelve thousand cubic feet of air per minute is delivered to the intake of the pillar line.

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

No operator or mine foreman shall permit any person to work where he is unable to maintain the quantity and quality of the air current as heretofore required: Provided, That such provisions shall not prohibit the employment of men to make places of employment safe.

The ventilation of any mine shall be so arranged by means of airlocks, overcasts, or undercasts, that the use of
doors on passageways where men or equipment travel may be kept to a minimum. Where doors are used in a gassy mine they shall be erected in pairs so as to provide a ventilated airlock, unless the doors are operated mechanically: Provided, That such provisions shall not apply to doors in or between panel or room entries. In mines not classified as gassy, single doors may be used, provided such doors are closed promptly after men or equipment have passed through them.

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

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

Rooms, entries, airways, or other working places shall not be driven in advance of air currents. Such provisions shall not prohibit, as the room, entry or aircourse advances, the “necking” of any place for a distance not ex- ceeding that actually required for the installation of mining equipment in use at this location: Provided, That such room necks or entries are kept free of accumula-
§22-2-7a. Movement of face mining equipment.

Mining equipment being transported or trammed underground, other than ordinary sectional movements, shall be transported or trammed by qualified personnel under the supervision of a certified foreman. To avoid accidental contact where clearance vertically and horizontally is less than ten inches from any power line or other obstruction, face equipment being transported or trammed shall be reduced by the removal of such parts and assemblies as may be necessary to maintain necessary clearance.

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

It shall be the duty of the mine foreman, or the assistant mine foreman, of every coal mine in this state, to see that every person employed to work in such mine shall, before beginning work therein, be instructed in the particular danger incident to his work in such mine, and be 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,
bridle bars and guard rails; switch throws and stands, 
where possible, shall be placed on the clearance side.

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

On haulage roads where trolley lines are used, the clearance shall be on the side opposite the trolley lines.

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

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

Ample clearance shall be provided at all points where
supplies are loaded or unloaded along haulage roads or conveyors.

Shelter holes shall be provided along haulage entries driven after the effective date of this article where locomotive, rope or animal haulage is used. Such shelter holes shall be spaced not more than one hundred feet apart. Except where the trolley wire is six feet six inches or more above the roadbed or guarded effectively at the shelter holes, they shall be on the side of the entry opposite the trolley wire.

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

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

Shelter holes shall be provided at switch throws, and manually operated permanent doors, except where more than six feet of clearance is maintained, and at room switches.
No steam locomotive shall be used in mines where men are actually employed in the extraction of coal, but this shall not prevent operation of a steam locomotive through any tunnel haulway or part of a mine that is not in actual operation and producing coal.

Underground equipment powered by internal combustion engines using petroleum products, alcohol, or any other compound shall not be used in a coal mine unless such equipment has been approved by the United States bureau of mines for underground use in coal mines and only then when this equipment is maintained in compliance with the requirements of the approved schedule.

Locomotives, mine cars, supply cars, shuttle cars and all other haulage equipment shall be maintained in a safe operating condition. Each locomotive shall be equipped with a suitable lifting jack and handle. An audible warning device and headlights shall be provided on each locomotive and each shuttle car. All other mobile equipment, using the face areas of the mine, purchased after the effective date of this article, shall be provided with a conspicuous light or other effective method, so as to reduce the possibility of collision.
No persons other than those necessary to operate a trip or car shall ride on any loaded car or on the outside of any car.

The pushing of trips, except for switching purposes, is prohibited on main haulage roads: Provided, That this does not prohibit the use of a pusher locomotive to assist the locomotive pulling a trip. Motormen and trip riders shall use care in handling locomotives and cars. It shall be their duty to see that there is a conspicuous light on the front and rear of each trip or train of cars when in motion: Provided, That trip lights need not be used on cars being shifted to and from loading machines, on cars being handled at loading heads during gathering operations at working faces or on trips being pulled by animals. No persons shall ride on locomotives or loaded cars unless granted permission by the mine foreman.

No motorman, trip rider or brakeman shall get on or off cars, trips, or locomotives while they are in motion, except that a trip rider or brakeman may get on or off the rear end of a slowly moving trip or the stirrup of a slowly
moving locomotive to throw a switch, align a derail or open or close a door.

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

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

Motormen shall inspect locomotives and report any mechanical defects found to the proper supervisor before a locomotive is put in operation.

A locomotive following another trip shall maintain a distance of at least three hundred feet from the rear end
§22-2-38. Transportation of men.

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

Cars on the man trip shall not be overloaded, and sufficient cars in good mechanical condition shall be provided. Where “drop-bottom” cars are used, special safety precautions shall be taken.

No person shall ride under the trolley wire unless suitably covered man cars are used.
Men shall not load or unload before the cars in which they are to ride, or are riding, come to a full stop. Men shall proceed in an orderly manner to and from man trips. When belts are used for transporting men, a minimum clearance of eighteen inches shall be maintained between the belt and the roof or crossbars, projecting equipment, cap pieces, overhead cables, wiring and other objects. Where the height of the coal seam permits, the clearance shall not be less than twenty-four inches. Unless a greater speed is allowed by special permission from the director of the department of mines, in which event the conditions, limitations and rules imposed in connection with the grant of such permission shall be observed, the belt speed shall not exceed two hundred fifty feet per minute where the minimum overhead clearance is eighteen inches, or three hundred feet per minute where the minimum overhead clearance is twenty-four inches, while men are loading, unloading, or being transported. A signaling system or method shall be provided for stopping the belt and men shall ride not less than six feet apart.
An assistant mine foreman or some other person designated by the mine foreman shall supervise the loading and unloading of belts and man trips. Where men are required to regularly cross over belts, adequate and safe facilities shall be provided.

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


Operators of coal mines in which electricity is used as a means of power shall comply with the following provisions:

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

2. Underground transformers purchased after the effective date of this article, shall be air cooled or cooled with non-inflammable liquid or inert gas.
Underground stations containing transformers or circuit breakers filled with inflammable oil shall be provided with door sills or their equivalent, which will confine the oil if leakage or explosion occurs, and shall be of fireproof construction.

Transformers shall be provided with adequate overload protection.

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

Battery charging stations, motor generator sets, rotary converters and oil filled transformers and switches, used underground shall be housed in fireproof buildings ventilated by a separate split of air direct to the main return (rectifiers excepted).
All power wires and cables entering a mine shall be provided with lightning arrestors at points of entry.

“Danger—high voltage” signs shall be posted conspicuously on all transformer enclosures, high-potential switchboards and other high-potential installations.

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

Insulating platforms of wood, rubber, or other suitable non-conductive material shall be kept in place at each switchboard and at stationary machinery where shock hazards exist.

All power wires and cables in hoisting shafts, slopes and power boreholes shall be properly insulated, provided with lightning arrestors, substantially installed and well maintained.

All power wires, except training cables, especially designed cable used as electrical conductors to underground-rectifier or transformer stations, portable power cables or bare or insulated ground and return wires, shall be supported on well-installed insulators and shall not contact combustible material, roof or ribs.
Trolley and feeder wires shall be installed as follows:

Where installed on permanent haulage, after the effective date of this article, they shall be: (1) At least six inches outside the track gauge line; (2) provided with cutout switches at intervals of not more than two thousand feet and near the beginning of all branch lines; and (3) kept taut and not permitted to touch the roof, rib, or crossbars.

Particular care shall be taken where they pass through door openings to preclude bare wires from coming in contact with combustible material.

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

After the effective date of this article, in new underground installations of electric face equipment in new mines the difference in potential between any two points in the electrical circuits, or between any point in the elec-
trical circuits and the ground, shall not exceed six hundred and fifty volts. No provision of this section shall prohibit the use of higher voltages of alternating current on service lines to rectifiers, converters, transformers or switches connected thereto located in areas out by the immediate face regions: Provided, That electrically face operated equipment used in underground mines may be operated at higher voltages if the conductor in the trailing cable is surrounded by a flexible grounded metallic sheath, ground current is limited by acceptable methods, and the ground circuit is continuously monitored in a method approved by the director of the department of mines.

In a gassy mine, trolley, feeder wires, mine power centers, rectifiers and distribution centers shall not extend beyond the last open crosscut and shall be kept at least one hundred and fifty feet from open pillar workings.

Trolley wires and feeder wires shall be anchored securely, insulated, and properly identified at their ends. Metallic frames, casings, and other enclosures of stationary electric equipment that can become "alive" through failure of in-
sulation or by contact with energized parts shall be grounded effectively.

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

Lightning arrestors suitable for the voltage of the system shall be installed on each ungrounded conductor for each exposed feeder circuit entering the mine.

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

Where a.c. to d.c. conversion equipment is used to supply direct current for shuttle cars or other face equipment, adequate electrical protection shall be provided on either the alternating current side and/or the direct current side of the conversion equipment.

Where both a.c. and d.c. equipment is operating in the same mine the grounding systems shall not be interconnected.

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

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

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

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

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

All unattended underground permanent belt conveyor drives shall be provided with an automatic spray system or its equivalent.

All unattended underground loading points where elec-
Electric driven hydraulic systems are used shall utilize a fire-proof oil or emulsion, unless the electrical wiring and hydraulic systems are separated.

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

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

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

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

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

All power transformers shall be provided with adequate over-load protection. A visual and suitable means of disconnecting the primary line of the transformers shall be provided.
In new installations made after the effective date of this section, lightning arrestors shall be connected to a low resistance grounding medium on the surface which shall be separated from system and equipment grounds by a distance of not less than fifty feet.

At locations where cables cross regular haulage or travelways, or where equipment must pass, unless protected by sufficient height, the cables shall be installed in a trench in the roof, protected by some mechanical means, or buried at least twelve inches below combustible material and adequately protected from crushing by the weight of equipment passing over it.

Underground high-voltage main feeder cables shall extend to high-voltage distribution centers with breakers or disconnect switches supplying the branch circuits. Disconnecting devices shall be incorporated to provide visual evidence that the circuit is de-energized when the switches are opened.

Permanent high-voltage cables shall be installed only in well maintained and accessible passageways of the mine and when installed in haulageways shall be supported on
hangers and/or messenger wire supported from the roof and/or buried. Extra lengths may be stored in a workman-like manner, vertically on suitable supports, or horizontally in a protected location.

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

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

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

In unusually dusty locations, electric motors, switches and controls shall be of dust-tight construction, or enclosed with reasonably dust-tight housings or enclosures.

Open type motors, switches or controls in use at the effective 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.
Personnel who are required frequently and regularly to travel on belts or chain conveyors extended to heights of more than ten feet, shall be provided with adequate space and protection in order that they may work safely. Permanent ladders extending more than ten feet shall be provided with back guards. Walkways around thickeners that are less than four feet above the walkway shall be adequately guarded. Employees required to work over thickeners shall wear a safety harness adequately secured, unless walkways or other suitable safety devices 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 employ any person to work in such mine, or permit any persons to be in the mine for the purpose of working therein, unless they are in communication with at least two openings, or outlets, to each seam, separated by natural strata, such openings to be not less than three hundred feet apart, if the mine be worked by shaft; if the
mine be worked by shaft and slope, such openings shall
be separated by one hundred feet of natural strata; and
not less than fifty feet apart at the outlets, if worked by
slope or drift; but this requirement of a distance of
three hundred feet between openings or outlets to shaft
mines shall not apply where such openings or outlets have
been made prior to the effective date of this article. To
each of the outlets there shall be provided from the
interior of the mine a safe and available roadway, prop-
erly drained, which shall at all times, while the mine is
in operation, be kept free from all obstructions that might
prevent travel thereon in case of an emergency. If either
of the outlets be by shaft, it shall be fitted with safe
and available appliances, such as stairs or hoisting ma-
chinery, which shall at all times when men are under-
ground be kept in order and ready for immediate use,
whereby persons employed in the mine may readily
escape in case of accident.

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

This section shall not apply to any mine work while work is being prosecuted with reasonable diligence in making communications between outlets, necessary repairs, or removing obstructions, so long as not more than twenty persons are employed at any one time in the mine; neither shall it apply to any mine, or part of a mine, in which a second outlet has been rendered unavailable by reason of the final robbing of pillars, preparatory to abandonment, so long as not more than twenty persons are employed therein at any one time; but before a limited number of men are so permitted to work, approval of the necessity therefor shall be obtained from the department of mines.

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

Coal storage bins hereafter constructed with vertical sides fifty feet or over in height shall be provided with
3 ventilators and/or louvers to provide adequate ventilation. Where roofs are constructed over coal storage bins, adequate ventilation shall be provided by stacks, ventilators, louvers or mechanical means.

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

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

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

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

20 Where electric lights are used in recovery tunnels of over one hundred feet in length, the wiring shall be in rigid conduit and shall be enclosed in waterproof receptacles.
An escapeway shall be provided from any recovery tunnel hereafter constructed, to a safe place on the surface; such escapeway shall be at least thirty inches in diameter and, where inclined, a ladder shall be provided to extend the full length of the escapeway to facilitate emergency exit.

Extreme caution shall be exercised by all employees required to work at or near coal storage piles during coal recovery operations to avoid injury by coal slides 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, maintained and operated in compliance with the following provisions:

1. Good housekeeping shall be practiced in and around thermal dryer plants.
2. Adequate fire fighting facilities shall be provided on all floors.
3. When welding and cutting operations are to be performed in a dryer structure, the area shall be wetted down thoroughly and adequate fire-fighting apparatus shall be readily available during the operation.
Only qualified persons shall be permitted to operate dryers; however, this provision shall not prohibit qualified persons from training other persons to become qualified operators.

Dryer control panels shall be provided with audible and visible alarm devices; such devices should be adjusted to function at somewhat less than maximum dryer temperature.

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

Thermal coal dryers hereafter installed shall not be enclosed, except that roofs may be used. Whenever it is deemed necessary to inclose thermal dryers, such equipment shall be in a fireproof structure.

Dryer installations and discharge stacks shall be protected with adequate explosion release vents that open to the outside atmosphere.

Thermal coal dryers shall be located at a safe distance from tipples, cleaning plants, mine openings and surface
buildings, such as oil storage areas, explosives magazines, and other buildings where coal dust, sparks and flames are likely to enter and become ignited or otherwise cause danger of fires.

Dryers shall be equipped with quick-response heat control device which, in the event of superelevated temperatures, will automatically divert the hot inlet gases into a by-pass stack thereby by-passing the drying chamber and, at the same time, will stop the fuel being supplied to the air heater.

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

Dryers shall be examined thoroughly after normal and emergency shutdown for fires and coal dust accumulations.

Dryer controls, valves, and mechanical equipment shall be frequently inspected and no dryer shall be operated with defective mechanical equipment.
The gauges of temperature control instruments shall be of the recording type.

Operating rules suitable for the characteristics of each dryer system and the materials processed shall be developed and shall be available at the control panel.

Electrical equipment, electrical wiring and lighting fixtures shall be of dust-tight construction.

Adequate illumination shall be provided.

Dryers shall not be operated beyond their rated evaporation capacity.

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

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

Thermal coal dryers previously installed in a tipple or cleaning plant shall be separated where practicable from other working areas by substantial partitions capable of providing greater resistance to explosion pressures than an exterior wall or walls.

When it is necessary to use extension cables for emer-
gency illumination, such lighting devices shall be dust-tight and adequately guarded. When it becomes necessary to perform work in dryer system bins or any other dusty areas, permissible cap lamps shall be used for illumination.

ARTICLE 6. CERTIFICATION OF COAL MINERS.

§22-6-5. Examination to be practical; certificates not transferable; how certificates to be issued.

All examinations shall be conducted in the English language and shall be of a practical nature, so as to determine the competency and qualifications of the applicant to engage in the mining of bituminous coal with reasonable safety to himself and his fellow employees.

No applicant shall be certified as qualified or competent who (1) has had less than six months' practical experience as a miner or as a miner apprentice, or (2) lacks a sound knowledge of first aid. Evidence of satisfactory completion of a course of instruction in first aid offered by the West Virginia department of mines, the federal bureau of mines or by such other sponsor as the director may approve, may be received as proof of competence in first aid without further examination.
15 During this six-months' period 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 Tampe
Chairman Senate Committee

Clayton C. Davidson
Chairman House Committee

Originated in the Senate.

To take effect from passage.

H. Lamar White
Speaker House of Delegates

Howard W. Carson
President of the Senate

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

Herbert C. Smith
Governor
PRESENTED TO THE
GOVERNOR

Date  3/21/67
Time  2:20pm