

**WEST VIRGINIA
SECRETARY OF STATE
NATALIE E. TENNANT
ADMINISTRATIVE LAW DIVISION**

Form #1

Do Not Mark In This Box

FILED

2009 JUN 30 PM 4:45

OFFICE WEST VIRGINIA
SECRETARY OF STATE

NOTICE OF A PUBLIC HEARING ON A PROPOSED RULE

AGENCY: WV Office of Miners' Health, Safety and Training TITLE NUMBER: 56

RULE TYPE: Legislative CITE AUTHORITY: West Virginia Code 22A-1-6 and 22A-1-38

AMENDMENT TO AN EXISTING RULE: YES ☐ NO ☒

IF YES, SERIES NUMBER OF RULE BEING AMENDED: _____

TITLE OF RULE BEING AMENDED: _____

IF NO, SERIES NUMBER OF RULE BEING PROPOSED: 16 ☒

TITLE OF RULE BEING PROPOSED: Rules and Regulations Governing the Safety of Those Employed
in and Around Preparation Plants in West Virginia

DATE OF PUBLIC HEARING: July 30, 2009 TIME: 9:00 am

LOCATION OF PUBLIC HEARING: WV Office of Miners' Health, Safety and Training

142 Industrial Drive

Oak Hill, WV 25901

COMMENTS LIMITED TO: ORAL ☐ WRITTEN ☐ BOTH ☒

DATE WRITTEN COMMENT PERIOD ENDS: July 30, 2009 TIME: 4:30 pm

WRITTEN COMMENTS MAY BE MAILED TO:

The Department requests that persons wishing to make
comments at the hearing make an effort to submit written
comments in order to facilitate the review of these comments.

WV Office of MHST

1615 Washington Street, East

Charleston, WV 25311-2126

The issues to be heard shall be limited to the proposed rule.

ATTACH A **BRIEF** SUMMARY OF YOUR PROPOSAL


Authorized Signature

APPENDIX B

FISCAL NOTE FOR PROPOSED RULES

Rule Title:

Rules and Regulations Governing the Safety of Those Employed in and Around Preparation Plants in West Virginia

Type of Rule:

☒ Legislative ☐ Interpretive ☐ Procedural

Agency:

WV Office of Miners' Health, Safety and Training

Address:

1615 Washington Street East
Charleston, WV 25311-2126

Phone Number:

304.558.1425

Email: ksloan@mines.state.wv.us**Fiscal Note Summary**

Summarize in a clear and concise manner what impact this measure will have on costs and revenues of state government.

The fiscal impact is unknown at this time and cannot be determined until fully implemented. Any increase in administrative costs will be minimal and will be absorbed without increasing employees or substantial increases in expenses.

Fiscal Note Detail

Show over-all effect in Item 1 and 2 and, in Item 3, give an explanation of Breakdown by fiscal year, including long-range effect.

FISCAL YEAR			
Effect of Proposal	Current Increase/Decrease (use "-")	Next Increase/Decrease (use "-")	Fiscal Year (Upon Full Implementation)
1. Estimated Total Cost	0.00	0.00	0.00
Personal Services	0.00	0.00	0.00
Current Expenses	0.00	0.00	0.00
Repairs & Alterations	0.00	0.00	0.00
Assets	0.00	0.00	0.00
Other	0.00	0.00	0.00
2. Estimated Total Revenues	0.00	0.00	0.00

Rule Title:

Rules and Regulations Governing the Safety of Those Employed in and Around Preparation Plants in West Virginia

Rule Title: Rules and Regulations Governing the Safety of Those Employed in and Around
Preparation Plants in West Virginia

3. **Explanation of above estimates (including long-range effect):**
Please include any increase or decrease in fees in your estimated total revenues.

No increases or decreases in revenue at this time.

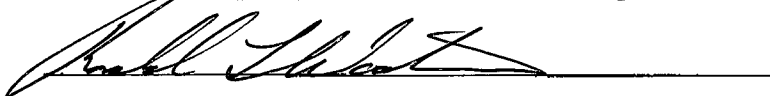
MEMORANDUM

Please identify any areas of vagueness, technical defects, reasons the proposed rule **would not** have a fiscal impact, and/or any special issues **not** captured elsewhere on this form.

None are anticipated.

Date: June 30, 2009

Signature of Agency Head or Authorized Representative



SUMMARY OF THE RULE AND STATEMENT OF FACTS AND CIRCUMSTANCES

Currently preparation plants, loadouts, tipples, and other coal handling facilities are governed by two different areas of the law. If the preparation plant, loadout, tippie or other coal handling facility is processing coal received from an underground mine, the laws applicable to an underground mine apply. If the preparation plant, loadout, tippie or other coal handling facility is processing coal from a surface mine, the laws applicable to surface mines apply. In addition, there are independent preparation plants, loadouts, tipples, and other coal handling facilities that process coal from both underground mines and surface mines and at these facilities there are issues as to which of these laws apply. This Rule is designed to apply to any and all preparation plants, loadouts, tipples, and other coal handling facilities processing coal regardless of the source of the coal and will provide a uniform application of laws to all such facilities.

This Rule creates two classes of certification. One class is known as an “apprentice preparation plant miner” and the other class is known as an “experienced preparation plant miner.” The purpose of these certifications is to insure that all people working at preparation plants, loadouts, tipples, and other coal handling facilities have received a minimum level of training designed to educate prospective employees by providing them with basic work knowledge applicable to such facilities and to educate them in the dangers and hazards associated with this line of work. Furthermore, this Rule takes the law applicable to preparation plants, loadouts, tipples and other coal handling facilities processing surface mine coal (the more detailed law) and expands on that law to create a safer work environment applicable to processing coal in the 21st century.

FILED

**TITLE 56
LEGISLATIVE RULES
OFFICE OF MINERS' HEALTH, SAFETY AND TRAINING**

2009 JUN 30 PM 4:45

OFFICE WEST VIRGINIA
SECRETARY OF STATE

**SERIES 16
RULES AND REGULATIONS GOVERNING THE SAFETY OF THOSE EMPLOYED
IN AND AROUND PREPARATION PLANTS IN WEST VIRGINIA**

§56-16-1. General.

1.1. Scope. -- These rules govern safety of employees in and around preparation plants.

1.2. Authority. -- W. Va. Code § 22A-1-6 and 22A-1-38

1.3. Filing Date. -- June 30, 2009

1.4. Effective Date. -- _____

1.5. Applicability. -- These regulations shall extend to all preparation plant operations, loadouts, tipples or other coal handling facility. These regulations shall not apply to any utility or railroad having facilities in the vicinity of preparation plant operations unless such utility or railroad is also the operators of such preparation plant operations.

1.6. Other law applicable. -- All provisions of the mining law of this state, specifically Chapter 22A, of the West Virginia Code, are applicable to preparation plants, except to the extent that these regulations cover the specific requirement, and except to the extent that the context of a specific provision would render its applicability totally inappropriate to preparation plants.

§56-16-2. Effect of Law and Regulations.

2.1. These regulations shall have the effect of law and violations shall be deemed a violation of law and so cited with the same effect as law. All provisions of Article 1, Chapter 22A of the West Virginia Code are applicable to these regulations.

§56-16-3. Definitions.

3.1. Accident. -- The term "accident" shall mean any premature ignition, fire or injury, or death other than natural causes of any person. See 170 CSR 1-2.

3.2. Agent. -- The term "agent" shall mean any person charged with the responsibility for the operations of all or a part of a preparation plant or the supervision of the miners at a preparation plant.

3.3. Apprentice Preparation Plant Miner. -- The term "apprentice preparation plant miner" shall mean any individual who has taken the required training as approved by the Office of

Miners' Health, Safety and Training and passed an examination administered by the Office of Miners' Health, Safety and Training.

3.4. Approved. -- The term "approved" shall mean in strict compliance with mining law, or, in the absence of law, accepted by a recognized body or organization whose approval is generally recognized as authoritative on the subject.

3.5. Approved Detector. -- The term "approved detector" shall mean any detector, approved by MSHA, to test for methane gas, oxygen deficiency, or other harmful gases.

3.6. Armored Cable. -- The term "armored cable" shall mean a cable provided with a wrapping of metal, usually steel wires or tapes, primarily for the purpose of mechanical protection.

3.7. Barricaded. -- The term "barricaded" shall mean to obstruct passage of person, vehicles, or flying materials.

3.8. Berm. -- The term "berm" shall mean a pile or mound of material or equivalent capable of restraining a vehicle.

3.9. Blaster. -- The term "blaster" shall mean any individual who has passed an examination prescribed by the Department of Environmental Protection pertaining to the handling of explosives and blasting.

3.10. Board of Miner Training, Education and Certification. -- The term "Board of Miner Training, Education and Certification" shall mean the Board of Miner Training, Education and Certification established by W. Va. Code § 22A-7-1 *et seq.*

3.11. Brake Systems. -- The term "brake systems" shall include:

(a) Service brake system - the primary brake system used for stopping a vehicle.

(b) Emergency stopping system - the system used for stopping a vehicle in the event of any single failure in the service brake system.

(c) Parking system - a system to hold a stopped vehicle in a stationary position.

3.12. Branch Circuit. -- The term "branch circuit" shall mean any circuit, alternating current or direct current, connected to and leading from the main power lines.

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

3.14. Certified Electrician. -- The term "certified electrician" shall mean any person who is qualified as a electrician and who has passed an examination given by the Office of Miners' Health, Safety and Training. See 48 CSR 8.2.5.

3.15. Certified Person. -- The term "certified person" when used to designate the kind of person to whom the performance of a duty in connection with the operation of a preparation plant, loadout, tipple, or other coal handling facility, shall mean a person who is qualified under the provisions of this law to perform such duty.

3.16. Certified Shot Firer. -- The term "certified shot firer" shall mean any individual who has passed an examination prescribed by the Office of Miners' Health, Safety and Training in the handling of explosives and blasting.

3.17. Circuit Breaker. -- The term "circuit breaker" shall mean a device for interrupting a circuit between separable contacts under normal or abnormal conditions.

3.18. Coal Handling Facility. -- The term "coal handling facility" shall mean any facility where coal is cleaned, washed, sized, blended, processed and/or loaded for transportation to the consumer.

3.19. Competent Person. -- The term "competent person" shall mean a person designated by the mine operator or independent contractor who has a minimum of twenty-four (24) months experience at a preparation plant, loadout, tipple, or other coal handling facility and is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

3.20. Delta Connected. -- The term "delta connected" shall mean a power system in which the windings or transformers or S.C. generators are connected to form a triangular phase relationship, and with phase conductors connected to each point of the triangle.

3.21. Department. -- The term "department" shall mean the state Office of Miners' Health, Safety and Training provided for in Section 1, Article 1 of Chapter 22A of the West Virginia Code.

3.22. Director -- The term "Director" shall mean the Director of the Office of Miners' Health, Safety and Training provided for in Chapter 22A, Article 1, Section 3, of the West Virginia Code.

3.23. Effectively Grounded. -- The term "effectively grounded" shall mean grounded through a grounding connection of sufficiently low impedance (inherent or intentionally added or both) so that fault grounds which may occur cannot build up voltages in excess of limits established for apparatus, circuits or systems so grounded.

3.24. Experienced Preparation Plant Miner. -- The term "experienced preparation plant miner" shall mean any individual who has obtained the required experience as evidenced by the experienced preparation plant miner documents and has passed the required examination administered by the Office of Miners' Health, Safety and Training.

3.25. Explosives. -- The term "explosives" shall mean any substance, compound or mixture

which is approved by MSHA and whose primary purpose is to function by explosion.

3.26. Flame-resistant Cable, Portable. -- The term "flame-resistant cable, portable" shall mean a portable flame-resistant cable that has passed the flame test of the Federal Mine Safety and Health Administration.

3.27. Ground or Grounding Conductor (mining). -- 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 or any equipment, device or wiring system with a mine track or other effective grounding medium.

3.28. Grounded (earthed). -- The term "grounded (earthed)" shall mean that the system, circuit, or apparatus referred to is provided with a ground.

3.29. High Voltage. -- The term "high voltage" shall mean voltages of more than one thousand (1,000) volts.

3.30. Imminent Danger. -- The term "imminent danger" shall mean the existence of any condition or practice at a preparation plant, loadout, tippie, or other coal handling facility which could be expected to cause death or serious physical harm before such condition or practice can be abated.

3.31. Inspector. -- The term "inspector" shall mean an authorized representative of the Director.

3.32. Interested Persons. -- The term "interested persons" shall include the operator, members of any mine safety committee at the mine affected and other duly authorized representative of the mine workers and the Office of Miners' Health, Safety and Training.

3.33. Lightning Arrestor. -- The term "lightning arrestor" shall mean a protective device for limiting surge voltage on equipment by discharging or by passing surge current, it prevents continued flow or follow current to ground and is capable of repeating these functions as specified.

3.34. Loadout. -- The term "loadout" shall mean any facility where coal is cleaned, washed, sized, blended, processed and/or loaded for transportation to the consumer.

3.35. Low Voltage. -- The term "low voltage" shall mean up to and including six hundred sixty (660) volts.

3.36. Medium voltage. -- The term "medium voltage" shall mean voltages from six hundred sixty-one (661) to one thousand (1,000) volts.

3.37. Neutral (derived). -- The term "neutral (derived)" shall mean a neutral point or connection established by the addition of a "zigzag" or grounding transformer to a normally underground power system.

3.38. Neutral Point. -- The term "neutral point" shall mean the connection point of transformer or generator windings from which the voltage to ground is nominally zero (0), and is the point generally used for system groundings in wye-connected A.C. power system.

3.39. Operator. -- The term "operator" shall mean any firm, corporation, partnership or individual operating any preparation plant, loadout, tipple, or other coal handling facility or part thereof, or engaged in the construction of any facility associated with a preparation plant, loadout, tipple, or other coal handling facility.

3.40. Permissible Electric Blasting Caps. -- The term "permissible electric blasting caps" shall mean instantaneous electric blasting caps and all types of delay electric blasting caps.

3.41. Person. -- The term "person" shall mean any individual, partnership, association, corporation, firm, subsidiary of a corporation or other organization.

3.42. Portable (Trailing) Cable. -- The term "portable (trailing) cable" shall mean a flexible cable or cord used for connecting mobile, portable or stationary equipment to a source of electrical energy where permanent wiring is prohibited or is impracticable.

3.43. Power Center or Distribution Center. -- The term "power center or distribution center" shall mean a combined transformer or distribution unit, complete within a metal enclosure from which one (1) or more low-voltage power circuits are taken.

3.44. Preparation Plant. -- The term "preparation plant" shall mean any facility where coal is cleaned, washed, sized, blended, processed and/or loaded for transportation to the consumer.

3.45. Qualified Person. -- The term "qualified person" shall mean a person who has completed an examination and is considered qualified on record by the Office of Miners' Health, Safety and Training and has demonstrated an ability to perform a particular task.

3.46. Qualified Person-Electrician. -- The term "qualified person-electrician" shall mean a person who has completed an examination and is considered qualified on record by the Office of Miners' Health, Safety and Training to perform limited electrical work.

3.47. Safety Belt -- The term "safety belt" shall mean a safety harness.

3.48. Safety Harness -- The term "safety harness" shall mean a full body harness that possesses a tensile strength of five-thousand (5,000) pounds.

3.49. Supervisor. -- The term "supervisor" shall mean a superintendent, facility foreman, assistant facility foreman, or any person specifically designated by the superintendent or facility foreman to supervise work of employees and who is acting pursuant to such specific designation and instructions.

3.50. Tipple. -- The term "tipple" shall mean any facility where coal is cleaned, washed,

sized, blended, processed and/or loaded for transportation to the consumer.

3.51. Work of Preparing the Coal. -- The term "work of preparing coal" shall mean the breaking, crushing, sizing, cleaning, washing, drying, mixing, storing, and loading.

3.52. Working Place. -- The term "working place" shall mean all areas in or about a preparation plant, loadout, tipple, or other coal handling facility where persons are working.

3.53. Wye-Connected. -- The term "wye-connected" shall mean a power system connection in which one (1) end of each phase windings or transformers or A.C. generators are connected together to form a neutral point, and a neutral conductor may or may not be connected to the neutral point, and the neutral point may or may not be grounded.

3.54. ZigZag Transformer (Grounding Transformer). -- The term "zigzag transformer (grounding transformer)" shall mean a transformer intended primarily to provide a neutral point for grounding purposes.

§56-16-7. Preparation Plant Miner Certifications.

7.1 Certification Required – As of January 1, 2012 no individual shall work at a preparation plant, loadout, tipple, or other coal handling facility without first possessing the required Preparation Plant Miner Certification.

7.2 Grandfathering Experienced Underground Miners and Experienced Surface Miners – Any individual possessing either an experienced underground miner card or an experienced surface miner card on December 31, 2011 shall be allowed to obtain an Experienced Preparation Plant Miner certificate without taking the required training or passing an examination. Those individuals possessing an experienced underground miner certificate or an experienced surface miner certificate on December 31, 2011, shall receive an experienced Preparation Plant Miner certificate by completing an application with the Office of Miners' Health, Safety and Training and paying the required fee.

7.3 Grandfathering Preparation Plant Workers – Any individual who has been employed at a preparation plant, loadout, tipple, or other coal handling facility on or before December 31, 2011 and who documents that he/she has worked at such a facility for six (6) months and 108 shifts shall be allowed to obtain an Experienced Preparation Plant Miner certificate without taking the required training or passing an examination. Those individuals who verify such experience, shall receive an experienced Preparation Plant Miner certificate by completing an application with the Office of Miners' Health, Safety and Training and paying the required fee.

7.4 Apprentice Preparation Plant Miner – As of January 1, 2012, any individual seeking employment at a preparation plant, loadout, tipple, or other coal handling facility who is not eligible for grandfathering under 7.2 or 7.3 above, must first complete a training course approved by the Office of Miners Health, Safety and Training covering the criteria established by the Board of Miner Training, Education and Certification and pass an examination administered by the Office of Miners' Health, Safety and Training. All Apprentice Preparation Plant Miners shall

wear a red hard hat. Apprentice Preparation Plant Miners must be supervised in accordance with the requirements to supervise Apprentice Surface Miners found in 56 CSR 3-57.2. Upon completion of a training program approved by the Office of Miners' Health, Safety and Training, a permit of apprenticeship shall be issued to any person who scored at least eighty percent (80%) on the final examination administered by the Office of Miners' Health, Safety and Training: Provided, That: such person shall pass the examination within forty-five (45) days of completion of the approved training program. No person shall be employed as an apprentice for a period in excess of eight (8) months, except that in the event of illness or injury, time extensions shall be permitted as established by the Director of the Office of Miners' Health, Safety and Training.

7.5 Certificate of Competency and Qualification – Preparation Plant Miner. - A certificate of competency and qualification as a Preparation Plant Miner shall be issued by the Director to any person who has at least six (6) months and 108 shifts total experience as an apprentice and demonstrated his/her competence as a miner by successful completion of an examination given by the Director or his representative in a manner and place to be determined. Provided, That 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 duties of a preparation plant miner with reasonable safety to himself/herself and his/her fellow workers: Provided, however, That notice of the time and place of such examination shall be given to management at the facility, to the local union there if there is a local union, and notice shall also be posted at the place or places in the vicinity of the facility where notices to employees are ordinarily posted. Examinations shall also be held at such times and places, and after such notice, as the Director finds necessary to enable all applicants for certificates to have an opportunity to qualify for certification.

7.6 Experienced Preparation Plant Miner Certification – Any Preparation Plant Miner having six (6) months and 108 shifts verified experience at a preparation plant, loadout, tipple, or other coal handling facility and having in their possession a first-aid certificate, is eligible to take the Experienced Preparation Plant Miner examination.

§56-16-8. General Provisions.

8.1. Horseplay - Horseplay, practical jokes, wrestling, fighting or other actions which threaten persons with personal injury, causing them to fear for their personal safety or causing damage resulting in interference with safe operations shall be prohibited.

8.2. Intoxicants - Persons under the influence of any intoxicant shall not be permitted at a preparation plant, loadout, tipple, or other coal handling facility. An authorized representative of the Director may cause any miner to be withdrawn from the mine and request the mine operator to search and/or test the miner for intoxicants or paraphernalia.

8.3. Housekeeping - Paths, walkways, stairways, and roadways shall be kept free of obstructions. Structures and inside work areas shall be kept free of oil, coal spillage, litter, and coal dust accumulations.

8.4. Smoking - Smoking or open flames shall not be permitted in the following areas:

Within 150 feet of the area where explosives are being stored, handled, or used;

Within 150 feet of flammable liquid storage areas;

Within 150 feet of liquefied and nonliquefied gas storage areas;

Within 150 feet of any other fire or ignition source.

8.5. Compressed air or gases.

(a) Safety chains or suitable locking devices shall be used at connections to machines or high-pressured hose lines where a connection failure would create a hazard.

(b) Compressors and compressed-air receivers shall be equipped with automatic pressure relief valves, pressure gauges, and drain valves.

(c) All hoses exceeding one-half (1/2) inch inside diameter shall have a safety device at the source of supply at each branch line to reduce pressure in case of hose failure.

8.6. No working alone - No person shall be assigned, or allowed, or be required to perform work alone in any area where hazardous conditions exist that would endanger his safety unless he can communicate with others, can be heard, or can be seen.

8.7. Stockpiles - Coal shall not be stockpiled within fifty (50) feet of exposed or buried gas lines.

8.8. Toilet facilities - Each operator of a preparation plant, loadout, tippie, or other coal handling facility shall provide at least one sanitary toilet in a location convenient to each surface work site. All sanitary toilets shall be regularly maintained in a clean and sanitary condition.

8.9. Drinking water - An adequate supply of potable water shall be provided for drinking purposes. Water transported to all work sites shall be carried, stored and otherwise protected in sanitary containers.

8.10. Persons entering a preparation plant, loadout, tippie, or other coal handling facility - Only authorized persons shall be permitted to enter a preparation plant, loadout, tippie, or other coal handling facility. Each preparation plant, loadout, tippie, or other coal handling facility shall have a check-in and check-out system that will provide positive identification of every person at that facility. A record of all persons working at the facility shall be kept in a place that will not be affected in the event of a fire and/or explosion. Said record shall bear a number or name identical to the identification check that is securely fastened to the person's belt. The identification check shall be made of rust-resistant metal of no less than sixteen gauge.

8.11. The operator shall develop a plan to account for those authorized persons while at the preparation plant, loadout, tippie, or other coal handling facility. The plan shall be available to a

representative of the Director upon request.

8.12. All individuals performing work at preparation plants, loadouts, tipples and other coal handling facilities shall be provided by the operator with two-way communications that shall be worn by those individuals at all times.

8.13. All individuals shall have two-way communications to a location designated by the operator during their entire shift. The location of each person shall be recorded anytime they change locations. Each person shall check-in every two hours to the location designated by the operator. Failure to check-in every two hours shall require the operator to make an immediate check of the person's location and status. This does not preclude more stringent communication and/or tracking requirements prescribed in stockpile plans and comprehensive mine safety programs.

8.14. Every preparation plant, loadout, tipple and other coal handling facility shall have a check-in and check-out system that will provide positive identification of every person at that facility. A record of all working persons at the facility shall be kept in a place that will not be affected in the event of a fire and/or explosion. Said record shall bear a number or name identical to the identification check that is securely fastened to the person's belt. The identification check shall be made of a rust-resistant metal of no less than sixteen gauge.

8.15. Coal truck drivers hauling into and/or out of preparation plants, loadouts, tipples and other coal handling facilities shall possess a minimum of a 03 Coal Truck Driver certification issued by the West Virginia Office of Miners' Health, Safety and Training. Other certification(s) in the future approved by the West Virginia Office of Miners' Health, Safety and Training which specifically include Coal Truck Driver may suffice for the 03 Truck Driver certification.

8.16. Self-contained self-rescue devices shall be stored at locations identified in the comprehensive mine safety program and/or other site specific plans prescribed by the Director or his/her authorized representative.

8.17. Preshift examinations shall be conducted within three (3) hours prior to work being performed in any area. The results shall be recorded in an approved book and kept at the facility for one (1) year.

8.18. All haulage roads located on preparation plant, loadout, tipple, or other coal handling facility property shall be maintained in accordance with the requirements set forth in W. Va. Code 22A-2-53(b).

8.19. Every preparation plant, loadout, tipple, or other coal handling facility shall include in its comprehensive mine safety program safety precautions to be exercised while workers are working in confined spaces including but not limited to bins, hoppers, and tanks.

8.20. All belt conveyors shall be equipped with de-energizing devices accessible from both sides and the entire length of each conveyor.

8.21. All stockpiles located on preparation plant, loadouts, tipple, or other coal handling facilities property shall comply with the provisions of 36 CSR 27-5 *et seq.*

§56-16-9. Electricity.

9.1. Performance of electrical work.

(a) No electrical work shall be performed on low-, medium-, or high-voltage distribution circuits or equipment, except by a qualified person or by a person enrolled in an approved electrical apprentice program under the direct supervision of a qualified person. Disconnecting devices shall be locked out and suitably tagged by the person who performs such work and such devices shall be open and suitably tagged by such person. They shall be removed only by the person who installed them or if such person is unavailable, by a qualified person authorized by the operator or his agent. Suitably tagged, as used in these sections, means that a sign such as, "Danger, Hands Off, Do Not Close, Men Working On Line", shall be attached to the locked switches. The signs or tags shall bear the name, date, and certification of the workman who installed the tag. Keys used to lock out switches shall be kept only on the person who is performing the work on the equipment and his immediate supervisor. Such locks shall be provided by the operator.

(b) All power circuits and electrical equipment shall be de-energized before work is performed on such circuits and equipment, except when necessary for troubleshooting or testing.

9.2. Transformers.

(a) All surface transformers, unless constructed of materials that will eliminate shock hazards, or unless installed at least eight (8) feet above the ground, shall be enclosed in a house or surrounded by a fence at least six (6) feet high. If the enclosure is constructed of metal, it shall be grounded effectively and the gate or door to the enclosure shall be kept locked at all times, unless authorized persons are present.

(b) Transformers shall be provided with adequate overload protection.

(c) "Danger - High Voltage" signs with voltage indicated shall be posted conspicuously at all transformer enclosures, high potential switch boards, and other high potential installations.

(d) Ground fields shall be installed and maintained at a resistance not to exceed five (5) ohms.

9.3. Electrical equipment generally.

(a) Capacitors used for power factor connections shall have suitable drain off resistors or other means to protect workmen against electrical shock following removal of power.

(b) Dry insulated platforms of rubber or other suitable nonconductive material shall be

kept in place at each switchboard and at stationary machinery where shock hazards exist.

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

(d) All electric conductors shall be sufficient in size and have adequate current carrying capacity and be of such construction that a rise in temperature resulting from normal operation will not damage the insulating materials. In no case shall the requirements be less than set forth in the current National Electric Code.

(e) All electrical connections, splices, and conductors shall be mechanically and electrically efficient. Suitable connectors shall be used. All electric connections or splices and insulating wires shall be reinsulated at least to the same degree of protection as the remainder of the wire. Splices made shall provide continuity of all components.

(f) All power wires, except trailing cables on mobile equipment, specially designed cables conducting high voltage power shall be supported on well installed insulators, and shall not contact different potential passes within eighteen (18) inches of each other. Such cables shall be insulated to the potential of the highest voltage wire or cable.

(g) All electrical equipment shall be provided with switches or controls that are adequate in design, construction, and installation. Power cable, trailing cable or conductor couplings or connections cannot be connected or disconnected while under load.

(h) Single phase loads such as transformer primaries shall be connected phase to phase.

(i) Power wires and cables, including but not limited to, phone communications and control wires shall be insulated adequately and fully protected.

9.4. Testing, Maintenance and Repair of electrical equipment.

(a) All electrical equipment, except circuit breakers, shall be examined daily, by a certified person to assure safe operating condition. All electrical equipment shall be examined monthly, tested and properly maintained by a certified electrician. When a potential dangerous condition is found on electrical equipment, such equipment shall be removed from service until the condition is corrected by a certified electrician. A record of such examination and the action taken, when a potential dangerous condition is found, shall be kept and made available to an authorized representative of the Director and to the miners at such facility.

(b) Circuit breakers and their auxiliary devices shall be tested and examined at least once each month by a qualified person-electrician or certified electrician, and a record of such examination shall be kept and made available to an authorized representative of the Director and to the miners at such facility. Circuit breaker tests shall include:

(1) Breaking continuity of the ground check conductor where ground check monitoring is used;

- (2) Actuating all of the auxiliary protective relays; and,
- (3) Visual observation of all components of the circuit breaker and its auxiliary devices.

Repairs or adjustments indicated by such tests and examinations shall be carried out immediately.

9.5. Circuit breakers.

(a) Automatic circuit breaking devices or fuses of the correct type and capacity shall be installed so as to protect all electrical equipment and circuits against short circuit and overload. Three (3) phase motors on electrical equipment shall be provided with overload protection that will de-energize all three (3) phases in the event that any phase is overloaded. As used in this section, adequate current interrupting capacity requires that the fuse or circuit breaker be capable of interrupting the maximum short circuit current that the circuit may conduct without destruction of the breaker or fuse.

(b) Electric equipment shall be provided with devices that will permit the equipment to be de-energized quickly in the event of an emergency.

(c) One (1) circuit breaker may be used to protect two (2) or more branch circuits if the circuit breaker is adjusted to afford over current protection for the smallest conductor.

(d) Power circuits to three (3) phase alternating current equipment, which serve portable or mobile equipment, shall be protected by suitable circuit breakers of adequate interrupting capacities, which are properly tested and maintained as prescribed by the Director. Such breakers shall be equipped with devices to provide protection against under voltage, grounded phase, short circuit and over current.

(e) Disconnecting devices shall be installed at the beginning of branch lines in high voltage circuits, and equipped or designed in such manner that visual observation can determine that the circuit is de-energized when the switches are open.

(f) Circuit breakers and disconnecting switches shall be marked for identification.

9.6. Cables.

(a) Cables shall enter metal frames of motors, splice boxes and electrical compartments only through proper fittings. When insulated wire, other than cables pass through metal frames, the hole shall be substantially bushed with insulated bushings. Cables and power wires, including, but not limited to, telephone communication and control wires, shall be insulated adequately and fully protected.

(b) Trailing cables shall be clamped to machines in a manner so as to protect the cables

from damage, and to prevent strain on the electrical connections. No cable shall be hung in a manner which may cause damage the insulation or conductors.

(c) Trailing cables shall be adequately protected to prevent damage by mobile equipment.

(d) Short circuit protection for trailing cables shall be provided by an automatic circuit breaker, or no less effective device, approved by the Director. Such device shall be of adequate current interrupting capacity in each ungrounded conductor. Disconnecting devices used to disconnect power from trailing cables shall be plainly marked and identified. Such devices shall be equipped or designed in such a manner that it can be determined by visual observation that the power is disconnected. Devices shall be labeled to show which unit they control.

(e) Cable couplers shall be constructed so that the ground check continuity conductor shall be broken first, and when the coupler is being uncoupled, the ground conductor shall be broken last.

(f) When two (2) or more trailing cables junction to the same distribution center, means shall be provided to assure against connecting the trailing cable to the wrong size circuit breaker.

(g) One temporary splice may be made in any portable trailing cable. Such trailing cable may only be used for the next twenty-four (24) hour period. Temporary splices in trailing cables shall be made in a workmanlike manner and shall be mechanically strong and well insulated. Trailing cables or hand cables which have exposed wires, or which have splices that heat or spark under load shall not be used. As used in this section, the term splice means a mechanical joining of one (1) or more conductors that have been severed.

(h) When permanent splices in trailing cables are made, they shall be:

(1) Mechanically strong with adequate electrical conductivity and flexibility;

(2) Effectively insulated and sealed so as to exclude moisture;

(3) Vulcanized or otherwise treated with suitable materials to provide flame-resistant qualities and good bonding to the outer jacket, and;

(4) Made in accordance with the manufacturers specifications.

(i) Trailing cables for medium voltage circuits shall include; grounding conductors, a ground check conductor, and grounded metallic shields around each power conductor, or a grounded metallic shield over the assembly. Provide that, equipment employing cable reels, cables without shields may be used if insulation is rated at two thousand (2,000) volts or more.

9.7. Grounding.

(a) All metallic shields, armors and conduits enclosing power conductors shall be electrically continuous throughout, and shall be grounded by a method approved by an

authorized electrical representative of the Director. Where grounding wires, used to ground metallic shields, armors, conduits, frames, casings and other metallic enclosures, such grounding wire shall be approved where:

(1) the power conductor used is #6 A.W.G. or larger, the cross sectional area of the grounding wire is at least one-half (1/2) the cross sectional area of the power conductor.

(2) the power conductor used is less than #6 A.W.G., the cross sectional area of the grounding wire is equal to the cross sectional area of the power conductor.

(b) The attachment of grounding wires to other grounded power conductors will be approved where separate clamps, suitable for such purpose, are used and installed to provide a solid connection.

(c) Metallic frame, casing, and other enclosures of electrical equipment that can become energized through failure of insulation or by contact with other energized parts, shall be grounded, and shall have a ground monitoring system. To assure continuity, such ground check circuit, or other device approved by the Director shall cause the circuit breaker to open when either the ground or pilot check wire is broken. A temporary waiver may be permitted by the Director, on a facility to facility basis if he determines that such equipment is not available.

(d) In instances where single phase one hundred ten (110)-two hundred twenty (220) volt circuits are used to feed electrical equipment, the only method of grounding that will be approved is the connection of all metallic frames, casings or other enclosures of such equipment to a separate grounding conductor which establishes a continuous connection to a grounded center tap of the transformer.

(e) Where batteries are being charged, without removing them from mobile equipment, or are sitting on wooden blocks, the frames of the machine or battery case shall be grounded to the grounded frame of the charger to prevent the machine from becoming energized through failure of insulation in the charger. All ground conductor connections shall be clamped or bolted connections.

(f) All buildings and structures shall be earth grounded if they are constructed of metal. Also, any building or structures which could become energized with electrical energy shall be effectively grounded.

(g) Guy wires from poles supporting high voltage power lines shall be securely connected to the system grounding medium or shall be provided with insulators rated at the highest voltage installed near the pole end.

(h) At preparation plants, shop areas, and all other surface areas 120/240 volt AC circuits used to power electrical devices in wet locations shall be protected with ground fault circuit interrupting devices.

9.8. Energized lines generally.

- (a) All guy wires shall be marked or flagged when equipment is working in the area.
- (b) Energized power lines crossing an access road or work area shall be identified by warning signs visible from each direction. Warning signs shall include height if lines for clearance and made of reflective material. In no event shall any high voltage power line be installed less than fifteen (15) feet above ground, walkways, or working areas.
- (c) All equipment near energized power lines with the following voltages shall maintain the following clearances: one hundred (100) to sixty-nine thousand (69,000) - ten (10) feet; sixty-nine thousand (69,000) to one hundred fourteen thousand (114,000) - twelve (12) feet; one hundred fifteen thousand (115,000) to two hundred twenty-nine thousand (229,000) - fifteen (15) feet; two hundred thirty thousand (230,000) to three hundred forty-four thousand (344,000) - twenty (20) feet; three hundred forty-five thousand (345,000) to four hundred ninety-nine thousand (499,000) - twenty-five (25) feet; five hundred thousand (500,000) or more - thirty-five (35) feet.
- (d) All personnel, except those directly involved in the operation, shall stay clear of equipment working near energized lines.
- (e) If equipment comes in contact with an energized line, the operator shall stay in the equipment until notified by a certified electrician or competent person that the line is de-energized.
- (f) All electrical wiring and equipment installed shall meet the requirements of the current National Electrical Code.

9.9. High voltage.

- (a) High voltage lines on the surface shall be de-energized, locked out, tagged out, and grounded before work is performed on them, except that repairs may be permitted, in the case of energized surface high voltage lines, if such repairs are made by a certified electrician, or a qualified person-electrician under the direct supervision of a certified electrician, in accordance with the procedures and safeguards, including, but not limited to, a requirement that the operator of such mine provide tests, and maintain protective devices in making such repairs. No work shall be performed on any high voltage line on the surface which is supported by any pole or structure which also supports other high voltage lines until all lines supported on that pole are de-energized and grounded.
- (b) No high voltage lines shall be regarded as de-energized for the purpose of performing work until it has been determined by a certified electrician, or a qualified person-electrician, that such high voltage line has been de-energized and grounded. Such certified electrician, or a qualified person-electrician of a certified electrician, shall, by visual observation, determine that the connecting devices on the high voltage circuit are in open position, and insure that each ungrounded conductor of the high voltage circuit upon which work is to be done is properly connected to the system grounding medium.

(c) An energized high voltage line may be repaired only when the operator has determined that such repairs cannot be scheduled during periods when the power circuit could be properly de-energized and grounded. Such repairs will be performed on power circuits with a phase to phase nominal voltage no greater than fifteen thousand (15,000) volts. The weather conditions shall be noted so as not to interfere with such repairs, or expose those persons assigned to such work to an imminent danger. The operator shall designate a certified electrician, or a qualified person-electrician under the direct supervision of a certified electrician, as the person responsible for carrying out such repairs. In order to insure protection for himself/herself and other persons assigned to perform such repairs. He/she must prepare and file with the operator; (1) a general description of the nature and location of the damage or defect to be repaired; (2) the general plan to be followed in making of such repairs; (3) a statement that a briefing of all certified electricians, or a qualified person-electrician under the direct supervision of a certified electrician, assigned to make such repairs was conducted, informing them of the general plan, their individual assignments, and the dangers inherent in such assignments; (4) a list of proper protective equipment and clothing that will be provided, and such other information as the person designated by the operator feels necessary to properly describe the means or methods to be employed in such repairs. All statements obtained by the operator shall be recorded and contain a notation of the time, date, location and general nature of the repairs.

(d) When two (2) or more persons are working on an energized high voltage surface line simultaneously and anyone of them is within reach of each other, such persons shall not be allowed to work on different phases or equipment with different potentials.

(e) All persons performing work on energized surface high voltage lines shall wear protective rubber lineman's gloves, sleeves, and climber guards if climbers are worn. Protective rubber gloves shall not be worn wrong side out or without protective leather gloves. Protective devices worn by a person assigned to perform work on high voltage surface lines shall be worn continuously from the time he leaves the ground until he returns to the ground and if such devices are employed for extended periods, such persons shall visually inspect the equipment assigned him for defects before each use and in no case, less than twice each day.

(f) All rubber protective equipment used for work on energized high voltage surface lines shall be electrically tested by the operator in accordance with ASTM Standards, part 28 published February, 1968.

(g) Disconnecting or cutout switches on energized high voltage surface lines shall be operated only with insulated sticks, fuse tongs or pullers which are adequately insulated and maintained to protect the operator from voltage. When such switches are operated from the ground, the person operating such devices shall wear protective rubber gloves.

(h) No new additional circuits may be tied to a high voltage surface line while such line is energized.

(i) Grounded messenger wires used to suspend high voltage cable systems may be used as a grounding medium.

(j) All high voltage circuits supplying portable, mobile or stationary equipment shall contain either a direct or derived neutral, which shall be grounded through a suitable resistor at the source transformer. A grounding circuit originating at the grounded side of the grounding resistor shall extend along the power conductors, and serve as a grounding conductor for the frames which receives power from that circuit. The grounding resistor shall be of the proper ohmic value to limit the voltage drop in the grounding circuit, external to the resistor, to not more than one hundred (100) volts. Under fault conditions, the grounding resistor shall be rated for maximum volt current continuously, and insulated from ground for a voltage equal to the phase to phase voltage of the system.

(k) High voltage resistant grounded system serving portable or mobile equipment shall include a failsafe ground check circuit. The fail safe ground check circuit or other device approved by the Director shall cause the circuit breaker to open when either the ground or pilot check wire is broken.

(l) High voltage cables used in resistant grounded systems shall be equipped with metallic shields around each power conductor with one (1) or more ground conductors having a total cross sectional area of not less than one-half (1/2) the power conductor and with an insulated internal or external conductor not smaller than #10 A.W.G. for the ground continuity check circuit.

9.10. Movement of electrical equipment.

(a) Power centers, portable transformers, cable couplings and enclosures shall be de-energized before they are moved. The Director may, on a case-by-case basis, approve the movement of high voltage power centers, portable transformers, cable couplings and enclosures while energized. Power centers and transformers, moved while energized, must be examined by a certified electrician and found to be grounded by methods approved by an authorized representative of the Director and otherwise protected from hazard to the miners. A record shall be kept of such examination.

(b) High voltage cables other than trailing cables shall not be moved or handled at any time while energized.

(c) Facility operators shall require all people, handling energized portable trailing cables, to wear approved and tested insulated workmen's gloves. All such protective equipment shall be furnished by the operator. Rated gloves, used when handling energized portable trailing cables, shall be electrically tested every thirty (30) days and a record of that test shall be kept for one (1) year, and made available to a representative of the Director upon request. If straps or hooks are used, those straps and hooks shall be non-conductive and designed for that purpose.

9.11. Other electrical apparatus or areas.

(a) Metal ladders shall not be used for electrical work.

(b) No electrical machinery or apparatus shall have unguarded exposed energized parts.

(c) Lighting plants shall be located so as not to obstruct or be a safety or health hazard.

(d) Employees performing work that requires them to come in contact with electrical equipment involving shock hazards shall be provided with suitable insulating gloves. Suitable insulation shall be of approved type that will protect such person from voltage to which he is exposed. All such protective equipment shall be furnished by the operator.

(e) Rooms in which circuit breakers or controls are installed shall have two (2) separate and distinct travelable passageways, designated as escapeways.

(f) Open flame in or about surface structures shall be restricted to locations where it will not cause fire or an explosion.

(g) All lights with less than eight (8) feet overhead clearance shall be guarded and the lamps installed in weatherproof sockets. Lamps installed in a hazardous area must be of substantial construction and fitted with a glass enclosure.

(h) A ten (10) pound fire extinguisher shall be provided for each permanent electrical installation.

§56-16-10. Hand-Held Electric Drills and Rotating Tools.

10.1. Electric drills and other electrically operated rotating tools intended to be held in the hand shall have the electric switch constructed so as to break the circuit when the hand releases the switch or shall be equipped with friction or safety clutches.

§56-16-11. Installation of Lighting.

11.1. Electric lights or other approved methods of lighting shall be installed so that they do not come in contact with combustible materials, and the wires shall be supported by suitable insulators and fastened securely to the power conductors.

§56-16-12 Compressed Gases and Welding.

12.1. Handling and use of welding or cutting equipment generally.

(a) The clothing of any person using any welding or cutting equipment in or about a preparation plant, loadout, tippie, or other coal handling facility shall be reasonably free of petroleum products. When handling oxygen cylinders or apparatus, the use of oily gloves is prohibited. Hands shall also be free of petroleum product deposits.

(b) Compressed gases shall not be used under direct pressure from tanks or cylinders but must be used under reduced pressures not exceeding that recommended by the manufacturers.

- (c) At no time shall compressed air be directed toward a person.
- (d) A suitable wrench designed for compressed tanks shall be in the possession of the person authorized to use the equipment.
- (e) Oxygen and gas cylinders and their contents shall be used solely for their intended purposes.
- (f) Only an approved type spark-lighter shall be used for lighting torches.
- (g) All welding and cutting equipment shall be maintained in a safe condition.

12.2. Storage of compressed gas cylinders.

- (a) Cylinders shall be securely stored in an upright position with valve protection caps on and hand tightened. The storage area shall be well ventilated, protected and at least twenty (20) feet from highly combustible materials such as oil or other flammables.
- (b) "Danger No Smoking, Matches or Open Flame" signs at storage areas of cylinders shall be conspicuously posted.
- (c) All oxygen cylinders, stored in buildings, must be separated from fuel gas cylinders by a distance of at least twenty (20) feet or a non-combustible barrier at least five (5) feet high. Such barrier must have a fire resistance rating of at least thirty (30) minutes.

12.3. Transportation of compressed gas cylinders.

- (a) When transporting, cylinders shall be securely mounted with regulators removed, cylinder valves closed, and protective valve caps replaced. An exception to this requirement is compliance with the provisions of 36 CSR 27-11.1(a) through (h).
- (b) Gas cylinders shall not be transported on vehicles used to transport employees unless separate approved compartments are provided.

12.4. Welding preparations.

- (a) Any person or persons assigned to use and work with welding and cutting tools shall be properly instructed in their uses and fully understand the danger of their misuse.
- (b) All persons responsible for welding, cutting, heating, brazing or soldering operations shall be provided with goggles or shields, gloves, safe type spark-lighter and proper torch tip cleaner.
- (c) Prior to welding, cutting, heating, brazing or soldering in areas likely to contain methane, an examination shall be made by a qualified person with an approved detector. Examinations for methane shall be made immediately before and continuously during welding,

cutting, heating, brazing or soldering, and such work shall not commence or continue in air which contains one percent (1%) or more methane.

(d) Welding operations shall be shielded when necessary, and the area shall be well ventilated.

(e) Fire watchers shall be used whenever welding, cutting, heating, brazing, or soldering is performed at locations where a fire hazard exists.

(f) Adequate fire protection shall be provided at the location where welding, cutting, heating, brazing, and soldering is performed.

12.5. Acetylene welding.

(a) Only approved apparatus such as torches, regulators, pressure reducing valves, hoses, back flow check valves, and gas cylinders shall be used.

(b) Back flow check valves shall be attached to the exhaust side of a regulator before using.

(c) Repairs involving the pressure system of compressors, receivers, or compressed-air-powered equipment are prohibited until the pressure has been relieved from the part of the system to be repaired.

(d) Gas cylinders shall be protected from contacting sparks, hot slag, or flame during welding, cutting, heating, brazing, or soldering.

(e) Regulators shall be adequately attached to the cylinders before using.

(f) The cylinder valve shall be opened partially for an instant then closed before connecting a regulator. Such person performing said act shall stand to one (1) side (not in front) of the outlet when opening the cylinder valve.

(g) When removing a regulator from a cylinder bottle valve, such valve shall be closed and the gas released from the regulator, before removing the regulator.

(h) Empty cylinders shall be marked, and removed from the work area immediately.

(i) Oxygen and acetylene tanks or cylinders or compressed gases shall be protected from power lines or energized electrical machinery or equipment. These tanks or cylinders shall be kept away from the place where the cutting is being done in order to prevent damage or accident and to prevent heat from affecting such tanks or cylinders.

12.6. Electrical welding.

(a) All connections at the welding machine shall be checked before starting such

operations.

- (b) The ground lead shall be adequately attached to the work.
- (c) Magnetic work clamps shall be free of adherent metal particles or spatter on contact surfaces.
- (d) Coiled welding cable shall be adequately separated to avoid serious overheating and damage to cable insulation.
- (e) The welding machine frame shall be adequately grounded.
- (f) The welding machine shall be free of: leaks; cooling water, shielding gas, and engine fuel.
- (g) Proper switches shall be provided for de-energizing the welding machine.
- (h) Electrode holders shall be located so they do not make electrical contact with persons, conducting objects, fuel, or compressed gas cylinders. Energized electrode holders may be laid down or placed only in approved nonconductive trays or holders.
- (i) There shall be splice-free cables within ten (10) feet of the electrode holder.
- (j) The welding cable shall not coil or loop around parts of the welder's body.
- (k) When welding has ceased for any substantial period, all electrodes shall be removed from holders. Holders shall be located so that accidental contact cannot occur.
- (l) Where work permits, arc welders shall be enclosed by individual booths or non-combustible screens painted with a finish of low reflectivity such as zinc oxide or lamp black.

12.7. Safety Hazards.

- (a) Welding, cutting, and burning shall be prohibited in dusty areas.
- (b) After welding operations, the area where metal particles could come into contact with other workers shall be posted with signs to provide warning.
- (c) Welders shall report any equipment defect or safety hazard to their supervisor and discontinue welding until safety has been assured.
- (d) When welding machines are used to provide an external power source, the welding machine's 120/240 volts AC receptacles shall be provided with ground fault circuit interrupting protection.

12.8. Maintenance and repairs.

(a) Cylinders, valves, couplings, regulators, hoses and apparatus shall be kept free from oil, dirt, and greasy substances and shall be maintained in good condition.

(b) Test for leaks on hoses, valves, or gauges shall be made with a soft brush and soapy water, soap suds, or other approved means.

(c) Welding machines, electrodes, and cables shall be examined weekly for wear and/or damage.

§56-16-13. When Respiratory Equipment to be Worn; Control of Dust.

13.1. Persons exposed for short periods to gas, dust, fume, and mist inhalation hazards shall wear permissible respiratory equipment. Dust shall be controlled by the use of permissible dust collectors or other approved methods.

§56-16-14. Mobile Equipment.

14.1. General.

(a) Immediately prior to the beginning of each working shift, all equipment, except licensed vehicles subject to state highway inspection requirements, shall be examined for safety defects by the equipment operator or mechanic, if designated by the foreman in charge of the daily operation. The person performing such examination shall record his findings in ink or indelible pencil on a form approved by the Director. Such form shall be given to the supervisor or his assistant within four (4) hours after the beginning of the start of the working shift. The person performing the above examination shall sign the report form, and the supervisor receiving such form shall initial upon receipt. A record of all above such examinations shall remain with the equipment for thirty (30) days and made available to an authorized representative of the Director and to the employees.

(b) Immediately prior to the beginning of each working shift, equipment operated by independent contractors on a preparation plant, loadout, tipple, or other coal handling facility shall be examined by the equipment operator for safety defects. The person performing such examination shall record his/her findings in ink or indelible pencil on a form approved by the Director. Such form shall be signed by the person performing the examination, and such form shall remain with the vehicle for thirty (30) days and made available to an authorized representative of the Director upon request.

(c) Equipment defects resulting in imminent dangers shall be reported immediately to the supervisor, tagged out, and corrected before the equipment is operated. The supervisor shall record the defect in the pre-shift book.

(d) All mobile equipment shall be operated and maintained according to the manufacturer's instructions.

(e) All mobile equipment including any vehicle utilized to haul preparation plant miners shall have two-way communications available consisting of a CB radio and a Company FM radio, or other approved communication devices.

14.2. Operation of loaders, dozers, excavators, and backhoes, etc.

(a) No person(s) shall enter the work area of any mobile equipment until first making positive contact, either audible or visual, with the equipment operator(s). Equipment operators shall cease operating their equipment when any person is located within an area in which the continued operation of such equipment would pose a hazard to the individual(s).

(b) Operators of backhoes shall sound an audible alarm e.g. whistle, bell, horn or other approved device, before moving such equipment.

(c) Equipment operators shall not leave their cabs without lowering all raised attachments of equipment to the ground.

(d) When the equipment operator is present, all other persons shall notify him/her before getting on or off the equipment.

(e) No one shall be permitted in the immediate vicinity of loaders, dozers, and backhoes unless their work assignments require such.

(f) Walkways and platforms on loaders, dozer, excavators, and backhoes shall be maintained in a safe condition and shall be equipped with safe handrails, toe boards, walkways, and platforms.

(g) Riding a dipper or bucket is prohibited.

14.3. Maintenance and repairs.

(a) All safety equipment on all machinery shall be maintained in a safe working condition.

(b) Mobile and stationary equipment shall be maintained in safe operating condition. Equipment in unsafe condition shall be removed from service immediately.

(c) Good housekeeping shall be practiced on all equipment. All heavy duty equipment shall be cleaned as necessary to maintain the equipment reasonably free of combustible substances.

(d) Employees shall not work on or from a piece of mobile equipment in a raised position until it has been securely blocked in place.

(e) No work shall be performed under machinery or equipment that has been raised until such machinery or equipment has been securely blocked in place.

(f) While greasing or doing repair work on a boom of a backhoe or loader, the boom shall be lowered to a position whereby the work can be done from the ground, or if done from an elevated position the employees shall use safety harnesses. This does not apply on backhoes or loaders that are equipped with safe handrails or ladders.

(g) Dippers of buckets, loaders, or backhoes shall be lowered for repairs.

(h) Repairs or maintenance shall not be performed on equipment until the power is off and the equipment is blocked against motion, except where the movement of the machine or parts is necessary to make adjustment(s).

14.4. Warning devices, lights, brakes.

(a) All mobile equipment shall be equipped with an approved automatic warning device which shall give a clearly distinguishable alarm when such equipment is in reverse.

(b) Equipment such as fork-lifts, front-end loaders, tractors, dozers, and graders shall be provided with an approved audible warning device.

(c) Lights shall be provided on both ends of equipment, when equipment is being worked other than during daylight hours. Also, lights on both ends of equipment shall be provided during periods when visibility is impaired due to weather or darkness.

(d) All mobile equipment shall be equipped with adequate brakes and parking brakes.

14.5. Dump trucks and dumping.

(a) Dump bodies of trucks shall be properly blocked when raised for any purpose except dumping.

(b) No person shall be permitted in or on the cargo space of dump trucks while being loaded with coal or other materials.

(c) No person shall be allowed in the cab or a dump truck while the truck is being loaded unless the cab is shielded.

(d) Truck cabs where rear vision is impaired shall be equipped with adequate rear view mirrors on both sides or cameras.

14.6. Dippers and buckets.

(a) Employees shall keep out from under suspended dippers or buckets at all times.

(b) Operators shall not swing a dipper or bucket over passing haulage equipment.

14.7. Equipment generally.

(a) No equipment or machinery shall be altered or modified in a manner that reduces the level of safety.

(b) Road maintenance equipment, such as graders or other equipment normally used, shall be equipped with roof mounted approved flashing lights (stropes).

(c) All equipment, when equipped with a safety bar for automatic transmission, shall be set in the locked position before the operator leaves the cab. Operators of dozers that are equipped with standard transmission shall lock the park brake, place the transmission in a neutral position, and lock the clutch in before leaving the cab.

(d) All steps, handrails, walkways and platforms installed on equipment at preparation plants, loadouts, tipples and other coal handling facilities shall be maintained in a safe condition.

(e) Electrically powered mobile equipment shall not be left unattended unless the master switch is in the "Off" position. All operating controls shall be placed in the neutral position, and the brakes set or other equivalent precautions taken against unintentional movement.

(f) A tow bar or other approved device shall be used for towing equipment. A safety chain shall be used in conjunction with a tow bar.

(g) All exhaust tail pieces shall be positioned and properly maintained to prevent carbon monoxide and other toxic fumes from entering the operator's compartment.

(h) The operator of a grader shall face in the direction of travel.

(i) Emergency stop switches shall be provided and maintained that will quickly de-energize electrically powered mobile equipment engines in the event of an emergency. The switches shall be located in the operator's cab and at a location accessible from ground level.

(j) Electrical compartments in use on electrically powered mobile equipment shall be maintained free of dust, water, and oil accumulations. Electrical compartment panel doors shall be secured in a manner to prohibit unauthorized access.

(k) Wheel covers (hubcaps) shall be provided for electric wheel motors, and shall be adequately secured and maintained in good condition.

14.8. Glass, doors and mirrors.

(a) Glass cab windows on equipment shall be made of safety glass or equivalent material with good visibility, in good condition.

(b) All windshield wipers shall be operable at all times.

(c) All doors on mobile equipment shall be maintained in good operating condition.

(d) Adequate mirrors shall be maintained on all mobile equipment.

14.9. Guards.

(a) Fan blades, shafts, gears, flywheels, coupling, and similar exposed moving machine parts, which may be contacted by persons, shall be adequately guarded.

(b) Guards installed on equipment to prevent accidental contact with moving parts shall:

(1) Be of substantial construction;

(2) Not have openings large enough to be penetrated by a person's hand;

(3) Be firmly bolted or otherwise installed in stationary position; and

(4) Be of sufficient dimension to exclude the possibility of bodily contact while in motion.

14.10. Operation of mobile equipment.

(a) Mobile equipment operators shall have full control of the equipment while in motion and shall operate such mobile equipment safely.

(b) The type of equipment and posted operating speeds shall be prudent and consistent with conditions of roadways, grades, clearance, visibility and traffic.

(c) All mobile equipment shall be completely stopped before a person gets on or off.

(d) No person other than the operator shall be permitted to ride in or on equipment unless his/her work assignment requires such and only then when adequate safe seating facilities are provided.

(e) Cabs of mobile equipment shall be kept free of extraneous materials and adequately ventilated by mechanical means.

(f) When necessary to protect the operator of the equipment, all rubber tired or crawler mounted self-propelled scrapers, front-end loaders, dozers, graders, and tractors that are used at preparation plants, loadouts, tipples or other coal handling facilities shall be provided with substantial falling object protective structures (FOPS).

(g) Equipment shall be operated only by persons trained in the use of and authorized to operate such equipment.

(h) Operators of all equipment shall keep a reasonable safe distance from the edge of all

vertical or abrupt excavations or fills.

14.11. Loads.

- (a) Equipment which is to be hauled shall be secured.
- (b) Any load extending more than four (4) feet beyond the rear of the vehicle body shall be marked clearly with a red flag.
- (c) Dump trucks shall be trimmed properly when they have been loaded higher than the confines of their cargo space.

14.12. Track type dozers - track type dozers shall meet the following minimum standards:

- (a) Have adequate fan blade guards;
- (b) Have properly working track brakes;
- (c) Have steering clutches in operating condition;
- (d) A portable fire extinguisher of at least five (5) pounds;
- (e) Keep all floor boards secured in place;
- (f) The safety bar lever for automatic transmission in working condition; and
- (g) An approved warning device which the operator can operate manually.

14.13. Front-end loaders - rubber tire front-end loaders shall meet the following standards.

- (a) A portable fire extinguisher, of at least five (5) pounds;
- (b) Have fan blade guards;
- (c) Have adequate lights;
- (d) Have approved warning devices;
- (e) If a loader is provided with a windshield it shall be constructed of safety type glass or the equivalent with good visibility, and shall be equipped with windshield wipers.
- (f) Have properly functioning steering apparatus;
- (g) Have adequate foot brakes meaning that each individual wheel brake shall be working properly;

(h) The parking brake shall have capability equivalent to hold the vehicles stationary on a twelve percent (12%) grade under all conditions; and

(i) The service braking system using stored energy shall be equipped with a warning device that activates when the system energy drops below fifty percent (50%) of the manufacturer's specified minimum operating energy level.

14.14. Machinery.

(a) All overhead belts shall be adequately guarded.

(b) Belt conveyors in locations where fire would create a hazard to personnel shall be provided with switches to stop the drive pulley automatically in the event of excessive slippage.

(c) Unguarded conveyor belt walkways less than five (5) feet in width shall be equipped with emergency stop switches or pull cord along their entire length.

14.15. Hand-held tools, power tools and safety devices.

(a) Conditions of tools - all tools, power tools and similar equipment shall be maintained in a safe condition.

(b) Hand-held power tools shall be equipped with controls requiring constant hand or finger pressure to operate the tools or shall be equipped with friction or other equivalent safety device.

(c) Employers shall not issue or permit the use of unsafe hand tools.

(d) Adjustable, pipe, end, and socket wrenches shall not be used when the jaws are sprung to the point that slippage occurs.

(e) All mushroomed heads on impact tools e.g. drift pins, wedges and chisels shall be replaced or repaired.

(f) The wooden handles of tools shall be kept tight and free of splinters or cracks and shall be kept tight in the tool.

(g) Electrically operated tools shall be approved double-insulated or grounded type.

(h) Only proper hoisting equipment shall be used for hoisting or lowering tools. The use of hoses or electric cords for such purpose is prohibited.

(i) Pneumatic power tools shall be secured to the hose by some positive means to prevent the tools from becoming accidentally disconnected.

(j) Safety clips or retainers shall be securely installed and maintained on pneumatic

impact (percussion) tools.

(k) The manufacturer's safe operating pressure for hoses, pipes, valves, filters, and other fittings shall not be exceeded.

(l) All fuel powered tool engines shall be shut off while being refueled, serviced, or maintained.

(m) When fuel powered tools are used in enclosed spaces, the applicable requirements for concentrations of toxic gases and use of personal protective equipment shall apply.

(n) Only approved fuel containers shall be used, and such containers shall be safely stored.

(o) All hand-held tools, power tools, and safety devices shall be used and maintained in accordance with manufacture's specifications.

14.16. Jacks.

(a) The manufacturer's rated capacity shall be legibly marked on all lifting jacks and shall not be exceeded. All jacks shall be maintained and used in accordance with the manufacturer's specifications.

(b) All lifting jacks shall have a positive stop to prevent over-travel.

(c) Blocking - When it is necessary to provide a firm foundation, the base of the lifting jack shall be blocked or cribbed. Where there is a possibility of slippage of the metal cup or the jack, a wood block shall be placed between the cap and the load. Work shall not be performed under any machinery until the proper blocking is in place.

14.17. Stationary grinding machines, protective devices.

(a) Mechanically operated grinding wheels shall be equipped with safety washers, substantial retaining hoods, or approved eye shields. Safety glasses or approved face shields shall be provided and located at the grinding location and shall be worn by all machine operators. Where eye shields are not provided, wrap-around safety goggles shall be worn by all machine operators.

(b) Adjustable tool rests shall be set as close as required by manufacturer's specifications.

(c) Grinding wheels shall be operated according to the manufacturer's specifications.

14.18. Stationary grinding machines. The American National Standards Institute (ANSI) safety code for the use, care and protection of abrasive wheels is adopted by reference and made applicable hereto.

14.19. All rubber tired or crawler mounted self-propelled scrapers, front-end loaders, dozers, graders, and tractors, manufactured after January 1, 1969, shall be provided with roll over protective structures (ROPS).

14.20. Tires and repairs.

(a) A safety tire rack, cage, or equivalent protection shall be provided when inflating tires installed on split rims or rims equipped with locking rings or similar devices. Tires shall be deflated before repairs on them are started, and means shall be provided to prevent wheel locking rims from creating a hazard during tire inflation.

(b) Heat shall not be applied to lug bolts, rims, or wheels while tires are inflated.

(c) When work is being performed on models that are equipped with dual wheels, both tires must be deflated before heating lugs and beginning repair work. Safe means shall be provided to remove rocks or other hazardous material between the dual tires.

(d) No person shall be permitted in front of a tire being inflated regardless of whether it is located on the equipment or not.

(e) When fork lift trucks are used to mount or transport tires, they shall be secured properly. No person shall be permitted to stand between the hub of a vehicle and fork lift truck when used to change a tire.

(f) A clip-on-air chuck shall be provided at all tire airing stations. At least six (6) feet of air hose shall be provided between the valve stem and inflation gauge.

(g) All tires shall be maintained in a safe condition, pursuant to the manufacturer's specifications. Any tire with a defect which could be a hazard to the safe operations of a vehicle or to other persons shall be replaced immediately.

§56-16-15. Preparation plants, loadouts, tipples and other coal handling facilities.

15.1. Preparation plants, loadouts, tipples and other coal handling facilities generally.

(a) All structures, enclosures, and other facilities shall be maintained in good condition.

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

(c) Openings in surface installations through which men or material may fall shall be protected by railings, barriers, covers, or other protective devices.

(d) Illumination sufficient to provide safe working conditions shall be provided in and on all surface structures, paths, walkways, switch panels, loading/dumping sites, working areas, and parking areas.

(e) Materials shall be stored and/or stacked in a manner to prevent a stumbling or tripping hazard.

(f) Compressed and liquid gas cylinders shall be secured in a safe manner.

15.2. Machinery guards.

(a) Gears, sprockets, chains, drives, heads, tails and take-up pulleys, flywheels, couplings, shafts, saw blades, fan inlets, and similar exposed moving machine parts which may be contacted by persons shall be guarded adequately.

(b) Except when testing, machinery guards shall be secured in place while being operated.

(c) Belt rollers shall not be cleaned, while belts are in motion.

15.3. Ramps and dumping.

(a) Both sides of any preparation plant, loadout, tippie, or other coal handling facility dumping ramp shall be provided with adequate, securely anchored rubbing boards.

(b) An adequate bumping block at least eight (8) inches high shall be installed at all dumping points, excluding stockpiles.

(c) Adequate protection shall be provided at dumping locations where persons may be exposed to falling material.

(d) Dust control measures shall be taken where dust significantly reduces the visibility of equipment operators.

(e) After the effective date of these regulations, all power lines in dumping areas shall be maintained at least six (6) feet above the largest piece of equipment used at such facility, including a dump truck in a raised position.

(f) All dumping ramps shall be of sufficient width to insure safe operation of vehicles expected to utilize such ramps.

(g) Unless the equipment is locked and tagged out at no time shall any person be permitted to enter onto any coal bin, coal crusher, or any other coal dumping facility for the purpose of breaking or removing coal or other materials that are too large to drop through the grizzly or screening device of the facility.

(h) Ramps and dumps shall be of solid construction and have ample width, clearance, and be kept reasonably free of accumulations of material and spillage.

(i) Truck spotters shall be used when required by an authorized representative of the Director.

(j) When car couplers are to be aligned in rotary dump areas, a hook or other device shall be used. A suitable lifting jack and handle shall be provided at all rotary dumps.

15.4. Fire protection.

(a) Where cutting or welding is performed at any location, fire-fighting equipment must be readily available.

(b) Adequate fire-fighting facilities required by the Director shall be provided on all floors. At least two (2) exits shall be provided for every floor of preparation plants, loadouts, tipples or other coal handling facilities constructed after the effective date of these regulations.

(c) Signs warning against smoking and open flames shall be posted so they can be readily seen in appropriate locations.

(d) Smoking or open flames in or about surface structures shall be restricted to locations where it will not cause fire or an explosion.

(e) In structures where compressed gases are piped through permanently installed fixtures, such fixtures shall be examined daily for leaks and damage. If leaks or damage to the fixtures are discovered, repairs shall be made immediately.

(f) A ten (10) pound fire extinguisher shall be provided for each permanent electrical installation.

15.5. Repairs of machinery.

(a) Machinery shall not be lubricated or repaired while in motion, except where safe remote lubricating devices are used. Machinery shall not be started until the person(s) lubricating or repairing is in the clear, and has signaled such.

(b) Means and methods shall be provided to assure that structures and the immediate area surrounding the same shall be reasonably free of coal dust accumulations.

(c) Where repairs are made to preparation plants, loadouts, tipples, and other coal handling facility, scaffolding and overhead protection shall be provided when necessary.

(d) Where overhead repair work is being performed, adequate protection shall be provided for all persons working or passing below.

15.6. Stairs, platforms, etc.

(a) Stairways, elevated platforms, and runways shall be equipped with handrails.

Railroad car trimmer platforms are exempted from such requirements.

(b) Elevated platforms and stairways shall be provided with toeboards. They shall be kept clear of refuse and ice and maintained in good condition.

15.7. Belts, etc.

(a) Drive belts shall not be shifted while in motion unless such machines are provided with mechanical shifters.

(b) Belt dressing shall not be applied while belts are in motion.

(c) Belts, chains, and ropes shall not be guided by hand on to power-driven moving pulleys, sprockets, or drums unless the equipment is especially designed for hand feeding.

15.8. Conveyors and crossovers.

(a) When the entire length of a conveyor is visible from the start switch, the operator shall visually check that all persons are in the clear before starting the conveyor. When the entire length of the conveyor is not visible from the start switch, a positive audible or visible warning system shall be installed and operated to warn persons when the conveyor will be started.

(b) Crossovers shall be provided where necessary to cross conveyors. All crossovers shall be of substantial construction with handrails and maintained in good condition. Moving conveyors shall be crossed only at designated crossover points.

(c) A positive audible or visible warning system shall be installed and operated to warn persons that a conveyor or other preparation plant, loadout, tipple, or other coal handling facility equipment is to be started.

(d) Conveyor pulleys shall not be cleaned manually while the conveyor is in operation.

(e) Guards, nets, or other suitable protection shall be provided where tramways or conveyor belts pass over roadways, walkways, or buildings.

(f) Where belt cross-unders are provided, adequate means shall be taken to prohibit a person from making contact with a moving part.

15.9. Tipple or cleaning operations.

(a) At no time shall there be only one miner per shift working at a preparation plant, loadout, tipple, or other coal handling facility.

(b) Good housekeeping shall be practiced in and around tipples and cleaning plants. Such practices include cleanliness, orderly storage of materials, and the removal of possible sources of injury, such as tripping hazards, protruding nails, and broken glass.

(c) Adequate ventilation shall be provided in tipples and preparation plants.

(d) Coal dust in or around tipples or cleaning plants shall not be permitted to accumulate.

15.10. Travelways.

(a) Safe means of access shall be provided and maintained to all working places.

(b) Access to areas where persons are required to travel or work shall be kept free of all extraneous material and other tripping or slipping hazards.

(c) Inclined travelways shall be constructed of nonskid material or equipped with cleats.

(d) Regularly used travelways shall be salted, sanded, or cleared of snow and ice as soon as practicable.

15.11. Ladders.

(a) All ladders shall be securely fastened. Permanent ladders more than seven (7) feet in height shall be provided with backguards.

(b) Ladders shall be of substantial construction and maintained in good condition.

(c) Wooden ladders shall not be painted.

(d) Fixed ladders shall not incline backward at any point unless equipped with backguards.

(e) Fixed ladders shall be anchored securely and installed with at least three (3) inches of toe clearance.

(f) Side rails on fixed ladders shall project at least three (3) feet above landings, or substantial handholds shall be provided above the landing.

(g) No person shall be permitted to work from the top step of any ladders.

(h) The maximum length of a step ladder shall be twenty (20) feet and an extension ladder sixty (60) feet.

15.12. Hoisting.

(a) Hitches and slings used to hoist materials shall be suitable for handling the type of material being hoisted.

(b) Persons shall stay clear of hoisted loads.

(c) Tag lines shall be attached to hoisted materials that require steadying or guidance.

(d) A hoist shall not lift loads greater than the rated capacity of the hoist being used.

15.13. Drawoff tunnels.

(a) When it is necessary for a tunnel to be closed at one (1) end, an escapeway not less than thirty (30) inches in diameter (or of the equivalent if the escapeway does not have a circular cross section) shall be installed which extends from the closed end of the tunnel to a safe location on the surface. When an escapeway is inclined more than thirty (30) degrees from the horizontal, it shall be equipped with a ladder, which runs the full length of the inclined portion of the escapeway. All escapeways shall be adequately illuminated.

(b) Tunnels located below stockpiles and coal storage silos shall be adequately ventilated to maintain concentrations of methane below one percent (1%).

(c) Communications shall be provided near the entrance to the escapeways in drawoff tunnels.

(d) Self Contained Self Rescuers for all persons working in the drawoff tunnel shall be provided and stored near the entrance to the escapeway.

15.14. Ventilation and methane.

(a) Tests for methane in structures, enclosures, or other facilities where coal is stored shall be conducted by a qualified person with an approved methane detector at least once during each operating shift.

(b) If, at any time, the air in any enclosure contains 1.0 percent or more of methane, changes or adjustments in the ventilation of such installation shall be made at once so that the air shall contain less than one (1.0) percent methane.

15.15. Railroad equipment.

(a) Railroad cars shall be maintained under control at all times. Cars shall be dropped at a safe rate of speed and in such manner that will ensure that the car dropper maintains a safe position while working and traveling around the cars. The car dropper shall control the trip from a location and not drop more cars than can be controlled from such location. A car dropper shall not drop more than three (3) cars at time utilizing a single brake.

(b) Railroad cars shall not be coupled or uncoupled manually from the inside of curves unless the track and cars are so designed to eliminate any hazard from coupling or uncoupling cars from inside curves.

(c) No person shall ride the drawhead or coupler of a railroad car. No person other than

the car dropper shall ride cars. No car dropper shall ride the end of a car about to be coupled with another car where other brakes are available.

(d) Employees handling railroad cars shall have access to and use an approved distinct audible signaling device to give warning when cars are in motion. A car dropper shall get on or off a moving car only in an emergency.

(e) Rail cars shall not be left on side tracks unless ample clearance is provided for traffic on adjacent tracks. Parked rail cars, unless held effectively by brakes, shall be blocked securely.

(f) Railroad cars shall be trimmed properly when they have been loaded higher than the confines of their cargo space.

(g) A minimum of thirty (30) inches of continuous clearance from the farthest projection of moving railroad equipment shall be provided on at least one side of the tracks.

(h) Roadbeds, rails, joints, switches, frogs, and other elements on railroads shall be designed, installed, and maintained in a safe manner consistent with the speed and type of haulage.

(i) Positive - acting stopblocks, derail devices, track skates, or other adequate means shall be installed wherever necessary to protect persons from runaway railroad equipment.

(j) Switch throws shall be installed so as to provide adequate clearance for switchmen.

(k) Bumper blocks or the equivalent shall be provided at all track dead ends.

(l) Cars shall be inspected for broken steps, platforms, and brake wheels and for defective brakes before dropping.

(m) Equipment operating speeds shall be consistent with conditions of roadways, grades, clearance, visibility, traffic, and the type of equipment used.

(n) Safety harnesses shall be worn and properly attached by all car droppers handling railroad cars. All such harnesses shall be of a design to allow maximum safety to provide for immediate unbuckling or unhooking.

15.16. Railroad track construction and maintenance.

(a) All parts of the track haulage road under the ownership or control of the operator shall be well maintained. Rails shall be secured at all points by means of plates or welds. When plates are used, they shall conform to the weight of the rail. Broken plates shall be replaced immediately. Appropriate bolts shall be inserted and maintained in all bolt holes. The appropriate number of bolts conforming to the appropriate rail plate for the weight of the rail shall be installed, tightly secured, and maintained.

(b) All points shall be installed and maintained so as to prevent bad connections. Varying weights of rail shall not be joined without proper adapters. Tracks shall be blocked and leveled and so maintained so as to prevent high and low joints.

(c) Tracks shall be gauged so as to conform to the track mounted equipment. Curves shall not be constructed so sharp as to put significant pressure on the trucks of the track mounted equipment.

(d) Severely worn or damaged rails and ties shall be replaced immediately.

(e) Personnel who are frequently required to travel on belts or chain conveyors extended to heights of more than ten (10) feet shall be provided with adequate space and protection in order that they may work safely. Permanent ladders extending more than seven (7) feet shall be provided with back guards. Walkways around thickeners that are less than four (4) feet above the walkway shall be adequately guarded. Employees required to work over thickeners shall wear safety harnesses which are adequately secured, unless walkways are provided.

§56-16-16. Coal Storage Bins; Recovery Tunnels; Coal Storage Piles.

16.1. Coal Storage Bins; Recovery Tunnels; Coal Storage Piles.

(a) Coal storage bins hereafter constructed with vertical sides fifty (50) feet or over in height shall be provided with ventilators or louvers or both to provide adequate ventilation. Where roofs are constructed over coal storage bins, adequate ventilation shall be provided by stacks, ventilators, louvers, or mechanical means.

(b) Where cutting or welding is performed at any location where coal is stored, fire-fighting equipment shall be immediately available, and the area where cutting or welding is performed shall be adequately watered down and rock-dusted.

(c) 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 (30) inches in diameter and where inclined, a ladder shall be provided to extend the full length of the escapeway.

(d) 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.

(e) Where mobile equipment is used to push coal in coal stockpiles to feeders beneath such, stockpiles shall be marked.

§56-16-17. Fire Protection.

17.1. Fire extinguishers.

(a) A portable fire extinguisher containing a nominal weight of at least five (5) pounds

shall be kept on each piece of mobile equipment. This requirement is also applicable to mobile equipment equipped with fire suppression systems.

(b) All portable fire extinguishers on equipment shall be properly secured.

17.2. Flammable liquids.

(a) Flammable liquids such as oils, greases, gasoline, and such other similar materials shall be stored in buildings, compartments, or closed containers used for that purpose only.

(b) The storage of surplus gasoline, oil, or other fuels, other than that which is in the fuel tank, shall be prohibited on any piece of equipment except for diesel equipment using gasoline starting engines. In this instance one (1) extra gallon of gasoline in an approved safety can (flash arresting screen with self-closing lid) may be stored on the equipment when securely fastened in a location on the equipment clear of moving objects.

(c) Flammable liquids shall not be used to clean machinery.

(d) Combustible materials, grease, lubricants, paints, and/or flammable liquids shall not be permitted to accumulate where fire hazards exist.

17.3. Fueling and storage.

(a) Internal combustion engines, except diesels, shall be shut off and stopped before being fueled.

(b) Areas surrounding flammable liquid storage tanks, electric substations, and transformers shall be kept free from grass, (dry) weeds, underbrush, and other combustible materials for at least twenty-five (25) feet in all directions.

(c) Fuel lines on fuel storage tanks shall be equipped with valves to cut off fuel at the source and shall be located and maintained to minimize fire hazard.

(d) Smoking and use of open lights are prohibited in all places where flammable materials are stored and in other places where there is a fire hazard.

17.4. Maintenance of fire fighting equipment.

(a) Fire fighting equipment shall be continuously maintained in an operable condition. Fire extinguishers, fire hoses, fire outlets, fire nozzles, and ancillary equipment shall be examined at least once every six (6) months. The date of such examination shall be recorded on a permanent tag attached to the unit.

17.5. Warnings - Warning signs prohibiting smoking and open flames shall be posted where they can be readily observed in areas or locations where fire or explosion hazards exist.

17.6. Drills - Fire drills and demonstrations with various types of available fire-fighting equipment shall be held for employees at least every six (6) months. A record of such demonstration shall be recorded.

§56-16-18. Protective Equipment and Clothing.

18.1. Eye protection.

- (a) Welders and helpers shall use adequate shields or goggles to protect their eyes.
- (b) All employees shall have approved goggles or shields and wear the same at all times where there is a hazard from flying particles or other eye hazards.

18.2. Clothing.

- (a) Employees engaged in haulage operations and all other persons employed around moving equipment shall wear snug-fitting clothing.
- (b) Protective gloves shall be worn when material which may injure hands is handled. Gloves with gauntleted cuffs shall not be worn around moving equipment.

18.3. Safety hats and safety toed shoes.

- (a) Safety hats and safety toed shoes or boots shall be worn by all persons while in or around a preparation plant, loadout, tippie, or other coal handling facilities, except that safety toed shoes or boots shall not be required on barge operations.

Provided, That such employees shall not be required to wear such safety hats while operating machinery equipped with a falling object protective structure which satisfies the impact and penetration requirements established by the American National Standards Institute, Safety Requirements for Industrial Head protection, Standard Z89.1, unless the Director finds that the dangers set forth herein may be present: **Provided, however,** That such employees shall be required to wear safety hats while not operating such equipment, including periods of travel to and from such equipment. The safety hats required hereunder shall meet the specifications for such hats as prescribed by the federal mine safety and health administration.

18.4. Life jackets, life lines, and safety harnesses.

- (a) Persons shall wear safety harnesses and lifelines where there is a danger of falling. A person shall continuously tend the lifeline when bins, tanks, or other dangerous areas are entered.
- (b) Life jackets and/or safety harnesses shall be worn where there is a danger of falling into water or slurry.

§56-16-19. First Aid Equipment.

19.1. First aid stations and equipment - Each operator of a preparation plant, loadout, tippie, or other coal handling facility shall maintain a supply of first aid equipment at a central location.

First aid equipment shall contain the following:

- (1) One stretcher.
- (2) One broken-back board or approved combination stretcher.
- (3) Twenty-four triangular bandages.
- (4) Eight four-inch bandage compresses.
- (5) Sixteen two-inch bandage compresses.
- (6) Twelve one-inch adhesive compresses.
- (7) One foille.
- (8) Two approved blankets.
- (9) One rubber blanket.
- (10) Two tourniquets.
- (11) One one-ounce bottle of aromatic spirits of ammonia.
- (12) Two inflatable plastic leg splints.
- (13) Two inflatable plastic arm splints.
- (14) Six small splints, metal, or wooden.
- (15) Two cold packs.

19.2. Proper storage of first aid supplies - All first aid supplies required to be maintained shall be stored in suitable sanitary, dust-tight, moisture proof containers. First aid supplies shall be accessible to the miners.

19.3. Emergency arrangements.

(a) Each operator of a preparation plant, loadout, tippie, or other coal handling facility shall make arrangements with a licensed physician, medical service, medical clinic, or hospital to provide emergency medical assistance while any person is on duty at a facility.

(b) Each operator of a preparation plant, loadout, tippie, or other coal handling facility

shall make arrangements with an approved ambulance service, or otherwise provide for approved emergency transportation while any person is on duty at a facility.

(c) Each operator shall have arrangements made with an ambulance service or other emergency transportation facilities for injured persons to be transported from the work site to a licensed physician, medical service, medical clinic, or hospital, pursuant to subsection (b) above while people are actually employed at the operation.

(d) Each operator shall immediately, after making arrangements required under this section, or immediately after any change of such agreement, post at the appropriate places at the mine, the names, titles, addresses, and telephone numbers of all persons and/or services currently available under such arrangements made pursuant to (a), (b), (c) above to provide medical assistance and transportation of injured persons at the facility.

19.4. Emergency communications.

(a) Each operator shall provide two (2)-way communication at all times when miners are present between all work sites at the facility and an emergency communication center, which may be at the office or elsewhere at the facility.

(b) Each operator shall establish and maintain a direct two-way (2) communication system from such emergency communication center at the facility to the nearest point of medical assistance for use in an emergency. Except as hereinafter provided, such emergency communication system shall be by telephone. If telephone communication from the emergency communication center to the nearest point of medical assistance is not possible at any one (1) facility, the Director may allow by prior approval such communication by radio transmission to any emergency assistance facility (e.g. state police, sheriff, local hospital) which has available the means of communication with the person or persons providing the requisite emergency medical assistance or transportation.

§56-16-20. Thermal Coal Dryers and Plants.

20.1. Thermal coal dryer plants shall be hereafter constructed, maintained, and operated in compliance with the following provisions.

(a) Good housekeeping shall be practiced in and around thermal dryer plants.

(b) Adequate fire-fighting facilities shall be provided on all floors.

(c) 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.

(d) 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.

(e) 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.

(f) A bypass or relief stack equipped with an automatically operated damper shall be provided to bypass gases from the heating units to the outside atmosphere during emergency or normal shutdown operations.

(g) Thermal coal dryers hereafter installed shall not be enclosed except that a roof may be installed. Whenever it is deemed necessary to enclose thermal dryers, such equipment shall be in a fire proof structure.

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

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

(j) Dryers shall be equipped with quick-response heat control devices which in the event of super elevated temperatures, will automatically divert the hot inlet gases into a bypass stack, thereby bypassing the drying chamber and at the same time stopping the fuel from being supplied to the air heater.

(k) 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.

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

(m) Dryer controls, valves, and mechanical equipment shall be frequently inspected, and no dryer shall be operated with defective mechanical equipment.

(n) The gauges of temperature control instruments shall be of the recording type.

(o) 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.

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

(q) Adequate illumination shall be provided.

(r) Dryers shall not be operated beyond their rated evaporation capacity.

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

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

(u) Thermal coal dryers previously installed in a tipple of 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.

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

56-16-21 Explosives.

21.1 Authorized Explosives – Permissible explosives or permissible blasting devices only shall be used for blasting in a preparation plant, loadout, tipple, or other coal handling facility.

§56-16-22. First Aid Training of Preparation Plant, Loadout, Tipple, and other Coal Handling Facility Employees.

22.1. Each operator shall provide every new employee within six (6) months of the date of his/her employment with the opportunity for first aid training prescribed by the Director unless such employee has previously received such training. Each employee shall be required to take refresher first aid training of not less than five (5) hours within each twenty-four (24) months of employment. The employee shall be paid regular wages or overtime pay if applicable for all periods of first aid training.