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**TITLE 36
LEGISLATIVE EXEMPT RULE
BOARD OF COAL MINE HEALTH AND SAFETY**

**SERIES 57
RULE GOVERNING PROXIMITY DETECTION SYSTEMS
AND HAULAGE SAFETY GENERALLY**

§36-57-1. General.

1.1. Scope. -- This rule pertains to the implementation of provisions designed to protect miners from injuries sustained when becoming contacted by or caught between or by mobile equipment and other equipment or structures mobile or stationary in underground coal mines operating in West Virginia.

1.2. Authority. -- W. Va. Code §§22A-6-4 and 22A-6-5.

1.3. Filing Date. — January 9, 2023.

1.4. Effective Date. — March 1, 2023.

§36-57-2. Definitions.

2.1. Director. -- Director shall mean the Director of the Office of Miner's Health, Safety, and Training or the Director's authorized representative.

2.2. Proximity detection system. -- A system that must be capable of providing an audible and visual warning prior to safely shutting down mobile equipment, and must be capable of stopping the mobile equipment before contacting a miner.

§36-57-3. Proximity Detection System Requirements.

3.1. A proximity detection system includes machine-mounted components and miner-wearable components.

3.2. A proximity detection system must meet the following requirements:

3.2.1. Cause a machine, which is tramping from place to place or repositioning, to stop before contacting a miner except for a miner who is in the on-board operator's compartment;

3.2.2. Provide an audible and visual warning signal on the miner-wearable component and a visual warning signal on the machine that alerts miners before the system causes a machine to stop. These warning signals must be distinguishable from other signals;

3.2.3. Provide a visual signal on the machine that indicates the machine-mounted components are functioning properly;

3.2.4. Prevent movement of the machine if any machine-mounted component of the system is not functioning properly. However, a system with any machine-mounted component that is not functioning

properly may allow machine movement if it provides an audible or visual warning signal, distinguishable from other signals, during movement. Such movement is permitted only for purposes of relocating the machine from an unsafe location for repair;

3.2.5. Be installed to prevent interference with or from other electrical systems; and

3.2.6. Be installed and maintained in proper operating condition by a person trained in the installation and maintenance of the system.

§36-57-4. Proximity Detection Systems Required.

4.1. All place change continuous miners on the working section shall have a proximity detection system installed and maintained.

§36-57-5. Care, Maintenance, and Performance Minimum for Proximity Detection Systems.

5.1. Proximity detection system checks.

5.1.1. Operators must:

5.1.1.a. Designate a person who must perform a check of machine-mounted components of the proximity detection system to verify that components are intact, that the system is functioning properly, and take action to correct defects:

5.1.1.a.1. At the beginning of each shift when the machine is to be used; or

5.1.1.a.2. Immediately prior to the time the machine is to be operated if not in use at the beginning of a shift; or

5.1.1.a.3. Within one (1) hour of a shift change if the shift change occurs without an interruption in production.

5.1.1.b. Check for proper operation of miner-wearable components at the beginning of each shift that the components are to be used and correct defects before the components are used.

5.2. Certifications and records.

5.2.1. The operator must make and retain certifications and records as follows:

5.2.1.a. At the completion of the check of machine-mounted components required under Subsection 5.1.1. of this Section, a certified person, as defined in W. Va. Code §22A-1-2, must certify by initials, date, and time that the check was conducted. Defects found as a result of the check, including corrective actions and dates of corrective actions, must be recorded before the end of the shift;

5.2.1.b. Make a record of the defects found as a result of the check of miner-wearable components required under Subdivision 5.1.1.b. of this Section, including corrective actions and dates of corrective actions;

5.2.1.c. Make a record of the persons trained in the installation and maintenance of proximity

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detection systems required under Subsection 3.2.6. of this Section;

5.2.1.d. Maintain records in a secure book or electronically in a secure computer system not susceptible to alteration and capable of producing a record; and

5.2.1.e. Retain records for at least one (1) year and make them available for inspection by the Director, or his/her authorized representative, or interested persons as defined by W. Va. Code §22A-1-2.

5.3. The Director shall impose all applicable penalties pursuant to W. Va. Code §22A-1-21 on any person that, without the authorization of the operator or the Director or the Director's authorized representative, knowingly tampers or attempts to tamper with a proximity detection system or related equipment approved by the Director.

§36-57-6. Requirements for Section Haulage Equipment.

6.1. Scoops, diesel powered equipment, and other battery powered section haulage equipment operating in-by the section loading point not provided with compatible proximity detection systems shall at a minimum:

6.1.1. Employ cameras; or

6.1.2. Be equipped with other alternatives as recommended by the West Virginia Board of Coal Mine Health and Safety and approved by the Director that provide warnings to equipment operator and or persons who are traveling in the area.

§36-57-7. Pre-Operation Equipment Checks.

7.1. Each working shift prior to its operation, all self-propelled equipment to be operated during that shift shall be examined by the equipment operator for safety defects and/or unsafe conditions.

7.2. Pre-operational equipment examination required under Section 7.1. of this Series shall include the following items at a minimum. In addition, a list of the following items shall be maintained on such equipment:

7.2.1. Stop/start control;

7.2.2. Panic bar;

7.2.3. Tram controls;

7.2.4. Steering;

7.2.5. Service brakes;

7.2.6. Automatic emergency brakes, if applicable;

7.2.7. Lights;

7.2.8. Warning device;

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7.2.9. Canopies, where required;

7.2.10. ATRS system and boom controls on roof bolting machines;

7.2.11. Proximity detection systems or cameras, if applicable;

7.2.12. Park Brakes.

7.3. Additionally, all equipment operators shall:

7.3.1. Ensure adequate visibility and that there are no extraneous objects on top of the equipment that serves to inhibit or restrict operator visibility. It shall be the responsibility of the equipment operator to remove such items from the equipment; ~~and~~

7.3.2. Inspect audible warning devices and cameras, if applicable; and

7.3.3. Confirm that an appropriate amount of danger tags and/or items that can be used as danger tags, i.e. pen and paper, are kept and available for use near the various locations upon which equipment is kept and maintained at the start and end of all shifts or upon the operator's person.

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7.4. Upon completion of the required examination under Section 7.1 of this Series, if the equipment is determined to be unsafe, the individual making the examination shall report such unsafe equipment to his/her foreman. Any unsafe equipment shall be taken out of service and tagged until such unsafe condition is corrected. Before the unit of equipment can be placed back into service, the operator of such unit shall make a pre-operational examination.

§36-57-8. Equipment Operators to Check Haulage Routes.

8.1. In addition to the provisions under West Virginia Code of State Rules §36-25-12, before operating a piece of section haulage equipment on a working section underground for the first time during a shift, the equipment operator shall physically walk the path of travel to observe for hazards or non-routine work being performed in the path of travel or any individual that may be in path of travel.

§36-57-9. Equipment Operators to Sound Warning Devices.

9.1. All equipment operators of underground section haulage equipment shall sound the audible alarm on the equipment at the start-up and when approaching and moving through any brattice material or check curtains to warn any miner in the vicinity.

§36-57-10. Reflective or Highly Visible Materials Requirements.

10.1. Mine operators shall provide all miners with at least 100 square inches of reflective or highly visible material to be worn at all times while underground in a coal mine in this state. The reflective or highly visible material shall be readily visible and on the outer garments so as to be seen from all directions.

§36-57-11. Designated Work Site Program.

11.1. Approved strobe lights, extension rods (pogo sticks) or cones shall be used in all working sections of an underground mine where maintenance, repair or rehabilitation work is being performed and where there is an

unusually high risk of collision or contact by any other equipment that may be traveling in the affected area. Approved strobe lights, extension rods (pogo sticks) or cones shall be installed so as to provide warning and caution others approaching of the work area. If an approved strobe light is not utilized, a minimum of four (4) extension rods (pogo sticks) or four (4) cones or other devices approved by the Director must be used in each travel way of the affected area.