WEST VIRGINIA
SECRETARY OF STATE
BETTY IRELAND
ADMINISTRATIVE LAW DIVISION

Form #5

Do Not Mark In This Box

FILED

2005 MAR 10 P 2:58

OFFICE WEST VIRGINIA
SECRETARY OF STATE

NOTICE OF AGENCY ADOPTION OF A PROCEDURAL OR INTERPRETIVE RULE OR A LEGISLATIVE RULE EXEMPT FROM LEGISLATIVE REVIEW

AGENCY: Board of Coal Mine Health and Safety TITLE NUMBER: 86

CITE AUTHORITY: 22A-6-4

RULE TYPE: PROCEDURAL _____ INTERPRETIVE _____

EXEMPT LEGISLATIVE RULE XXX

CITE STATUTE(s) GRANTING EXEMPTION FROM LEGISLATIVE REVIEW
22A-6-4(a)

AMENDMENT TO AN EXISTING RULE: YES XX NO ____

IF YES, SERIES NUMBER OF RULE BEING AMENDED: 1

TITLE OF RULE BEING AMENDED: No shaft and/or slope to be opened without prior approval of the Director of the Office of Miners' Health, Safety and Training

IF NO, SERIES NUMBER OF RULE BEING PROPOSED: _____

TITLE OF RULE BEING PROPOSED: _____

THE ABOVE RULE IS HEREBY ADOPTED AND FILED WITH THE SECRETARY OF STATE. THE EFFECTIVE DATE OF THIS RULE IS May 1, 2005

Kenneth Dickens
Authorized Signature

$4

TITLE 36
LEGISLATIVE RULE
BOARD OF COAL MINE HEALTH AND SAFETY

SERIES 1
RULES AND REGULATIONS GOVERNING APPROVALS AND PERMITS, EXPLOSIVES AND VENTILATION FOR THE CONSTRUCTION OF SHAFT AND/OR SLOPE OPERATIONS IN THE STATE OF WEST VIRGINIA

'36-1-1. General.

1.1. Scope. -- This regulation amends Title 36, Series 1, Section 17.1 by requiring a device to detect improper spooling of the cable on hoists used to raise and lower persons during shaft and slope construction.

1.2. Authority. -- W. Va. Code '22-6-4.

1.3. Filing Date. --

1.4. Effective Date. --

1.5. Definitions. -- The term "Director" shall mean the Director of the Office of Miners Health, Safety and Training. All other terms used in these rules and regulations, not defined herein, shall have the meanings set forth in Chapter 22A, Article 1A, Section 1 of the West Virginia Code.

'36-1-2. Surface Distributed Reclamation Bond.

2.1. After the effective date of these rules and regulations, no shaft and/or slope shall be opened unless a surface disturbed reclamation bond in the amount of five hundred dollars ($500.00) per acre is submitted by the coal mine operator to the Office of Miners Health, Safety and Training for the removal of unused surface structures, the sealing of abandoned shafts and slopes, and the reclamation of any land disturbed that does not result in an operational shaft and/or slope, the above mentioned bond shall go into a separate fund and must be submitted separately, when application is made for the issuance of a shaft and/or slope permit approval.

'36-1-3. No Shaft and/or Slope To Be Opened Without Prior Approval of the Director of the Office of Miners Health Safety and Training.

3.1. An application for the sinking of a shaft and/or slope shall be filed by the coal mine operator for approval to the Director. All revisions to such approved application shall be resubmitted for approval to the Director. A shaft and/or slope permit application filed for approval with the Director shall include the following:

3.1.1. The name and address of the coal company and permit number, if such shaft and/or slope is an additional opening.

3.1.2. A surface topographic map revealing the geographic location of the shaft and/or slope operation.

3.1.3. A certified engineer's map revealing the locations of underground mining, oil, and/or gas wells and construction projects within five hundred (500) feet of the shaft and/or slope.

3.1.4. A certified engineer's map showing the profile of the shaft and/or slope.

3.1.5. A description of the construction work and methods to be used in the construction of the slope and/or shaft, including a detailed description of how water rings will be constructed.

3.1.6. The elevation, depth, and dimensions of the shaft and/or slope.

3.1.7. The location and elevation of the coal bed.

3.1.8. All hoisting and ventilation equipment will meet MSHA standards.

3.1.9. The approved methane detectors to be used and/or other equipment needed to make proper methane examinations (such as probes or pumps). Also a description of how, where, and when these examinations will be conducted and the maintenance and calibration of detectors which will be in accordance with manufacturer's recommendations. A shaft and slope examiner can be certified by MHST to qualify other employees to make required methane examinations.

3.1.10. The company's comprehensive mine safety plan will detail specific training subject matter to be covered and established time frames of the training sessions. Also training will be conducted with examiners as the shaft and slope work approach coal bed seams that have a history of liberating methane.

3.1.11. Provide a list of all certified persons responsible for making all mandatory examinations and inspections (not limited to blasting, pre-shift, electrical, gas testing, etc.).

'36-1-4. Information To Be Filed By Company Performing Construction Work; Notices, Orders, and Decisions Received By Company Agent; Principal Officer in Charge; Permits To Be Obtained By Company Performing Construction Work.

4.1. Prior to beginning work in a shaft and/or slope, the company performing such construction work shall file with the Director, the name and address of the company performing the shaft and/or slope construction work.

4.2. Prior to beginning work in the shaft and/or slope after the permit approval has been obtained by the coal mine operator, the company performing such construction in a shaft and/or slope shall file with the Director, the name and address of the person who controls or operates the shaft and/or slope. Any revisions in such names and address shall be promptly filed with the Director. Each operator of a shaft and/or slope shall designate a responsible official at such shaft and/or slope as the principal officer in charge of health and safety at such shaft and/or slope and such official shall receive a copy of any notice, order, or decision issued under these rules and regulations affecting such shaft and/or slope. In any case where the shaft and/or slope is subject to the control of any person not directly involved in the daily operations of the shaft and/or slope there shall be filed with the Director the name and address of such person and the name and address of a principal official of such person who shall have overall responsibility for the conduct of an effective health and safety program at any shaft and/or slope subject to the control of such person and such official shall receive a copy of any notice, order, or decisions issued affecting any such shaft and/or slope. The mere designation of a health and safety official under these rules and regulations shall not be construed as making such official subject to any penalty under the West Virginia Code.

4.3. The following permit approvals shall be obtained from the Director by the company performing construction work in a shaft and/or slope before such work is started:

4.3.1. Stop the ventilation fan.

4.3.2. Stop the ventilating fan when men are in shafts and/or slopes.

4.3.3. Use electrical machinery in shafts and/or slopes.

4.3.4. Use electrical lights in shaft and/or slopes.

4.3.5. Multiple shoot coal or rock in a shaft and/or slope.

4.3.6. Use or store any non-permissible explosives or non-permissible blasting devices at a shaft and/or slope.

4.3.7. Hoist more than four (4) men at one time in buckets or cars in a shaft and/or slope.

4.3.8. Use welder, torches, and like equipment in a shaft and/or slope.

§36-1-5. Posting of Permit Approvals.

5.1. At each shaft and/or slope there shall be maintained an office with a conspicuous sign designating it as the office of the shaft and/or slope, and a bulletin board as such office, in such office, in such manner that permit approvals required by these rules and regulations to be posted on the bulletin board shall be posted thereon, be easily visible to all persons desiring to read them.

§36-1-6. Roof and Rib Control Programs and Plans.

6.1.

6.1.1. Each operator shall undertake to carry out on a continuing basis, a program to improve the roof control system of each shaft and/or slope and the means and measures to accomplish such system. A roof control plan and revisions thereof suitable to the roof conditions and mining systems of each shaft and/or slope and approved by the Director shall be adopted and set out in printed form before new operations are started. The safety committee of the miners of each shaft and/or slope where such committee exists shall be afforded opportunity to review and submit comments and recommendations to the Director and operator concerning the development, modification or revision of such roof control plan. The plan shall show the type of support and spacing approved by the Director. Such plan shall be reviewed periodically, at least every six (6) months by the Director, taking into consideration all falls of roof or rib inadequacy of support of ribs. A copy of the plan shall be furnished to the Director or his authorized representative and shall be available to the miners and their representatives.

6.1.2. The operator, in accordance with approved plan shall provide as the Director may prescribe, an ample supply of suitable materials of proper size with which to secure the roof thereof all working places in a safe manner.

§36-1-7. Use of Authorized Explosives; Storage or Use of Underground Explosives.

7.1. It shall be unlawful to have, use, or store any permissible explosives or non-permissible blasting devices at any shaft and/or slope on the premises of the shaft and/or slope operation, without a permit of approval from the Director.

§36-1-8. Use of Magazines for Explosives.

8.1. Separate surface magazines at least fifty (50) feet apart shall be provided for storage of explosives and detonators.

8.2. Surface magazines shall be provided with doors constructed of at least one-forth inch steel plate lined with two-thickness of wood or equivalent, properly screened ventilators and with no openings except for entrances and ventilation and shall be kept locked securely when unattended.

8.3. The area for a distance of at least twenty-five (25) feet in all directions shall be kept free of materials of a combustible nature.

8.4. Suitable warning signs shall be erected, so located that a bullet passing directly through the face of the sign will not strike the magazine.

8.5. The location of magazines shall not be less than three hundred (300) feet from any shaft and/or slope opening, occupied building or open roads, unless barricaded in a manner approved by the Director.

8.6. If magazines are illuminated electrically, the lamps shall be of vapor type, properly installed and wired.

8.7. Smoking and open lights shall be prohibited within twenty-five (25) feet of any surface magazine.

8.8. Surface magazines shall be located away from power lines, fuel storage areas and other possible sources of fire.

8.9. Surface magazines shall be electrically bonded and grounded if constructed of metal.

§36-1-9. Transportation of Explosives.

9.1. Individual containers used to carry permissible explosives or detonators shall be constructed of substantial non-conductive materials kept closed and maintained in good condition.

9.2. Any container used for transporting or storage of explosives shall be properly identified or marked.

9.3. Explosives and detonators shall be transported in the following manner: original and unopened cases, or in suitable individual containers.

9.4. If a large quantity of explosives and/or detonators are transported to a blasting site, than are needed, such explosives and/or detonators shall be returned immediately to the surface magazines, prior to blasting operations being performed.

§36-1-10. Vehicles Used to Transport Explosives.

10.1. Vehicles used to transport explosives shall have substantially constructed bodies, no sparking metals

exposed in the cargo space, and shall be equipped with suitable sides and tail gates. Explosives shall not be piled higher than the side and end.

10.2. Vehicles containing explosives and/or detonators shall be maintained in good condition and shall be operated at a safe operating speed.

10.3. Vehicles containing explosives or detonators shall be posted with placard warning signs. Placards shall be located on all four (4) sides of the motor vehicle. The placards shall contain letters four (4) inch minimum height, using 3/4 inch stroke.

10.4. Other materials or supplies shall not be placed on or in a cargo space of a vehicle containing explosives or detonators.

10.5. Explosives or detonators shall be transported in separate vehicles unless separated by four (4) inches of hardwood or the equivalent.

10.6. Explosives or detonators shall be transported promptly without undue delay in transit.

10.7. Only necessary persons shall ride on or in vehicles containing explosives or detonators.

10.8. When vehicles containing explosives or detonators are parked, the brakes shall be set, the motor power shut off and the wheels blocked.

10.9. Vehicles containing explosives or detonators shall not be taken to a repair garage for any purpose.

10.10. Smoking and open lights shall be prohibited on vehicles transporting explosives or detonators.

§36-1-11. Explosives Handling, and Use.

11.1. Damages or deteriorated explosives or detonators shall be destroyed by a representative from a powder company.

11.2. Light and power circuits shall be disconnected and removed from affected blasting area before charging and blasting.

11.3. No shots shall be fired until such place has been properly examined by an examiner-foreman and no shots shall be fired in any place where methane gas in excess of one percent (1%) is detected with a permissible flame safety or other approved methane gas detector.

11.4. Blasting practices.

11.4.1. All persons shall be removed from the shaft prior to blasting.

11.4.2. All persons in a slope shall be given ample warning before shots are fired. Care shall be taken to determine that all persons are in the clear before shots are fired.

11.5. Blasting areas in shaft and/or slopes shall be covered with mats or other suitable material when the excavation is too shallow to retain blasted material.

11.6. Where it is impractical to prepare primers in the blasting areas, primers may be prepared on the

surface and carried into the shafts in a specially constructed, insulated, covered container.

11.7. No other development works shall be performed in a shaft or at the face of a slope where drill holes are being charged until after all shots have been fired.

11.8. Explosives shall be kept separate from detonator until charging is started.

11.9. Holes shall not be drilled where there is danger of intersecting a charged or misfired hole.

11.10. Only wooden or other non-sparking implements shall be used to punch holes in explosive cartridge.

11.11. Tamping poles shall be blunt and squared at one end and made of wood, non-sparking material, or of special approved plastic.

11.12. Electric detonators shall be kept shunted until they are being connected to the blasting line or wired into a blasting round.

11.13 Wired rounds shall be kept shunted until they are being connected to the blasting line.

11.14. Completely wired rounds shall be tested with a blasting galvanometer before connections are made to the blasting line.

11.15. Permanent blasting lines shall be properly supported, insulated and kept in good repair.

11.16. Electric detonators of different brands shall not be used in the same round.

11.17. A capped primer shall be prepared so that the detonator is contained securely and is completely embedded within the explosives cartridge.

11.18. No tamping shall be done directly on a capped primer.

11.19. Shots shall be fired promptly after charging. Mudcaps (adobes) of any other confined shot shall not be permitted in any shaft and/or slope.

11.20. Drill holes shall be stemmed from the charge of the collar of the hole unless more effective permissible stemming material or methods are approved by the Director.

11.21. Explosives shall not be removed from their original wrapper, except as possibly required under 4.1 of these regulations.

11.22. An independent circuit unless otherwise approved by the Director shall be provided for electric blasting. The circuit shall be well insulated and protected from sources of active or stray electrical currents.

11.23. Electrical currents for firing shots shall be adequate to insure detonation of an entire round.

11.24. Shooting cables shall be connected to the leg wires by the person firing the shot.

11.25. After blasting, all wires in the broken rock shall be carefully traced and a search made for unexploded explosives.

11.26. Shooting shall not be performed where a danger exists from the shooting cables crossing high voltage power lines above the shaft, after shots are fired.

11.27. When electrical detonators are used, charging shall be suspended and men withdrawn to a safe location upon the approach of an electrical storm.

§36-1-12. Misfires of Explosives.

12.1. When electric blasting caps have been used, men shall not return to misfired holes for at least fifteen (15) minutes.

12.2. Misfires shall be reported to the Examiner-Foreman and shall be disposed of safely before any work is performed in the blasting area.

12.3. After a misfire, the blasting cable shall be disconnected from the source of power and the battery ends short-circuited before electric connections are examined.

12.4. When a charge has misfired, the misfire shall be removed by:

12.4.1. Firing separate holes at least two (2) feet away from the parallel to the misfired charge.

12.4.2. Washing the stemming and the charge from the borehole with water.

12.4.3. Inserting and firing a new primer after the stemming has been washed out.

12.5. The handling of a misfired shot shall be under the direct supervision of an Examiner-Foreman.

12.6. Requirements for the use of sheathed explosive units for the construction of shaft and/or slope mines.

12.6.1. Not withstanding subsection four (4) of these rules and regulations, sheathed explosives that are approved by the U.S. Bureau of Mines shall be permitted for use in West Virginia coal mines, provided however that they are used in accordance with subsection 12.6.1 - 12.6.8 as stated.

12.6.2. Sheathed explosive units shall be primed and placed in a position for firing and detonated by a certified shot firer designated by mine management. To primp a sheathed explosive unit, the entire detonator shall be inserted into the detonator well of the unit and be held securely in place.

12.6.3. Separate instantaneous detonators shall be used to fire each sheathed explosive unit.

12.6.4. Use of transportation of handling and storage of sheathed explosives shall be in accordance with the manufacturers specifications and applicable to State and Federal Law.

12.6.5. Sheathed explosives units shall not be primed until immediately before units are placed where they are to be fired. A sheathed explosive unit shall not be primed if it is damaged or deteriorated.

12.6.6. No more than three sheathed explosive units shall be fired at one time.

12.6.7. No sheathed explosive unit shall be fired in contact with another sheathed explosive unit.

12.6.8. Certified shot firers and all persons responsible for the use, transportation and handling of sheathed blasting explosives shall be trained in the care and use of sheathed explosives.

§36-1-13. Examination - Records - Ventilation - Shaft and/or Slopes.

13.1. All shafts and/or slopes shall be ventilated by mechanical ventilation equipment during development. Such equipment shall be examined before each shift and the quantity of air in the shaft and/or slope measured daily by a certified person and the results of such examination and tests recorded in a book approved by the Director.

§36-1-14. Ventilation - Working Area.

14.1. While men are employed in a shaft and/or slope, all shafts and/or slopes shall be ventilated adequately and continuously with fresh air. Air tubing shall deliver not less than nine thousand (9,000) feet per minute at the working area or as much as necessary to remove noxious gases.

§36-1-15. Ventilation - Fans.

15.1. Ventilation fans shall be:

15.1.1. Installed on the surface.

15.1.2. Installed in fireproof housing and connected to the shaft and/or slope opening with fireproof air ducts.

15.1.3. Designed to permit the reversal of the air current and located in an area which will prevent a recirculation of air from the shaft and/or slope or air contamination from any other source.

15.1.4. Equipped with an automatic signal device designed to give an alarm in the event the fan slows or stops which can be seen or heard by any person on duty in the vicinity of the fan, except where fans are constantly attended.

15.1.5. Offset not less than fifteen (15) feet from the shaft and/or slope.

§36-1-16. Ventilation - Methods - Maintenance - Evacuation - Quality - Quantity.

16.1. Ventilating tubing shall be constructed to permit ventilation be either exhausting or blowing methods and when metal air ducts are used, they shall be grounded effectively to remove static and other electrical currents.

16.2. Ducts shall extend as close to the bottom as necessary to ventilate properly.

16.3. A certified person, designated by the operator, shall be assigned to maintain each ventilating system.

16.4. Unless a permit has been obtained from the Office of Miners Health, Safety and Training, the fan shall be operated continuously when men are below the surface of a shaft and/or slope. Any accidental stoppage or reduction in air-flow shall be corrected promptly; however, where repairs cannot be made immediately, development work below the surface shall be stopped and all the men who are not needed to

make necessary repairs shall be removed to the surface. If ventilation is not restored in fifteen (15) minutes all underground employees shall be removed from the shaft and/or slope and the underground employees shall not return until ventilation is restored and the shaft and/or slope is examined by a certified person holding a certificate to make a pre-shift examination.

16.5. No Superintendent-Examiner-Foreman shall permit any person to work where he is unable to maintain the quantity and quality of the air required. Provided, that such provisions shall not prohibit the employment of men to make place of employment safe.

16.6. All active underground working places in a shaft and/or slope shall be ventilated by a current of air obtaining not less than nineteen (19) and five tenths (5/10ths) percent oxygen and no harmful quantities of other noxious or poisonous gases.

§36-1-17. Device to Detect Overlapping on Hoists.

17.1. Hoists used to raise and lower persons shall be equipped with an overlap device to detect improper spooling of the cable.

WEST VIRGINIA BOARD OF COAL MINE HEALTH AND SAFETY

1591 Washington Street, E.• Charleston, WV 25311 • (304) 558-3721•FAX: 558-3729

TO: All Persons Interested in Rules and Regulations Constructed by the Board of Coal Mine Health and Safety

FROM: Kenny Dickens, Administrator

SUBJECT: Shaft and/or Slope Operations

DATE: March 10, 2005

ACTION: Draft Proposed Rule – Title 36, Series 1, Section 3.1.3

AUTHORITY: WV Code §22A-6-4

The Board of Coal Mine Health and Safety is created pursuant to West Virginia Code §22A-6-1.

Background:

On January 22, 2003, at 1:00 a.m. a fatal explosion accident occurred, fatally injuring three (3) contractor employees. The accident occurred as the victims attempted to cut through the panning tin covering a pre-formed door opening to a water ring and a methane explosion occurred.

The Board of Coal Mine Health and Safety recognizes that fatalities of this nature could possibly have been prevented if the employees had been trained in the proper method of methane testing in or around the water rings inside the shaft. Accordingly, the Board has constructed and is hereby proposing the enclosed regulation to assist in the prevention of future accidents of this nature.

KND:lgh