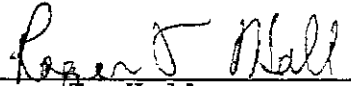


NOTICE OF AGENCY APPROVAL

Legislative Rule: Rules and Regulations Governing Roof Control, Chapter 22, Article 1, Section 15, Series 20. The attached legislative rule constitutes the official rule approved by the West Virginia Department of Energy Mines and Minerals on the 20th day of April, 1987, and filed pursuant to law with the West Virginia Secretary of State and the Legislative Rule-Making Review Committee.


Roger T. Hall

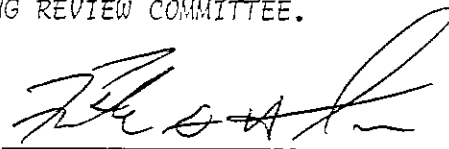
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NOTICE OF AGENCY APPROVAL

LEGISLATIVE RULE: Roof Control

THE ATTACHED LEGISLATIVE RULE CONSTITUTES THE OFFICIAL RULE APPROVED
BY THE Department of Energy ON 23 DAY OF
January 1987 AND FILED PURSUANT TO LAW WITH THE SECRETARY
OF STATE AND THE LEGISLATIVE RULE MAKING REVIEW COMMITTEE.



Rich O. Hartman for the
DOE

FILED IN THE OFFICE OF
THE SECRETARY OF STATE
THIS DATE Jan 23, 1987
ADMINISTRATIVE LAW DIVISION

FISCAL NOTE FOR PROPOSED RULES

Rule Title: Rules and Regulations Governing Roof Control

Type of Rule: x Legislative Interpretive Procedural

Agency WV Department of Energy Address 1615 Washington Street,
E., Charleston, WV 25311

1. Effect of Proposed Rule	ANNUAL		FISCAL YEAR		
	Increase	Decrease	Current	Next	Thereafter
Estimated Total Cost	\$ 00.00	\$ 00.00	\$ 00.00	\$ -0-	\$ 00.00
Personal Services					
Current Expense					
Repairs and Alterations					
Equipment					
Other					

2. Explanation of above estimates.

The proposed rules will not result in any additional expenditures or revenue to the State.

3. Objectives of these rules:

These rules and regulations are for the purpose of providing necessary guidance to mine operators and Department personnel in the development and implementation of roof control plans.

4. Explanation of Overall Economic Impact of Proposed Rule.

A. Economic Impact on State Government.

None

B. Economic Impact on Political Subdivisions; Specific Industries;
Specific groups of citizens.

None

C. Economic Impact on Citizens/Public at Large.

None

Date April 20, 1987

Signature of Agency Head or Authorized Representative

Loren T. Hall
Administrator

DATE: April 20, 1987

TO: LEGISLATIVE RULE-MAKING REVIEW COMMITTEE

FROM: West Virginia Department of Energy

LEGISLATIVE RULE TITLE: Rules and Regulations Governing
Roof Control

1. Authorizing statute(s) citation Chapter 22, Article 1
Section 15 of the Code of West Virginia, 1931 as amended
2. a. Date filed in State Register with Notice of Hearing:
December 16, 1986
- b. What other notice, including advertising, did you
give of the hearing?
See attached listing
- c. Date of hearing(s): January 20, 1987
- d. Attach list of persons who appeared at hearing, comments
received, amendments, reasons for amendments.
Attached No comments received X
- e. Date you filed in State Register the agency approved
proposed Legislative Rule following public hearing:
(be exact)
April 20, 1987
- f. Name and phone number of agency person to contact
for additional information:
Roger T. Hall 348-3500

3. If the statute under which you promulgated the submitted rules requires certain findings and determinations to be made as a condition precedent to their promulgation:

- a. Give the date upon which you filed in the State Register a notice of the time and place of a hearing for the taking of evidence and a general description of the issues to be decided.

N/A

- b. Date of hearing: N/A
-

- c. On what date did you file in the State Register the findings and determinations required together with the reasons therefor?

N/A

- d. Attach findings and determinations and reasons:

Attached N/A

WEST VIRGINIA LEGISLATIVE RULE
DEPARTMENT OF ENERGY
CHAPTER 22-1
SERIES 20

TITLE: RULES AND REGULATIONS GOVERNING ROOF CONTROL

Type of Rule: _____

Legislative

FILED IN THE OFFICE OF
THE SECRETARY OF STATE
THIS DATE JUN 23, 1987
ADMINISTRATIVE LAW DIVISION

FILED

1987 OCT 21 PM 4:40

CLERK OF COURTS
STATE OF WEST VIRGINIA

WEST VIRGINIA LEGISLATIVE RULE
DEPARTMENT OF ENERGY
CHAPTER 22-1
SERIES 20

Title: Rules and Regulations Governing Roof Control

Type of Rule: _____

General	Section 1
Definitions	Section 2
Roof Support	Section 3
General Information Required in Roof Control Plans	Section 4
Criteria for Approval of Roof Control Plans	Section 5
Criteria - Full Roof Bolting Plan	Section 6
Criteria - Conventional Roof Control Plan	Section 7
Criteria - Combination Roof Control Plan	Section 8
Criteria - Spot Roof Bolting Plan	Section 9
Criteria - Pillar Recovery Plan	Section 10
Criteria - Special Roof Control Plan	Section 11
Criteria - Temporary Support	Section 12
Criteria - Roof Support Recovery	Section 13
Mining Methods	Section 14
Width of Openings	Section 15
Pillar Recovery Method	Section 16
Longwall Mining	Section 17
Roof Support Materials	Section 18
Adequate Supply and Location of Roof Support Materials	Section 19
Roof Bolt Tests	Section 20
Testing Requirements	Section 21
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WEST VIRGINIA LEGISLATIVE RULE
DEPARTMENT OF ENERGY
CHAPTER 22-1
SERIES 20

Title: Rules and Regulations Governing Roof Control

Type of Rule: _____

Section 1. General

- 1.1 Scope - This legislative rule establishes standards for approval of roof control plans in underground coal mines.
- 1.2 Authority - WV Code 22-1-15
- 1.3 Filing Date -
- 1.4 Effective Date -

Section 2. Definitions

- 2.1 All terms used in these regulations, not defined herein, shall have the meanings set forth in Section 1, Article 1, Chapter 22A of the Code.

FILED IN THE OFFICE OF
THE SECRETARY OF STATE
THIS DATE July 23, 1987
ADMINISTRATIVE LAW DIVISION

FILED
OCT 21 PM 4 41
SECRET
1987

Section 3 Roof Support

(a) Roof Control Programs and Plans

Each operator shall undertake to carry out on a continuing basis a program to improve the roof control system of each coal mine and the means and measures to accomplish such system. The roof and ribs of all active underground roadways, travelways, and working places shall be supported or otherwise controlled adequately to protect persons from falls of the roof or ribs. A roof control plan and revisions thereof suitable to the roof conditions and mining system of each coal mine and approved by the Commissioner shall be adopted and set out in printed form. The plan shall show the type of support and spacing approved by the Commissioner. Such plan shall be reviewed periodically, at least every 6 months by the Commissioner, taking into consideration any falls of roof or ribs or inadequacy of support of roof or ribs. No person shall proceed beyond the last permanent support unless adequate temporary support is provided or unless such temporary support is not required under the approved roof control plan and the absence of such support will not pose a hazard to the miners. A copy of the plan shall be furnished to the Commissioner or his authorized representative and shall be available to the miners and their representatives.

(b) Roof Control Program Requirements

Each operator shall adopt an adequate program for improving roof control systems. This program shall include a roof control plan, provisions for the training of miners, a history of all unintentional roof falls, and systematic evaluation of the effectiveness of the roof control system in use.

(c) Roof Control Plans

Each operator shall adopt a roof control plan suitable to the roof conditions and the mining system for all underground roadways, travelways including escapeways, and working places of each mine.

(d) Filing of Roof Control Plans

Roof control plans shall be filed with the Director of the Division of Mines and Minerals.

(e) Actions on Roof Control Plans

The Director of the Division of Mines and Minerals shall notify the operator in writing of the approval of a proposed roof control plan. If revisions are required for approval, the changes required will be specified and the operator will be afforded an opportunity to discuss the revisions with the Director of the Division of Mines and Minerals.

Section 4

General Information Required in Roof Control Plans

A roof control plan shall include the following information:

- (a) Name and address of the company.
- (b) Name and address of the mine.
- (c) Names and addresses of the responsible officials.
- (d) Area of the mine covered by the roof control plan.
- (e) A columnar section of the mine strata which shall:
 - (1) Show the name and thickness of the coalbed mined and any persistent partings.

- (2) Identify by type and show the thickness of each stratum (rock layer) up to and including the main roof over and for 10 feet under the coalbed.
- (3) Show the maximum cover over the mining area covered included in the roof control plan.
- (f) A description of the sequence of mining and installation of supports including temporary supports. The description shall include:
 - (1) Drawings on 8 1/2-inch by 11-inch paper or on paper folded to this size, showing the location of all roof, face and rib supports for each method of mining employed at the mines. The scale shall be specified and not less than 5 feet to the inch nor more than 20 feet to the inch. A legend explaining all the symbols used shall also be included on the drawings.
 - (2) A list of all roof support materials employed in the roof control system including, where applicable, the name of the manufacturer and its designation for the item. Prior approval shall be obtained before making any changes in the materials listed.

Section 5 Criteria for Approval of Roof Control Plans

Sections ⁶11 through ¹³18 set out the criteria by which the Director of the Division of Mines and Minerals will be guided in approving roof control plans on a mine-by-mine basis. Additional measures may be required. Roof control plans which do not conform to these criteria may be approved providing the operator can satisfy the Director of the Division of Mines and Minerals that the resultant roof conditions will provide no less than the same measure of protection to the miners.

Section 6 . Criteria-Full Roof Bolting Plan

A full roof bolting plan is one in which roof bolts constitute the sole means of roof support at a face as part of the normal mining cycle.

- (a) Roof bolt assemblies should meet the following specifications:
 - (1) All components of the roof bolt assembly should comply with the American National Standards Institute, "Specifications for Roof Bolting Materials in Coal Mines".
 - (2) Roof bolts that provide support by creating a beam of laminated strata should be of a length that assures adequate anchorage, but in no case should the length of the bolt be less than 30 inches.
 - (3) Roof bolts that provide support by suspending the immediate roof from a stronger overlying strata should be of a length that permits anchoring at least 12 inches in the stronger strata.
 - (4) Bearing plates used directly against the mine roof should be not less than 6 inches square or of equivalent area. In exceptional cases where the mine roof is firm and not susceptible to sloughing, bearing plates 5 inches square or of equivalent area may be used.
 - (5) When wooden material such as planks, header blocks, and crossbars are used between the bearing plate and the roof for additional bearing, the use should be limited to short life openings (not to exceed 3 years) unless treated. Bearing plates used in conjunction with wooden materials should be not less than 4 inches square or of equivalent area.
 - (6) When washers are used, the shape of such washers should conform to the shape of roof bolt head and the shape of the bearing plate and such washers should be of sufficient strength to withstand loads up to the yield point of the roof bolt.

- (b) Installation practices:
- (1) Finishing bits should be easily identifiable by sight or feel and the diameter should be within a tolerance of plus 0.030-inch minus zero of the manufacturers recommended hole diameter for the anchor used.
 - (2) Torque ranges specified in the roof control plan should be capable of providing roof bolt loads to within plus or minus 1,000 pounds of 50 percent of either the yield point of the roof bolt being used or the anchorage capacity of the strata, whichever is less. In no case, however, should installed torques provide loads that exceed the yield point of the roof bolt being used or the anchorage capacity. Relationship for determining roof bolt load for torque applied are as follows:

Cone Neck or Self-Centering Roof Bolt

5/8-inch expansion type roof bolt--
30 lbs. of load per ft.-lb. of torque.

3/4-inch expansion type roof bolt--
30 lbs. of load per ft.-lb. of torque.

Standard Roof Bolt Without Hard Washer
or Lubricant

5/8-inch expansion type roof bolt--
50 lbs. of load per ft.-lb. of torque.

3/4-inch expansion type roof bolt--
40 lbs. of load per ft.-lb. of torque.

Standard Roof Bolt With Hard Washer
or Lubricant

5/8-inch expansion type roof bolt--
60 lbs. of load per ft.-lb. of torque.

3/4-inch expansion type roof bolt--
60 lbs. of load per ft.-lb. of torque.

- (3) Each operator should outline and describe roof bolt testing procedures to be followed in the roof control plan. The procedures to be followed should include:
 - (i) Providing and maintaining an approved, calibrated torque wrench on each roof bolting machine. An approved wrench should be one that will indicate the actual torque on the roof bolt.
 - (ii) Designating a qualified person to spot-check torques on at least 25 percent of the roof bolts immediately after the working place has been fully bolted. If the majority of the installed torques fall outside the recommended range, the remaining roof bolts in the working place should be tested. If the majority of the torques still fall outside the recommended range, necessary adjustments in the equipment used for tightening the roof bolts should be made immediately. If, after adjustments are made and required torques are not achieved, supplementary support such as additional roof bolts, longer roof bolts with adequate anchorage, posts, cribs, or crossbars should be installed.
 - (iii) On a daily basis, spot-check torques on at least 10 percent of the roof bolts from the outby corner of the last open crosscut to the face and record the results. This record should show the number of roof bolts tested, number of roof bolts below the recommended range, and the number of roof bolts above the recommended range. If results show that a majority of the roof bolts are not maintaining at least 70 percent of the minimum torque required (50 percent if plates bear against wood), or have exceeded the maximum required torque by 50 percent, supplementary support such as additional roof bolts, longer roof bolts with adequate anchorage, posts, cribs, or crossbars should be installed.

until a review of the adequacy of the roof control plan is made by an authorized representative of the Commissioner.

- ✓(4) Devices should be used to compensate for the angle when roof bolts are installed at angles greater than 5° from the perpendicular to the roof line.
- (c) Roof bolting pattern:
 - (1) Roof bolt spacing either lengthwise or crosswise should not exceed 5 feet.
 - (2) Roof bolts should be installed as close as possible to, but not more than 5 feet from, the face before starting conventional cutting or a continuous miner run.
 - (3) Roof bolts should be installed as close as possible to, but not more than 5 feet from, the face before starting conventional cutting or a continuous miner run.
- (d) Openings should not exceed 20 feet in width where roof bolting is the sole means of roof support.

Section 7 Criteria--Conventional Roof Control Plan

A conventional roof control plan is one in which installation of materials other than roof bolts such as metal or wood posts, jacks, or cribs in conjunction with wooden cap blocks (half headers), footers (sills), planks and beams are installed as the sole means of roof support at a face as part of the normal mining cycle.

- (a) Support materials should meet the following specifications:
 - (1) Posts should be of solid, straight grain wood with the ends sawed square and free from defects which would affect their strength.

- (2) The diameter of round posts should not be less than one inch for each 15 inches of length, but in no case should the diameter be less than 4 inches; split posts should have a cross-sectional area equal to that required for round posts to equivalent length.
- (3) Wooden cap blocks and footers should have flat paralleled sides and be not less than 2 inches thick, 4 inches wide and 12 inches long.
- (4) Wooden crossbars and planks should be straight and of solid wood. Crossbars should have a minimum cross-sectional area of 24 square inches and the minimum thickness should be 3 inches. Planks should have a minimum cross-sectional area of 8 square inches and a minimum thickness of 1 inch.
- (5) Cribbing material should be of wood having parallel flat sides. In no case should the crib be less than 30 inches square.
- (b) Installation practices:
 - (1) No more than two wooden wedges should be used to install a post.
 - (2) Posts should not be installed under roof susceptible to sloughing or under disturbed roof without a wooden cap block, plank, or crossbar between the post and the roof.
 - (3) Posts should be installed tight and on solid footing.
 - (4) Blocks used for lagging between the roof and wooden crossbars, planks, or metal bars should be spaced so that the load on the supports will be equally distributed.
 - (5) Cap blocks should be used between jacks and the roof.

- (c) Conventional support pattern:
 - (1) Spacing of roadway roof supports should not exceed 5 feet.
 - (2) Width of roadways should not exceed 14 feet on the straight and 16 feet on the curves.
 - (3) Roof supports should be installed to within 5 feet of the uncut face; however, the supports nearest the face may be removed to facilitate the operation of face equipment if equivalent temporary support is installed prior to removal.
 - (4) When an opening is no longer needed for storing supplies or for travel of equipment the roof at the entrance of all such openings along travelways should be supported by extending the post line across the opening.
- (d) Openings should not exceed 20 feet in width where the roof is supported solely by conventional means.

Section 8 Criteria--Combination Roof Control Plan

For a plan where both roof bolts and conventional supports are used for roof control at the face, the criteria for a Full Roof Bolting Plan and a Conventional Roof Control Plan should apply with the following modifications:

- (a) Any place being driven over 20 feet in width should be supported by a Combination Roof Control Plan.
- (b) The roadway should be limited to 16 feet in width on both the straight and the curves to within 10 feet of the uncut face.
- (c) A row of posts should be set for each 5 feet of space between the roadway posts and the ribs.

- (d) Openings should not exceed 30 feet in width.

Section 9' Criteria--Spot Roof Bolting Plan

Spot roof bolting may be used only as a supplement to the approved roof control plan at random locations where adverse roof conditions are encountered. Where spot roof bolting is used, the criteria in Section 11 (a) and (b) of the Full Roof Bolting Plan should apply. In addition, roof bolts should be installed in accordance with roof conditions, but in no case should spacing exceed 4 feet lengthwise and crosswise. Roof bolting should begin under safe roof and continue for the length of the adverse roof condition until safe roof is again encountered.

✓ Section 10. Criteria--Pillar Recovery Plan

Any reduction in pillar size during second mining shall be considered pillar recovery. Second mining is construed to be intentional retreat mining. The following criteria are applicable to pillar recovery roof control plans:

- (a) Sections 11, 12 and 13 should apply depending on whether the pillar recovery plan calls for conventional support or a combination of conventional support and roof bolting.
- (b) During development, the size and shape of the pillars should be dictated by the depth of cover, height of coal and other conditions associated with the coalbed. The smallest dimension of the pillar should be no less than 20 feet.
- (c) Pillar splits and lifts should not exceed 20 feet in width.
- (d) A minimum of two rows of breaker posts or the equivalent should be installed on not more than 4-foot centers across each opening leading into pillared areas and such posts should be installed before production is started. Such posts should be

installed before production is started. Such posts should be installed near the breakline between the lift being started and the gob.

- (e) A row of roadside-radium (turn) posts or the equivalent should be installed on not more than 4-foot centers leading into pillar splits, including secondary splits in slabs, wings or fenders.
- (f) The width of the roadway leading from the solid pillars to a final stump (pushout) should not exceed 14 feet. At least two rows of posts or their equivalent should be set on each side of the roadway on not more than 4-foot centers. Only one open roadway leading to a final stump (pushout) should be permitted.
- (g) Before full pillar recovery is begun in areas where roof bolts were used as the sole means of roof support and openings are more than 16 feet wide, supplementary support should be installed. Supplementary supports should consist of at least one row of posts installed on either side on not more than 4-foot centers lengthwise and limit the width of all roadways to 16 feet. These supports should be extended from the entrance to the split for at least one full pillar outby the pillar in which the split is being made.
- (h) The following criteria should apply to open end pillaring:
 - (1) At least two rows of breaker posts or their equivalent should be installed between the lift being started and the gob on not more than 4-foot centers before the initial cut is made and should be extended to within 7 feet of

the face. The width of the roadway should not exceed 14 feet.

- (2) If the roof in open end pillaring has a tendency to hang, falls should be made, or cribs installed in addition to the breakline posts between the active lift and the hanging area. The cribs should be set not more than 8 feet apart. Heavy duty hydraulic jacks set at centers close enough to give equivalent support may be substituted for cribs, if such jacks are removed remotely.

Section 11 Criteria--Special Roof Control Plan

A special roof control plan should be adopted and followed when support is installed on an intermittent basis but only at predetermined locations such as at intersections, or when equipment is especially designed to provide either natural or artificial support as the coal is mined. Special roof control plans also cover experimental installations using new devices, materials, and methods for roof support.

- (a) The following criteria should apply to mining systems employing continuous mining machines designed to give natural roof support by means of an arched roof:
 - (1) Where coal roof other than that included in the arch is necessary for roof support, positive means should be used to assure that at least 6 inches of coal roof is maintained at all times. In the event that less than 6 inches of coal roof is encountered, all work in such places should be stopped, the continuous miner withdrawn, and artificial roof support installed. A roof control plan for the support to be installed in such cases must be submitted for approval.
 - (2) During the development of four-way intersections, the roof between the tangents of the arches in the entry or room should be supported with artificial roof supports prior to the development of the fourth entrance to such intersection.

- (3) All areas where the width of openings is to exceed the normal cutting width of the continuous mining machine should be supported with additional support as specified in the roof control plan before any other work is performed in the place.
- (4) All areas where the arch is broken, except planned areas such as those covered in paragraphs (a) (2) and (3) of this section should be considered as having unsupported roof and such roof should have artificial roof supports installed prior to any other work being performed in the area.
- (b) The following criteria should apply to mining methods using continuous miners with integral roof bolting equipment where roof bolts are the sole means of roof support:
 - (1) The distance between roof bolts should not exceed 8 feet crosswise, unless additional material such as wooden planks, wooden beams, or metal straps are installed in conjunction with the roof bolts. Roof bolts installed more than 8 feet but less than 9 feet apart should be supplemented with a wooden plank at least 2 inches thick by 8 inches wide or its equivalent. Roof bolts installed more than 9 feet but less than 10 feet apart should be supplemented with a wooden plank at least 3 inches thick by 8 inches wide or its equivalent. Roof bolts should not be installed more than 10 feet apart.
 - (2) Work in intersections, pillar splits, or other such places should not be started until additional support has been installed where the roof is supported with only two roof bolts crosswise. Such support should reduce bolt spacing to maximum of 5 feet.

- (3) The maximum opening width where the roof is supported by only two roof bolts crosswise should be 16 feet.
- (4) The distance between the last row of bolts and the face should not exceed the distance from the head of the machine to the integral roof bolting equipment before starting a continuous miner run.
- (c) Before any new support materials, devices or systems are used as a sole means of roof support, their effectiveness should be demonstrated by experimental installations in areas approved by an authorized representative of the Commissioner.

Section 12 Criteria--Temporary Support

- (a) The following criteria should apply to the installation of temporary supports in faces:
 - (1) In areas where permanent artificial support is required temporary support should be used until such permanent support is installed.
 - (2) Only those persons engaged in installing temporary support should be allowed to proceed beyond the last permanent support until such temporary supports are installed.
 - (3) A minimum of two temporary supports should be installed on not more than 5-foot centers and within 5 feet of the rib or face when work is being done between such support and the nearest rib or face. At least four temporary supports should be installed on not more than 5-foot centers when work is being done in other areas of the face inby the last permanent support. No person should be permitted to proceed beyond temporary support in any direction unless such support is within 5 feet of the rib, face, or permanent support.
- (b) During rehabilitation work such as rebolting, installing crossbars, or other permanent roof support, taking down loose roof and cleaning up

falls of roof, temporary roof supports should be installed and the following criteria should apply:

- (1) Where rebolting work is being done or crossbars are being installed, at least two rows of temporary supports on not more than 5-foot centers should be installed across the place so that the work in progress is done between the installed temporary supports and permanent roof supports installed in sound roof. The distance between the permanent supports and the nearest temporary supports should not exceed 5 feet.
- (2) Tools used to take down loose material should be of a design that will enable workmen to perform their duties from a safe position without exposure to falling material. Where loose material is being taken down, a minimum of two temporary supports on centers of not more than 5 feet should be set between the workmen and the material if such work cannot be done from an area supported by permanent roof supports.
- ✓ (3) Where roof falls have occurred a minimum of four temporary supports shall be set before starting any work in and around the affected area. These supports should be located so as to provide the maximum protection for persons working in the area.

Section 13 Criteria--Roof Support Recovery

Any operator who intends to recover roof supports should include a detailed plan for such recovery in the roof control plan. The following criteria should apply to recovery procedures:

- (a) Recovery should be done only under the direct supervision of a mine foreman, assistant mine foreman, or section foreman.
- (b) Only experienced miners should be assigned to such work.

- (c) The person supervising recovery should make a careful examination and evaluation of the roof and designate each support to be recovered.
- (d) Supports should not be recovered in the following areas:
 - (1) Where roof fractures are present or there are other indications of the roof being structurally weak.
 - (2) Where any second mining has been done.
 - (3) Where torque readings on roof bolts or visual observations of conventional support indicate excessive loading.
- (e) Two rows of temporary supports on not more than 4-foot centers, lengthwise and crosswise, should be set across the place, beginning not more than 4 feet in by the support being recovered. In addition, at least one temporary support should be provided as close as practicable to the support being recovered.
- (f) Temporary supports used should not be recovered unless recovery is done remotely from under roof where the permanent supports have not been disturbed and two rows of temporary support, set across the place on 4-foot centers, are maintained at all times between the workmen and the unsupported area.
- (g) No one should be permitted to enter any area from which supports have been recovered.
- (h) Entrances to the areas from which supports are being recovered should be marked with danger signs placed at conspicuous locations. The danger signs will suffice as long as further support recovery work is being done in the area. If the recovery work is completed or suspended for 3 or more days, the areas should be barricaded.

Section 14 Mining Methods

The method of mining followed in any coal mine shall not expose the miner to unusual dangers from roof falls caused by excessive widths of rooms and entries or faulty pillar recovery methods.

Section 15 Widths of Openings

- (a) The method of mining shall provide widths of openings and pillar dimensions compatible with effective roof control. These widths and dimensions shall be incorporated into the roof control plan submitted for approval.
- (b) Where excessive widths result from poor mining practices, additional roof support shall be installed before any travel or other work is done in such area. If excessive widths or openings are a result of coal sloughing, additional support shall be installed and the mining system reevaluated to determine changes that are necessary to minimize such occurrences.

Section 16 Pillar Recovery Method

In addition to those criteria set forth in Section 15 which may be required in the roof control plan, the following shall apply to pillary recovery:

- (a) The overall pillar recovery system shall be designed to minimize the possibility of outbursts or squeezes. The manner and sequence of recovery shall be included in the roof control plan submitted for approval.
- (b) Where full pillar recovery is being done, extraction shall be such as to allow total caving of the main roof in the pillared area.
- (c) During partial pillar recovery sufficient coal shall be left in place to support the main roof to the extent that the possibility of undue forces overriding the working places will be minimized.

- (d) A combination of full and partial pillar recovery shall not be conducted on the same pillar line.
- (e) If full extraction of pillars is being done and physical conditions such as standing water, adverse roof conditions, and falls of roof, or law requirements concerning oil and gas wells or surface subsidence dictate that some pillars of coal are to be left in place, a sufficient amount of coal shall be left to support the main roof so as to minimize the possibility of undue forces overriding the working places.
- (f) Where full recovery of pillars is planned, the design of the pillars shall be compatible with the planned method of extraction.
- (g) Pillaring methods shall eliminate pillar points and pillars that project inby the breakline.
- (h) When recovering adjacent pillars left and right from the same opening, mining shall be completed in one such pillar lift and the openings posted off with at least two rows of breaker posts on not more than 4-foot centers before operations are started in the second pillar.

Section 17 Longwall Mining

Longwall mining shall be considered as a modification of the open-end method of pillar extraction and the support system for the longwall shall be approved on an individual basis.

Section 18. Roof Support Materials

The operator, in accordance with the approved plan, shall provide at or near each working face and at such other locations in the coal mines as the Commissioner may prescribe an ample supply of suitable materials of proper size with which to secure the roof of all working places in a safe manner. Safety posts, jacks, or other approved devices shall be used to protect the workmen when

roof material is being taken down, crossbars are being installed, roof bolt holes are being drilled, roof bolts are being installed, and in such other circumstances as may be appropriate. Loose roof and overhanging or loose faces and ribs shall be taken down or supported. Except in the case of recovery work, supports knocked out shall be replaced promptly.

Section 19 Adequate Supply and Location of Roof Support Materials

The operator shall have an adequate supply of roof support material (including temporary supports) as specified in the approved roof control plan for the type of mining being conducted as close as practical to the working face, but no farther away than the first open crosscut outby the working face unless storing of such supplies in this area poses a hazard to the miner. In such cases supplies shall be stored at an alternate location approved by an authorized representative of the Commissioner. Where mining equipment such as roof drilling machines or timbering machines are required to install the supports, such support material may be transported from place to place on the equipment. An adequate supply shall be defined as sufficient material including temporary supports, to support roof exposed by one complete cycle of mining. An additional supply of supplementary roof support materials, such as posts, jacks, crossbars, or different length roof bolts, shall be available in each working section in the event adverse roof conditions, such as water coming from the roof, slips, washouts, wants, roof cracks, are encountered.

Section 20 Roof Bolt Tests

When installation of roof bolts is permitted, such roof bolts shall be tested in accordance with the approved roof control plan.

Section 21 Testing Requirements

The criteria which may be required in the roof control plan for testing installed roof bolts are set forth in Section 11(b) (3), (ii) and (iii).

Section 22 Roof Bolt Recovery

Roof bolts shall not be recovered where complete extractions of pillars are attempted, where adjacent to clay veins, or at the locations of other irregularities, whether natural or otherwise, that induce abnormal hazards. Where roof bolt recovery is permitted, it shall be conducted only in accordance with methods prescribed in the approved roof control plan, and shall be conducted by experienced miners and only where adequate temporary support is provided.

Section 23 Requirements for Roof Bolt Recovery

To assure that miners are protected during roof bolt recovery work, the operator shall conform with criteria set forth in Section 18.

Section 24 Roof Testing

Where miners are exposed to danger from falls of roof, face, and ribs the operator shall examine and test the roof, face, and ribs before any work or machine is started, and as frequently thereafter as may be necessary to insure safety. When dangerous conditions are found, they shall be corrected immediately.

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PUBLIC HEARING RECORD

WEST VIRGINIA DEPARTMENT OF ENERGY

January 20, 1987

A public hearing was held on January 20, 1987, at the West Virginia Department of Energy, Region Six Conference Room, 322 70th Street, Charleston, West Virginia, to receive written and oral comments on proposed rules and regulations governing roof control.

Presiding at the public hearing was Ronald O. Sheets, Administrative Assistant for the Department of Energy. The public hearing record was opened at 10:00 a.m. Attached is a list of those persons in attendance at the hearing which indicates those wishing to make comments. Oral comments were taken, recorded, and a verbatim transcript prepared and is attached and made a part of this record. No written comment was filed. All comments being received, the hearing record was closed at 12:30 p.m.

RESPONSE TO COMMENTS

As indicated in the verbatim transcript, all comments were generally in support of current roof control and mining methods and expressed concern about the "full bolting plan" contemplated by the proposed regulations. None of the testimony identified any specific provisions of the regulations which should be amended or any suggested new provisions.

In reviewing the comments, the Department of Energy understands the concerns expressed by the commenters regarding safety in the mine and the potential for lost employment opportunities; however, a ruling issued by the West Virginia Supreme Court on July 19, 1986, orders the Commissioner of the Department of Energy to implement a "full roof bolting" requirement by developing rules and regulations consistent with federal requirements. These regulations respond to the court order.

AMENDMENTS

None of the comments received recommended specific changes to the regulations; therefore; no changes or amendments are proposed.

REGISTRATION FOR PUBLIC HEARING
TITLE 38 SERIES 20
REGULATIONS GOVERNING ROOF CONTROL

January 20, 1987

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* Those persons desiring to make oral statement

** Those persons desiring to make written statement

PUBLIC NOTICE MAILING LIST

1. Clarksburg Publishing Company
Clarksburg Exponent and Telegram
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Charleston, West Virginia 25301
9. West Virginia Oil and Natural Gas Association
Post Office Box 3231
Charleston, West Virginia 25332



ARCH A. MOORE, JR.
GOVERNOR

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
1615 WASHINGTON STREET, EAST
CHARLESTON, WEST VIRGINIA 25311
TELEPHONE 348-3500

KENNETH R. FAERBER
COMMISSIONER

April 20, 1987

The Honorable Ken Hechler
Secretary of State
Capitol Building
Room 157-K
Charleston, West Virginia 25305

Dear Mr. Hechler:

Please find enclosed proposed legislative rules entitled Rules and Regulations Governing Roof Control, authorized under Chapter 22, Article 1, Section 15 of the Code of West Virginia 1931 as amended.

Also enclosed is a copy of the public hearing notice, the public hearing record with responses to comments, the statement of agency approval, and the required fiscal note.

I respectfully request that these proposed regulations be placed on file in your office.

Your cooperation in this matter is very much appreciated.

Sincerely,

Roger T. Hall
Administrator

RTH:cc

Attachments

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STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY

Transcript of the public hearing held at
322 70th Street, Charleston, West Virginia, on
Tuesday, January 20, 1987, commencing at 10:00 a.m.,
regarding emergency rules and regulations governing
roof control.

CONDUCTED BY:

RONALD O. SHEETS
Administrative Assistant
West Virginia Department of Energy
Health, Safety and Training Section
Mines and Minerals Division
1615 Washington Street, East
Charleston, West Virginia 25311

DATE: January 26, 1987
NINETY DAYS FROM THE ABOVE DATE THE
TAPES OF THIS MATTER WILL BE ERASED
SO THAT THEY MAY BE REUSED UNLESS
WE HEAR FROM YOU INDICATING YOUR
REASONS WHY THIS SHOULDN'T BE DONE.

JANET T. SURFACE
COURT REPORTER
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MR. SHEETS: My name is Ron Sheets. I work with the West Virginia Department of Energy. My job is administrative assistant to Bart Lay, who most of you probably know, health, safety, and training section.

This public hearing is being held January 20, 1987, at the Department of Energy's Charleston regional office, Charleston, West Virginia, upon the rules and regulations governing roof control.

The rules and regulations were constructed by the Department of Energy and filed in the Office of the Secretary of State as emergency regulations on October 21, 1986.

On December 16, 1986, a public hearing notice upon the rules and regulations was filed in the Office of the Secretary of State and mailed to all interested persons within the mining industry within the State of West Virginia.

This public hearing here today is being held to afford all interested persons an opportunity to submit data, objections, suggested amendments, views, evidence, and arguments orally or in writing upon the rules and regulations.

We will now open this hearing for

comments.

The following persons have indicated on our form that they would like to make comments here today. We would ask that when you come up to present your comments, please state your name and any company you represent. And if you have copies of your comments available in writing please leave them with the recording secretary.

Our first commenter is Larry Hopson.

MR. LARRY HOPSON: I really wouldn't want to be the first one to comment. I was wanting something to get started. But I can't see where the revision of a full roof bolt plan on a Wilcox is going to help safety at all.

Men who have worked under them and know feel exactly as I do. Having another roof bolt machine up there operating with you beside of a miner when you are in low coal and you're not able to move around as quickly as you could if you was on your feet, I would think would be a bigger hazard than any roof control, roof bolt.

Furthermore, I think that a Wilcox system where everyone is involved with your roof at

all times, all your timber men, your jack setters, whatever, are constantly in touch with your roof. Where if you went to a full bolt system your roof would lie mainly in the hands of your bolt operators. It would be the people that would be in contact with it at all times. Where now you don't. Right now in that mines on a roof on a Wilcox system every man in the mines is in constant contact with your roof. You know what you've got. You're, all the time in there you're setting timbers, you're hammering on it, and you know where the bad roof is.

MR. SHEETS: Could you state your name for the record.

MR. HOPSON: Larry Hopson. I'm here representing Orchard Branch Mining Company. And I'm a mine foreman.

MR. SHEETS: Okay. Thank you very much.

The next commenter: Wayne Addair.

MR. WAYNE ADDAIR: My name is Wayne Addair. I'm president of Little Darrell Coal Company which Orchard Branch Coal Company works under.

And my comments, I came here without anything prepared to say, but we have worked Wilcox miners for ten years. And when this ruling

first came out in December we were working in a mine in Mingo County that had solid sandstone top. We were roof bolting in the roadway. It was taking two or three bits to a hole, burning them up putting them in. So when this came out we knew we couldn't work there if this was put into effect. So we had to stop this mine.

Now during the last year and two months I think out of two operations we have ran approximately eighty-six-thousand clean tons of coal with about forty-four-thousand man hours. And also during this period of time we didn't have one lost time accident.

Now I feel, as Larry had mentioned, that when you are working a Wilcox system the way we are, the way we have for ten years, that you are in constant contact with the top. Each man has to be aware of what the top conditions are. I don't think that you should just make an arbitrary ruling that every mine has to have full bolts in it. That would be the same as saying that every vehicle in this parking lot out here was the same thing. And we can all look out and see that they are not.

If you're talking about bringing a

Wilcox down a twenty-foot width, you might as well say that you can take one of these big Cline trucks on a strip job and drive it through a ten-foot opening. You can't do it; you'll get people hurt.

The coal industry is in a bad situation now, as we all know. And if we're talking about adding roof bolts, we're talking about adding more cost and less production. And I don't think that is a very good thing to do.

As far as I know, everyone I've dealt with that is in mining wants to see that everyone mines safe. I don't think that I know of any operator or anybody working in the mines that wants to see people get hurt. And I think that the best way to mine this low seam coal, we're talking about twenty-six to thirty, thirty-two-inch coal, is with equipment you can put in it. And that at the time happens to be the Wilcox. It is a safe method. And if you don't follow your roof control plan, yes, there will be things happen. But that will happen on other types of mining.

You can put a man in eight foot of coal and if he gets away from the roof support he could very easily be killed. And we know it because

it happens.

I think that the Department should consider each mine when they are issuing roof control plans. We have worked under one type plan for ten years. And I think if it is not broke don't fix it.

And if you are going to classify every mine, every seam, every top condition the same, then it all should be the same. And we all know it is not. Anyone that's been in the coal mines knows you have different conditions. We have a provision in our plan if you encounter bad top that you either get it down or you pin it. And we do that. Because if you don't you're not following the roof control plan. Which you are just asking for someone to get hurt. And we don't want anyone to get hurt. We want everyone to be able to work.

And we're talking about our living in this, myself, my brother, these men that are here. And if we can't work here, all we can do is try to find somewhere else we can work. But we don't want to do that. We need to stay here. We need to work here and try to help support this state and let this state help support us.

Thank you.

MR. SHEETS: Thank you, Mr. Addair.

Mr. McConnell.

State your name, please.

MR. DAVID McCONNELL: David McConnell.

I've got about seventeen years in the mines, three of them around Wilcoxes. And for my part of it, I can't see anything unsafe. It's what you and the men do yourself. You either make it safe or you don't.

And I work for Little Darrell and they've always done it right.

MR. SHEETS: Thank you very much.

Darrell Addair.

MR. DARRELL ADDAIR: My name is Darrell Addair and I'm with the Little Darrell Coal Company at Orchard Branch.

And I think Wayne, Larry, and Dave has pretty well said what I could say to it. But I don't, I don't see where they can just make a blanket solution to problems in the mines. I think, like Wayne said, if we take it on a mine-by-mine basis, some of these mines that wouldn't have top suitable to mine the Wilcox in maybe. But some of them does. And I know that there is no such thing as good top. But

if you've got men up there checking the top, like Larry was stating earlier, they're in contact with that top at all times and they know what they've got. And the way we've got now is a spot bolt plan. If you encounter drummy top you have to full bolt it from solid top to solid top. And that's the way we have done for ten years or so. And I think we have had fairly good success with it.

Now if you're talking about cutting it down to twenty foot wide and going to full bolting, you're going to have a lot of people that would be desperate, they're going to try to keep their jobs, they're going to try to keep their mines. And they may stick a bolter on each side and try to run the production that it takes to stay in business. And I think you're getting more equipment in there in a smaller area. And I don't know the statistics on your pinning fatalities, but I believe they are kind of high too on the pin men themselves. And I just don't think that would be-- I don't think it is necessary to do that.

I think the solution to the problem is to follow the timber plans that we've got now. And if we stay within the law on that I don't

see no problem with it. And I can't understand why anybody would want us to cut it down to twenty-foot wide, and to me that would be endangering more lives if you try to mine with that type miner. Myself, I don't think you can do it. I think we would have to junk our miners and go somewhere else and try it there.

That's all I've got to say. Thank you.

MR. SHEETS: Thank you.

Danny Laverty.

State your address, please.

MR. DANNY LAVERTY: It's Glen Daniel, West Virginia.

First of all, I would like to offer on this, probably experience-wise I have less experience around a Wilcox than probably anybody in this room. But in ten years I've been around other types of miners. And I would like to say that I was impressed when I started on this type of mining at the awareness that people had of their conditions. That was something that I hadn't seen in the mines before that I'd worked at. Their mines were bolted. They took for granted that it was safe. They ran their

equipment back and forth and never checked their top. Here at this mines each person is aware of their conditions; they don't take for granted anything. They go around with their sounding devices; they check the top; they know what is there.

You take the top, the miner where you're running equipment behind it, and so on, they get on their equipment at the start of the shift, they run their equipment back and forth under the top, they assume that it is good. Which they don't know. They may be running under stuff that is no good, but they just don't take the time to get off and check it.

This type, each person is right there, nose right up to it. They know what is going on. And I feel safer really around this type of thing.

Now you can put up all the bolts you want to in bad top and that doesn't make it safe. But I have seen over the years that happen. They go into a place with bad top, they put up their bolts, and that's fine. They go ahead and run their coal and they're taking a risk doing it.

These people that I've seen which also impressed me, they get the bad top, they take it

down or they put up the bolts there. They take what they can down and bolt it. And then you've got something-- No top, I would say, that you can always trust anywhere.

But these people, because they are right there with it, know what is going on, can take more precautions than what you see around these other type miners.

So, to me, the statement I would like to make has already been made. Mining safety is up to each individual person. And this type of mining offers each individual person that chance to be safe. He's got more hands-on time there with what is around him and knows what's going on more so than your people around these other types of miners. To me it is actually, in this way it's more safer than these other type mines.

And I suppose that's about all I have to say.

MR. SHEETS: Thank you, Mr. Lavery.

George M. Bailey.

MR. GEORGE M. BAILEY: My name is George Bailey. And I work at Little Darrell Coal Company, representing Orchard Branch, West Virginia.

Now I personally--

MR. SHEETS: Could you give me your address, please?

MR. BAILEY: Box 317, Fairdale, West Virginia.

I have personally worked for Darrell and Wayne for almost ten years on this Wilcox system. Right at the present time I am setting jacks in the face. I am a face person.

Okay. I have a timber man. Okay. Me and my timber man keep constant check on the top under the plan that we are running. If I encounter bad top, I tell my foreman I have bad top. And for these certain individuals, all I have to do is say my top is bad. They will shut the miner down, move the miner to another place, bring the roof bolter in, and bolt the top if it is deemed necessary. If we can pull it, we pull it.

Okay. We have had inspectors with us, at this particular mines, we have had inspectors with us inspecting while we have been running coal. Personally one inspector told me that he had never seen any bunch of people go through and check the top constantly like we do and keep our timbers and stuff

up. We keep our curtain up, we keep our timbers up. If we think it is necessary to bolt, we bolt. If we have to shut down to bolt, we stop and bolt.

Okay. You are wanting to narrow this down to twenty foot. The plan-- Well, even the machine, you cannot run it with twenty foot. Your breaks will not cut through. Your bridges are not long enough. You can't get your miner through. You can't get your bridges through. If we don't have at least from twenty-six to twenty-eight foot width we can't mine it. We would just have to shut down. Which would force all of us out of a job. Because we are just barely making it now.

The cost of the roof bolts, if we have to go to a full roof bolt plan, and the time that it would take us to back the miner out of the place to roof bolt it and get the bolter in would just put us out of business.

And that is all I have to say.

MR. SHEETS: Thank you. I appreciate those comments.

MR. GEORGE COBB: I wasn't nervous before. I heard all these articulate coal people. And I'm very proud of their ability to communicate.

My name is George Cobb. I'm with Fairchild International. My address is Daniels, West Virginia.

It is my pleasure to come before this hearing today to make a very few comments on our feelings toward the proposed regulations.

The Wilcox miner, Mark 20 and Mark 21, has over thirty-two years of technology due to the fact that the first miner was introduced to the industry in 1955 here in the State of West Virginia.

The mining system has many advantages over a typical continuous miner section which if these regulations are put into effect will greatly increase the hazards to the underground coal mining industry here in the State of West Virginia by way of abandonment of the Wilcox miners here in the state.

To briefly discuss these advantages is the fact that the U. S. Department of Energy and Department of Labor categorizes fatalities in different areas, one of which is that of machine fatalities. In investigating past fatalities I know that in the decade of the '80s there has been in excess of one hundred fatalities in the category of

machine fatalities. In that one hundred fatalities there is one, one single, sad, but true, one single fatality on a Fairchild or a Wilcox miner, a detailing machine fatality.

In the area of haulage, which is another category of fatalities, to the best of my knowledge there is not one fatality on a Wilcox section due to haulage.

In the event that these miners are put out of service here in the State of West Virginia, some will be replaced with other types of mining systems. And there's a very good opportunity that we'll see an increase in fatalities in these other categories.

The system has within the concept and design of the system many safety features. I would like to discuss these briefly, the first being the fact that the crew is working in one general location where they are almost always in contact with face supervision unlike conventional mining where blasting, loading, hauling type, drilling is taking place in many locations throughout the face area. And in this type of auger type mining, the personnel are always in contact, much closer contact with face

supervision. Ventilation is much more easily achieved with this type of mining.

And through technology, dust suppression is kept at an absolute maximum due to water through the augers. So with the ease in ventilation and dust control you have a much better work environment.

I have had the opportunity to investigate on paper the last fatalities, not only in the State of West Virginia but industry wide. I can say without any hesitation that ninety-eight percent of these fatalities that are categorized in a Wilcox section have several things in common. And these are, number one, that in ninety-eight percent of the cases the operator is out of compliance with both his federal and state approved roof control plans. This is a very sad state of affairs but is the truth. The entries were driven wider than proposed by the regulatory agencies or the entire crew was put into, out of compliance in an unsafe position at the direction of supervision or the mine management.

The second common area is that, and this is kind of a strange situation, is that it is generally and without exception the second location

for the mining system. A mining system that would be purchased for mine number one, we could not find and I cannot remember any exception of a fatality. But that same system purchased and directed for mine number one being relocated to mine number two and sometimes three and four are the areas where these fatalities are taken. It is our feeling that this is due mainly for the training of new personnel and new mines and new applications for this type of system.

Our company feels very strongly about safety. It is foremost in our minds of both the design engineers and our service and sales people that work with our company. And we work extensively with mining operators and the different regulatory agencies for training.

As we know, reserves in the coal industry are being depleted at a fast rate. Production is very high in these days even though the industry is at one of the lowest levels in modern times due to the selling price of the coal. The coal that is remaining in remaining reserves is at a seam height of far less than ever before. It is felt that in the eastern United States Appalachian coalfields that two-thirds of the coal seams that are left, the

remaining reserves are less than forty-two inches.

It is my understanding that in the State of West Virginia, seventy-five percent of the remaining underground reserves are less than forty-eight inches. If the Wilcox miners are proven to be put out of service through regulations such as proposed here, these reserves will either go unmined or will have to be mined in what is deemed a far greater, a less safe factor than ever before.

It is an impossibility to mine productively with the Mark 20 and Mark 21 miners in entries of twenty feet. This would create a hazard in trying to maneuver the machine from entry to entry and cross cuts in entry widths of twenty feet.

I appreciate the concern of the Department of Energy in listening to the remarks of the operators and other interested people proposing these regulations. I appreciate the operators themselves and their concern for these regulations.

Thank you very much.

MR. SHEETS: Thank you, Mr. Cobb.

Leonard Smith, Junior.

MR. FRANKLIN PERDUE: My name is not checked on there but I'd like to say something.

MR. SHEETS: Okay.

MR. LEONARD SMITH, JUNIOR: I'm Leonard Smith, Junior; address is Daniels, West Virginia. And I'm representing myself.

What I would like to make a comment on, I ran Wilcoxes for ten years. And I ran the first ones that ever come out, the 25. And it's basically the same as the 20. But I never have had a man hurt on roof control in the mines.

You get people that gets their backs hurt, you know, lifting stuff. But as far as having a man hurt setting timbers or having a piece of rock on him, I never have in ten years.

Okay. On the width of the mines, driving these things twenty feet wide, you just can't do it. Because if you've got a place twenty foot wide, you can't maintain your ventilation, because you've got to have four feet out from the rib for your curtain. Plus, you can't get your bridge run in it. You're going to disrupt your ventilation. You just can't do it.

And another thing, these longwall systems, they mine their entries, the head entry on them, thirty feet wide, maintain their head entry and

everything to get the belt, track, and everything in the same entry. So this would be penalizing us when somebody else can do the same thing.

And on this bolting thing, there is other type of machinery that can bolt and go one-hundred foot straight ahead on timbers, like the Wilcox is wanting to do on this timber plan. On a Lee Norse they can get a hundred foot plan, drive them a hundred foot straight ahead and back out and pin it, but yet a Wilcox can't. That top is ignorant to what is going on and what kind of machine is mining it.

The Wilcox miner is a safe miner if it's applied right. Nothing is safe unless it's applied right. And it is, basically what everybody has said right here is the truth. You've got to maintain your top, and your crew has got to work together. You get one guy on the crew that's no good, you find him out real fast. Because if he don't set his timber somebody is on him. And it is not like-- Everybody has to depend on each other.

And if you've got a-- On these other type of miners you've got a pinning machine over, he might put a bolt up, he might not even check his top when he goes in there. You move around. You

don't know what conditions it is unless he comes back and tells you. And half the time they don't do it. But on this Wilcox everybody is right there together; everybody knows what's going on. And the boss is right there, he can see what is going on, and everything is much better. And it is a safe system.

That's about the only thing I've got to say. There's nothing wrong with the miner.

MR. SHEETS: What mines do you operate, sir?

MR. SMITH: Glade Creek Coal Company.

MR. SHEETS: Thank you for your comments.

MR. FRANKLIN PERDUE: My name is Franklin Perdue. My address is Box 125, Fanrock. I represent Orchard Branch Coal Company.

I haven't really had all that much experience, but I've been working with Darrell and Wayne since March of '84. And in that time I have not seen any fatalities or any serious injuries.

And I don't think, this is my comment or argument or ever how you want to put it down, I don't think it is right.

I went to the supreme when they had their hearing there and listed to it. People up

there standing and talking with their PhD degrees. And they're going to stand out here behind a desk and tell what is safe and what is unsafe for a man that is under there working? I don't see how, what kind of degree he's got, how you can stand up there and just say, well, why are they trying to outlaw it so bad for.

I mean, it's putting people out of work. This is the only life I know. I mean, it's all I've ever been on. Any experience at all: Wilcox. What are you going to do? How many hundreds of men is on a Wilcox? What are you going to do, look at these people?

When the people are supposed to be trying to get more jobs, get more jobs for West Virginia, what good is it doing to get a job if you're just going to turn right around and lose it?

People that gets in there usually nine times out of ten they get killed. These fatalities happens. Plainly, you see these little posters: Do not go under unsupported roof. And that's how you can tell. The inspectors come in there and talk to you. How did the man get killed? He went out under unsupported roof.

I don't think it's right for people like that to have any ruling, you know. It might be the law but I don't think it's right for people to sit outside behind a desk and say what is safe and unsafe for the man that has to go in there and try to work to provide for his family. I mean, I look out after safety.

Like I said, in that time I have not seen no deaths, no serious injuries. I've worked at four different mines on both Wilcoxes. I set jacks, I set timbers. And I just don't think it's right for people that's probably not even had any experience at all to have any ruling on it.

That's all I have to say.

MR. SHEETS: Thank you, Mr. Perdue.

That concludes the-- Oh, do we have another commenter?

MR. DAVE OWENS: My name is Dave Owens, Four-O Mining Corporation.

I can understand the situation on bolting. If the top needs bolting, I can see bolting it. Like massive sandstone, there is no way. I have run a Wilcox, well, fifteen year. I've owned one since 1982. I run anywhere from three-hundred-seventy-

five to four-hundred-fifty-ton a shift. I've never had a lost time accident. And if the top needs bolting, that's all right. But there is no way that you can bolt top and get your roof bolters in there and cut them down to twenty foot wide.

Your bridges, just like one guy said, your bridges ain't long enough. You won't maintain ventilation. You're apt to get somebody killed like that. You just absolutely can't get it around. You'll not cut breaks through or nothing else.

Thank you.

MR. WAYNE ADDAIR: Could I say something else?

MR. SHEETS: Sure.

MR. WAYNE ADDAIR: I just wanted to mention, bring to the attention of the board that on your roof control system, once you are in by an area, let's just say that a mine is three-thousand-feet deep, if you have driven it on timbers, as you travel that each day you have a visual contact with what your timbers are doing. If you have some top getting bad, you can tell as you watch. And we do visually check. That's part of the program is checking the roadways,

et cetera, each day.

Whereas, if you have this roof bolted and no other visual means, the only visual sight you would see would be if it is down. Now if it comes down as you're going under it, it's too late for you to see.

And I have worked for other companies, big companies. And I have been on a pin crew before. And there has been times that you would have, well, a couple of instances I know of people got killed. One guy was setting down eating his dinner and he was under a bolted top. It was a slug but it fell out and it hit him.

If you have timbers up you will get a warning. And lots of times you won't. And as you drill your top to put up roof bolts, you're opening that up to air exposure which could help deteriorate the roof that you have. That's the reason that your roof needs to be examined on a nine-to-nine basis.

One other point that I would like to mention, I don't know if it's industry-wide or not, but I have seen it in the times that I've worked around Wilcoxes and in the situation we are in now. A

lot of times you have family members working together. In this room here we have brothers that works together. And they're always, you're always looking out for each other whether you're a family member or not. But it's just a situation of taking care of what you have and the people you have around you.

If you do not follow your plan, I don't care if it's full bolting and six inches apart, if you don't follow it, you cannot maintain a safe mine.

And I thank you for letting me back up here again.

MR. SHEETS: All right. Thank you.

Any other commenters?

If there are no other commenters, I would like to say at this time we will take your comments into consideration. We do appreciate your comments.

We are going to recess until approximately noon in case somebody else does show up to comment. So if you guys think of something or you would like to comment between now and noon, feel free to show up.

(WHEREUPON, a recess was
taken.)

(WHEREUPON, no one else
appearing, this matter -
was adjourned at 12:30 p.m..)

STATE OF WEST VIRGINIA
COUNTY OF KANAWHA

I, the undersigned, Janet T. Surface,
Stenomask Reporter, do hereby certify that the
foregoing is, to the best of my skill and ability, a
true and accurate transcript of the proceedings had at
a public hearing held in the above-styled matter on
the 20th day of January, 1987.

Given under my hand this the 21st day of
January, 1987.

Janet T. Surface

Reporter