

FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION

1730 K STREET NW, 6TH FLOOR
WASHINGTON, D.C. 20006

October 7, 1996

SECRETARY OF LABOR,
MINE SAFETY AND HEALTH
ADMINISTRATION (MSHA)

v.

C.W. MINING COMPANY

:
:
:
:
:
:
:

Docket No. WEST 92-204

BEFORE: Jordan, Chairman; Marks and Riley, Commissioners¹

DECISION

BY THE COMMISSION:

This civil penalty proceeding arises under the Federal Mine Safety and Health Act of 1977, 30 U.S.C. § 801 et seq. (1994) (“Mine Act” or “Act”). At issue is a citation issued by the Department of Labor’s Mine Safety and Health Administration (“MSHA”) alleging that C.W. Mining Company (“CW”) violated 30 C.F.R. § 75.220(a)(1) by operating its mine without an approved roof control plan.² Concluding that CW’s old roof control plan was no longer suitable for the mine and that the plan proposed by MSHA was suitable, Administrative Law Judge August Cetti affirmed the citation. 15 FMSHRC 1559 (June 1993) (ALJ). The Commission granted CW’s petition for discretionary review (“PDR”). For the reasons that follow, we affirm the judge.

¹ Commissioner Holen participated in the consideration of this matter, but her term expired before issuance of this decision. Pursuant to section 113(c) of the Federal Mine Safety and Health Act of 1977, 30 U.S.C. § 823(c), this panel of three Commissioners has been designated to exercise the powers of the Commission.

² Section 75.220(a)(1) states:

Each mine operator shall develop and follow a roof control plan, approved by the District Manager, that is suitable to the prevailing geological conditions, and the mining system to be used at the mine. Additional measures shall be taken to protect persons if unusual hazards are encountered.

I.

Factual and Procedural Background

A. The Old and New Roof Control Plan Provisions

CW operates the Bear Canyon No. 1 Mine, an underground coal mine in Huntington, Utah. 15 FMSHRC at 1561. MSHA's District 9 Office revoked CW's "old" roof control plan because CW refused to adopt changes in provisions addressing (1) the distance CW could mine before permanent roof bolts were to be installed ("roof bolting development cycle") and (2) the manner and sequence of pillar extraction. *See* PDR at 3-4; S. Br. at 8.

The old plan provided:

Where the roof is strong and competent, the faces of the entries, rooms, plus crosscuts, can be advanced 120 feet prior to installing permanent roof supports.

Gov't Ex. 2, at 5, Item 3. CW customarily advanced 120 feet before roof bolting where top coal was sufficient, in its view, to provide temporary roof support. On review of the old plan, MSHA took the position that roof support and control required roof bolting every 20 feet. Gov't Ex. 35A at 6; 15 FMSHRC at 1561. The 20-foot benchmark was based on the maximum distance CW's continuous mining machines are able to cut with the operator of the machine still under supported roof. *Id.* at 1562, 1569. Under MSHA's approach, CW could no longer rely on top coal as temporary roof support.

In addition, the old plan provided that, when recovering coal by pillar extraction, CW could split the pillar without roof bolting when adequate top coal was present. Gov't Ex. 2 at 23; Gov't Ex. 32; Tr. 1005-06.³ Splitting the pillar was the first step in the sequence of cuts and divided the pillar into two blocks. Gov't Ex. 2, at 23; Gov't Ex. 32. The blocks were then mined as follows: CW would take a cut or "lift"⁴ in the middle of the block that was nearer the gob (cutting perpendicular to the split); then it would cut the inby part of that block; next it would cut the outby part of that block. *Id.* A similar pattern of cuts would take place on the other block. *Id.* Under the new plan, MSHA took the position that splitting the pillar would be done in 20 foot cuts followed by roof bolting after each cut. Gov't Ex. 33; Tr. 339-40, 593-94. The sequence of cuts into the blocks began inby and continued outby. Gov't Exs. 33, 35A at 16.

³ To "split" the pillar means to mine through it, dividing it in half. Tr. 32-33, 418. *See also* Bureau of Mines, U.S. Department of the Interior, *Dictionary of Mining, Minerals and Related Terms* ("DMMRT") at 1056 (1968) ("To divide a pillar . . . by driving through it").

⁴ A "lift" is "[a] slice taken off a pillar The extraction of a coal pillar in lifts or slices." *DMMRT* at 640.

B. History of Discussions of the Plan Provisions

On June 29, 1991, CW sent the MSHA District Manager its roof control plan (the “old” plan) for review. 15 FMSHRC at 1562. The plan had last been approved March 5, 1990. *Id.* CW stated that it did not feel any changes were needed. *Id.*

On August 9, MSHA responded by letter that the plan was inadequate. *Id.* The letter listed 30 “necessary” changes in the pillar section of the roof control plan and 10 “necessary” changes in the plan’s development section. *Id.* MSHA indicated that the old plan provisions concerning roof bolting during roof development did not comply with 30 C.F.R. § 75.202(a) and “[m]ust be revised.”⁵ Gov’t Ex. 3, at 4. As to pillar removal, MSHA stated that mining an inby block after taking a lift out of the middle of the pillar was a faulty practice and that it was necessary to use a conventional support plan or otherwise develop full overhead support. Gov’t Ex. 3, at 4, Items 28, 29, *citing* Item 6, at 2. MSHA requested CW to submit a new plan by August 26, 1991, addressing MSHA’s concerns. 15 FMSHRC at 1562-63.

On August 22, CW sent a letter to MSHA stating that the roof control systems set forth in the plan submitted for review had been used at the mine for 30 years and there had been no uncontrolled roof falls during that time. *Id.* at 1563. CW asked that the plan be approved with no change and did not otherwise respond to MSHA’s 40 concerns. *Id.*

By letter dated September 9, MSHA requested that CW respond to and comply with MSHA’s August 9 letter. *Id.* The letter informed CW that, if an acceptable plan was not received by the due date, September 30, 1991, the existing plan “may be rescinded” and any further mining under that plan would result in a citation charging a violation of section 75.220. *Id.*

On September 24, a meeting between representatives of CW and MSHA was held in Price, Utah. *Id.* Among those attending the meeting were MSHA District 9 Roof Control Supervisor William Ponceroff⁶ and CW President Bill Stoddard. *Id.* At the meeting, the participants discussed the need for full roof bolting and the other changes in MSHA’s September 9 letter. *Id.*

⁵ Section 75.202(a) states:

The roof, face and ribs of areas where persons work or travel shall be supported or otherwise controlled to protect persons from hazards related to falls of the roof, face or ribs and coal or rock bursts.

⁶ Ponceroff was responsible for reviewing roof control plans for all mines in the district and for advising the district manager, who had the ultimate authority to approve plans. Tr. 24.

In a letter dated October 4, MSHA recapped the meeting discussion and noted that Stoddard agreed to submit an acceptable plan within two weeks and that the deadline for submission was extended to October 11. *Id.* at 1563-64. The letter also stated that CW must make the necessary revisions or “the currently approved roof control plan will be rescinded.” *Id.* at 1564.

On October 12, CW submitted a “new revised” roof control plan. *Id.* The plan did not provide for a permanent roof support mining cycle. *See* Gov’t Ex. 12. The “typical pillar extraction sequence” was also similar to that of the old plan. *See* Gov’t Ex. 12, Fig. 7; Gov’t Ex. 2, Fig. 10.

On October 22, MSHA faxed to CW 16 deficiencies in the “new revised” roof control plan. 15 FMSHRC at 1564. MSHA indicated that the plan must include a provision for “Full Roof Bolting” as the primary roof support. Gov’t Ex. 13, at 1, *citing* Gov’t Ex. 12, at 1, 5. MSHA further stated that “roof bolts will be drilled at 20 feet intervals.” *Id.*, *citing* Gov’t Ex. 12, at 7, Item 2. MSHA also indicated that the “Typical Pillar Extraction Sequence” was unacceptable and that pillar lifts were taken out of sequence. *Id.*, *citing* Gov’t Ex. 12, at 9, Item 3 & Fig. 7. The hard copy concluded:

Since all negotiations concerning the development of an acceptable roof control plan, in accordance with 30 C.F.R. 75.220, remain at an impasse, the currently approved roof control plan is rescinded. Any further mining activities without an approved plan is a violation of 30 C.F.R. 75.220.

15 FMSHRC at 1564-65.

Effective October 23, MSHA revoked the old roof control plan. *Id.* at 1565. Later that same day, MSHA Inspector Ted Farmer issued CW a citation alleging violation of section 75.220(a)(1) for operating without an approved roof control plan, and set a termination date of October 26. *Id.*; Gov’t Ex. 15. On October 26, Farmer extended the termination date to October 28. Gov’t Ex. 15.

On October 28, MSHA received a proposed roof control plan from CW providing that the primary method of roof support would be roof bolting. Gov’t Ex. 16. With regard to the pillar extraction sequence, CW adopted the sequence of cuts requested by MSHA. *Compare* Gov’t Ex. 16, Fig. 7 *with* Gov’t Ex. 33, Fig. 7. CW indicated that it was filing the proposed plan under protest as “dictated” by MSHA. Gov’t Ex. 16.

On October 29, MSHA Inspector Robert Baker extended the citation’s termination date to November 1. Gov’t Ex. 15. After a telephone conversation between representatives of CW and MSHA, CW further revised the plan’s pillar extraction procedure by providing for installation

of breaker posts, temporary supports and roof bolting in accordance with MSHA's request. 15 FMSHRC at 1565-66; Gov't Ex. 17.

On October 30, MSHA informed CW that the submitted roof control plan remained unacceptable in six respects. 15 FMSHRC at 1566. In response, that same day, CW faxed the requested revisions. *Id.* On November 4, the MSHA district manager approved CW's revised plan. *Id.*⁷ The approved plan included the 20-foot roof bolting cycle and the new pillar extraction procedure and cut sequence. *Id.*

Before the judge, CW argued that the mine's old roof control plan was improperly revoked; that MSHA did not consult over the requested changes in good faith; and that the mine's old roof control plan was adequate, more suitable and a safer roof control plan than the new plan. *Id.* at 1559. The judge concluded that CW violated section 75.220 by operating a coal mine without an approved roof control plan. *Id.* at 1572. The judge found that the Secretary and CW had "negotiated in good faith and for a reasonable period of time" over the terms of the roof control plan, but were unable to reach an agreement on the roof bolting cycle and the pillar extraction procedure. *Id.* at 1561, 1567. The judge determined that the new plan was "suitable for the mine in question and . . . mine specific." *Id.* at 1571, 1572. For similar reasons, the judge found that the old roof plan was no longer suitable to the conditions at the mine. *Id.* at 1572. The judge relied upon the testimony of MSHA's roof control experts about changing roof conditions at the mine and specifically credited MSHA's expert witnesses over CW's witnesses. *Id.* at 1570-72.

II.

Disposition

On review, CW argues that the judge erred in finding that the Secretary properly revoked the old roof control plan as unsuitable. PDR at 2-35. CW submits that the Secretary followed neither the letter nor the spirit of his regulations, criteria, and program policy in revoking the old plan. *Id.* at 2-3, 6-7, 17, 28. CW also contends that each roof control plan must be unique and structured to meet the specific conditions of the mine. *Id.* at 4-5, 7. CW submits that no consideration was given to prevailing geological conditions, the mining system, the accident and injury history, or any of the other unique factors at its mine. *Id.* at 16-17. CW argues that the Secretary did not consult in good faith over the requested changes, did not provide reasons in writing for rejecting CW's plan, and simply adopted by fiat, the changes imposed. *Id.* at 14, 17-19. CW also argues that the old roof bolting development cycle was suitable, and that the new plan's pillar extraction method is not suitable. *Id.* at 4, 7-17, 19-35.

⁷ On November 25, 1991, MSHA corrected an inadvertent error in the approved plan's pillar extraction sequence and reissued a new copy of the approved plan. 15 FMSHRC at 1566.

The Secretary responds that substantial evidence supports the judge's decision. S. Br. at 7. He argues that MSHA consulted in good faith and properly revoked CW's roof control plan. *Id.* at 8-16. He further submits that changes in the plan were necessary due to significant changes in the mine's roof conditions and that the requested changes were mine-specific. *Id.* at 15-16 n.8, 22-23& n.13. According to the Secretary, there was a history of roof fall accidents and citations for violative roof conditions at the mine. *Id.* at 23. The Secretary contends that substantial evidence supports the judge's findings that the old provisions were no longer suitable and that the new provisions are suitable. *Id.* at 18, 20-27.

A. Revocation of the Old Roof Control Plan

We reject CW's contention, PDR at 6-7, that the Secretary's revocation of its old plan was improper because nothing in the regulations prohibit the old roof control provisions. Roof control plan provisions are not limited to implementing the substantive provisions of the Secretary's regulations and criteria; they may provide for protection in addition to those standards. Section 75.220(a)(1) states that "[a]dditional measures shall be taken to protect persons if unusual hazards are encountered." *See also* 30 C.F.R. § 75.222(a) ("Additional measures may be required in plans by the District Manager."); 30 C.F.R. § 75.207 ("Pillar recovery shall be conducted in the following manner, unless otherwise specified in the roof control plan . . ."); 30 C.F.R. § 75.223(a)(1) ("Revisions of the roof control plan shall be proposed . . . [w]hen conditions indicate that the plan is not suitable for controlling the roof . . ."). Thus, while plan provisions may implement the substantive provisions of the Secretary's standards, they may also supplement MSHA's regulations in the interest of better protecting miners' safety.

We also reject CW's argument that the Secretary's revocation or approval of roof control provisions must be based on conditions that are "unique" to the mine. *See* PDR at 4-5, 7. Neither section 75.220(a) nor its statutory source limit roof control plans to unique conditions of the mine. Section 75.220(a) stipulates only that the plan provisions be "suitable to the prevailing geological conditions, and the mining system to be used at the mine." Section 75.220(a) is based on Section 302(a) of the Mine Act, which requires each operator to adopt "[a] roof control plan and revisions thereof suitable to the roof conditions and mining system of each coal mine and approved by the Secretary." 30 U.S.C. § 862(a). The Commission considered and rejected the uniqueness argument in *Peabody Coal Co.*, 15 FMSHRC 381 (March 1993) ("*Peabody I*"). There, the Commission stated:

[R]oof control plan provisions must address the specific conditions of a particular mine. *Such conditions, however, need not be unique to the mine.* Indeed, a general plan provision addressing conditions that exist at a number of mines may be permissible providing those conditions are present at the mine in question.

Id. at 386 (emphasis added). Accordingly, the Secretary need show only that the provisions in question address specific conditions of the mine; those conditions need not be unique.

CW also attacks the Secretary's revocation of the old plan on factual grounds, arguing that the Secretary failed to give consideration to prevailing geological conditions, the mining system, accident and injury history, or any other factors required to be considered on a mine-by-mine basis. PDR at 16-17. We think substantial evidence supports the judge's findings that CW was encountering changing and increasingly adverse roof conditions, and that the new plan provisions were mine-specific. See 15 FMSHRC at 1571, 1572. There is considerable testimony that CW was encountering changing adverse roof conditions in the development and pillar sections of the mine. See, e.g., Tr. 32, 99-106, 284-85; Gov't Ex. 21. Because of the adverse roof conditions, CW had limited itself to a 20-foot cycle in its development sections. Tr. 41-42, 275-77. The new plan provisions were specifically aimed at those changing adverse roof conditions. Tr. 29-30, 32, 125-30.

B. Good Faith Consultations

We are not persuaded by CW's argument that "[t]he Secretary provided no reasons in writing [for disapproval of the old plan], refused to negotiate, and simply adopted by fiat, the changes imposed." PDR at 18. Substantial evidence supports the judge's finding that the Secretary consulted in good faith with CW over the roof control plan.

The plan approval process involves good faith discussions between MSHA and the mine operator. *United Mine Workers of America v. Dole*, 870 F.2d 662, 667 (D.C. Cir. 1989) ("[t]he specific contents of any individual mine [ventilation or roof control] plan are determined through consultation between the mine operator and the [MSHA] district manager"). The consultation process provides the operator with notice of MSHA's intended action and opportunity to voice objections and make suggestions concerning proposed plan provisions. This is not to say, however, that the Secretary is in the same position as a private party conducting arm's length negotiations in a free market. Ultimately, absent bad faith or arbitrary action, the Secretary retains the discretion to insist upon the inclusion of specific provisions as a condition of the plan's approval. As the court noted in *Dole*:

[W]hile the mine operator had a role to play in developing plan contents, MSHA always retained final responsibility for deciding what had to be included in the plan. In 1977 Congress "caution[ed] that while the operator proposes a plan and is entitled, as are the miners and representatives of miners to further consultation with the Secretary over revisions, the Secretary must independently exercise his judgment with respect to the content of such plans in connection with his final approval of the plan."

870 F.2d at 669 n.10, quoting S. Rep. No. 181, 95th Cong., 1st Sess. 25 (1977), reprinted in Senate Subcommittee on Labor, Committee on Human Resources, 95th Cong., 2d Sess., *Legislative History of the Federal Mine Safety and Health Act of 1977*, at 613 (1978). See also *Peabody Coal Co.*, 18 FMSHRC 686, 692 (May 1996) ("*Peabody II*") ("plan approval process

involves an element of judgment on the part of the Secretary”); *Monterey Coal Co.*, 5 FMSHRC 1010, 1019 (June 1983) (withdrawal of approval of water impoundment plan was not arbitrary or capricious where MSHA’s conduct throughout the process was reasonable).

Two key elements of good faith consultation are giving notice of a party’s position and adequate discussion of disputed provisions. In *Peabody I*, the Commission reversed the judge’s finding that the operator had failed to negotiate in good faith, noting that the operator communicated its legal position to the Secretary, that “adequate discussion occurred between the parties,” and that the operator requested and attended meetings with MSHA to discuss the ventilation provision and proposed an alternative. 15 FMSHRC at 388. The Commission also noted that “reliance on a cognizable legal position is not indicative of bad faith negotiation by an operator in the plan approval process.” *Id.*

Based on these principles, we affirm the judge’s finding, which is supported by substantial evidence, that the parties engaged in good-faith consultations prior to revocation of the old plan and approval of the new plan. After CW submitted its roof control plan to MSHA on June 29, 1991 for the required six-month review, the parties exchanged correspondence and fully explored the changes MSHA was proposing, the rationale behind them, and CW’s objections. MSHA notified CW of proposed changes, twice extended the deadline for CW to present an acceptable plan, and held a face-to-face meeting with CW. MSHA District Roof Control Supervisor Ponceroff testified that at the meeting, the participants discussed roof control plan provisions MSHA wanted modified. Tr. 117-121. Once it became apparent that CW officials understood the changes that MSHA desired, but simply disagreed with them, the meeting ended. Tr. 79-81, 532-33; Gov’t Ex. 7. Immediately after the meeting, Ponceroff and other MSHA officials, including MSHA Inspectors Gibson and Ted Farmer, visited the mine to verify that the conditions MSHA was concerned about were in fact still present. Tr. 119-21. When a further exchange of letters failed to result in a plan acceptable to MSHA, the agency rescinded CW’s old plan and cited the operator for failing to operate under an approved roof control plan. This bilateral process lasted almost four months from the time CW first submitted its old plan to MSHA for review.

CW also argues that MSHA gave no reasons in writing for disapproving the old plan provisions. PDR at 18, citing *Bishop Coal Co.*, 1 MSHC (BNA) 1367, 1370-71 (November 1975). The statement of reasons discussed in *Bishop* is merely a facet of the good faith discussion requirement and its purpose is to insure that the operator is informed why MSHA has disapproved the plan. Here, substantial record evidence establishes that MSHA did give CW adequate notice as to why the plan was being disapproved. In its August 9 letter, MSHA set forth in detail, by page and item number keyed to CW’s original plan, the areas in which it thought CW’s plan deficient. Gov’t Ex. 3. On October 22, MSHA also faxed to CW a communication identifying 16 deficiencies in CW’s revised plan. Gov’t Ex. 13; 15 FMSHRC at 1564.

We discern in these events adequate notice and discussion by MSHA officials. Nothing in the record suggests bad faith by MSHA, and we perceive no course of arbitrary conduct. We

therefore affirm the judge's determination that the Secretary and CW engaged in sufficient good faith consultations prior to the revocation of the old plan and the approval of the new plan.

C. Suitability

The Secretary did not object to assuming the burden of proving both that the old plan was no longer suitable to the conditions and mining system of the coal mine, and that the new plan is suitable. *See* S. Br. at 23; *see also Peabody II*, 18 FMSHRC at 691. With respect to the roof bolting development cycle required by MSHA, CW argues that the old plan was suitable to the conditions of the mine, and therefore was improperly revoked by MSHA. PDR at 27. CW does not challenge the suitability of MSHA's new provision for roof bolting. Concerning the pillar extraction provisions, CW maintains that the old plan was suitable, and MSHA's provisions are unsuitable. *Id.* at 19, 27-29, 33, 35. In *Peabody II*, the Commission defined "suitable" as "matching or correspondent,' 'adapted to a use for purpose: fit,' 'appropriate from the viewpoint of . . . convenience, or fitness: proper, right,' 'having the necessary qualifications: meeting requirements.'" 18 FMSHRC at 690, *quoting Webster's Third New International Dictionary* 2286 (1986). The Commission held that "the Secretary carried his burden of proving the unsuitability of the former plan and the suitability of the new provision once he identified a specific mine condition not addressed in the previously approved ventilation plan and addressed by the new provision." 18 FMSHRC at 690.

1. Roof Bolting Development Cycle Provision

The old plan, although requiring full roof bolting, allowed the operator to advance 120 feet "where the roof was strong and competent" between bolting cycles. Gov't Ex. 2, at 5, Item 3. However, "[i]n areas where subnormal roof conditions [were] encountered . . . the operator [was required to] provide additional support where necessary." Gov't Ex. 2, at 5, Item 1. In finding the old provision unsuitable, the judge relied on the testimony of M. Terry Hoch, a mining engineer, who was head of the Roof Control Division of the MSHA Safety and Health Technology Center in Pittsburgh, Pennsylvania; Jerry Davidson, a geologist at the MSHA Safety and Health Technology Center in Denver, Colorado; and mining engineer David Ropchan of the Denver Center. The judge concluded:

Based upon their superior credentials I credit the opinion of the Secretary's Safety and Health Technology Center experts. Based upon their testimony and the undisputed fact that there were changing adverse roof conditions in the mine that required full roof bolting on 20 foot cycles, I find that the old roof plan was no longer suitable to the conditions of the mine in question and was properly revoked.

15 FMSHRC at 1572.

In our view, no sufficient reason has been advanced to overturn the judge's decision to credit the opinion of the Secretary's experts, and substantial evidence supports the judge's unsuitability finding. "[A]n ALJ has substantial latitude in choosing between conflicting expert testimony." *In Re: Contests of Respirable Dust Sample Alteration Citations*, 17 FMSHRC 1819, 1844 (November 1995) ("*Dust Cases*"), *appeal docketed sub nom. Secretary of Labor v. Keystone Coal Mining Corp.*, No. 95-1619 (D.C. Cir. Dec. 28, 1995) (quoting *L & J Energy Co. v. Secretary of Labor*, 57 F.3d 1086, 1088 (D.C. Cir. 1995)). Hoch, Davidson, and Ropchan all testified the old plan provision was unsuitable. In general, their testimony rejected CW's past reliance on the use of top coal as adequate for purposes of temporary support. Tr. 398-402, 1103-12. Hoch testified that coal roof cannot be a sole means of support because, as a material, it is inconsistent, jointed, cleated and, most importantly, can and will fall. Tr. 448; 15 FMSHRC at 1571. He stated that top coal can "mask" hidden roof problems such as joints and fractures. Tr. 398-99, 406; 15 FMSHRC at 1571. He also testified that coal left on the roof can increase the absorption of humidity into the shales and sandstone above it, increasing the dangers of roof falls. Tr. 398-99; 15 FMSHRC at 1571. Davidson testified that roof coal is not self-supporting. Tr. 345-46, 369. Ropchan testified that it is not possible to accurately predict the magnitude of tensile forces created in a coal layer left in the roof. Tr. 1095. MSHA Inspector Gibson's testimony was consistent with that of the Secretary's experts. Tr. 285-86.

Additionally, there were adverse roof conditions in the development sections of the mine and a declining presence of top coal. *E.g.*, Tr. 615, 1079. CW does not appear to dispute this point on review but, instead, states that these conditions were "temporary." PDR at 27. To the extent the adverse conditions were, in fact, temporary, we note that mine plan provisions are not set in concrete and are subject to review every six months under 30 C.F.R. § 75.223(d). Indeed, the record indicates that CW was already mining on a 20-foot cycle due to adverse conditions. The record also indicates adverse roof conditions continued to exist after MSHA revoked the plan. Tr. 320-23, 353, 400-05, 407-08.

CW argues that the judge should have credited the testimony of its witnesses, including MSHA Inspectors John Turner, Ted Farmer, and Donald Hanna, who held the view that top coal was adequate roof support. PDR at 8-9, 16, 22-24. None of the three inspectors presented any geological or engineering data to support the use of top coal as roof support or to otherwise controvert the Secretary's experts. Rather, they relied upon their past experience and general opinion. Farmer conceded that conditions in the mine had deteriorated, changing dramatically, and that in June 1991, CW was using a 20-foot roof bolting cycle to support the roof. Tr. 800-01, 804-05, 842-43. Accordingly, we conclude that the inspectors' testimony presented by JWR does not fatally undermine the Secretary's expert witnesses, whose opinion the judge accepted.

CW also relied on expert witness Dr. Krishna Sinha, a geological engineer, who testified that there was no added safety benefit in requiring installation of roof bolts in 20-foot cycles. Tr. 983-84, 992. The judge rejected Sinha's testimony. 15 FMSHRC at 1570. Sinha did not know from which areas of the mine the roof samples that he tested had been taken. Tr. 993. Sinha admitted he did not perform tensile or shear strength tests on the roof samples. Tr. 995. Sinha

also conceded that the computer program he used to analyze the roof did not consider the effect of roof bolts on the stability of the roof. Tr. 997-98. The Secretary's expert, Ropchan, explained that Sinha erroneously assumed the mine roof was homogeneous, but that evidence demonstrated that different areas of the mine had different geological formations with varying amounts of overburden. Tr. 996-99, 1090-92. On this record, we decline to disturb the judge's appraisal of Sinha's testimony. *See Dust Cases*, 17 FMSHRC at 1843-44.

CW further argues that its roof fall reports show a minimum number of falls. In view of the changing adverse roof conditions, however, CW's past record does not strike us as compelling. In sum, we conclude that the previously approved plan did not address changing adverse roof conditions, and that substantial evidence supports the judge's finding that the old plan provision relating to the roof bolting development cycle was unsuitable to the present conditions of CW's mine.

CW does not contest the suitability of the 20-foot roof bolting development cycle provision approved by MSHA. CW's letter to MSHA of October 23, 1991, simply states that the previously approved provision was as safe as the provision advocated by MSHA. Gov't Ex. 16. The 20-foot cycle addresses the hazard of roof falls under adverse roof conditions because the reach of the continuous mining machine beyond the cab operator is 20 feet. Tr. 118. Roof bolting is the universally accepted means of supporting roof. Even Inspector Hanna, testifying as CW's witness, conceded that roof bolting plus top coal was a *more* desirable system than reliance on top coal alone. Tr. 896-97. The provision for a 20-foot bolting cycle addresses the adverse roof conditions continuing at the mine. Accordingly, we affirm on substantial evidence grounds the judge's determination that MSHA's 20-foot roof bolting cycle is suitable to the conditions of CW's mine.

2. Pillar Extraction Provision

a. Unsuitability of Old Plan Provision

The judge found the old pillar extraction provision unsuitable based on the testimony of Hoch, Davidson, and Ropchan, the Secretary's expert witnesses. 15 FMSHRC at 1572. CW asserts that the testimony of the Secretary's witnesses should have been discounted because none of them ever pulled a pillar, using either the old or new method, or observed pillar removal at the mine. PDR at 28-29. CW also contends that its method of pulling pillars had been used successfully and safely for over 25 years. *Id.* at 19.

Hoch, the head of the Roof Control Division at MSHA's Pittsburgh Center, had 20 years of experience with the Department of Interior's Bureau of Mines and with MSHA dealing, in part, with the extraction of pillars. Tr. 421. Hoch indicated that during this period he visited at least 150 coal mines in every district of the United States. *Id.* Hoch visited CW's mine on August 17, 1992. Tr. 424. His basic testimony was that pillar mining is dangerous, based on the possibility

of roof falls, and that miners should not go inby unsupported roof. Tr. 427. Hoch also testified that mining inby a cut is “poor mining practice.” Tr. 433.

Davidson’s experience on pillar work was not noteworthy. His experience focused on non-coal mines and he indicated that he never reviewed on-site the extraction of an entire pillar at a coal mine. Tr. 353. When he visited CW’s mine in January and February 1992, Davidson looked at the areas where CW was going to pull pillars and noticed their deterioration. Tr. 317, 353, 360, 361, 367-68. Davidson testified that CW’s method was not a safe way to mine pillars because the process exposed miners to a large area of unsupported roof, and that there was virtually no secondary ground support. Tr. 327-35, 344-45. Davidson further stated that roofs that are not supported by “outside” means such as roof bolts and timbers are unpredictable. Tr. 346.

Ropchan’s underground mining experience was with the Bureau of Mines in mining research. Tr. 1098. He had an engineering degree and did graduate study at the Colorado School of Mines and received a masters degree from Stanford University in applied mechanics. Tr. 1070. He visited the mine twice, in August 1991 and August 1992. Tr. 1078-80. During the 1992 visit, he examined the pillar extraction area. Tr. 1102-03. Ropchan testified that larger areas of open ground create greater potential danger and that, under CW’s pillar extraction process, more open ground is created than under the process advocated by the Secretary. Tr. 1097.

Ponceroff also testified against CW’s pillar extraction process. As the roof control supervisor for MSHA District 9, Ponceroff assisted the district manager in reviewing roof control plans and determining whether a plan should be approved. Tr. 18, 23-24. He visited CW’s mine various times between 1986 and October 1991. Tr. 23, 121, 141-44. Ponceroff also had considerable actual mining experience in pulling pillars, although not in mines west of the Mississippi. Tr. 134, 137-40. He indicated the failure to have splits bolted was faulty, and that the purpose of bolting in the split was to protect miners as they advanced. Tr. 89, 239-40. According to Ponceroff, the District submitted the plan to the MSHA Denver Technical Support Division, and that Division advised that CW’s pillar extraction method was a poor mining practice and unsafe. Tr. 130.

On the other hand, CW argues that its witnesses, who had actual experience pulling pillars using both methods, believed that CW’s method provided adequate support and safety. PDR at 29. These witnesses included CW personnel with extensive experience in pillaring and also MSHA inspectors Turner and Farmer, who were familiar with pillaring at the mine. Tr. 546-50, 638, 662-63, 665, 669, 697, 735, 789, 806-07, 815, 1014. While CW also called MSHA Inspector Hanna as a witness, Hanna did not indicate whether CW’s old procedure or the new procedure was better. Tr. 902. CW again relies upon the testimony of its expert, Dr. Sinha, whose testimony the judge found unpersuasive. 15 FMSHRC at 1570.

We conclude that CW has failed to show that the judge’s credibility resolutions should be overturned. Even if the pillaring testimony of the relatively less experienced Davidson is given

less weight, both Hoch and Ropchan were qualified experts and provided corroborative testimony that the previously approved plan failed to adequately address adverse roof conditions in the pillar sections by not requiring bolting in the pillar splits, and by mandating the taking of lifts in a sequence that resulted in mining inby a cut, thereby creating larger areas of open ground. Although the relevant testimony is, in part, conflicting, we cannot say that the evidence supporting the judge's finding is insubstantial. Accordingly, we affirm as supported by substantial evidence the judge's determination that the prior plan provision on pillar extraction was unsuitable to the adverse roof conditions in CW's mine.

b. Suitability of the New Pillar Extraction Provision

For similar reasons, we decline to overturn the judge's decision to credit the opinions of the Secretary's experts, Hoch, Davidson, and Ropchan, in making his determination that the new pillar extraction provision is suitable. 15 FMSHRC at 1571. Both Hoch and Ropchan testified roof bolting in the pillar split helps keep the layers of roof together, protects miners from roof failure and prevents debris falling from the roof and injuring miners. Tr. 415-16, 1087-88. Davidson indicated two reasons why the new provision was safer than the old one: (1) bolts provide secondary ground support installed where miners would be working; and (2) the size of the area most inby where miners may be working is reduced. Tr. 338-44, Gov't Ex. 32, at 7. Davidson emphasized that without roof support, miners are exposed to what could very quickly become a cave line. Tr. 345. Ropchan testified that miners would be more exposed under the old plan than under the new plan, especially with regard to mining inby. Tr. 1095-97; *compare* Gov't Exs. 40-A and 40-B.

CW takes the position that the Secretary's provision is hazardous and therefore not suitable. PDR at 27-29, 33, 35. MSHA Inspector Turner indicated CW had difficulty in pulling pillars under the new plan. Tr. 698-99. He testified that roof bolting in the pillars transfers the weight from pillar to pillar causing increased pressure on the roof bolts in the split and the ribs, and results in little warning of roof failure or rib deterioration. Tr. 699-704. In Turner's view, the provision advocated by the Secretary was neither effective nor safe. Tr. 722-23, 735. Turner emphasized that, in pulling pillars, timeliness is a necessity. Tr. 723. According to Turner, roof bolting the pillar splits conflicts with the principle of removing the coal and getting the cave quickly. Tr. 724. MSHA Inspector Farmer also expressed doubts about the suitability of the new plan provision. Tr. 811-12. Farmer felt that the roof bolter was in a fairly hazardous position when doing the pillar split bolting. Tr. 813. He was also concerned that pressure would "ride over" the roof bolts. Tr. 809-10. MSHA Inspector Hanna agreed that the longer pillars stand after cutting, the more pressure they take; he also suggested that roof bolting takes time. Tr. 901. Hanna, however, conceded that both CW's old procedure and the procedure advocated by the Secretary have been successful and could not say which one would be better. Tr. 902. *But see* Tr. 896 (suggesting Secretary's procedure better). CW's management uniformly testified against the new provision, generally along the lines of Turner and Farmer. Tr. 546-49, 550, 640-42, 669. CW's expert, Sinha, indicated only that he did not see any safety advantage in the Secretary's provision. Tr. 991-92.

Hoch and Ropchan disagreed with Turner's view that roof bolting would transfer weight to the pillars. Tr. 413-15, 1087, 1097. In their view, bolting the roof does nothing more than keep the layers together so they do not fall. Tr. 338-48, 1085-88. Hoch generally disagreed with Turner's views on pillar pulling. Tr. 444. Ropchan indicated that the purpose of roof bolting was to prevent any possible failure of the roof. Tr. 1108.

As to the effect of roof bolting, the record establishes that its purpose is to keep the layers of roof together so they do not fall. While the contrary view of CW's witnesses may be plausible, the judge did not abuse his discretion in deciding to credit the Secretary's witnesses, who testified that bolting increases safety in the pillaring operation. The Commission does not lightly overturn a judge's evaluation of expert witness testimony. *Dust Cases*, 17 FMSHRC at 1843-44. This same principle leads us to uphold the judge's crediting of the Secretary's witnesses who opined that the Secretary's provision reduces the need for miners working in by unbolted roof and is therefore safer than the old plan provision. Also supporting the judge's suitability determinations is the evidence of changing adverse roof conditions in the pillar section of the mine. In sum, we conclude that the new plan provisions address the adverse roof conditions in the pillar section of CW's mine.

Accordingly, we affirm on substantial evidence grounds the judge's determinations that the old plan provisions were unsuitable to the conditions in CW's mine, and the new plan provisions are suitable.

III.

Conclusion

For the foregoing reasons, we affirm the judge's decision.

Mary Lu Jordan, Chairman

Marc Lincoln Marks, Commissioner

James C. Riley, Commissioner