CCASE: CLIMAX MOLYBDENUM V. SOL (MSHA) DDATE: 19830124 TTEXT: Federal Mine Safety and Health Review Commission Office of Administrative Law Judges

CLIMAX MOLYBDENUM COMPANY, A DIVISION OF AMAX, INC., CONTESTANT CONTESTANT CONTESTANT CONTESTANT CONTESTANT CONTESTANT CITATION PROCEEDINGS DOCKET NO. WEST 82-87-RM CITATION 567341; 12/3/81 DOCKET NO. WEST 80-453-RM CITATION No. 566900 (Consolidated) SECRETARY OF LABOR, MINE SAFETY AND HEALTH ADMINISTRATION (MSHA), MINE: Climax

## RESPONDENT

Appearances: Todd D. Peterson, Esq., Crowell & Moring 1100 Connecticut Avenue, N.W., Washington, D.C., For the Contestant

Richard W. Manning, Esq., Climax Molybdenum Company 1707 Cole Boulevard, Golden, Colorado, For the Contestant

Robert J. Lesnick, Esq., and James H. Barkley, Esq. Office of the Solicitor, United States Department of Labor 1585 Federal Building, 1961 Stout Street, Denver, Colorado, For the Respondent

Before: John A. Carlson, Judge

## DECISION AND ORDER

These two cases were consolidated for decision upon joint motion of the parties. Docket WEST 80-453-RM was fully tried upon the merits; WEST 82-87-RM was not tried, but as shown in the pleadings, involves an identical question of law. Upon the parties' representation that the underlying facts were the same as those adduced at hearing in WEST 80-453, the motion for consolidation for decision was granted. Both cases arose out of contests of a 104(a) citation. The citations in both cases alleged violation of the mandatory standard published at 30 C.F.R. 57.20-11. It provides:

> Areas where health or safety hazards exist that are not immediately obvious to employees shall be barricaded, or warning signs shall be posted at all approaches. Warning signs shall be readily visible, legible, display the nature of the hazard, and any protective action required.

The case presents this issue: In parts of the Climax Molybdenum Mine where miners are exposed to 0.1 working levels or more of radon daughter radiation, does the cited standard require the operator to post signs warning miners that cigarette smoking, in the mine or outside the mine may significantly increase their risk of contracting respiratory cancer?

Both parties submitted extensive post-hearing briefs. The Commission's jurisdiction was stipulated.

## REVIEW AND DISCUSSION OF THE EVIDENCE

Ι

The parties have no significant disagreement as to most of the facts. Climax Molybdenum Company (Climax) operates a large molybdenum mine near Leadville, Colorado. Radon gas is naturally present in measurable quantities in certain underground areas of the mine. The gas which emanates from uranium in the ore body or surrounding rock is not itself dangerous to miners, but as it decays it liberates radioactive particles known as radon daughters. Health authorities recognize that certain of these particles cause respiratory cancer when inhaled over prolonged periods of time. Consequently, the Secretary has promulgated a number of specific mandatory health standards regulating exposure levels to radon progeny. These are found at 30 C.F.R. 57.5-37 through 57.5-47. The standards use the "working level" as the measurement of radon daughter exposure.(FOOTNOTE 1) Four working level months exposure are permitted in any calendar year under 30 50.5-38. Other standards prescribe sampling techniques, C.F.R. the frequency of testing, and record keeping methods. In a non-uranium mine such as Climax, 30 C.F.R. 57.5-40 requires the operator to record the exposure received by all miners working in areas where concentrations exceed 0.3 WL.

None of the radiation standards mention smoking except for 30 C.F.R. 57.5-41 which provides:

Smoking shall be prohibited in all areas of a mine where exposure records are required to be kept in compliance with standard 57.5-40.

The parties agree that Climax mine has a number of areas where exposures are high enough to require recording of individual miner exposure.(FOOTNOTE 2)

The Secretary has never contended that Climax failed to comply with any of the specific radon daughter standards. On the contrary, he makes no effort to dispute the operator's evidence that it maintains an effective computerized system for regulating miner's exposure. He also concedes that the north hanging wall area, on the date of inspection, displayed a "no smoking" sign in conformity with section 57.5-41.

The Secretary contends, however, that scientific data disclose that persons who smoke cigarettes and who are also exposed to radon daughters experience a far higher incidence of respiratory cancer than do miners who do not smoke, or smokers who are non-miners. Moreover, according to the Secretary, the incidence of cancer in smoking miners who are exposed to radon daughters significantly exceeds the rate predictable from adding the incidence observable for non-smoking miners and the incidence for non-miner smokers. In other words, the Secretary maintains cigarette smoking and radon daughter exposure interact synergistically to create significantly greater probabilities of cancer than one would expect from looking at either type of exposure alone, or from the sum of the two.

The Secretary provided evidentiary support for his position through the testimony of Victor E. Archer, M.D., Clinical Professor at the University of Utah School of Medicine. Dr. Archer, a Fellow of the American College of Preventive Medicine, has specialized in the study of the biological effects of radon daughter exposure on humans (Tr. 32). His testimony traced the history of epidemiological studies in this country and elsewhere which indicate that radon daughter exposure has a linear relationship to the incidence of cancer - the greater the exposure, the higher the respiratory cancer rate. Studies of uranium miners conducted under his direction, he testified, further showed respiratory cancer rates were higher among cigarette smokers than non-smokers where radon daughter exposures were the same. He presented a graph based upon data obtained from his uranium miner studies and those of the American Cancer Society which investigated the relationship between lung cancer and smoking.

The graph compares the incidence of respiratory cancer (in terms of incidence rates per 10,000 person years) between uranium miners who smoked and who did not smoke in contrast to non-miners who smoked and who did not smoke (respondent's exhibit 2). These data disclose, among other things, that the rate observed in miners who smoked was six times greater than miners who had never smoked, and ten times greater than for non-miners who smoked (Tr. 41). According to Dr. Archer, two Swedish studies inquiring into the same areas produced results consistent with his. He further asserted that the data establish that the "induction latent period" (the time between initial exposure and ultimate onset of cancer) was "considerably" shorter for smoking miners than for non-smoking miners (Tr. 45). From the studies and his experience and training he was of the opinion that for miners exposed to radon daughter concentrations:

. . . the first 25 years the lung cancer rate substantially increased and that the induction latent period would be shorter among smokers. (Tr. 47.)

He further believed that this would be true for exposure levels below the 4 working level months allowed as a maximum annual exposure under the Secretary's radiation rules. In fact, according to Dr. Archer, some cancer risk exists at any level of radon daughter exposure, and that risk would in all instances be enhanced by smoking (Tr. 57-58).

In Dr. Archer's opinion, miners should be warned of the effects of smoking whenever radon daughter concentrations substantially exceed normal ambient air or "background" levels. When questioned regarding the precise concentration which should trigger a warning, he responded with this specific recommendation:

> Any level one sets is somewhat arbitrary, but I would suggest that one-tenth working level would be a reasonable place (Tr. 60).

This is the proposition upon which the Secretary founds his citation. He concedes that the north hanging wall area displayed a "no smoking" sign in compliance with standard 57.5-40. Because miners who smoke cigarettes at any time or place and also inhale radon decay particles in the mine environment are especially vulnerable to respiratory cancer, the Secretary reasons that that hazard must be spelled out to miners. The standard at 30 CFR 57.20-11, he maintains, imposes a clear duty upon Climax to post such a sign wherever radon readings exceed 0.1 working levels. This is so because smoking, when combined with radiation exposure, is a health hazard "not immediately obvious to employees," in the words of the standard, and thus one which must be emphasized and explained by a warning sign.(FOOTNOTE 3)

Climax relied upon the testimony of Dr. Keith J. Schiager, a health physicist, to dispute Dr. Archer's opinion concerning a radon daughter-smoking synergism. Dr. Schiager conceded that over the long-term there is a relationship between radon daughters and smoking in that both increase the risk of lung cancer (Tr. 123). He asserted, however, that agreement among scientists ends there. No concensus exists within the scientific community, he testified, as to the proof of a synergistic relationship (Tr. 123).(FOOTNOTE 4)

Climax also stresses an admission from Dr. Archer that the various studies which led him to his conclusions were conducted at a time before today's stringent limitations on radon daughter exposure were in effect (Tr. 56). Exposures of the studied miners could thus have been many times higher than those now permitted at Climax.

II

Climax's basic defenses may be summarized as follows:

(1) The evidence does not prove that risk of respiratory cancer associated with radon daughter exposure is increased synergistically by cigarette smoking.

(2) The plain language of section 57.20-11, together with its history, show that the standard was not intended to address hazardous conduct outside the mine - including smoking at home.

(3) A comprehensive body of regulations covers the admitted hazards arising from radon daughters. At section 57.5-41 these regulations cover smoking in radiation areas. Operators are entitled to rely on these regulations as encompassing the requirements with respect to smoking as it relates to radon daughters. Consequently, the Secretary cannot properly rely upon a "general" regulation such as 57.20-11 to impose a requirement for signs warning against smoking at home.

III

In resolving this dispute I do not decide whether the Secretary's assessment of the combined smoking and radiation hazard is valid. Such a finding is unnecessary to reach a correct result. Therefore, for the purposes of this decision, the existence of the hazard is assumed. The central issue presented here concerns the cited standard: Does it fairly encompass the hazard perceived by the Secretary? For the reasons which follow, I hold that it does not.

In analyzing the scope of the standard which the Secretary seeks to apply, we must first recognize that the enforcement and review processes contemplated by the Act are accusatory and adversarial. Thus, while mine operators are obliged to comply with every mandatory standard, the language of each standard must reasonably convey to the operator the nature of the practices or procedures required or forbidden. Diamond Roofing Co., v. OSHRC 528 F. 2d 645 (5th Cir. 1976); Phelps Dodge Corp., v. FMSHRC, 681 F.2d 1189 (9th Cir. 1982). Put another way, a standard must import reasonable notice of conduct expected. Climax concedes that the standard has valid application to non-obvious safety or health hazards originating in the mine. The thrust of its claim is that a good faith reading does not fairly suggest any obligation to place warning signs in the mine concerning miners' non-work-related conduct outside the mine.

Much of the specific argument of the parties centers around the relationship between the group of standards which deal specifically with radiation, and the more general standard cited by the Secretary. Climax stresses those cases arising under the Occupational Safety and Health Act which declare that specific standards dealing with a certain subject matter must take precedence over those of a more general application. In the same vein, Climax argues that by promulgating the discrete body of radiation standards beginning at section 57.5-37, the Secretary has worked a species of preemption. Operators, that is to say, reading this seemingly comprehensive collection of standards naturally are lead to believe that they need look no further to find all the requirements for radiation protection. Climax further suggests that, other considerations aside, the plain words of the standard, speaking as they do of "barricades" in addition to warning signs, imply that section 57.20-11 was intended to apply solely to definable hazards within the posted or barricaded area.(FOOTNOTE 5)

The Secretary contends that the distinctions Climax attempts to draw are invalid because the hazard contemplated here is not exclusively a radiation hazard, but a unique combination of smoking and radiation exposure, and therefore beyond the cognizance of the radiation standards. Thus, he contends, the hazard fits squarely within the cited "miscellaneous" standard. The Secretary also stresses that every standard must be read with an appreciation of the remedial intent of the Act, which gives the safety of miners paramount consideration.

I agree that the existence of a body of regulations dealing with a specific class of hazards does not invariably operate to exclude coverage of the same sort of hazard by a more general regulation, unless the general in some way conflicts with the specific. Also, the remedial aims of the Act are beyond cavil. The cited standard must be liberally construed.

Given the most liberal construction consistent with the constraints of due process, however, Climax's arguments must prevail in this case. I am simply unable to conclude that a mine operator, even supposing his knowledge of the alleged synergistic effect of smoking and radon daughter exposure, could read section 57.20-11 in conjunction with the radiation standards and perceive a requirement to post signs in radiation areas of the mine to warn miners against smoking outside those areas. The standards, taken together, do not fairly convey such a notion to the most prudent and conscientious operator. This is particularly so for the following reasons:

(1) The specific radiation standards do not ignore smoking. Section 57.5-41 addresses the matter quite clearly. As mentioned earlier, this standard requires simple "no smoking" signs in all mine areas where exposure records must be kept in compliance with section 57.5-41 (0.3 working levels). This implies that the Secretary considered the combined effects of smoking and radiation exposure, and was satisfied with this mode of protection. Moreover, the Secretary predicates his case for signs warning against smoking at home on a 0.1 working level threshold. Such a level appears wholly inconsistent with the 0.3 level specified in sections 57.5-40 and 41. Operators may scarcely be expected to read section 57.20-11 to imply the necessity for more elaborate and intensive warnings at a lower level of exposure than does the specific radiation standard which speaks directly to the issue of smoking.

(2) The cited standard identifies no particular hazards. It refers to those "[a]reas where health or safety hazards exist that are not immediately obvious to employees ...." It is specific, however, concerning means of abatement. It names but two: barricades and warning signs. This specificity concerning corrective measures may properly be considered in determining the intended reach of the standard. Assume that a mine operator, through its own exploration of the scientific and medical data

on the relationship between smoking and radon daughter exposure, is convinced of a need to warn its miners against smoking away from the mine. Would that operator be likely to see any connection between that need and the section 57.20-11 requirement for on-site signs? I think not. I must agree with Climax that the operator would be inclined to regard the act of smoking at home as a unique off-site hazard, and to look for corrections through such common devices as safety meeting presentations, employee safety handbook coverage, or paycheck inserts.

(3) As mentioned earlier, this decision does not purport to decide whether the Secretary correctly identifies and assesses the smoking-radiation hazard. One aspect of this issue, however, is material to efforts to determine the application of the cited standard. The Secretary's expert, Dr. Archer, was commendably frank in acknowledging that he was "somewhat arbitrary" in fingering one-tenth working level as the trigger point for a warning under section 57.20-11. Nowhere does his testimony or any other evidence suggest a general agreement among experts that this, rather than some other point, is where the operator's duty should commence. As a regulated party, the operator is entitled to some concrete guidance in the scientific literature, if not the standard itself, as to the radiation level which poses a danger sufficient to necessitate worker warnings. It is likely true, as Dr. Archer suggests, that there is no "safe" radiation level; and that the minimum radiation level requiring warning would of necessity be somewhat arbitrary. The point is, however, that under the regulatory scheme of the Act the Secretary bears the duty of determining where that level is, and making it known to mine operators. The ad hoc quality of the determination in this case is all too apparent.(FOOTNOTE 6)

Climax did not violate the cited standard. The citations must therefore be vacated.

## ORDER

In accord with the findings and conclusions embodied in the narrative portions of this decision, the citation in Docket WEST 80-453-RM is ORDERED vacated.

Further, in accord with the findings and conclusions made in Docket WEST 80-453-RM, and pursuant to the parties' agreement that the determination in WEST 82-87-RM should be governed by the result reached in WEST 80-453-RM, the citation in WEST 82-87-RM is likewise ORDERED vacated.

Consequently, this consolidated proceeding is dismissed.

John A. Carlson Administrative Law Judge

1 The term is defined at 30 C.F.R. 57.2 as:

. . . any combination of the short-lived radon daughters in one liter of air that will result in ultimate admission of 1.3 x 105 MeV (million electron volts) of potential alpha energy, and exposure to those radon daughters over a period of time is expressed in terms of "working level months" (WLM). Inhalation of air containing a radon daughter concentration of 1 WL for 173 hours results in an exposure of 1 WLM.

2 A stipulation made during the hearing shows that radon daughter concentrations monitored in the Climax Mine during the year preceding the issuance of the citation ranged from .00 to 5.77 working levels (Tr. 74-75). Respondent's exhibit 3 shows readings at various locations, including the "north hanging wall," which was the area singled out in the citation. The highest reading disclosed in the exhibit for that area is 0.33 working levels, recorded on August 11, 1980. There is no dispute as to the exhibits's accuracy.

3 The Secretary does not contend that Climax's duty extends beyond the giving of a warning; he has not suggested, for example, that compliance with any standard demands any sanctions against miners who smoke outside the mine.

4 However, Raymond Rivera, Climax's occupational health manager at the mine, agreed on cross examination that there is a synergistic relationship (Tr. 97).

5 In a refinement of that argument, counsel for Climax attached to his post-hearing brief an excerpt from the proceedings of the Federal Metal and Non-Metal Safety Advisory Committee, which recommended adoption of the regulation in 1975. According to counsel, the comments of committee members show their explicit concern was the protection of miners from non-obvious hazards in underground travelways or mined out areas. The Secretary objects to this post-trial submission as an improper attempt to adduce evidence after the closing of the evidentiary record. While it is probable that the Advisory Committee's proceeding (42 Fed. Reg. 5546, 29418 (1977)) is subject to official notice as an aid to interpretation of the standard, I give it no weight because of its content. The hurried discussion of the participants is random and superficial, giving few useful clues to the true intended scope of the standard.

6 I do not fault the Secretary for his concern over the hazard which he perceives. Much of his evidence on the issue is impressive. I must suggest, however, that his effort to protect against the hazard through an existing standard was misplaced. The lack of a finite threshold radiation level for warnings illustrates the need for recourse to the rule making powers granted by the Act. Use of those powers would provide ample opportunity for a full airing of all data, the making of a decision based upon that data, and the promulgation of a clear and precise regulation.