CCASE: SOL (MSHA) V. AMAX POTASH DDATE: 19890324 TTEXT: Federal Mine Safety and Health Review Commission (F.M.S.H.R.C.) Office of Administrative Law Judges

Amax Mine & Mill

SECRETARY OF LABOR,	CIVIL PENALTY PROCEEDING
MINE SAFETY AND HEALTH	
ADMINISTRATION (MSHA),	Docket No. CENT 87-72-M
PETITIONER	A.C. No. 29-00174-05537

v.

AMAX POTASH CORPORATION, RESPONDENT

### DECISION

Appearances: Rebecca A. Siegel, Esq., Office of the Solicitor, U.S. Department of Labor, Dallas, Texas, for Petitioner; Charles C. High, Jr., Esq., Kemp, Smith, Duncan & Hammond, El Paso, Texas and James L. Dow, Esq., Dow and Williams, Carlsbad, New Mexico, for Respondent.

## Before: Judge Lasher

This matter arises under Section 110(a) of the Federal Mine Safety and Health Act of 1977, 30 U.S.C. Section 820(a) (herein the Act). Petitioner seeks assessment of a penalty (\$700) for an alleged violation cited and described in a "Citation/Order"(FOOTNOTE 1) dated February 12, 1987, issued under the authority of Sections 104(a) and 107(a) of the Act, respectively, and which specifically charged Respondent (herein Amax) with an infraction of 30 C.F.R. 57.3200 (which appears in Subpart B of the codified regulations entitled "Ground Control", under the subparagraph pertaining to "Scaling and Support-Surface and Underground" and which itself is headed "Correction of Hazardous conditions"), to wit:

> "Ground conditions that create a hazard to persons shall be taken down or supported before other work or travel is permitted in the affected area. Until corrective work is completed, the area shall be posted with a warning against entry and, when left unattended, a barrier shall be installed to impeded unauthorized entry."

I note initially that 57.3200, in its essential language thrust, is nearly identical to the provision of 30 C.F.R. which may have been in effect in February, 1987, i.e. Section 57.3022, which provides: "Loose ground shall be taken down or adequately supported before any other work is done." Section 3022 has been the subject of specific analysis by this Commission in its landmark decision in Secretary v. Amax Chemical Company, 8 FMSHRC 1146 (1986). Any such question is found moot since it was not raised at hearing or in briefs.

The alleged violative conditions were described in Section 8 of the Withdrawal Order as follows:

Miners were observed in the 7 West Mains pillaring section making a scheduled belt-line and power move in preparation for further continuous mining of the next rows of pillars. After inspecting most of the area where miners were present it was determined by this inspector that an imminent danger condition existed by reason of (practice) a failure of the operator to take down or support much loose and drummy top as detected throughout this area "before" effecting the belt-line and power move that exposed this crew to the following (conditions):

A front-end loader was observed traveling under an area of loose and drummy top that measured about 7 feet wide by 4 to 5 feet long by 3 to 10 inches thick with visible separation and located in the southeast corner of the 180/6 intersection adjacent to the belt-line. A front-end loader and miners were observed traveling under an area of loose top located over the southeast corner of the 185/6 intersection and extending about 10 feet east along the beltline. After this area was posted off with warning signs the same front-end loader again traveled under this loose and drummy top disregarding the signs.

An area of loose and drummy top was detected in the main travelway, 5 entry, along the east perimeter of a cut into the back at the 182 intersection. The loose top was about 4 to 5 feet long by about 10 to 12 inches thick and extended across the width of the intersection.

A loose and drummy area of top was detected in the 185 break near its intersection with 5 entry along the west rib line where a front-end loader had traveled. Loose and drummy top was detected in the 186 break and 7 entry along the southwest corner of the pillar over the access to the operators cab of a parked shuttle car.

As other areas of loose and drummy top, unsupported, were found it became apparent that little effort had been put forth to secure bad top before using these travelways and accesses to effect the move. Consequently, miners were withdrawn from the area (180 break to the pillaring face along the 5, 6, & 7 entries).

On a five-level "gravity" scale provided on the face of the Order, the Order was marked "Reasonably Likely". The Order also indicated that the violation charged was "significant and substantial".

Amax contends that the violation charged did not occur, that the ground (roof) conditions described in the Order did not create a hazard, that the allegedly violative conditions did not constitute- or cause- an imminent danger, and that any alleged violation was not "significant and substantial". Respondent Amax also makes the contention that a drummy sound obtained by sounding the roof in its potash mine does not necessarily indicate a hazard, i.e., the danger of a roof fall.

Having considered the transcript of testimony, exhibits, and the briefs submitted by the parties, the position of Petitioner is found supported in the record and meritorious.

Discussion of Evidence and Findings.

On February 12, 1987, Lawrence R. Haynes, a Metal-Nonmetal Mine Inspector for MSHA, (FOOTNOTE 2) while conducting an inspection of the mine, issued the subject Citation/Order (T. 69). He was accompanied on this inspection by David Tackett, Respondent's safety supervisor, and Bruce Yates, an electrician (T. 257, 279).

On February 12, 1987, at point (area) "A"(FOOTNOTE 3) as depicted on Joint Exhibit 2, the conditions extant which led Inspector Haynes to conclude their was "loose" roof or ground, were described by him as follows:

"A. Well there were two things that came into play there. The first one, the most obvious, was seeing that section of roof hanging down diagonally away from the roof and hanging down far enough to where it was about three inches at its widest point, wide enough where I could have stuck my elbow in it. Secondly, by sounding the perimeter of that particular slab to gain an indication of the size of the loose material in the roof." (T. 74-75).

According to the Inspector the piece of roof that was hanging down was 3 inches thick at its narrowest and ran to 10 inches thick and the area at Point "A" which he cited was 4 feet by 5 feet in size (T. 75, 79, 192).

The areas in which Inspector Haynes determined there existed hazardous or loose ground were marked and are depicted on Joint Ex. 2, at Points marked thereon as "A", "B", "C", "D", and "E" (T. 70, 72-73, 319-321, 325).

The Inspector's description of Point "A" (referred to in Joint Ex. 2) in the Citation/Order has been set forth above. His descriptions of points "B" (T. 204), "C", "D", and "E" (T. 197) are set forth below:

B. "An area of loose and drummy top was detected in the main travelway, 5 entry, along the east perimeter of a cut into the back at the 182 intersection. The loose top was about 4 to 5 feet long by about 10 to 12 inches thick and extended across the width of the intersection."

C. "A loose and drummy area of top was detected in the 185 break near its intersection with 5 entry along the west rib line where a front-end loader had traveled." D. "Loose and drummy top was detected in the 186 break and 7 entry along the southwest corner of the pillar over the access to the operator cabs of a parked shuttle car."

E. "A front-end loader and miners were observed traveling under an area of loose top located over the southeast corner of the 185/6 intersection and extending about 10 feet east

along the belt-line. After this area was posted off with warning signs the same front-end loader again traveled under this loose and drummy top disregarding the signs."

At the time of the subject inspection, Amax was in the "retreat" mode of mining, was retreating from the western end of 7 West Mains toward the shaft and was removing (mining) the pillars which had been left during the initial development to support the roof (T. 60-65; Joint Ex. 1; T. 392-396, 416-419). The actual mining was to be accomplished by two continuous miners (T. 65, 401, 433-434).

Inspector Haynes was of the opinion based on his observations that due to the mode of retreat mining employed there was weight-shifting rolling over into the specific areas where he observed the violative conditions (T. 104-105, 215, 216-218, 221-226). There is a greater likelihood of loose ground (roof) falling where there is a weight shift into that area (T. 106-108, 110).

Inspector Haynes further described the mining process at the time as follows:

"Along the north and south of these 7 West Mains, there were still areas where there might have been a little bit of solid ground, virgin ground, to be mined into and developed out and then pillared anyway to be mined. There were also old, first mine, or already developed sections where there was ore in the pillars that could also be pillared or --. And the 7 West Mains themselves, I'm not sure how many pillars wide it averaged, you know, from beginning to end; but the idea was, and this was the explanation given to me by Danny (Desai) was to narrow the 7 West Mains, and whatever material was available in the way of other pillars on the side, down to approximately 10 pillars wide."

### XXX XXX XXX XXX

Barring any break down of equipment or anything that might take place to hamper a regular pulling of these pillars, or mining of these pillars, the two continuous miners were to begin at the far pillar on each side of the middle of the mains; pull that pillar, move to the next pillar, moving toward the center of the mains . . . and continue on; and just progress in that fashion."

Inspector Haynes, who used a metal hammer to sound the roof at the various locations cited (T. 78), testified generally that beating on the roof with any solid object would normally give an indication whether there are any separations above the immediate

roof; that a "fairly good, high ring usually indicates solid material" and that a "hollow, or kind of a dull or drummy sound indicates a separation" (T. 75, 76). This was confirmed by MSHA Supervisory Mine Inspector Sidney Kirk who testified that if a roof sounds drummy it indicates a separation of strata requiring something "to be done" (T. 427-428), meaning "its to be supported or taken down" (T. 428, 432).

Inspector Haynes gave this explanation concerning the meaning of such a separation:

"Any ground, including this potash out here, has a certain ability to hold itself up without ever falling, forever and ever. However, when a void is opened up, it looses some of that strength and ability to hold its own self up. Normally, at the stress points where's there's going to be weight pulling down and away from more competent roof head of it, the weight alone can cause the immediate beam of salt above this void to sag down and actually separate from the next beam. Again, that would normally be at a mud seam or a seam of this carnallite. Once that separation has occurred, that is the separation I'm referring to that can be detected by sounding the ground, by beating on it and listening for that hollow, drummy sound. Once that drummy sound is detected, again, the separation, you can get pretty good indication of its parameters by sounding out away from the drummiest point to aid and determine the size of ground below that separation." (T. 77).

Inspector Haynes did not actually observe any miners or mining activity at or under Point "A". Nevertheless, there was tire-track evidence that a front-end loader had been in this area (T. 87). Had the loader, which the Inspector actually observed, worked under Point "A", it is probable that the miner operating the same would not have been directly under the area of loose roof (T. 87. 88. 194). There were roof bolts in the vicinity of Point "A", but not on the portion that was hanging loose (T. 89).

Because there was loose roof which was unsupported, the Inspector considered this area to be hazardous since there existed the potential of the roof falling which could "easily" have resulted in a fatality had a person been under it at the time of the fall (T. 89, 181, 193).

As with Point "A", Inspector Haynes testified that there were no bolts holding up the other 4 areas of actual loose roof he found to exist and designated as points "B", "C", "D" and "E" on Joint Exhibit 2 (T. 94, 103, 185, 195-198, 206, 212, 214 222, 224, 230). He made his determinations of loose roof (ground) as to all five points by sounding (T. 198, 223-224). In addition,

as to Points A, B, C, D, and E, he visually observed a separation or sloughing of the roof material at the time of his inspection (T. 75, 96, 103, 104-107, 114-116, 198, 199, 207-210, 212, 214, 379). The separation at Point "B" was relatively slight (T. 207-210). The Inspector considered (1) points "A" through "E" to be hazardous because of loose ground (T. 181), (2) that the hazard of falling ground, should such occur, would "definitely" result in a fatal injury, and (3) that at that point in time when he determined imminency, "it was highly likely, not just reasonable" that the hazard could occur (T. 145-149). I find no probative or reliable basis in this record not to accept this determination.

At the time of his inspection, the Inspector himself did not attempt to bar down any of the loose ground at points A, B, C, D, or E (T. 138, 189-190) for two reasons, first, that MSHA would not allow him to, and secondly, because it would have been too dangerous (T. 139, 218). In the vicinity of Area "E" (which had a visible separation but not as bad as at Point "A"), the Inspector observed two signs which said "Keep out, Bad Top" (T. 198-199). At area "E" the Inspector observed a front-end loader operator disregard the signs and drive under the hazardous area (T. 115, 199-204). At area "D", Inspector Haynes observes shuttle cars and he testified that to gain access to the cab of a shuttle car, a person would have been required to pass "directly underneath the loose portion of ground" (T. 102-103).

The Inspector did not see anyone attempt to bar down any of the subject areas (T. 190).

It was Inspector Haynes's opinion that where an area of roof (ground) is sounded and is drummy, even if it is not subject to be being barred down by a scaling bar, the hazard of a roof fall exists even though such hazard is not immediate. Thus, he testified:

"Q. Well, if you try to bar it down and you can't at that moment it's not a fall hazard, right?

A. It is a fall hazard if it's not going to be supported. At some point in time, if it's left like that, it's going to fall. Eventually it's going to fall." (T. 189).

Respondent's own training program for employees (Ex. P-2, pg. 10, T. 286-289, 299) indicates that a drummy sound from the roof "usually", but not always, indicates a "separated or loose condition . . . " In instances where a hollow or drummy sound is given off as the bar is struck against the top, Respondent's Safety Supervisor conceded that the word "usually" used in its training Program for employees (Ex. P-2, page 10) means that such hollow or drummy sound indicates "more often than not" that a "separated or loose condition exists in the overlying strata or roof." (Tr. 301). In such instances, Respondent's employees are

to either (1) bar the area down or (2) bolt it as a precautionary measure (T. 302). Respondent's safety supervisor also conceded that at area "E" there was a "loose" top, the size of which ranged from basketball size to 2 feet by 2 feet (T. 295-296).

Although Inspector Haynes testified that he personally did not attempt to bar down any of the cited areas, Respondent established that Bruce Yates, a member of the inspection party, attempted during the inspection to bar down the areas designated "A" and "E" on Joint Exhibit 2 (T. 260-268, 281-285). Asked as to the "success" of the attempts to bar down these two areas, David Tackett, Respondent's safety supervisor, testified:

"A. Not totally. Most of the time, when we made the attempt, small pieces would crumble off the edges where we would try to bar down.

Q. Was that potash ore that you were breaking with a scaling bar?

A. Right.

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Q. Okay. And how large of pieces were breaking off?

A. Anywhere from softball size to, maybe, football size." (T. 283).

Mr. Tackett also testified that he observed nothing that he could "visually see" during the inspection walkaround that indicated that "something was going to fall before it could have been taken care of in the normal course of mining" (T. 285).

Although Respondent's witnesses indicated there was bolting in the vicinity of the five subject areas (T. 321) cited by the Inspector, that visible cracks were common and not evidence of looseness, and that there were no hazards, such evidence was almost entirely broadly stated (T. 301, 326-328, 332-336, 340, 341. 345, 348-350) and not specific(FOOTNOTE 4) enough in terms of numbers, distances, etc. to enable determination whether (1) the bolting present would have negated or lessened the hazards detected by Inspector Haynes, (2) the cracks observed by the Inspector were of no consequence, or (3) that the five cited areas were not hazardous.

Suresh Desai, Respondent's Production Superintendent, conceded that if an area is drummy and when scaled down pieces come down from the separation, such is a "loose roof" area (T. 383-384). He also indicated that if an area is drummy but can't be barred down, further inspection, including further sounding is required (T. 384) to determine whether further bolting was necessary (T. 384-385). Mr. Desai also conceded that whether a roof bolt was providing some support would involve consideration of various factors, including the "quality" of material being supported, whether there was drumminess around a separation, whether or not the area could be scaled down, and whether or not air could get in and affect the strata (T. 408-409).

Mr. Desai, who examined the 5 cited areas after Inspector issued the withdrawal order on February 12, 1987, was of the opinion that there were no hazards at Points "A", "B", "C" and "E". He did not recall seeing Point "D".

Mr. Desai acknowledged that there was a separation (crack) at Point "A" (T. 326-328) and that separations indicate that there is less adhesion of the roof (T. 380). He would not concede, on cross-examination, however that such reduced adhesion would "necessarily" increase the likelihood of the roof's falling (T. 380), explaining:

> "A. Why? Because you have to look at the separation, if the bolts installed or any precautionary measures are taken in terms of supporting the area with the remnant pillars or the bolts or could be a 60 x 60 pillar, which would support the area. So you have to use your own judgment."

> > (T. 380-381).

Respondent's Safety Supervisor, Tackett, conceded that there was loose top at Point "E" (T. 295). Respondent's witness, Bruce Yates, an electrician, as above noted, was a member of the inspection party. He conceded that there was a "crack" at Point "B", stating ". . . I know we didn't try to bar that one down because it (was) so thick and there would be no way to pull something down that heavy I would think" (T. 261).(FOOTNOTE 5)

## Legal Precedents and Conclusions

The safety standard involved here imposes the continuing duty on the mine operator to examine ground conditions in its potash mine and to take down or adequately support any loose ground. Secretary v. Amax Chemical Corporation, supra. In that case, the Federal Mine Safety and Health Review Commission

rejected any per se rule equating drumminess (detected in sounding the roof) with "loose" ground, stating "The result of a sounding test is an important factor, but is not necessarily dispositive." The Commission enumerated other factors to be considered in making a "loose ground" determination:

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"The size of the drummy area and other possible explanations for the drumminess must also be considered. Visible fractures, sloughed material, "popping" and "snapping" sounds in the ground, the presence, if any, of roof support, and the operating experience of the mine or any of its particular areas, are also relevant factors to be considered."

On the record in this matter, the only plausible explanation for the drumminess detected is separation of the strata. While there was bolting in the vicinity of the 5 areas (points) described by Inspector Haynes in the Citation/Order, there was no bolting in the drummy areas themselves. With respect to the size of the areas involved, all were sufficient in weight to have caused a fatality, i.e., 200 pounds to two tons, had a fall occurred. In addition, at all five points, visible separations, cracks of sloughing were detected. This record is relatively bland as to factors of operating experience, past or current, which would materially affect the determination of whether a hazard existed, or whether such was or wasn't an imminent danger. As noted previously, herein, Respondent's miner training program provides that a drummy sound usually, but not always, indicates a separated or loose roof condition.

In summary, the evidence indicates that sounding at all five cited locations produced drumminess, there was no bolting or evidence of other support inside the actual drummy areas, the size of the drummy areas was sufficient to cause fatalities, and visible separations, etc., were present. In addition, the record demonstrates varying degrees of exposure of miners to the danger of a roof (ground) fall (T. 87-89, 94, 98, 102-103, 114-115, 217). Inspector Kirk pointed out that these areas had not been barricaded or dangered off (T. 440-441). Accordingly, it is concluded that, in terms of the standard, ground conditions existed on February 12, 1987, that created a hazard to persons that were not taken down or supported before work or travel was permitted in the affected areas. This constitutes the violation as charged in the Citation/Order.

Imminent Danger and "Significant and Substantial" Considerations.

Inspector Haynes testified that he determined an imminent danger existed on February 12, 1987, because there was a

"potential for fall of ground", meaning a fall of the roof (T. 69, 70, 89, 122-127). In terms of the immediacy of the threat, Inspector Haynes gave this testimony:

"Q. Could and would that -- or would that reasonably be likely to happen if you had permitted AMAX to continue their operations without first stopping and withdrawing the miners and correcting this condition?

A. Yes. As a matter of fact, it was, in my estimation, highly likely that it was going to happen."

(T. 140).

In addition to the size of the affected areas (the potential weight of a ground fall), and the exposure of miners thereto, Inspector Haynes also indicated that his observation that there was a weight shift occurring which Respondent was not staying ahead of led to his determination that an imminent danger existed (T. 122-128). In this connection, the Inspector pointed out that a roof bolting machine had been out of operation (T. 126-127). It is noted that Supervisory Inspector Kirk confirmed Inspector Haynes' opinion that Respondent was not staying ahead of the weight shift (T. 217). The likelihood of fatal injuries to miners resulting from a fall(FOOTNOTE 6) has previously been discussed.

Although Inspector Kirk did not personally observe the cited conditions on February 12, 1987, he agreed with Inspector Haynes that an imminent danger existed which was caused by the hazards described in the Citation/Order (T. 426-427, 439-440).

The term "imminent danger" is found in both the Federal Coal Mine Health and Safety Act of 1969 and the Amendments thereto which comprise the Federal Mine Safety and Health Act of 1977, 30 U.S.C. 801 et seq., and the definition thereof currently found in section 3(j) of the 1977 Act is for all intents and purposes identical in both Acts, to wit:

> "the existence of any condition or practice in a coal or other mine(FOOTNOTE 7) which could reasonably be expected to cause

death or serious physical harm before such condition or practice can be abated." (emphasis added).

During the enactment of the 1977 Act, the Senate Committee on Human Resources, made this statement:

"The Committee disavows any notion that imminent danger can be defined in terms of a percentage of probability that an accident will happen; rather the concept of imminent danger requires an examination of the potential of the risk to cause serious physical harm at any time. It is the Committee's view that the authority under this section is essential to the protection of miners and should be construed expansively by inspectors and the Commission." (Leg. Hist. of the Federal Mine Safety & Health Act of 1977, Act at 38). (emphasis added).

Under the 1977 Act, decisional emphasis seems to be on the individual factual configurations involved rather than on discrete tests and formulas for determining imminent danger. See, for example, Secretary of Labor v. U.S. Steel Corporation, 4 FMSHRC 163 (1982). At this time, the Act's section 3(j) definition appears to be the primary legal touchstone. Evaluating the dangerous condition or practice - whether or not a violation-in the perspective of continued mining operations, as is required with S & S violations, also appears to be a prerequisite in determining the validity of an imminent danger order. There also is a case for treating these as prerequisites: (1) that the hazard (risk) foreseen must be one reasonably likely to induce fatalities or injuries of a reasonably serious nature, and (2) that such hazard or risk have an immediacy to it, that is, it could come to realization "at any time." See C.D. Livingston, 8 FMSHRC 1006, 1013-1016 (1986).

It is concluded on the basis of the findings heretofore made concerning the types of injuries (fatalities) which would reasonably be induced by the occurrence of the hazard, and the testimony relating to both the likelihood and immediacy of the hazard, that an imminent danger resulted from the violation. It is also found that this violation was significant and substantial since it created an imminent danger (T. 140, 145-149, 426-427). Specifically, I find that the Petitioner has established the 4 elements of a significant and substantial violation, by establishing (1) the occurrence of an underlying violation of a mandatory standard, (2) a safety hazard contributed to by such violation, (3) that there was a reasonable likelihood that the hazard will result in an injury, and (4) a reasonable likelihood that such injury would be of a reasonably serious nature. Mathies Coal Company, 6 FMSHRC 1 (January 1984).

~430 Penalty Assessment.

Respondent Amax operates a medium-sized underground potash mine which at material times had a payroll of approximately 248 employees and an annual tonnage of 2 million production tons (T. 9-11, 36-37, 50). Upon notification of the violation, Respondent proceeded in good faith to promptly abate the violative conditions (T. 6). During the pertinent 2-year period preceding the subject violation, Respondent had a history of 91 prior violations (T. 14; Ex. P-1). Payment of a penalty at any given appropriate monetary level will not jeopardize Respondent's ability to continue in business (T. 7).

The opinion of Inspector Haynes that only a moderate degree of negligence was involved is found to be well-reasoned and not otherwise rebutted in the record. The Inspector explained this determination in his testimony:

"Q. Why moderately?

A. Moderately negligent in that a problem in that area in regard to ground and ground movement and ground control was known. However, if there's mitigating circumstances, then the normal assignment is moderate negligence. And the mitigating circumstance in my mind was that an attempt was already in progress of getting a bolter for the area. By mine plan and an attempt to adhere to that mine plan, there was already an attempt and an ongoing attempt to stay ahead of the weight shifts. Even though there was a failure, the attempt was there and that, in my mind, was the mitigating circumstance."

(T. 146-147%9B.

With respect to the gravity of the violation, I find no basis in this record to discount Inspector Haynes' determination that a high likelihood existed (T. 146) that the roof fall hazard he observed on February 12, 1987, could happen, and that if it did, a fatal injury would result if there were miners exposed to the hazard. He estimated the weight range of such a fall to be from 200 to 300 pounds at the least to up to two tons (T. 147-149). It has previously been concluded that the violation in question caused an imminent danger and that the violation was significant and substantial. It is concluded that this is a very serious violation.

In view of the foregoing mandatory assessment considerations, the \$700 penalty sought by the Petitioner is found appropriate and is here assessed.

### ORDER

Citation/Order No. 2869304 is affirmed in all respects. Respondent shall pay to the Secretary of Labor within 30 days from the date hereof the sum of \$700.00 as and for a civil penalty.

> Michael A. Lasher, Jr. Administrative Law Judge

# ÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄ FOOTNOTES START HERE

~FOOTNOTE\_ONE 1. On line 12 of this form where the "type of action" is to

be specified, the issuing Inspector designated his action to be an "Order" only --- the "Citation" box was left blank.

## ~FOOTNOTE\_TWO

2. Amax attempted to impeach Inspector Haynes, who has been with MSHA 9 1/2 years, on the basis that he lacked sufficient experience in and knowledge of potash mines to determine and give opinion evidence as to the condition of the roof (ground) in the subject mine. Having carefully considered the record made in this connection, I conclude that the evidence of Inspector Haynes is not subject to rejection, nor should the weight to be given it be detracted from. The Inspector has approximately 16 years mining experience, and has inspected mines in the so-called Potash Basin wherein the subject mine is situated since the latter part of 1984. As the Inspector pointed out, his prior experience in other types of mining has some overall value in its contribution to this general core of information. Further, his opinion was supported by Supervisory Inspector Sidney Kirk who also testified and who has extensive background in potash mining and in the particular geographic area involved here.

## ~FOOTNOTE\_THREE

3. The alleged condition at point "A" was described in the Citation/Order as follows:

"A front-end loader was observed traveling under an area of loose and drummy top that measured about 7 feet wide by 4 to 5 feet long by 3 to 10 inches thick with visible separation and located in the southeast corner of the 180/6 intersection adjacent to the belt-line."

## ~FOOTNOTE\_FOUR

4. The testimony of Respondent's witness, Antonio Campos, was particularly uncertain and self-contradictory. He acknowledged, however, that the "company" taught that drumminess can mean looseness in the roof (T. 247-248).

### $\sim$ FOOTNOTE\_FIVE

5. Mr. Yates' memory of events was not particularly clear (259, 260, 262).

#### ~FOOTNOTE\_SIX

6. The Federal Mine Safety and Health Review Commission

itself pointed out in Secretary v. Halfway, Inc., 8 FMSHRC 8, at p. 13 (1986): "Our decisions have stressed the fact that roof falls remain the leading cause of death in underground mines".

### ~FOOTNOTE\_SEVEN

7. By virtue of Section 102(b)(4) of the 1977 Mine Act the phrase "or other" was added after the work "coal" to expand the Act's coverage to all mines.