CCASE:

ASARCO, v. SOL (MSHA)

DDATE: 19810527 TTEXT: Federal Mine Safety and Health Review Commission
Office of Administrative Law Judges

ASARCO, INC.,

v.

Contest of Citations

CONTESTANT

Docket No. SE 80-125-RM Citation No. 108670; 7/24/80

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

Docket No. SE 80-126-RM Citation No. 108671; 7/24/80

DECISIONS

Appearances: William O. Hart, Esquire, New York, New York, for the

Contestant; Leo J. McGinn, Attorney, U.S. Department of Labor, Arlington, Virginia, for the Respondent.

Before: Judge Koutras

Statement of the Case

These proceedings concern two consolidated contests filed by the contestant pursuant to section 105(d) of the Federal Mine Safety and Health Act of 1977, challenging two section 104(a) citations served on the contestant by an MSHA mine inspector on July 24, 1980, citing the contestant for two alleged violations of the mandatory noise standards set forth in 30 CFR 57.5-50(b). Contestant denied that it exceeded the required noise level standards in question and asserted that assuming that the cited noise levels exceeded the standards it nonetheless denies that the citations were "significant and substantial", denies that feasible engineering or administrative controls exist to reduce the employee exposure to noise, and contests the length of time fixed by the inspector for abatement of the citations.

Respondent MSHA filed a timely answer to the contests and a hearing was convened in Knoxville, Tennessee on March 11, 1981, and the parties appeared and participated therein. Post-hearing briefs were filed by the parties and the arguments therein have been fully considered by me in the course of these decisions.

Issues

The issues presented in these proceedings include the following: (1) whether the conditions or practices cited by the inspector on the face of the citations constituted violations of the cited mandatory

standard; (2) whether feasible engineering or administrative controls existed for the abatement of the asserted noise exposure levels described in the citations for the abatement of the citations; (3) whether the alleged violations were "significant and substantial" violations within the meaning of the Act; and (4) whether the citations were properly issued in accordance with the Act.

Applicable Statutory and Regulatory Provisions

- 1. The Federal Mine Safety and Health Act of 1977, P.L. 95-164, effective March 9, 1978, 30 U.S.C. 801 et seq.
 - 2. Mandatory standard 30 CFR 57.5-50, provides as follows:

56.5-50 Mandatory. (a) No employee shall be be permitted an exposure to noise in excess of that specified in the table below. Noise level measurements shall be made using a sound level meter meeting specifications for type 2 meters contained in American National Standards Institute (ANSI) Standard S1.4-1971. "General Purpose Sound Level Meters," approved April 27, 1971, which is hereby incorporated by reference and made a part hereof, or by a dosimeter with similar accuracy. This publication may be obtained from the American National Standards Institute, Inc., 1430 Broadway, New York, New York 10018, or may be examined in any Metal and Nonmetal Mine Health and Safety District or Subdistrict Office of the Mine Safety and Health Administration.

PERMISSIBLE NOISE EXPOSURES

Duration per day,	Sound level dBA,
hours of exposure	slow response
8	90
6	92
4	95
3	97
2	100
1-1/2	102
1	105
1/2	110
1/4 or less	115

No exposure shall exceed 115 dBA. Impact or impulsive noises shall not exceed 140 dB, peak sound pressure level.

NOTE. When the daily exposure is composed of two or more periods of noise exposure at different levels, their combined effect shall be considered rather than the individual effect of each.

If the sum

$$(C1/T1) + (C2/T2) + ... (Cn/Tn)$$

exceeds unity, then the mixed exposure shall be considered to exceed the permissible exposure Cn indicates the total time of exposure at a specified noise level, and Tn indicates the total time of exposure permitted at that level. Interpolation between tabulated values may be determined by the following formula:

$$log T = 6.322 - 0.0602 SL$$

Where T is the time in hours and SL is the sould level in dBA.

(b) When employees' exposure exceeds that listed in the above table, feasible administrative or engineering controls shall be utilized. If such controls fail to reduce exposure to within permissible levels, personal protection equipment shall be provided and used to reduce sound levels to within the levels of the table.

Discussion

Both of the citations in this proceeding were issued pursuant to section 104(a) of the Act on July 24, 1980, by MSHA Inspector Thurman E. Worth, and the conditions or practices which Mr. Worth believed were in violation of mandatory standard 30 CFR 57.5-50(b), are described on the face of the citations as follows:

Citation No. 108670 (Docket SE 80-125-RM)

The full-shift exposure to mixed noise levels of the secondary crusher operator exceeded unity (100%) by 2.46 times (246%) as measured with a dosimeter. This is equivalent to an 8-hour exposure to 96.5 dba. Personnel (sic) hearing protection was being worn. Recognized engineering noise controls for secondary crusher such as those listed in the attached document "Engineering Noise Controls Guidelines for Metal and Nonmetal Mine Inspectors," or other industry known controls were not being used and had not been tried by the mine operator.

Citation No. 108671 (Docket SE 80-126-RM)

The full-shift exposure to mixed noise levels of the Ball Mill operator exceeded unity (100%) by 2.01 times (201%) as measured with a dosimeter. This is equivalent to an 8-hour exposure to 95 dba. Personal hearing protection was being worn. Recognized engineering noise controls for Ball Mills such as those listed in the attached document "Engineering Noise Controls Guidelines for Metal and Nonmetal Mine Inspectors," or other industry known controls were not being used and had not been tried by the mine operator.

MSHA's Testimony and Evidence - Docket No. SE 125-RM

MSHA Inspector Thurmond E. Worth, testified that he had over 16 years experience in the mining industry before joining MSHA in 1976, including employment with ASARCO. He is currently employed as a health inspector and stated that he was familiar with the mill in question, and had visited in on one occasion prior to his inspection of July 24, 1980. He described the building where the alleged noise violations took place as a metal building built on a concrete floor, and he approximated the dimensions as 80 feet long, 40 feet wide, and some 25 to 30 feet high. The interior walls and ceiling are of metal construction. The structure houses a primary screen, a secondary screen, three cone crushers, and belt conveyors. Stone which is mined from an underground mine is processed in the building after being transported from a surge pile by conveyor belts into the crusher where it is reduced to smaller particles, processed through a secondary screen and there stored in bins according to product size. The building consists of three levels, and the source of the noise in the building is from the primary and secondary screens, as well as from the stone itself as it is transported and processed through the various chutes (Tr. 8-13).

Mr. Worth confirmed that he took his noise readings with instruments in the normal fashion and that the results indicated DBA readings of 96.5. The instrument readings were taken in the secondary crusher operator's work area, and at the specific location where he performs the greater part of his work. He confirmed that it was essential to know where an operator is located during the day and what his work duties are in order to relate to the test results. Although other individuals may travel through the building, the operator is essentially alone in the building during the course of the work day and he is assighed there for his entire eight-hour work shift.

Mr. Worth stated that based on his observations on the day he issued the citation, the operator's duties entailed checking the primary screen and crushers to insure that they are operating properly, insuring that the belts are functioning properly, and monitoring certain amp guages to

insure that certain electrical motors are not overloaded. The monitoring of the guages is a continual process and the operator is positioned some ten feet away from the primary screen when this is done. The remaining equipment checks are conducted periodically while the operator makes his equipment inspection rounds, and while he is in transit to check the silos to insure that they are not full. He described the manner in which these inspections are conducted visually by the operator while walking around the various equipment locations inside the building as well as outside where several conveyor belts feeding the stone from the surge pile are located. He estimated that it would take an operator approximately 20 minutes to perform one complete inspection round of all of the equipment, and upon completion of this round the operator would return and position himself on a "grease barrel" from where he would continue to monitor certain amp guages located approximately five feet from his seated position on the barrel. Mr. Worth estimated that the operator would remain at this location for approximately 45 minutes before beginning another inspection tour, and under normal operating conditions and absent any problems, the entire process would be repeated again every hour during the shift. In summary, Mr. Worth estimated that the operator would be walking around for approximately 20 minutes during any hour observing the equipment, and would remain by the barrel observing guages for the remaining approximate 40 minutes of any hour (Tr. 13-19).

Mr. Worth testified that it was his opinion that feasible administrative or engineering controls could be implemented to reduce the noise levels and bring the building into question into compliance with the cited noise standard, and he defined the term "feasible" as anything which is "reasonably possible" (Tr. 19). He believed that the most obvious option available to mine management would be the installation of a soundproof booth which could be constructed from two-by-four's and plywood, and insulated inside with accoustical tile insulation. He indicated that he made these suggestions to mine management. The purpose of the booth would be to house the operator while he is at the location by the barrel monitoring the amp guages, and he could monitor the guages by simply looking out of a window enclosure from inside the booth. Another option would be to place the guages inside the booth, and he believed that the operator would still be able to observe the bigger part of his operation from inside the booth and that his visibility would be the same as if he were sitting on the barrel (Tr. 20-22).

Mr. Worth expressed his opinion that installing a booth and requiring the operator to stay in it while he is monitoring the amp guages would not in any way inhibit the performance of his job. He also expressed an opinion that placing the operator in a booth for approximately 40 minutes of each working shift hour would result in a reduction of his exposure to noise below 90 dba, and in support of his opinion testified as follows (Tr. 23-24):

Q. Did you perform any calculations to arrive at that, or what would be the basis on which you would testify

to that?

A. The time span.

- Q. The time span?
- A. The time span inside the booth. He can be exposed to 95 DBA for four hours. All right, that is half a shift. He could spend, say, six hours in the booth, then that would cut his DBA reading down to below 90, so he would be in compliance.
- Q. Now, is it your opinion that a soundbooth, then, would work in this circumstance?
- A. Yes, sir.
- Q. Both from a health standpoint, and from a standpoint of his being able to achieve his job?
- A. Yes, sir.
- Q. Let me ask you this --

JUDGE KOUTRAS: Mr. McGinn, he hasn't finished.

THE WITNESS: I've had experience with a cement plant that had almost identical equipment, and their operator was over exposed, and they put in a soundproof booth. His exposure read 96 DBA. They put him in a booth, and now his DBA is less than 90.

BY MR. MCGINN:

- Q. Was this approximately the same type situation that we have here?
- A. Approximately, yes.

And at pages 25-26:

- Q. So, it's your opinion, then, that the use of soundbooths in this instance would reduce the DBA under the standard, is that right?
- A. Yes, sir.
- Q. Okay, now, you recommended the soundbooths, right?
- A. Yes, sir.
- Q. Is that -- was that based upon -- what was that opinion based upon?
- A. Past experience.

With respect to the feasibility of installing the type of soundproof booth that he recommended, Mr. Worth's testimony is support of his conclusion that the installation of the type of soundproof booth recommended by him is feasible is as follows (Tr. 24-25):

- Q. Now, as to the matter of soundbooths being feasible, you have experience in inspecting other plants of the same type or similar type, is that correct?
- A. Yes.
- Q. For instance, what types of other plants do you inspect which would be essentially the same activity and same physical setup?
- A. I have a cement plant. They don't have the floatation operation that ASARCO does, but essentially everything else is the same.
- Q. Now, and you're aware of other plants of the industry -- do you have any knowledge of other plants throughout the industry which are faced with approximately the same situation, as far as noise goes? Are you aware of any other -- is this industry wide concern?
- A. Not of floatation plants and this type thing, but our quarries have crushers, and screen houses, and they put their men in booths and have no problem with it whatsoever.
- Q. Now, would it be your opinion that this soundbooth that we've been talking about, is a highly unusual or a fairly normal practice throughout the industry in combating excessive noise?
- A. It's a normal practice.
- Q. Have you seen soundbooths installed in other plants?
- A. Yes.
- Q. Could you name a few for us?
- A. American Limestone has booths for their crusher operators. General Portland Cement has booths for their ball mills and rod mill operators. Vulcan Materials have booths for their crusher people. Nellie and Haden have booths for their crusher people. Nalley and Gibson, they have crusher booths for their operators. Adams Stone, Jenkins, Kentucky, they have booths for their operators.

- Q. Are all these operations within this district or sub-district?
- A. Yes, sir.
- Q. Do you know -- are these readily available, these soundbooths, which you described?
- A. You can buy them, or the easiest way would be to build one. They're not that expensive to build.
- Q. Are they commercially available, is what I really mean, for the industry? Are these companies which produce accoustical soundbooths of this type?
- A. Yes, sir, they are.

Mr. Worth testified that the costs for sound proof booths range from \$300 to \$4,000, depending on size and that it can be constructed as previously described by him. As for alternative means of reducing the noise levels, he stated "There's all kinds of insulating routes they can go in (sic) they want to", but he opted to recommend a booth because he believed it would be the easiest and cheapest method of achieving compliance (Tr. 26).

In response to my questions as to the procedures he used for testing the individual operator's noise exposure, Mr. Worth explained as follows (Tr. 29-33):

- Q. How did you arrive at the equivalent -- you stated in your citation that this is an equivalent to an eight-hour exposure. That leads me to believe that someone could be tested for under eight hours and with a computation, you come up with an eight-hour equivalent.
- A. Yes, sir.
- Q. What is that?
- A. We take a dosemeter reading and it reads out into a percentage and it's averaged out over eight hours. It records nothing less than 90 DBA. So at the end of eight hours, we have a chart that breaks the percentage down into an average of exposure for the eight-hour period.
- Q. All right, let me ask you this now: you said you hung the dosemeter on the operator. What specifically -- did you attach it to his body physically?
- A. Yes, sir, I put it in a pocket and the microphone on his shoulder.

- Q. And you left?
- A. Well, I was there on the property all day. I made periodic checks and sound level readings and this type thing.
- Q. All right, so this thing is attached to this individual and then, theoretically, he's supposed to wear it for his entire shift?
- A. Right.
- Q. Which is an eight-hour shift?
- A. Yes, sir.
- Q. So I take it while he was doing what he has to do there as a crusher operator, monitoring, sitting on the barrel and wandering around the plant and doing his job, this piece of equipment is attached to his body?
- A. Yes, sir.
- Q. And you're doing whatever inspection work you had to do in the mine $\ensuremath{^{--}}$
- A. Yes, sir.
- Q. -- And you would come back periodically?
- A. Yes, sir.
- Q. Would you take readings? What would you do when you'd come back?
- A. I'd check to see if he was having any problems wearing his equipment and take sound level readings.
- Q. What if this fellow takes it off and stashes it somewhere while you're gone and puts it back on again, how do you know that?
- A. Well, I wouldn't have any way of knowing it unless I caught him on a -- on a check as I come through.
- Q. Is there any way that -- are there any procedures for monitoring this device while you're off doing your other inspection duties?
- A. No, sir.

- Q. What would be the effect if this fellow took this device off and stashed it somewhere while you were gone, what would -- how would that affect it? What I'm trying to arrive at--at what point in time during an eight-hour shift do you check the dosemeter for a noise reading and how do you arrive at 96.5 DBA out there? How many times do you look at this device over an eight-hour period?
- A. We only check it, read it out, at the end of a shift but we visually -- visibly check it to see that he still has it on and this type thing.
- Q. Okay. You also indicated that the noise sources were from the falling stone, screen and the crusher; is that correct?
- A. Yes, sir.
- Q. Are there any other sources of noise in this particular building where this individual is stationed?
- A. No, sir.
- Q. How do you determine the different noise levels from the stone and the crusher or from the screen or does it make any difference? What type of noise are you monitoring in that building? Are you monitoring the falling stone, the conveyor belts, the crushers or are you just monitoring all noises or a combination?
- A. We're monitoring all noise that he's exposed to.
- Q. All noise?
- A. Yes, sir.

* * * *

In response to further questions from MSHA's counsel, Mr. Worth stated that he had never before tested the crusher operator in question, and he indicated that he explained the purpose of the dosemeter to him. Mr. Worth could not recall whether the operator advised him that he had previously been tested and asked him no questions. The operator did not explain his duties to Mr. Worth, and Mr. Worth reiterated that his opinion as to what those duties are is "based on experience and his job classification" (Tr. 35). Mr. Worth indicated that the duties of a secondary crusher operator in a mill such as the one in question would be essentially the same for each day. In response to questions as to how often he would return during a normal sampling cycle on a shift, Mr. Worth stated (Tr. 36-38):

- Q. Now, after you once put the measuring equipment on a man, do you return at different times furing the shift; is that correct?
- A. Yes, sir.
- Q. Approximately how often do you return during a normal sampling procedure?
- A. Usually we try to get back once an hour if possible.
- Q. Do you recall in this instance how often you got back?
- A. No, sir, I don't.
- Q. What do you do when you come back, for noise now?

What did you do in this instance when you came back?

- A. I checked him to see that the microphone was still in the right place and he still had it on his person.
- ${\tt Q.}\ \ \, {\tt When}$ you come back, do you also take sound level measurements?
- A. Yes, sir, I do.
- Q. What's the purpose of that?
- A. That's to check and be sure that I have the right exposure of percentages on my dosemeter whenever I read it out. It's to keep check on the dosemeter.
- Q. How do you take your sound level readings?
- A. I just have a sound level meter and hold it out at arm's length and take a reading off of it every -- up to 120 DBA's.
- Q. Now, can you state specifically about how many times you came back to check on the equipment during this shift?
- A. Not specifically, no, sir, I can't.
- Q. Do you recall the different areas in which you met him to take your reading and to check your equipment?
- A. Yes, sir, I met him at -- in his work area which is where he sit and monitored the amp guages and then I saw him going to the silos as I was coming over to the building to check on him again during the day. I saw him out on the outside on a walkway going to the surge tunnel and his checks of his equipment during the day.

- Q. At the end of the sampling time, you remove the equipment from him; is that correct?
- A. Yes.
- Q. Did you have any conversation with him at that time?
- A. No, sir. I told him that I appreciated him wearing it for me. Thanked him.
- Q. Did he indicate there was anything abnormal in his work activities that day?
- A. No, sir, he didn't.
- Q. Again, the question really is about your estimation about the time involved in these various tasks. Again, you testified earlier that you estimated it to be about 20 minutes per hour of him walking around and about 40 minutes of an hour sitting in one area stationary, checking and monitoring the electrical --
- A. Yes, sir.
- Q. Do you still stand by that?
- A. I do.
- Q. Again, what is your basis for that time frame?
- A. Well, observing the job that he has to do. Barring trouble, he just physically walks around and checks the conveyor belts and then sits and monitors the amp guages.
- Q. So in your opinion, knowing his job classification, is the monitoring or the walking around inspection the more primary, more essential time of his tasks?
- A. Monitoring his amp guages to keep from burning up a 50 hoursepower motor.
- Q. So would there be greater danger in his being away from the monitoring position than at other times or --
- A. Oh, sure, sure, because you never know when a crusher is going to stop up or a motor is going to short out or what.
- Q. What does he do if such a situation should occur?
- A. He shuts the equipment down.

- Q. What is the purpose of shutting it down immediately?
- A. So it won't do further damage to the motor or crusher or the other equipment that's involved.

On cross-examination, Mr. Worth conceded that he was not with the crusher operator during the entire eight hour shift for which he was tested, and the reason that he was not was that he had to make other inspection rounds through the mills. He stated that he was at the location in question "off and on, periodically, all day", and he determined that an inspection round by the crusher operator took approximately 20 minutes through actual observation and he explained this by stating "I could observe him from my rounds going through the plant". He testified as follows in support of his conclusion concerning this issue (Tr. 27-28):

- Q. Is this from discussing it with the employee or your actual observation?
- A. Actual observation.
- Q. How long were you there at a given time? Were you there for an hour at any time?
- A. Oh, it would vary. I might be there 30 minutes. I may be there an hour, may be there two hours.
- Q. But you didn't conduct a time study or anything? I mean, in other words, it was just kind of hit and miss so far as what the employee was doing?
- A. I had a dosemeter on him which is run for eight hours.
- Q. Right, but as far as what the employee was doing as far as making rounds or sitting around, you're really speculating; are you not?
- A. Well, observing him and his work habits. That's what I observed.
- Q. But you weren't there for eight hours?
- A. No, but --
- Q. I'm just saying you've kind of made a categorical statement that you think he made rounds for 25 minutes every hour and I was wondering how you concluded that if you were there and off at various times.
- A. Well, knowing the job, I estimated the time and -- and I feel it's a reasonable time.

- ${\tt Q.}$ You estimated it based on knowing the job. How do you know the job?
- A. I visibly observed what his job was as he went through his procedure.
- Q. But you were there and then off elsewhere at various times?
- A. Yes.
- Q. So it was very much an estimate?
- A. Yes, sir.

Mr. Worth testified further that he was aware of the fact that one of the mines mentioned by him as having sound booths installed, namely American Limestone, is a subsidiary of ASARCO (Tr. 29). He confirmed that while he tries to go back to check on an operator once every hour during a testing cycle, he did not know whether he did that in this case and did not know whether he was present for an hour at any given time or precisely how long he would have been present since he did not time himself. His conclusions concerning the time spent by the crusher operator on various tasks are based on what he believed to be his job tasks and through his personal observations, which he conceded were never even for an hour (Tr. 39). He further explained his position as follows (Tr. 39-41):

- Q. Well, I'm just wondering how you can come up with a conclusion that the man sits still for 40 minutes and walks for 20 minutes if you weren't there for even an hour at any given time or you don't even know if you were. How does one conclude that?
- A. Based on his job that he had to do.
- Q. And how do you know what his job is?
- A. Because I observed him doing it.
- Q. But never even for an hour at any given time as far as you know?
- A. No.
- Q. And it's your testimony that as far as you understand, his job of monitoring the guages is the most important aspect of his job?
- A. In my opinion, it would be.
- Q. And your opinion is based on what?

- A. Experience.
- Q. Experience in a mill like this?
- A. No, I have no experience -- experience in mills. I have experience in inspecting in every operation that we have, their primary job is to monitor amp guages so they won't burn up -- overload their motors and burn them up.
- Q. Do you know sitting where he does, do you know if he can see the ore bins?
- A. No, he can't see where they're pouring on.
- Q. Can he see the feeders under the surge pile?
- A. No, sir.
- Q. Can he see the conveyor belts on the east and the west side?
- A. He can see part of it, but he can't see all of it, no.
- Q. Can he see the ore transfer chute on the east side of the building?
- A. I don't know.

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Inspector Worth confirmed that he issued citation no. 108671, described the building where the Ball Mill operator was working, and described the procedures and equipment utilized in the processing of materials in the building. He stated that there is one operator on duty in the building, that he put the noise measuring device on him at 7:11 a.m., and left to conduct additional inspections. He returned periodically during the day but could not recall how often. However, he indicated that he usually tries to get back once every hour. Mr. Worth stated that he took sound level readings, and on his return observed the operator at different places in the building such as the walking between the ball mills, taking samples at the location where the mills feed out the ground material, and standing next to a control panel. He stated that he was "not that familiar" with the duties and functions of the ball mill operator, but arrived at his conclusions concerning those duties by observing him taking samples and monitoring the amp guages from a seat or box which he sits on. However, Mr. Worth could not recall whether he ever observed the operator seated, and he was of the opinion that the operator can position himself in such a way as to facilitate the monitoring of the amp guages as well as keeping an eye on the feeder belt. As for the taking of the samples, Mr. Worth could not state how often this was done, but estimated that one sample an hour would be taken by the operator, and that this would take about five minutes, and he indicated that the operator would have no reason to go outside of the building (Tr. 43-50).

Inspector Worth testified that he believed it was feasible to reduce the noise levels and that he recommended the installation of a soundbooth. Based on his understanding of the duties of the operator through his observations, he believed that the operator could perform his duties of checking and monitoring of the guages and the belts from inside a soundbooth, and that this would reduce his noise exposure to well below 90 dba's. He also indicated that he recommended the use of a soundbooth to mine management, and was told that their employees could not work in booths. Mr. Worth also indicated that other mine operators have used soundbooths, that they were readily available and moderately inexpensive, and that they have been recommended to him during his training or in reading literature on the subject (Tr. 50-52).

On cross-examination, Mr. Worth conceded that he was "not that familiar" with the duties of a ball mill operator, that he could not recall whether the operator was ever seated during his observations, and that his previous testimony that the operator took materials samples once every hour was an assumption on his part. He also conceded that he did not speak with the operator himself to determine what his duties were, and he (Worth) could not recall whether he was ever present observing the operator for as much as an hour at any one time, nor could he recall how often he returned from his other inspection rounds to actually observe the ball mill operator makes his rounds (Tr. 52-54).

Inspector Worth concluded his direct testimony as follows
(Tr. 54):

- Q. With all that lack of knowledge, you nevertheless concluded how often he could sit at that given seat and stay in a given place rather than move around and perform his job?
- A. No, I didn't stay with him.
- Q. You really don't know?
- A. No, sir, I don't know.

MR. HART: I have no further questions.

JUDGE KOUTRAS: Do you have anything further, Mr. McGinn?

MR. MCGINN: No.

In response to questions from the bench, Inspector Worth testified that the operators in question were wearing Dupont

dosemeters during his

testing, and that the secondary crusher was wearing an EAR brand earplug, while the ball mill operator was wearing an ACU-FIT earplug. However, he stated that he had no way of knowing how effective these devices were in terms of reducing any existing noise levels (Tr. 55). He stated that the contestant has never tried any other industry known noise controls other than earplugs, that he did not discuss the use of booths with the two individual employee operators who were cited, and that they made no comments concerning the effectiveness of the earplugs other than it was company policy that they be worn. He could not recall any complaints by the employees with respect to the use of the earplugs, and while he alluded to the fact that a mine operator was required to test its own employees for exposure to noise, he did not know how often this was done and stated "we really don't enforce it that heavy" (Tr. 56). He reiterated that the contestant's position was that its employees could not work in control booths (Tr. 57-58).

Inspector Worth testified that there was no way to sample an employee wearing plugs to determine whether he was in compliance with the noise exposure levels while wearing the plugs. As long as a mine operator has done all that he could in terms of administrative or engineering controls, he would not issue citations for noncompliance as long as the earplugs are worn (Tr. 61).

James Gardy, MSHA Health Specialist, testified as to his background and experience in mining, and stated that his present duties are those of a health inspector in underground mines and the crushed stone industry. He stated that he was familiar with contestant's mining operation and that he has inspected similar mills and crushers. With regard to his familiarity with the job classifications of a secondary crusher operator and ball mill operator, he stated that he was "vaguely familiar with those classifications" but "couldn't go into detail as to exactly what they do" (Tr. 66). Based on his experience and knowledge of operations similar to those of the contestant, Mr. Gardy was of the opinion that soundbooths are a feasible way for reducing the noise level dba's (Tr. 67). Booths may be constructed from inexpensive building materials and they are also available for purchase commercially throughout the industry. He believed that reductions in noise levels could be achieved below 90 dba's if a person remained in a booth for just two hours out of an eight hour shift. The longer one remained in the booth, more significant reduction in noise levels would result. He later stated that "I'd have to run calculations, but I would say they would probably reduce it to 90 or below" (Tr. 69).

Mr. Gardy testified that he has observed noise booths installed in a plant similar to that of the contestant's and named several of those plants in Kentucky and Tennessee. However, he qualified his testimony in this regard as follows (Tr. 69):

Now, I'm speaking about primary crusher operators where a guy is stationary. He doesn't have to move around

too much.

- Q. So is it your testimony then that use of the sound control booth is your basic, primary -- in other words, is that what you would look at before you would look at anything else?
- A. Well, if the man was stationary. If he didn't move around a lot. If his one job is in this one area the biggest part of the day, that is usually the answer.

Mr. Gardy was of the opinion that feasible controls are available to reduce noise levels, and as examples he referred to building barricades or enclosing the machinery. He also stated that it would depend on the particular situation and also stated "I'm not familiar with the one Mr. Worth testified about" (Tr. 70). He also believed that the use of earplugs is a temporary measure and that proper hearing conservation programs are the best methods at solving noise problems. Based on the testimony presented concerning the citations in question, he was of the opinion that the type of controls available would likely bring about compliance in these cases (Tr. 72).

On cross-examination, Mr. Gardy testified that he was not aware of any mills such as those operated by the contestant that have sound booths installed, and he indicated as follows (Tr. 72):

- Q. You cited a number of companies that have installed similar to this and as I picked it up, most of them were stone type operations. Do you know of a single operation -- for lack of a better name, I'm talking about a metal type mill -- that has one of these things installed?
- A. No.
- Q. You don't know?
- A. I can't specify a single company that's got a mill like yours because I'm not familiar with your mill. I don't know exactly what you have out there, but I am familiar with crushers and conveyor belts and screens.

And, at pages 74-75:

- Q. (By Mr. Hart) So basically, but you do not know of a metal type mill that's installed one of these; you're talking about a quarry type situation, is that correct?
- A. Quarries and the underground mines I've inspected out West, yes, all over.
- Q. You've never seen the mill we're discussing?

- A. No, sir, I haven't.
- Q. You testified just vaguely that there are other types of engineering controls such as barricades, enclosures, etcertera?
- A. Yes.
- Q. How could you testify to the feasibility of that in a mill you've never seen? I mean, you really don't know what --
- A. Well, I've seen other, other mills where they put curtains, lead shield curtains between the noise source and the employee. I've seen where they've enclosed the machinery completely.
- Q. Aren't all mills different?
- A. To what extent?
- Q. I mean, can you just sit there and come up with general engineering types things and say it would solve the problem --
- A. For noise, yes, sir.
- Q. -- And say it would apply?
- A. Yes, sir.
- Q. You can say that?
- A. yes, sir.
- Q. For noise. Do you have an engineering degree?
- A. No, sir, I don't.
- Q. You're not an industrial engineer?
- A. I'm not an expert, no.
- Q. You were talking about whether we had an audiometric program of sorts. Are you aware that we have an industrial hygiene department of 40 industrial hygienists in the company?
- A. Here at the Knoxville operation?
- Q. In Salt Lake, but it operates for all --

- A. No, sir, I didn't.
- Q. You don't know whether we have an audiogram department?
- A. No, sir, I do not.

Mr. Gardy believed that with the use of a soundbooth, placing an individual in it for two hours during a shift would lower the dba exposure to 90 or below. However, he conceded that he had made no calculations to support this conclusion (Tr. 76). Contestant's Testimony and Evidence

Samuel D. Lawrence, Assistant Mill Superintendent, testified that he is a graduate engineer with a degree in mineral process engineering from the Montana School of Mines, and that he has worked in various mills throughout the United States. responsibilities at the mill in question include maintenance and metallurgical controls and he is familar with the job functions of the two mill operators who were cited by MSHA in these proceedings. In his opinion, they cannot perform their job in a soundbooth (Tr. 83-85). He described the duties of the secondary crusher operator, and they include the checking of meters, chute blockage or damage, damaged screens, extraneous materials in the product being processed, etc. In his view, if the operator were sitting in a soundbooth, by the time any damage or problem was detected, the system would have to be shut down for repairs. Mr. Lawrence believed that the operator has to be mobile in order to perform his functions because his job is one that requires him to be moving the majority of his time to visually and physically inspect all of the machine components, namely, three crushers and two screens. In addition, the operator is also responsible for cleaning up any spillage each shift. The monitoring of the guages is critical during the start-up phase of the operation, but once the system is stablilized, a visual glance is all that is required, and the remaining time spent by the operator is the physical and visual checking of belts, motors, machinery, and oil levels. He also indicated that from the location of the seat where the operator may sit, he cannot observe the entire system, and is unable to check conveyor belts, worn idlers, or pulleys, nor can he check for required maintenance which may occur and which could be taken care of while the system is operational. The primary function of the crusher operator is to insure that the mill is functioning properly and that no major damage will occur. If it does, the mill will have to shut down and production is thereby interrupted. He believes the operator has to be constantly mobile in order to perform his job properly and effectively (Tr. 85-88).

With regard to the duties of the ball mill operator, Mr. Lawrence testified that once the critical start-up is achieved, his primary function is to periodically, on an hourly basis, go through the mill and take samples of the materials being processed. He explained the sampling process and stated it cannot be done effectively with the operator enclosed in a booth. He also indicated that the operator must

visually inspect the cyclone, take care of any minor problems which may be detected before they result in major items, and that he must also check motor bearings and grease them manually. These duties require constant mobility by the operator. He also stated that cyclone underflows and overflows cannot be visually observed from inside a booth, and they require visual monitoring, including the taking of cyclone samples at four or five locations. The sampling time for each sample takes about five minutes for each location, and possibly ten minutes to make a grind determination (Tr. 88-91).

Mr. Lawrence testified that the contestant has attempted to control noise at one of its other mills, and that the mill is similar to the one in question in these proceedings. He stated that contestant has expended \$135,000 at the Young Mill, and that this has resulted in reducing the noise levels one or two decibels. He conceded that it was possible that compliance could be achieved with the use of sound booths, but maintained that the operators could not perform their job tasks from such booth (Tr. 92). Mr. Lawrence stated further that the use of booths in at least one other plant was for the purpose of protecting the operator from the weather rather than for reduction of the noise exposure (Tr. 94).

On cross-examination, Mr. Lawrence stated that it was his view that the operators in question were required to be in motion the majority of their work time in order to perform their job tasks properly. He also indicated that he has spent a complete eight hour shift with these individuals, and in his opinion they could not remain in the booth for as long as an hour each shift and still do their jobs properly. He reiterated the duties that he believed were required of the two operators in question, and indicated that he has explored the possibility of using rubber liners to reduce the noise levels, but found that they were very expensive and were short lived. (Tr. 95-102). In response to bench questions, Mr. Lawrence testified that since the time he has been employed at the mill no previous citations for exceeding the noise levels had ever been issued (Tr. 108).

Ivan Campbell, testified that he is an electrical engineer and has a degree from the University of Colorado. His experience includes the installation and maintenance of both mechanical and electrical equipment, and that he is responsible for contestant's Tennessee mines. He stated that he was familiar with the citations which were issued in these cases and is familiar with the job duties of the cited operators. In his view the operators could not satisfactorily perform their jobs if they were enclosed in booths for any ten to fifteen minutes each hour of their shifts. He explained the duties required of the operators in question, and emphasized the fact that they are required to be mobile and to walk around checking out the entire system. He detailed each of the duties required by the operators in question, and expressed the opinion that they were required to be continually in motion or moving around to properly perform their job tasks (Tr. 111-117). Mr. Campbell alluded to the expenditure of \$135,000 by the contestant in an effort by the contestant to

reduce the noise levels, short of installing booths, but stated that he was not directly involved in the program (Tr. 117).

Harold F. Thompson testified that he is a graduate geologist from the University of Colorado and that he has been involved in safety matters for the past 30 years. His job with the contestant concerns safety matters for the entire Tennessee Mines Division. He stated that he was familiar with the soundbooths utilized by American Limestone Company, one of the examples cited by the inspector, and he characterized the booths as "operator shacks" to protect the employees from the weather. He also stated that they were constructed from wood, operated with the doors open, and were not soundproof (Tr. 125). He also stated that the contestant has a hearing program which includes the use of earplugs as well as the use of audiometric technicians who examine employees for hearing problems. In addition, he referred to the fact that employees are given a choice of wearing three protective ear devices, and that annual noise surveys are made by the company, including the use of noise meters at various locations for the purpose of reducing noise exposure, all of which is paid for by the company.

Mr. Thompson was of the opinion that it would require an employee to spend four hours in a soundbooth in order to reduce his noise exposure from 95 dba's to 90 dba's. He also indicated that since the existing attempts to reduce the noise levels at the Young Mill have not resulted in any significant changes they were not used at the New Market Mill (Tr. 128).

On cross-examination, Mr. Thompson conceded that he was aware of the fact that the noise exposure for the operators in question were as stated in the citations, namely 96.5 and 95 dba's, and that is the reason they were required to wear personal ear protection devices (Tr. 128). He believed that compliance was being achieved through the use of these devices, and he did not believe that additional considerations are needed because it was his view that additional measures are not feasible (Tr. 130). He indicated that feasibility measures have been an on-going project for the past five years in attempts to find solutions at the mill in question. In his view, additional expenditures are not feasible because operators cannot function from a soundbooth (Tr. 131). He also alluded to the fact that the problems have been discussed among company management as well as with Inspector Worth, and that in his view feasible controls of noise are not available, except through the use of earplugs (Tr. 131-133).

Mr. Thompson alluded to several specific methods considered for reducing noise, including enclosing the crusher from the rest of the building, use of rubber screens, moving the filter vacuum pump outside another building, insulating the walls of the building, relocating the flotation filter pump blower outside the building, and installing insulation barriers around the crushers (Tr. 134).

Findings and Conclusions

The contestant in these proceedings has been charged with two violations of the noise exposure requirements of mandatory standard

30 CFR 57.5-50(b), for exceeding the noise exposure levels for two of its employees, namely, a secondary crusher operator and a ball mill operator. In addition to the charges that the dBA exposures exceeded those levels required to be maintained by the cited standard, the citations also charge that the contestant was not using, and had not tried to use, recognized engineering noise controls such as those listed in certain guidelines contained in an April 8, 1977, publication used by MSHA inspectors when evaluating noise violations in the metal and nonmetal mining industry, or other industry known controls. Under the circumstances, I believe it is clear that MSHA has the burden of proving the fact that the noise exposure levels cited by the inspector were as stated in the citations, as well as the burden of proving the fact that feasible engineering controls are available for application by the contestant at the mill sites in question so as to bring the two cited employee operators into compliance with the required noise standard.

The so-called "recognized engineering noise controls" alluded to by the inspector on the face of the citations which he issued are incorporated in an MSHA document published April 8, 1977, entitled Engineering Noise Control Guidelines for Metal and Nonmetal Mine Inspectors, (exhibit ALJ-1), and pertinent introductory portions of that publication state as follows:

These guidelines have been prepared for use by Mining Enforcement and Safety Administration (MESA) inspectors when evaluating noise violations in the metal and nonmetal mining industry. The engineering controls listed have been taken from actual cases and hence have been shown to be feasible and effective. It is important to note, however, that these controls must be considered on a case-by-case basis; not all may be feasible for a specific machine type. This consideration will require individual judgement by the MESA inspector.

The mine operator must apply such noise controls as are considered feasible, in the judgement of the inspector, until noise levels are brought to within permissible limits. The controls listed can be applied in any order the mine operator chooses and alternative control methods may be acceptable. The inspector must judge whether or not a conscientious effort was made by the mine operator in applying engineering noise control methods. If in assessing a noise violation, a MESA inspector determines that additional assistance is necessary, the Noise Group at either Pittsburgh or Denver Technical Support Center should be contacted to evaluate the problem.

If permissible limits of noise have not been obtained after all feasible control methods (including administrative controls) have been instituted, then adequate ear protection must continue to be used until new control techniques become feasible. (Emphasis supplied.)

The guidelines list surface crushers, screens, and chutes at page 14, and the following methods of noise control are listed:

1. Operator Booths

- a. Commercial. Operator booths can be purchased as prefab units from various manufacturers. Refer to attached "Buyer's Guide" from Sound as Vibration Magazine.
- b. Upgrading Existing Booths. Upgrading consists of adding acoustical material to interior roof and walls, sealing openings, repairing and sealing doors and windows, and isolation mounting. Refer to attached "Buyer's Guide" from Sound and Vibration Magazine.
- c. Fabricated. Operator booths can be constructed using common building materials, and should be acoustically treated as per "Upgrading."
- 2. Rubber Screen Deckings. Materials are available from various manufacturers.
- 3. Covered Screens. Dust control covers for screens may be upgraded to act as acoustical enclosures.
- 4. Enclosing Crushers and Screens. Crushers and screens may be partially or totally enclosed.
- 5. Chute Liners. Chutes can be lined at impact points with resilient material. These materials and information concerning their wear characteristics are available from various manufacturers or by contacting PTSC or DTSC.

Estimated Costs and Noise Reductions

- 1. Operator Booths. Properly designed and installed booths should result in noise levels at the operator's position of less than 90 dBA; costs for booths will range between \$500 and \$3,000.
- 2. Rubber Screen Deckings and Chute Liners. Information as to cost, life expectancy, effects on production, etc. should be obtained from the manufacturer and should be evaluated on a case-by-case basis.

The noise controls for ball mills are listed in the guidelines at page 19, and they are as follows:

1. Operator Booths

- a. Commercial. Operator booths can be purchased as prefab units from various manufacturers. Refer to attached "Buyer's Guide" from Sound and Vibration Magazine.
- b. Upgrading Existing Booths. Upgrading consists of adding acoustical material to interior roof and walls, sealing openings, repairing and sealing doors and windows, and isolation mounting. Refer to attached "Buyer's Guide" from Sound and Vibration Magazine.
- c. Fabricated. Operator booths can be
 constructed using common building materials and
 should be accoustically treated as per
 "Upgrading."
- 2. Rubber Liners. Rubber liners are commercially available from several manufacturers. Information as to life expectancy, effects on production, etc., should be obtained from the manufacturer and should be evaulated on a case-by-case basis.

3. Enclosing Mills

- a. Full Enclosures. Full mill enclosures can be fabricated or purchased as prefab units.
- b. Partial Enclosures. Partial enclosures for the feed and discharge ends of mills can be fabricated using common building materials.

Estimated Costs and Noise Reductions

- 1. Operator Booths. Properly designed and installed booths should result in noise levels at the operator's position of less than 90 dBA; costs for booths will range between \$500 and \$3,000.
- 2. Rubber Liners. Information as to cost can be obtained from the manufacturer. Noise reductions may range between 3 and 7 dBA.

Included as "Buyer's Guide", the guidelines contain a list of manufacturers and suppliers of sound barrier systems, including acoustical booths, and a selected bibliography of several noise control publications and references.

The record adduced in these proceedings establishes the fact that the two cited mill operators were wearing personal ear protection devices. Further, it seems clear that Contestant does not dispute the fact that the noise levels measured by the inspector in these proceedings were above those permitted by the cited noise standard. Its defense is based on subsection (b) of section 56.5-50, which states:

(b) When employees' exposure exceeds that listed in the above table, feasible administration or engineering controls shall be utilized. If such controls fail to reduce exposure to within permissible levels, personal protection equipment shall be provided and used to reduce sound levels to within the levels of the table.

Contestant takes the position that it is not feasible to place the two mill operators in question in an acoustical sound booth because the nature of their job tasks is such as to require them to constantly move about the two buildings in which they are located so as to enable them to monitor, inspect, and service all of the machinery and equipment for which they are responsible. Contestant asserts that placing an operator in a soundbooth would not only restrict his mobility, but would impair his visibility and would inhibit his ready access to the equipment in the event of emergencies, and would unduly restrict his ability to visually observe the entire area over which he has responsibility. Further, contestant maintains that the mobility of the operators is most essential to a safe and productive operation, and that isolating the mill operators in a sound booth as suggested by MSHA would not only jeopardize the efficient operation of its milling process, but would result in a potential breakdown of its equipment and would result in the shutting down of its operation for major repairs. In short, contestant's position does not rest solely on the costs which may be incurred in constructing or purchasing soundbooths, but is based on its belief that the nature of the work required to be done by the mill operators in question simply does not lend itself to placing them in sound booths.

MSHA takes the position that soundbooths are in fact feasible noise controls at the two mill sites in question and that the contestant has not only failed to install them, but has not even made any attempts to try them out. MSHA also takes the position that by following the suggestions of its inspectors, the installation of soundbooths will reduce the level of noise to which each operator is exposed and will insure continued compliance with the requirements of the cited noise regulation.

In its post-hearing brief, MSHA asserts that it has carried its burden of establishing the fact that the noise exposure as measured by its inspector for the secondary crusher operator and the ball mill operator exceeded the permissible levels pursuant to the cited section 57.5-5-(b). In addition, MSHA argues that it has established that

feasible engineering or administrative controls are available to abate the violations, and relies on the following in support of this conclusion:

- 1. Inspector Worth's testimony regarding the construction and layout of the two mill buildings in question, including the types, locations, and functions of the machinery involved, and the primary sources of noise affecting the two employees in question.
- 2. Inspector Worth's opinion and recommendations that the installation of readily available acountical soundbooths would reduce the noise exposure to the two employees cited. MSHA asserts that the inspector's mining experience, coupled with his observations of the two men in question at their work locations support his conclusions that the installation of soundbooths are available feasible administrative or engineering controls readily available to the contestant at minimal cost.
- 3. Inspector Worth furnished the contestant with a copy of a 29 page booklet entitled "Engineering Noise Control-Guidelines for Metal and Nonmetal Mine Inspectors", which assertedly describes a variety of proven methods based on actual cases, for effective and feasible noise controls, including price lists and available acoustical materials and equipment.
- 4. Inspector Worth's opinion, based on his knowledge of similar job classifications and on his observations of the two employees in question over the eight hour sampling shift, that a significant portion of the employees' workday could be spent in a soundproof booth without impairing the accomplishment of their routine duties, particularly since they could visually monitor and observe the various machinery guages from inside the booths.
- 5. MSHA Health Specialist Gardy's testimony that soundbooths were readily available and were widely used throughout the industry as a successful and economical method of reducing noise levels in milling and crushing operations similar to those conducted by the contestant.

In addition to the testimony presented by its inspectors, MSHA argues that contestant's testimony concerning the job requirements of the two employees in question lacks credibility and "boggles the imagination". MSHA also contends that the contestant has not only never attempted any basic steps to abate the conditions cited, but has never even considered any controls at the New Market Mine Unit, and has opted to rely on personal ear protection as sufficient protection against noise. Finally, MSHA points out that contestant's position concerning the use of soundbooths

is not founded on economic considerations, and that since contestant is a very large corporation, MSHA believes that any of the basic controls available would require relatively insignificant expenditures.

Contestant's New Market Mill Unit is a metal mine which mines and processes zinc ore (Tr. 73-74). Contestant does not contest the result of the inspector's noise level readings as stated on the face of the citations issued in these proceedings, nor does it contest the accuracy or veracity of those noise meter readings as testified to by the inspector (Tr. 81). As a matter of fact, in its post-hearing brief, contestant concedes that the results of its concurrent noise samples were substantially the same as those taken by the inspector. Further, contestant's arguments, as articulated by counsel in his brief, rests on its assertion that MSHA not only failed to establish that sound booths were feasible at the locations in question, but also failed to establish that other feasible engineering controls do in fact exist.

Even though MESA's guidelines provide for several methods of reducing noise exposure, the inspectors in these proceedings take the position that the installation of soundbooths at the two mill sites in question here will effectively solve any noise problems and will in fact facilitate compliance. Under the circumstances, the critical question presented is whether MSHA can support its position in this regard by a preponderance of the credible evidence that it has offered to prove its case. A discussion and analysis of the evidence presented by both parties follows below.

With regard to MSHA's reliance on the noise guidelines cited by the inspector in the citations, and in particular the assertion that they are based on actual cases and thus are proven feasible and effective controls, MSHA conveniently omits the fact that the guidelines specifically state that the recommended controls discussed in that publication must be considered on a case-by-case basis, that not all of the recommendations may be feasible for a specific machine type, and that this consideration will require individual judgment by the inspector. Since there are many kinds of metals and nonmetals, it stands to reason that there are many kinds of mills. Further, since I assume there are different methods available to process the material being mined at any one mill site, this diversity supports a conclusion that no two mills may be identical in terms of the equipment, processes, and noise exposure. If this conclusion is wrong, then I believe it is incumbent on MSHA to establish through credible evidence that all mills are alike, and that the installation of a workable soundbooth at some other mining operation supports its position that it will work at the mill sites in question in these proceedings.

It also occurs to me that the source of any particular noise in a building which houses different kinds of equipment would be different, and a noise supression device which is workable in one area from where the noise source is located may not work in another area. It seems

clear to me that a dosimeter reading over 90 may not necessarily mean that the individual worker is being overexposed to noise. From my understanding of the requirements of the noise standard, the question of whether an individual is overexposed to noise levels which may have an adverse effect on his hearing mechanism is dependent upon the noise exposure time. Therefore, the time that any individual worker spends at any particular job task which exposes him to prolonged periods of excessive noise becomes most critical to the question as to whether he is in or out of compliance with the dBA requirements of the standard. MSHA's position seems to be that since all mill operators perform the same job tasks, isolating them in a sound booth for four hours during an eight-hour work shift will automatically bring them within compliance. The problem that I find with this rather simplistic approach is that MSHA's conclusions are based on speculative conclusions and opinions which are unsupported by any credible evidence.

Although MSHA's health specialist Gardy testified that he was familiar with contestant's mining operations and had inspected similar mills and crushers, he admitted that he had never even seen the New Market Mill in question. With regard to his testimony that similar operators had successfully installed soundbooths, he conceded that the "similar" operators he had experience with were stone quarries and underground mines and that he knows of not one single metal mill which has such booths installed. His inability to cite any metal mills like those of the contestant to support his conclusion that soundbooths are feasible is based on his candid admission on cross-examination that he was not familiar with contestant's mill and that he "did not know exactly what you have out there" (Tr. 720). Further, while Mr. Gardy was of the opinion that general engineering devices are available for all noise control, he conceded that he was not an engineer, nor an expert. As a matter of fact, he was not even aware of the fact that contestant had an audiometric program, including an industrial hygiene department employing some 40 industrial hygienists. Finally, with respect to his conclusion that placing an individual in a soundbooth for two hours during a shift would lower his exposure to noise below the 90 dBA level, Mr. Gardy conceded that he had made no calculations to support that conclusion (Tr. 76). As a matter of fact, on direct examination, he conceded that his conclusions that soundbooths would reduce the noise exposure in these cases was based on Inspector's Worth's testimony at the hearing, and even at that, he stated that soundbooth's would likely bring about compliance (Tr. 72).

After careful consideration of Mr. Gardy's testimony, I have concluded that it is of little value in support of MSHA's case. Mr. Gardy is totally unfamiliar with the mine site in question, has never been there, did not know what was going on there, knows of no soundbooths ever being installed in a mill similar to the one in question, he is not an expert, he never made any calculations to support his theory that the use of soundbooths at the mill in question would achieve compliance, and was unaware of contestant's noise control program. In short, MSHA have have

been better off in not calling him as a witness.

With regard to MSHA's assertion that the contestant has made no attempts to control the noise exposure levels at the New Market Mine, contestant's assistant mill superintendent Lawrence testified that the company has expended \$135,000 at the Young Mill, an operation similar to the New Market Mine Unit, and that the noise levels have reduced one or two decibels. He also alluded to the fact that consideration was given to the use of rubber liners but that they were very expensive and did not last long. These efforts were confirmed by Mr. Thompson, and he testified that the contestant has an on-going hearing program staffed by audiometric technicians who conduct hearing tests, annual noise surveys, and employee examinations for the purpose of detecting hearing problems. He also indicated that all employees are allowed to choose from among three personal ear protection devices, and stated that several methods for reducing noise have been considered, including the use of rubber screens, insulating the walls of the buildings, enclosing the crusher from the rest of the building, relocation of equipment, and installing barriers around the crushers. Some of these control measures are included in MSHA's quidelines.

Contrary to MSHA's assertion that contestant has made no efforts to reduce its noise exposure levels, I conclude that the testimony of respondent's witnesses supports a finding that contestant has in fact attempted to reduce its noise levels. As a matter of fact, the record indicates that the expenditure of \$135,000 has resulted in a reduction of the noise exposure at a similar plant. However, contestant's reluctance to use soundbooths obviously stems from its belief that the two employees must be constantly mobile and cannot safetly and efficiently perform their job tasks while isolated in a soundbooth for the periods of time indicated by the inspectors. In response to the inspector's contentions that soundbooths are in use at other similar plants, contestant's witnesses indicated that these booths are not acoustical soundbooths, but simply enclosures to protect employees from the weather.

In Hilo Coast Processing Company v. Secretary of Labor, DENV 79-50-M, July 13, 1979, Commission Judge Moore vacated several citations after finding that MSHA had failed to prove that certain engineering controls recommended by inspector were technically and economically feasible. Judge Moore found that for the most part, MSHA's proof was based on the unsupported personal judgments of the inspector who issued the citations, and that the operator was left in the untenable position of "guessing" as to what was required by the inspector for compliance.

In MSHA v. Callanan Industries, Inc., YORK 79-99-M, decided January 12, 1981, Judge Melick vacated a noise citation after finding that MSHA had failed to establish through any credible evidence that its proposed noise controls were either economically or technologically feasible.

After careful review and consideration of all of the testimony and evidence adduced in these proceedings, I am not

persuaded that MSHA has established through any credible evidence that it is technologically $% \left(1\right) =\left(1\right) +\left(1\right$

feasible to implement the recommendations of its inspectors at the mills in question. MSHA's case is one based on broad speculative and theoretical conclusions which have no sound factual or evidentiary support. In short, it is based essentially on the subjective opinion of one inspector. When viewed in light of the testimony and evidence presented by the contestant, I simply can find no support for MSHA's position.

As indicated earlier, I have given little or no weight of the testimony of Inspector Gardy. With regard to the testimony of Inspector Worth, I believe that he made a rather cursory study of the noise levels to which the employees in question were exposed, and his testimony reflects that he had no in-depth perception as to precisely what the duties of a crusher or ball mill operator are, and it seems obvious to me that he had no idea how long he spent monitoring the tasks required of those individuals. As a matter of fact, he conceded that he was not familiar with the duties of a ball mill operator, and the record reflects that he did not speak with the individuals, and apparently made no real attempt to ascertain precisely what they were expected to do during their working shifts. Further, as noted earlier, MSHA failed to call the two operators as witnesses, and simply relied on the so-called "expertise" of its inspectors to prove its case. As correctly argued by the contestant in its post-hearing brief, MSHA's proof in this regard leaves much to the imagination.

With regard to the question concerning the mobility of the crusher operator and ball mill operator, I find that the contestant has established through credible evidence by its witnesses that it is neither feasible nor practical to isolate the two individuals in a soundbooth for the duration of time suggested by the inspector. I further find that the contestant has established that these two individuals must be mobile so that they are fully able to observe, test, and otherwise insure the safe and efficient operation of the equipment and machinery for which they are responsible. Based on the evidence presented by the contestant, subjecting these individuals to a soundbooth environment would seriously detract from their ability to effectively and safety perform their job tasks during their working shifts.

In view of the foregoing findings and conclusions, I conclude and find that MSHA has failed to establish that the contestant is in violation of the cited standards, and IT IS ORDERED that the citations issued to the contestant in these proceedings be VACATED.

George A. Koutras Administrative Law Judge