

TRANSCRIPT OF PROCEEDINGS

UNITED STATES DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

In the Matter of:)
)
MSHA'S PUBLIC HEARINGS HEALTH)
STANDARDS FOR OCCUPATIONAL NOISE)
EXPOSURE IN COAL, METAL AND)
NONMETAL MINES)

Pages: 1 through 257

Place: Washington, D.C.

Date: May 30, 1997

HERITAGE REPORTING CORPORATION

Official Reporters
1220 L Street, NW, Suite 600
Washington, D.C.
(202) 628-4888

UNITED STATES DEPARTMENT OF LABOR
OFFICE OF ADMINISTRATIVE LAW JUDGES

In the Matter of:)
)
MSHA'S PUBLIC HEARINGS HEALTH)
STANDARDS FOR OCCUPATIONAL NOISE)
EXPOSURE IN COAL, METAL AND)
NONMETAL MINES)

Frances Perkins Building
Room N5437B
200 Constitution Ave., NW
Washington, D.C.

Friday,
May 30, 1997

The hearing in the above-entitled matter
commenced, pursuant to notice, at 9:28 a.m.

BEFORE: JIM CUSTER
Moderator

APPEARANCES:

JIM CUSTER, Office of Metal and Nonmetal Mine
Safety and Health

PATRICIA SILVIE, Director, Office of Standards,
Regulations, and Variances

MIKE VOLOSKI, from the Office of Technical
Support

ROBERT THAXTON, from MSHA's Office of Coal Mine

Heritage Reporting Corporation
(202) 628-4888

Health and Safety

SANDRA WESDOCK, from the Department of Labor's
Office of Solicitor

VICTORIA PILATE, Office of Standards,
Regulations, and Variances

ADDITIONAL APPEARANCES:

ROSLYN FONTAINE, Office of Standards,
Regulations, and Variances

WILLIAM AMENT, Organization Resources Counselors,
Inc.

TERRENCE DEAR, DuPont Engineering

JOE MAIN, United Mine Workers

JAMES WEEKS, United Mine Workers of America

LINDA RAISOVICH-PARSONS, United Mine Workers

ED PLOWCHA, United Mine Workers

JON HITCHINGS, United Mine Workers

JIM MILLER, United Mine Workers

JIM LAMONT, United Mine Workers

JANICE BRADLEY, Industrial Safety Equipment
Association

ALICE H. SUTER, American Speech-Language Hearing
Association

KEVIN R. BURNS, National Stone Association

BRUCE WATZMAN, National Mining Association

BOB GLENN, National Industrial Sand Association

WILLIAM W. CLARK, Central Institute for the Deaf

TOM B. SHADE, Teamster's Local Union 992

RICK WAUGH, Teamster's Local Union 992

Heritage Reporting Corporation
(202) 628-4888

HARRY TUGGLE, United Steel Workers

ROBERT J. BLAYLOCK, Arch Mineral Corporation

MIKE SPRINKER, International Chemical Workers
Union, Council of USCW

ADDITIONAL APPEARANCES:

KELLY BAILEY, Manager, Occupational Health,
Vulcan Materials Company; Chairman, Safety and
Health Committee, NSA

CURTIS SMITH, Audiologist, Auburn, Alabama

DAVID HUDSON, Electrician, Vulcan's Graham
Quarry, Virginia

WES ING, Chairman, Noise Task Force, National
Mining Association

TIMOTHY RINK, President, HDI, Incorporated

KEN VORPAHL, Unimin, National Industrial Sand
Association

KLAUS LEIDERS, New England Stone

1 hearings are being held in accordance with Section 101 of
2 the Federal Mine Safety and Health Act of 1977, and as some
3 of you know, as is the practice of this Agency, formal rules
4 of evidence will not apply.

5 Let me give you some background into the noise
6 proposal. MSHA published an Advance Notice of Proposed
7 Rulemaking on December 4, 1989, as part of the Agency's
8 ongoing review of its safety and health standards. The
9 Agency's existing noise standards, which were promulgated
10 more than 20 years ago, are inadequate to prevent the
11 occurrence of occupational noise-induced hearing loss among
12 miners.

13 In the Advance Notice of Proposed Rulemaking, the
14 Agency solicited information for revision of the noise
15 standards for coal and metal and nonmetal mines. The
16 comment period closed on July 15, 1990.

17 On December 17, 1996, in response to information
18 received on the Advance Notice of Proposed Rulemaking, MSHA
19 published a proposed standard. The Agency has developed a
20 proposal that it estimates can reduce by two-thirds the
21 number of miners currently projected to suffer a material

1 impairment of their hearing, but which it estimates can be
2 implemented at a cost of less than \$9 million to the mining
3 industry as a whole.

4 The focus of the proposal is on the use of the
5 most effective means to control noise -- engineering
6 controls to eliminate the noise or administrative controls,
7 for example, rotating miner duties, to minimize noise
8 exposure whenever feasible.

9 The proposed standard would retain the existing
10 permissible exposure level, which I will refer to as the
11 "PEL." It would establish a new "action level" of an eight-
12 hour, time-weighted average of 85 dBA. If a miner's
13 exposure exceeds the PEL, the proposal would require that
14 the mine operator use feasible engineering and
15 administrative controls to reduce the noise exposure to the
16 PEL.

17 If engineering and administrative controls do not
18 reduce the miner's noise exposure to the PEL, the operator
19 must use those controls to lower exposure to as close to the
20 PEL as is feasible or achievable. In addition, the operator
21 would have to provide any exposed miner with annual

1 audiometric examinations, properly fitted hearing
2 protection, and ensure that the miner takes the annual
3 audiometric examinations and uses such protection.

4 The comment period was extended from February 18,
5 1997 to April 21, 1997, due to requests from the mining
6 community. MSHA has received a broad range of comments from
7 over 60 different interests, which included mine operators,
8 industry trade associations, organized labor, college and
9 universities, and noise equipment manufacturers. The
10 comments addressed the primary provisions of the proposed
11 rule, such as the action level, the PEL, methods of
12 compliance, exposure monitoring, and audiometric testing.

13 I will now discuss major provisions of the
14 proposed rule. Exposure to noise is measured under proposed
15 Section 62.120. The proposed section would require that
16 miner's noise exposure not be adjusted for the use of
17 hearing protectors, that a miner's noise exposure
18 measurement integrate all sound levels from 80 dBA to at
19 least 120 dBA during the miner's full work shift and that
20 the current 5 dBA exchange rate to measure the level of a
21 miner's noise exposure would continue to be used.

1 An action level of 80 dBA during any work shift,
2 or, equivalently, a dose of 50 percent, would be established
3 under the proposed rule.

4 For miners who are exposed to the 85 dBA action
5 level, the proposed rule does not require the use of
6 engineering and administrative controls. Rather, operators
7 would be required to provide personal hearing protection
8 upon a miner's request, annual employee training, and
9 enrollment in the hearing conservation program.

10 The proposed rule would also retain the existing
11 PEL of 90 dBA, requiring that no miner be exposed to noise
12 exceeding a TWA of 90 dBA during any work shift, or,
13 equivalently, a dose of 100 percent. While the PEL would
14 not change, the actions required if noise exposure exceeds
15 the PEL are different from the current requirements.

16 MSHA's existing metal and nonmetal noise
17 standards, for example, already require the use of feasible
18 engineering or administrative controls when a miner's noise
19 exposure exceeds the PEL.

20 The existing standards, however, do not require
21 the mine operator to post the procedures for any

1 administrative controls used to conduct specific training or
2 to enroll miners in a hearing conservation program.

3 Under MSHA's current coal mining standard, a
4 citation is not issued when a miner's exposure exceeds the
5 PEL if appropriate hearing protection is being used by the
6 miner. In the event of a violation of the coal-mining
7 standard, operators are required to properly institute
8 engineering and/or administrative controls and to submit to
9 MSHA a plan for the administration of a continuing,
10 effective hearing conservation program.

11 The proposed rule would establish a hierarchy of
12 control for all miners when exposure exceeds the PEL. In
13 addition, other aspects of the rule increase protection for
14 miners and further reduce the potential for hearing loss.

15 Under the proposal, mine operators must first
16 utilize all feasible engineering and administrative controls
17 to reduce the sound levels to the PEL before relying on
18 other controls to protect against hearing loss.

19 Furthermore, an operator would be required to
20 ensure that a miner whose exposure exceeds the PEL takes the
21 hearing examination offered through enrollment in the

1 hearing conservation program.

2 Under Proposed Section 62.120(f), MSHA would
3 require operators to establish a system of monitoring which
4 effectively evaluates each miner's noise exposure. The
5 proposal would also require that within 15 calendar days of
6 determining that a miner's exposure exceeds the action
7 level, the PEL, the dual-hearing protection level, or the
8 ceiling level, the mine operator notify the miner in writing
9 of the overexposure and the corrective action being taken,
10 pursuant to Section 103(c) of the Mine Act.

11 The proposed rule also provides for hearing
12 protection and training. Under Proposed Section 62.125,
13 miners would be given a choice from at least one muff-type
14 and one plug-type hearing protector. Under Section 62.130,
15 miners would be given required training.

16 Additionally, under Proposed Section 62.140,
17 operators would be required to offer baseline audiograms to
18 miners enrolled in a hearing conservation program. That is,
19 when a miner's exposure exceeds the action level. Prior to
20 conducting the baseline audiogram, operators would be
21 required to make certain that miners have at least a 14-hour

1 period when they are not exposed to work place noise. Use
2 of hearing protectors as a substitute for this quiet period
3 would be prohibited.

4 The proposed rule would also require mine
5 operators to offer a valid audiogram at intervals not
6 exceeding 12 months for as long as the miner remains in the
7 hearing conservation program.

8 Proposed Section 62.150 would require the operator
9 to assure that all audiometric testing is conducted in
10 accordance with scientific, validated procedures. MSHA
11 would also require that audiometric test records be
12 maintained at the mine site for the duration of the affected
13 miner's employment, plus at least six months thereafter.

14 Under Proposed Section 62.160, operators would
15 have 30 days in which to obtain audiometric test results and
16 interpretation. Additionally, under Proposed Section
17 62.180, MSHA would require that unless a physician or
18 audiologist determines that a standard threshold shift is
19 neither work related nor aggravated by occupational noise
20 exposure within 30 calendar days of receiving evidence of a
21 standard threshold shift or results of a retest confirming a

1 standard threshold shift, the operator must do the
2 following: retrain the miner, allow the miner to select a
3 hearing protector or a different hearing protector, review
4 the effectiveness of any engineering or administrative
5 controls to identify and correct any deficiencies.

6 Proposed Section 52.190 would require that within
7 10 working days of receiving the results of an audiogram or
8 receiving the results of a followup evaluation, the operator
9 notify the miner in writing of the results and
10 interpretation of the audiometric test, including any
11 finding of a standard threshold shift or reportable loss
12 and, if applicable, the need and reasons for any further
13 testing or evaluation.

14 Finally, the proposed rule would require that the
15 operator provide the miner, upon termination of employment,
16 with a copy of all records that the operator is required to
17 maintain under this part without cost to the miner.

18 This is the last of six hearings. The hearing
19 was scheduled to begin at 9:00 a.m. -- well, you know what
20 happened about that -- and to end at 5:00 p.m. If
21 necessary, however, MSHA will continue this hearing until

1 all persons have been heard today.

2 At this point, let me note that the Agency has
3 received several requests for a 60-day extension of the
4 post-hearing comment period beyond the now-scheduled time of
5 June 20th. The record is now scheduled to close on June
6 20th.

7 We have evaluated those requests in light of the
8 extensions that have already been given, including the
9 number of hearings held, and believe that a 60-day, post-
10 hearing comment period is both adequate and reasonable.
11 MSHA is, therefore, expanding the time for the record for an
12 additional 42 days until August 1st, which results in a
13 post-hearing comment period, that is, a comment period from
14 today's date of an additional 60 days.

15 This extension will be put in the Federal Register
16 for notification to the mining community. We will be making
17 this announcement several times throughout this hearing for
18 all members of the mining community. Now, I will turn the
19 hearing over to the moderator, Jim Custer.

20 MR. CUSTER: Thank you, Pat. As Pat said, I'm Jim
21 Custer, and I'm with Nonmetal Mine Safety and Health

1 Division in MSHA, and I will be the moderator for this
2 public hearing.

3 The Mine Safety and Health Administration views
4 these rulemaking activities as extremely important and
5 recognizes that your participation here today is a
6 reflection of the importance that you, the mining community,
7 attach to the rulemaking.

8 Presentation of public statements will be as
9 follows: William Ament, Organization Resources Counselors,
10 Inc.; Terrence Dear, DuPont Engineering; Joe Main, United
11 Mine Workers; Dr. James Weeks, United Mine Workers of
12 America; Linda Raisovich-Parsons, United Mine Workers; Ed
13 Plowcha, United Mine Workers; Jon Hitchings, United Mine
14 Workers; Jim Miller, United Mine Workers; Jim Lamont, United
15 Mine Workers; Janice Bradley, Industrial Safety Equipment
16 Association; Alice H. Suter, American Speech-Language
17 Hearing Association; Kevin R. Burns, National Stone
18 Association; Bruce Watzman, National Mining Association; Bob
19 Glenn, National Industrial Sand Association; William W.
20 Clark, Central Institute for the Deaf; Tom B. Shade and Rick
21 Waugh, Teamster's Local Union 992; Harry Tuggle, United

1 Steel Workers; Robert J. Blaylock, Arch Mineral Corporation;
2 and Mike Sprinker, International Chemical Workers Union,
3 Council of USCW.

4 It is intended that during this hearing anyone who
5 wishes to speak will be given the opportunity to do so.
6 Anyone who has not previously requested to speak should
7 indicate their intention to do so by signing the list of
8 speakers, which is under the care of Ms. Fontaine, at the
9 extreme right of the table. Time will be allocated for you
10 to speak following the scheduled speakers.

11 The Chair will attempt to recognize all speakers
12 in the order which they are requested to speak. If
13 necessary, however, the moderator reserves the right to most
14 of the order of presentation in the interest of fairness.

15 Also, as the moderator, I may exercise discretion
16 to exclude irrelevant or unduly repetitious material. in
17 order to clarify certain points, the panel may ask questions
18 of the speaker. Also, you asked to refrain from asking
19 questions of the presenters during this hearing, but you may
20 question the panel.

21 All comments are important to the Agency. MSHA

1 will accept written comments and other appropriate data on
2 the proposal from any interested party, including those who
3 will not present an oral statement. Written comments may be
4 submitted to Roslyn Fontaine during this hearing or sent to
5 Patricia Silvie, Director of MSHA's Office of Standards, at
6 the address listed in the hearing notice.

7 All written comments and data submitted to MSHA
8 will be included in the rulemaking record. Should anyone
9 desire to modify their comments or submit additional
10 comments following the hearing, the record will remain open,
11 as stated this morning, until August 1, 1997, to allow for
12 submittal of post-hearing comments and data. If possible,
13 the Agency would appreciate receiving a copy of your
14 comments in electronic file on computer disk.

15 The comments are essential in helping MSHA develop
16 the most appropriate rule that fosters health among our
17 nation's miners. We appreciate the constructive criticism
18 and the hard work and careful thought which your comments
19 represent.

20 Personally, and on behalf of the Assistant
21 Secretary of Labor for Mine Safety and Health, J. Davitt

Heritage Reporting Corporation
(202) 628-4888

1 McAteer, I would like to take this opportunity to express
2 our appreciation to each of you for being here today and for
3 your input. MSHA looks forward to your continued
4 participation in the Agency's rulemaking activities.

5 Before we begin with the first speaker, you are
6 reminded to sign the attendance sheet that we have located
7 on the table outside of the auditorium whether or not you
8 choose to speak. Also, once again, if your name does not
9 yet appear on the list of speakers, you will still have an
10 opportunity to present your testimony by notifying Mrs.
11 Fontaine of your intent.

12 For each speaker, before you begin your statement,
13 please come to the podium, state your name and organization,
14 and spell your name for the reporter. If you have copies of
15 your prepared testimony, please present copies to the panel
16 as you begin. Thank you. Our first speaker this morning is
17 William Ament.

18 MR. AMENT: Good morning. It's an unexpected
19 pleasure to be leading off this morning. I was not aware
20 that that was going to be the case. I do have copies, as
21 well as a card, that we can give to the court reporter.

1 My name is William Ament. That's A-M-E-N-T. I am
2 an attorney and consultant with Organization Resources
3 Counselors, Inc. In that capacity, I am responsible for
4 reviewing all governmental regulatory initiatives that
5 address a wide variety of occupational safety and health
6 issues, including occupational exposure to noise.

7 The purpose of this statement is to present the
8 views of ORC in response to the December 17, 1996 request
9 for comments on the MSHA rule on occupational exposure to
10 noise in coal metal and nonmetal mines. We are pleased to
11 have this opportunity, and we will respond with post-hearing
12 comments to both the issues I've raised here, as well as
13 those raised by other participants in this hearing.

14 ORC sponsors occupational safety and health groups
15 that include more than 150 mostly large companies from a
16 wide variety of industries, including some with mining
17 interests. These companies have a strong commitment to
18 responsible and effective employer occupational safety and
19 health programs. This statement, however, is solely the
20 responsibility of ORC and may differ from comments submitted
21 by individual member companies.

1 We urge our individual company members to
2 participate in all the rulemaking hearings and present
3 whatever views they have. In fact, we encourage them to
4 contrast their views with ours if that is appropriate.

5 In this forum, we will limit our comments to ORC's
6 view of an effective and responsible regulatory approach
7 addressing occupational exposure to noise, as well as the
8 philosophy underlying regulation of the subject. ORC's
9 post-hearing comments will expand on these issues and, if
10 appropriate, will address issues raised by other
11 participants.

12 Traditionally, ORC's regulatory concerns are
13 limited to those that address hazards in general industry
14 and sometimes construction and maritime. Some issues,
15 occupational exposure to noise being one, transcend industry
16 classification if not only because of the ubiquitousness of
17 the hazard, but because the widespread and interlocking
18 concerns of the interested parties.

19 In addition, some regulatory initiatives such as
20 this one deserve comment because they mark a deep departure
21 from current approaches embodied in other regulations. The

1 change in the ACGIHTLV, the proposals made by NIOSH in its
2 April 16, 1996 draft criteria document on occupational
3 exposure to noise, and this MSHA rulemaking initiative have
4 raised the issue to a level that should be of concern to all
5 employers.

6 The regulatory agencies, such as OSHA and MSHA, we
7 believe, have the responsibility to develop their
8 regulations so that they not only meet the technical
9 requirements of the agencies' enabling legislation, but do
10 so in manner that takes into account the following concerns,
11 among others.

12 The rule should be cost effective. In today's
13 regulatory atmosphere, agencies such as MSHA and OSHA have
14 responsibility to focus on the effectiveness of regulations
15 rather than allowing final regulations to merely be a
16 reflection of the authority given the agencies by Congress.

17 We are not talking about strict cost-benefit
18 considerations, although we believe that those issues are
19 appropriate regulatory concerns, but about the
20 responsibility of regulatory agencies to select the least
21 costly regulatory solution that can arguably meet the

1 agencies' requirements and its legal mandates. And a
2 particular issue that I'm going to be discussing here, rules
3 should be consistent across industry lines.

4 I know there are differences from industries. I
5 know that MSHA exists because of a view, and an appropriate
6 one in many cases, that mining is an unusually dangerous
7 industry, but nevertheless we would like to see the
8 consistency be an important goal to the extent possible.

9 We recognize that the current situation of having
10 different regulatory requirements addressing exposure to
11 noise for metal and nonmetal, as compared to the coal
12 industries, needs to be addressed.

13 This piecemeal regulation of occupational exposure
14 to noise by agencies in the same executive department is not
15 in the public interest, in our view. In correcting this
16 unfortunate situation, we urge MSHA to recognize the well-
17 accepted and successful OSHA model, especially its approach
18 to feasibility and the use of hearing protection if the
19 exposure is less than 100 dBA as an acceptable alternative
20 to the MSHA proposal.

21 We recognize that incorporation of these concerns

1 into the MSHA approach to the regulation of exposure to
2 noise requires substantial change to the regulatory
3 solution, especially as it addresses the concept of
4 feasibility currently being considered by MSHA, but we
5 believe that such an action is important enough to support
6 such changes. MSHA has the responsibility, in our view, to
7 exhaustively examine the OSHA model before proceeding with
8 any alternative approach.

9 Consistent, cost-effective regulations that make
10 sense in the real world of employer implementation, in our
11 view, can go a long way toward achieving the goals MSHA has
12 set for this rulemaking.

13 We support the decision of the Agency to defer
14 consideration of the proposal included in the NIOSH draft
15 criteria document. It is ORC's view that such consideration
16 of the proposal would be premature, and there are several
17 serious concerns as to whether the NIOSH recommendations
18 take into account the pragmatic and legal limitations placed
19 on MSHA as those limitations are placed upon OSHA by both
20 its enabling legislation and court decisions.

21 We believe that Section 22 of the Occupational

1 Safety and Health Act of 1970 supports this view by stating
2 that as an important part of NIOSH's mission, the director
3 is, one, to consider such research and experimental programs
4 as the director determines are necessary for the development
5 of criteria for new and improved occupational safety and
6 health standards, and after consideration of the results of
7 such research and experimental programs, make
8 recommendations concerning new or improved occupational
9 safety and health standards.

10 Although she does not address the MSHA regulatory
11 process in NIOSH Director Linda Rosenstock's foreword to the
12 criteria document, she described the OSHA rulemaking process
13 and the limitations on OSHA in its authority to promulgate
14 standards. Without such a recognition, NIOSH's efforts
15 would be of little practical use to OSHA or, similarly,
16 MSHA.

17 Historically, reactions to employee exposure to
18 noise have generated emotional as well as scientific
19 responses to such an extraordinary extent that productive
20 dialogue has often been difficult, and I'm sure you have
21 found that to be true in many cases.

1 There are two areas of concern about the criteria
2 document and NIOSH's approach to the development. The draft
3 document was not prepared or reviewed by a broad spectra of
4 interested parties needed for the development of a criteria
5 document addressing such a controversial subject.

6 The expert panel, for example, which reviewed the
7 document and appeared at the public hearing desperately
8 needed additional viewpoints.

9 Whether or not NIOSH staff wish to think in these
10 terms, NIOSH is so closely related to OSHA and MSHA that its
11 activities are regulatory in consequence. For these
12 reasons, ORC supports MSHA in its decision to defer
13 consideration of the NIOSH proposals.

14 It is appropriate, we believe, that the debate
15 over the provisions of the NIOSH regulations addressed in
16 this rulemaking focus on the OSHA model and the differences
17 between the metal, nonmetal, and coal regulations in terms
18 that reflect traditional thinking about noise regulation.

19 The remainder of these comments will address
20 selected provisions in the MSHA proposal we believe are
21 important elements in the debate over a standard that will

1 effectively regulate occupational exposure to noise. In
2 addition to the deferral of consideration of the NIOSH
3 proposals, ORC supports the following MSHA proposals.

4 One, maintaining the exchange rate at 5 dB. The
5 earlier NIOSH criteria document on employee exposure to
6 noise recognized that a 5 dBA exchange rate was a real-world
7 descriptor of the effect increased noise levels have on
8 hearing.

9 Even the 1996 criteria document, which recommended
10 a 3 dB exchange rate, notes that that rate would be overly
11 protective in some cases. Also, the 5 dB exchange rate is
12 consistent with the OSHA model.

13 Two, maintaining the age-adjusted, 10 dB standard
14 threshold shift at 2, 3, and 4 kHz and a reporting
15 requirement at 25 dB. As a referral mechanism, the 10 dB
16 requirement can arguably be a part of an effective hearing
17 conservation program. OSHA, in ORC's view, has erred in
18 proposing a reduction of the recording criteria -- that's
19 OSHA's recording criteria -- from 25 to 15 dB at 2, 3, and 4
20 kHz levels. The proposed STS is consistent with the OSHA
21 model.

1 ORC particularly opposes the feasibility approach
2 described in the proposal. This approach is dramatically
3 inconsistent with the OSHA model on occupational exposure to
4 noise and ignores substantial industry experience with the
5 use of hearing protection and the effectiveness of properly
6 implemented, OSHA-mandated, hearing conservation programs.

7 Although arguments about the effectiveness of the
8 OSHA model are an appropriate line for inquiry, rejection of
9 the model and implementation of a more stringent approach
10 should not be undertaken until any unresolved questions
11 about the OSHA model are answered. It is our view that
12 unless a definitive response and examination of the OSHA
13 model can show that it does not meet the needs of the
14 requirements of MSHA, that MSHA has the responsibility to
15 create a consistent exposure to noise regulatory policy and
16 to do so by adopting the OSHA model.

17 We believe that this is the important OSHA
18 rulemaking that may set a pattern for the regulation of
19 occupational exposure to noise. We approach having the
20 opportunity to participate in the rulemaking and will be
21 available to MSHA for further comments in response to

1 questions. And as I mentioned, we do intend to file post-
2 hearing comments. Thank you.

3 MS. PILATE: On page three of your written
4 comments you discuss --

5 MR. AMENT: Yeah. I'm sorry. I can't hear you.

6 MS. PILATE: On page three of your written
7 comments, you discuss the agencies' responsibility to select
8 the least cost regulatory solution that can arguably meet
9 the agencies' requirements and legal mandate. Are you aware
10 that the agencies did do an analysis?

11 MR. AMENT: Yes, I am.

12 MS. PILATE: And you still believe that we did not
13 select the least-cost alternative?

14 MR. AMENT: I think that to match this with my
15 view of your examination of the OSHA model, I think that
16 there is always a question whether a regulatory agency fully
17 examines all of these issues in a way that is
18 straightforward, consistent, and absolutely complete, and I
19 urge that the agency go to extraordinary lengths to make
20 sure that the OSHA model is not rejected without
21 extraordinary concern about its effectiveness.

1 If the agency has come to the conclusion that, in
2 fact, it has done that, then so be it. That's the
3 responsibility of the agency, but I think evidence is going
4 to be presented by the testifiers, and probably has been,
5 that maybe that conclusion shouldn't have been reached yet.
6 But I understand that you have made such studies, and we
7 will probably comment on them further in our post-hearing
8 comments, because that is an issue we are very concerned
9 with.

10 MR. CUSTER: Thank you, Mr. Ament. The next
11 scheduled speaker is Terrence Dear, DuPont Engineering.

12 MR. DEAR: My name is Terrence Dear, D-E-A-R. I
13 am a principal mechanical engine from the DuPont Company,
14 Wilmington, Delaware; and I will submit my written comments
15 sometime later.

16 I would like to address the MSHA proposed rules of
17 12/17/96, in the priority order of concerns, and first to
18 say that the Agency has made a correct decision in
19 maintaining the 90 dBA, eight-hour criteria level, and
20 having said that, have concerns about the basis that it has
21 used in particular in terms of the pertinent legal

1 requirements at page 66447, column three, where the Agency
2 is required to use the best available evidence, the latest
3 scientific data, and the experience of other regulations.

4 I think the risk analysis that comprises Section
5 I(5) of those proposed rules does not in any way reflect
6 either the best available evidence or the latest scientific
7 data or experience under current regulation. It must be
8 realized that the proposed rules contain a risk analysis
9 that is really dated to the preregulatory era, that is to
10 say, even before the Walsh-Healey Act of 1969.

11 And this is noted by the use of the terms "damage
12 risk criteria, percentage risk," and the history of this is
13 well known. It's documented in a book by Olshifksi &
14 Harford called Industrial Hearing Conservation, published in
15 1975, the National Safety Council, that those percentage
16 risk and damage risk criteria came from the Intersociety
17 Committee deliberations in the sixties.

18 That is to say that MSHA and others, such as NIOSH
19 in its criteria document, that preceded these proposed rules
20 in draft form, have failed to recognize that there is more
21 than 25 years of longitudinal, epidemiologically sound data

1 of industrial hearing conservation program efficacy of
2 preventing occupational noise reduced hearing loss in
3 industry and that in concept MSHA's proposal is to say that
4 there is zero credit for such intervention, for example, as
5 is required by its own regulation.

6 That is to say, we don't know of anybody in the
7 insurance industry around the world who could survive, based
8 on doing that kind of risk analysis and saying 25 years
9 later that it is still valid. It is also like saying that
10 the risk of getting polio in 1996 is the same as it was in
11 1941, providing you exclude any benefit of the Salk
12 vaccines.

13 In addition, the bases for MSHA cost estimates do
14 not address any of the stated requirements that override all
15 other requirements, and this also affects this concept of
16 PEL and cost benefits, and I just want to address your
17 attention to what the proposed rules actually say in an
18 overriding standpoint.

19 Regarding, for example, cost impact on the mining
20 industry at page 66350, beginning at line 31, column one,
21 and let's now go and look at the facts at page 66454, where

1 it says: MSHA will require mine operators to consider all
2 possible controls, so as to find a combination that will, in
3 fact, reduce noise as much as possible, underlining the word
4 "possible" for emphasis. "Possible" is not "feasible."

5 Possible is open ended. Possible defies anyone's
6 ability to enforce a regulation that would overemphasize the
7 capability of such enforcement.

8 I would like to refer to the fact that when
9 considering the PEL at this point in time, MSHA, like other
10 involved agencies, should have considered not only the
11 reduction or change of PEL, but the increase of PEL.

12 And MSHA, in fact, within the proposed rules,
13 gives its own reasons for why the numbers of dose, for
14 example, just from a numerical standpoint, have been
15 increasing.

16 And I just wanted to point out that there has been
17 a de facto lowering of criterion level in PEL since the
18 advent of the noise dosimeter, which I might add, I was a
19 co-inventor of the first one in industry back in the late-
20 1960's of the system, and it's for the following reason.

21 First of all, dosimeters operate totally

1 differently than hand-held, sound-level-meter
2 instrumentation, both in principle and protocol. They
3 handle impulse and impact noise in an undamped manner, and
4 also there is little control at the present time over the
5 frequently range of interest. For example, in the MSHA
6 criteria document, you will find a line item suggesting that
7 noise-dose recording should include the 16 kHz center
8 frequency of that octave band.

9 Further proposed de facto reductions in the MSHA
10 regulation include lower integration threshold to 80 dBA,
11 which the Agency admits will just increase the numbers and
12 put more people, more miners at apparent risk.

13 They propose to increase the dynamic range,
14 propose to change the response time characteristics, or at
15 least examine that possibility. And by the way, one of the
16 concerns I have throughout this proposed rule set is that
17 there are not hard-and-fast decisions made, but much
18 wavering, for example, in terms of the PEL and some of these
19 other exchange rate and some of these issues. They were not
20 clear, concise decisions.

21 These are well-known methods of arbitrarily

1 increasing does numbers, and it's a situation of raising the
2 bridge and lowering the water simultaneously, apparently
3 later on to be combined with derating of personal hearing
4 protection, the elimination of personal hearing protection
5 device effectiveness from dose assessments, and possibly
6 changing the exchange rate.

7 The conclusion on that regard, they are
8 unnecessary and inappropriate requirements. And this is
9 deja vu all over again for me, having participated in the
10 1975 OSHA hearings on many of these same subjects, and I
11 would refer you to absolute conclusions to OSH Dockets 10
12 and 11, where these matters have been discussed in a lot
13 more detail than I have time to pursue today.

14 My second priority is to make sure that the Agency
15 understands the valid reasons for retaining the 5 dBA
16 exchange rate. And by the way, I'm not going to be able to
17 get into it, but I would point out that in the definitions
18 within the proposed rules the only place where the exchange
19 rate is properly identified in terms of the appropriate
20 designation, "dBA," is in the definition.

21 Elsewhere in the document that definition, for

1 whatever reason, is not used. I saw 5 dB, 3 dB, 5- dB, 3-
2 dB; only in the definitions did I see anything near an
3 appropriate definition.

4 Also, we had the Burns and Robinson study
5 revisited. I should point out that that was originally
6 eliminated from consideration by MSHA in its criteria
7 document of 1972 as reference 127. And the problem with the
8 Burns and Robinson study is they found it extremely
9 difficult to examine a case between what they called
10 "equinovicity" and equal energy hypotheses when they
11 couldn't identify or determine the dose for any individual
12 in their study plus or minus 5 dBA. And I think those of us
13 that do this for a living can understand that.

14 I'd also point out something that has not been
15 recognized heretofore, I don't think, and that is that the
16 original exchange rate basis that was picked by the
17 Intersociety Committee, which, by the way, considered
18 exchange rates up to and including 9 dBA, for good reasons,
19 but those original intermittency arguments were based upon
20 establishing a known relationship between temporary
21 threshold shift and permanent threshold shift.

1 And when that was abandoned, people continued to
2 say that those criteria demonstrate that intermittency
3 requirements cannot be met in the industrial work place.
4 Let me go back to Burns and Robinson and tell you what the
5 essence of their study was that they did prove, and that was
6 the emission concept.

7 The emission concept said you need to look at
8 those not only arbitrarily convenient intraday basis, but on
9 a weekly, monthly, and even yearly basis.

10 And I'll tell you what intermittency aspects are
11 for those, in case you are interested, and that is on a
12 weekly basis there are 120 hours of well-spaced
13 intermittency in 168 hours minimum on a monthly basis, 530
14 hours of well-spaced intermittency in 720 hours. And MSHA's
15 claim in the proposal that we have to make an assumption
16 about intermittency is, therefore, incorrect.

17 Moreover, there is one assumption that has to be
18 made to justify the equal-energy hypothesis, and that
19 assumption is that there is zero emittency in every day a
20 worker works in the United States of America. The
21 probability of zero emittency existing in the U.S. work

1 place is, of course, close to zero, if not zero. So that
2 assumption has gone.

3 I say intermittency of exposure is the rule, not
4 the exception. And there is also a fact that governing
5 agencies, regulatory agencies have chosen to ignore the fact
6 that there is in situ intermittency that is based on the use
7 of personal hearing protection, particularly where those
8 personal hearing protectors are used properly in an OSHA-
9 type hearing conservation program -- never been credited by
10 any agency.

11 Furthermore, longitudinal, epidemiological studies
12 prove that the 5 dBA exchange rate works extremely well in
13 preventing occupational noise-induced hearing loss well
14 below historical damage-risk criteria and percentage-risk
15 criteria used by MSHA and others, and I would maintain if it
16 ain't broke, don't fix it.

17 Other claims include, in the absence of fact, that
18 the equal energy hypothesis is convenient, appealing, makes
19 instrumentation easier, and a whole a lot of other things
20 that in today's world are not true.

21 Finally, I would point out that the three-versus -

1 five issue is clearly resolved by NIOSH in its criteria
2 document of April 23, 1996, in the following way. And I was
3 a little surprised, I must say, interject, that MSHA did not
4 pick up on this specific technical error of some magnitude.
5 And that is to say, NIOSH attempted to use an intensity
6 analysis to prove the equal energy hypothesis, and when one
7 corrects their flawed intensity analysis, one finds that
8 they are recommending the 6 dBA exchange rate as the proper
9 choice, which is further underscored by Vice and Hanson, and
10 it is, in fact, the latest scientific and best available
11 evidence that their widely acclaimed reference of 1996
12 provides.

13 I urge you to maintain the 5 dBA trading
14 relationship and not to get caught up in the 25-year-and-
15 more controversy of the equal energy hypothesis. Remember,
16 we won World War I, World War II, and we are not much
17 interested in the problems that Europeans have in their
18 noise regulation, because unlike a comment that I've also
19 found in the MSHA proposed rules, we have to realize that
20 there is very little-to-zero enforcement of these principles
21 in Europe and other countries.

1 My third priority is to establish the overall
2 primacy of the hearing conservation program per OSHA 3883
3 regulation, the current standard. And I would point out
4 that the hearing conservation program comments within the
5 proposed rules are not very true to what the real program
6 should be like, and, in fact, MSHA finds itself in the
7 awkward position of saying, in essence, a program that it
8 doesn't have doesn't work; and that's, I found, an awkward
9 position to take.

10 The hearing conservation program also does not
11 appear in either the benefits-of-cost charts on page 66350,
12 and there is no total annual cost representing all required
13 elements of an effective hearing conservation program.

14 We recommend that MSHA change its hierarchical
15 approach of the proposed rules to give due primacy to the
16 hearing conservation program as the best proven, best
17 available evidence of the overall method of preventing noise
18 and induced hearing loss for individual miners, which should
19 be the overriding and preeminent objective of the proposed
20 rules.

21 I find the fractions being discussed about who

1 will be protected, who will not be protected, who will be
2 saved, to quote MSHA, and who will not be saved, very, very
3 disconcerting, and one would hope at this juncture, as we
4 enter the next millennium, that MSHA and other agencies
5 would catch up with what's actually going on out there in
6 industry in regard to hearing protection and the context of
7 a hearing conservation program and what that difference
8 implies.

9 My fourth priority is to require that economic
10 feasibility should reflect the cost to meet the PEL and not
11 what has heretofore been discussed and proposed even 25
12 years ago as lowest-level feasible. I don't have time to go
13 through all the reasons for discussing this problem, but it
14 should be brought to MSHA's attention that the standard and
15 the PEL should be one and the same, even in context of the
16 requirements of the Mine Act.

17 In fact, as most of us who work in this field
18 know, in actuality, the standard is a device with which you
19 make the measurement, and that's what determines all of the
20 facts and consequences to those facts that -- according to
21 these kinds of regulations.

1 The fifth priority I have is that we should
2 require in all applications of personal hearing protection,
3 and I didn't see it mentioned in the MSHA requirements, but
4 it's most important, that the MSHA I method be used,
5 particularly versus arbitrary derating of person hearing
6 protection devices; and, moreover, that MSHA should retain
7 the personal hearing protection device adjustments of
8 exposure levels.

9 And in the context of an effective hearing
10 conservation program, as I said, not of the type that is
11 outlined necessarily in this particular set of proposed
12 rules, but in a strict accordance with the OSHA noise
13 regulation of March 8, 1983, that these kinds of performance
14 of personal hearing protection are best evaluated by that
15 process, and that all the other processes are mere
16 speculation.

17 Whether it's the laboratory data, field data,
18 performance data, the real performance is what's going on
19 with the individual miners that have to wear these devices,
20 and how is the best way to evaluate that on an annual basis?

21 The other priority that I have, which is my sixth

1 priority, is it's essential to maintain mine operator
2 flexibility of choice of how they pursue occupational noise-
3 induced hearing loss prevention and related compliance
4 methods. I have written a piece which is far too long to
5 accommodate at this time, but MSHA has included within the
6 proposed rules what I call a paradox of inflexible
7 flexibility, and that has to do with this process whereby
8 engineering controls are actually placed first, even though
9 there is said to be no hierarchy, and administrative
10 controls second, and there is a consequence of engineering
11 controls required that says basically -- and administrative
12 controls that says basically you try what is agreed by the
13 agency to be feasible regarding engineering controls; and
14 then if that doesn't work, then you go over to the
15 administrative controls. So there is a definite hierarchy
16 in this process, and you can find that hierarchy at pages
17 66453 through 66456.

18 My seventh priority is that MSHA should provide
19 realistic cost-impact estimates that address the
20 requirements stated in the proposed rules, that is, for
21 example, as I've already said, at page 66454, column one,

1 line 31, the all-possible, as much as possible requirements
2 for which it may be extremely difficult to put cross numbers
3 on them, and also at page 66356, column one, line 54, where
4 MSHA says it generally considers a reduction of 3 dBA or
5 more to be a significant reduction of sound level -- hear
6 me, sound level.

7 Remember, the Commission, in the paragraph
8 immediately preceding that, was quoted as talking about
9 exposure level. Of course, the difference between noise and
10 noise level, sound and sound level, exposure level and noise
11 permeates this document. In fact, I could direct you to
12 many, many instances where the word "noise" is used where
13 the "noise exposure" should be used, where "sound level"
14 where "noise exposure" should be used, and this is another
15 example.

16 And it brings up some very serious questions
17 because if, in fact, the Agency is struggling with a
18 determination or the difference between noise and noise
19 exposure and sound levels and exposure to sound, then one
20 wonders how, when at page 66454, at line 43, column two,
21 MSHA, the knowledgeable, I quote, and active partner, can,

1 in fact, go back and forth between noise exposure and the
2 sound levels measured at sources. This requires some very,
3 very sophisticated modeling.

4 I don't know whether it's appropriate to ask now
5 or not. May I ask a question of the panel? The question I
6 would like to ask is the following. Can MSHA describe the
7 models, software codes, protocol, whatever that it uses in
8 the presence of multiple sound-source environments to
9 evaluate the existing exposure determined by measurements,
10 presumably statistically valid measurements -- we can get
11 into that as well -- and then what process, what models,
12 specific models are used to deconvolute those exposures back
13 to required noise reductions for each and every one of the
14 contributing noise sources.

15 We are in an age of design by analysis. The next
16 millennium we will address and continue with those kinds of
17 procedures. So I would like to know how do you go back and
18 forth between exposure levels and sound levels and make a
19 determination about individual sound-source reduction in the
20 face of a given exposure determination.

21 MR. CUSTER: The question has been noted in the

1 record and will be addressed after the post-hearing
2 conference.

3 MR. DEAR: I understand it's a complicated
4 question. I just wanted to make sure that we are all aware
5 of what those statements on those pages actually imply.
6 What they imply is that the technical support, I believe is
7 the quoted group within the agency, has all these
8 capabilities, and my interest is to know what those
9 capabilities are, and I can tell you, the world will beat a
10 path to your door if you have these advanced capabilities,
11 and they involve very sophisticated technical models, and I
12 would like to know exactly what MSHA is talking about and,
13 in essence, what is the backup for the claims made on page
14 66454, 66455.

15 I don't know where I am with the time. Ms.
16 Silvie, could you help me?

17 MR. CUSTER: How close are you to the close of
18 your statement?

19 MR. DEAR: Well, I could go on quite a while, but
20 I could close by saying, and if necessary, I could come
21 back.

1 MR. CUSTER: Okay. If you would help us out here
2 because of the number of speakers we have, in order to give
3 others an opportunity, if you would close out soon --

4 MR. DEAR: Yeah. I'll agree to stay as long as
5 necessary and come back as required.

6 MR. CUSTER: We would certainly appreciate that,
7 sir.

8 MR. DEAR: Fine. My tenth priority was going to
9 be to identify and correct a number of technical errors,
10 false claims, and oversights that I saw in the proposed
11 rules. I gave NIOSH a grade. I teach acoustics and noise
12 controls as some of you know. I have done so for many, many
13 years. And I chose to grade the NIOSH definitions, and
14 there were 32 definitions, and I could only come up with a
15 grade of about 45 percent, being very, very liberal.

16 I realize that MSHA had the opportunity to copy
17 over those definitions, and I'm really glad you didn't.
18 However, I would just like to point out that there are
19 problems with the definitions that have been presented,
20 detailed technical problems. For example, there is one that
21 talks about the A-weighting network. It's gotten right the

1 first time, wrong the second time, but the key is, I'll
2 point out to you now, that the MSHA definition does not
3 state what goes on at a kilohertz correctly.

4 At a kilohertz, the A-weighting is plus or minus
5 zero. That is not what's in the definition that MSHA has
6 presented, and I wanted to point that out to say that's
7 where I would start, and now I'm going to conclude. Thank
8 you very much.

9 MR. CUSTER: Thank you, Mr. Dear.

10 The next scheduled speaker is Joe Main of the
11 United Mine Workers.

12 MR. MAIN: Good morning. My name is Joe Main, M-
13 A-I-N. I'm with the United Mine Workers of America, and the
14 first thing I want to do is commend the Agency for moving
15 forward to revise a rule that has needed revisions for quite
16 some time, and that is the noise rule that we are discussing
17 today.

18 It won't be long until you're sitting down and
19 writing that final rule, whatever it may be, but I think as
20 you do that, you do need to understand that you pick this up
21 through the comment period, that there are some shortcomings

1 to the rule that you have proposed. If the Agency issues a
2 final rule that will, in fact, prevent the occurrence of
3 occupational noise-induced hearing loss among miners,
4 significant changes in the current rule will have to occur,
5 and, moreover, improvements will be necessary beyond those
6 that were proposed in the December 16, 1996 Federal
7 Register.

8 It should be pointed out that some of the
9 standards proposed by MSHA ignore protections contained in
10 the 1977 Mine Act and Title 30, C.F.R. Since these rules
11 are being developed for the purpose of miners from hearing
12 loss at the work place, MSHA needs to understand what miners
13 want and need to accomplish that. First and foremost,
14 miners do not want to suffer hearing loss as a result of
15 their occupation as a miner, and I think that is the first
16 thing that everyone has to understand is the primary hope of
17 these rules in the minds of miners.

18 Now, they have a right to expect that, and
19 employers have an obligation to make sure that miners are
20 protected against such damage to a special and critical
21 sense placed in the human body. Mine operators have the

1 responsibility to factor that in as they design the work
2 places for miners, and we think that's a lost equation in
3 the way that the mining industry has been structured over
4 the past several years.

5 A loss of hearing has a long-term repercussion to
6 miners. God gave human beings a sense for reason, and I
7 think we need to all understand that, and anyone who has
8 become hearing impaired knows quite well what the
9 difficulties of life are. Being hearing impaired creates
10 difficulties in just carrying on communications with people
11 in a social environment or other environments. If you go to
12 an event or an activity where listening is part of the
13 event, it's difficult to function socially, to understand
14 what's going on.

15 For the hearing impaired, "What did you say?" or
16 "What happened?" becomes part of their normal vocabulary.
17 They have to keep seeking from someone else in a different
18 way of communicating what's going on in the world, what's
19 going on in their environment.

20 Ask the hearing impaired how difficult it is to
21 move around in the world's environment. Like in a coal

1 mine, the ability to hear in the general environment is
2 important to enable one to keep out of harm's way. Loss of
3 hearing puts people in danger. So it's very important that
4 these rules serve to protect miners against a loss of
5 hearing in the work place.

6 Secondly, miners don't want their hearing
7 intentionally impaired in the work place as the means to
8 achieve protection against occupational hearing loss, and
9 what that simply means is, don't put me in an environment,
10 cut off my ability to hear to protect my hearing as a means
11 to prevent me from being hearing impaired. That's not what
12 they are looking at as a solution. Having one's hearing
13 obstructed in a work environment is a last resort, not a
14 first step to fixing a problem.

15 When the numerous hazards that can harm you in the
16 work place are being placed in confined spaces where
17 equipment and machinery is moving around, taking away this
18 sense of hearing is not a wise idea. Placing workers in
19 locations where they are subject to being crushed by
20 equipment or materials in cutting off their ability to hear
21 noises that may warn them of impending harm is not the

1 proper choice of solutions for protecting miners against the
2 risk of hearing loss. The proper choice is to reduce the
3 noise level at a source.

4 In the coal-mining industry, these principles
5 somehow became like a lost ball in tall weeds. As a result,
6 controlling noise levels at their source as a method of
7 protecting miners from occupational hearing loss was
8 conveniently replaced by simply handing miners ear plugs,
9 accompanied with work rules to wear them, regardless of the
10 hazards of the work place. Miners deserve better than that.

11 Congress, in the passage of the 1969 act,
12 recognized this concern. The legislative history of the '69
13 Coal Mine Health and Safety Act points that out. As a
14 result, Congress placed a requirement in Section 206 of the
15 Mine Act which would guard against the use of personal
16 protection to control miners' noise exposure where they
17 would pose a hazard to the miners. That's currently in
18 Section 206 of the Mine Act.

19 That congressional concern seems to be forgotten
20 in the proposed rules. It is also unfortunately ignored
21 with the application of the current rules. Many miners

1 believe that mine operators ignore noise-reduction solutions
2 and work place hazards by simply handing them a cheap set of
3 ear plugs. They don't check to see if that even results in
4 a hazard to the miner.

5 It's time to end this negligent approach.
6 Emphasis in the rule must be geared toward requiring
7 operators to pursue meaningful engineering controls to
8 reduce noise levels at its source. The final rule should be
9 technologically forcing. Although it is the responsibility
10 of the operators to develop noise-reduction controls, I
11 would urge that all sectors of the government that have some
12 responsibility to protect miners from hearing loss be called
13 upon to help.

14 The Mining Research Center of NIOSH should be
15 called upon to identify noisy mining environments and help
16 find solutions to engine those out. MSHA needs to be more
17 diligent in identifying noisy work locations in the mining
18 industry and providing guidance on solutions to engine those
19 out. Our organization is willing to join that effort.

20 The Agency also needs to be more mindful of the
21 current law requiring mine operators to employ protective

1 systems to reduce noise as opposed to personal protective
2 devices that may cause a hazard to miners.

3 Miners want a noise exposure level set that
4 protects them against hearing loss. When MSHA issues the
5 final rule, they must be able to tell miners that they
6 should expect to spend a career as a miner and not suffer
7 hearing loss as a result of their occupation as a miner.
8 MSHA needs to tell them that they have not increased the
9 risk of injury or illness from other factors as a result of
10 the rules that they will employ.

11 Miners want quality surveillance of the work place
12 to assure that noise levels are maintained at levels that
13 will not impair their hearing. They also want a system in
14 place that will require immediate corrective action if noise
15 levels exceed established levels. Surveillance by the mine
16 operators and government agencies are important to achieve
17 this.

18 Congress recognized this important part of
19 assuring that miners would be protected against harmful
20 noise levels at the mine as they constructed the 1969 Coal
21 Mining Health and Safety Act. The legislative history on

1 that Act shows that they were insistent on requiring mine
2 operators to conduct tests of noise levels of the mine and
3 both MSHA and NIOSH certification of those results.

4 Congress placed a requirement in Section 206 of
5 the Mine Act that was very straightforward. That section
6 required mine operators to conduct tests at least every six
7 months of the noise levels at the mine and report and
8 certify the results to two government agencies, now MSHA and
9 NIOSH. Those are currently contained in 30 C.F.R., part
10 71.803. Instead of strengthening that standard to improve
11 work place surveillance, the proposed rule instead basically
12 abolishes it. That is contrary to requirements of Section
13 101(a)(9) of the Federal Mine Health and Safety Act.

14 Miners want the opportunity to have their hearing
15 acuity tested to determine if they are being adversely
16 impacted by the noise level in the mining environment. Mine
17 operators should be obliged to provide these tests at no
18 charge to the miner in a way that provides for accurately
19 and integrity. If their hearing is being impaired, they
20 have a right to know. I think it's that simple.

21 I've only touched upon some of the issues of

1 concern today to miners with respect to the rules. During
2 the comment period on these important rules, you have heard
3 from many miners and their representatives about the
4 problems identifying the inadequacies of the current rule
5 and the need to have meaningful fixes to those.

6 You have heard that miners are having their
7 hearing impaired as a result of their occupational
8 exposures. You have heard about mine operators who have
9 ignored fixing noise problems. You need to listen carefully
10 at these comments, which is sometimes something that some of
11 the miners are no longer able to do. You must, in the end,
12 issue rules that really work to end hearing impairment at
13 the work place and in a way that doesn't create other risks
14 to miners. Thank you.

15 MR. CUSTER: Thank you, Mr. Main. The next
16 speaker scheduled is Dr. James Weeks of the United Mine
17 Workers of America.

18 MR. WEEKS: Good morning. I appreciate the
19 opportunity to speak on this set of rules that you all have
20 proposed. My name is Jim Weeks. I'm an industrial
21 hygienist. I worked for the United Mine Workers for about

1 15 years, and during those 15 years and when I've talked to
2 the members of the union, I've been impressed with how
3 frequently and with such concern miners raise noise exposure
4 as a significant problem. So I think one of the things that
5 you've accomplished with this rule is simply to recognize
6 that noise exposure is a problem in the industry.

7 The second problem is that the current regulations
8 are obviously defective in a number of ways. And, finally,
9 I believe, in general, in the current situation there is
10 inadequate attention given to engineering controls over
11 hearing protection. Let me detail some of the ways in which
12 the current rules are defective.

13 First of all, the 90 dBA exposure limit is
14 excessive. The 5 dBA exchange rate is excessive. The
15 current exposure measurements integrate at 90 dBAs. There
16 is no action level. The provision for hearing conservations
17 are very weak and are only required after a citation which
18 occurs at 130 percent of the PEL. There is allowance for
19 hearing protection in considering the citation, and
20 administrative controls are monitored in very weak ways.

21 The rule that you propose makes improvements in

1 some of these areas, and I wish to recognize them and
2 support them. First of all, you've created the concept of
3 an action level, which didn't exist before in the industry,
4 and I think that is a step forward.

5 Second of all, noise exposure measurements
6 integrate at 80 dBA rather than at 90.

7 Third, the provisions for a hearing conservation
8 program are a significant improvement over what has existed
9 in the past, and the hearing conservation program itself is
10 called -- is required to be implemented after an action
11 level of 85 decibels.

12 You removed the adjustment for hearing protection
13 in determining citation, and the administrative controls are
14 posted for review, so there is more attention given to
15 administrative controls. Those are all steps in the right
16 direction, and we support those; but there are several
17 features of the proposed rule that we do not support.

18 First of all, you've failed to demonstrate that
19 adopting a PEL of 85 dBA and an exchange rate of 3 dBA are
20 infeasible. The requirement for operators monitoring noise
21 exposures is totally inadequate. Third, while the

1 preference for engineering controls is stated in one part of
2 the proposed rules, this preference is significantly
3 weakened throughout the rest of the rule.

4 I'd like to comment on each of these and a few
5 more in the time that I have. First of all, you've failed
6 to demonstrate that adopting a PEL of 85 dBA or an exchange
7 rate of 3 dBA are infeasible. You refer to a couple of
8 review commission decisions that outline criteria for
9 feasibility, and yet you did not apply them in evaluating
10 the 85 dBA PEL.

11 Ironically, in those decisions that you referred
12 us to, the review commission found that the engineering
13 controls that were being proposed by MSHA in those
14 proceedings were found to be feasible by applying the
15 criteria that the review commission had developed.

16 Now, it does not appear that you calculated, in
17 fact, any costs associated with 85 dBA limit, and yet you
18 base your decision to reject it on the question of
19 feasibility, presumably which would address the question of
20 cost, yet you gave no basis for making that determination.
21 Now, there may be some narrow interpretation of the Mine Act

1 that you only have to show feasibility for the standards
2 that you propose rather than infeasibility for the ones that
3 you reject, but given the superiority of the 85 dBA PEL and
4 the 3 decibel exchange rate, first of all; and, second of
5 all, given the requirements of the Act that you are required
6 to show the highest degree of protection available, it would
7 seem to me that you should go back to the drawing board and
8 make a realistic consideration, in fact, really consider the
9 85 dBA PEL and the 3 dBA exchange rate.

10 It looks like you simply looked at it and said,
11 "It's not feasible; let's go to 90," and you've done your
12 cost calculations based solely on 90.

13 I think that if colleagues of mine or others in
14 the health professions had presented data on health effects
15 with as little documentation, it would have been dismissed
16 as being out of hand, and I think the standards of analysis
17 and presentation that are required in practice of those of
18 us in the health profession should also apply to cost
19 estimates as well. And if we had done what you have done
20 for the 85 dBA exchange rate, nobody would have believed us.

21 All right. Secondly, the requirement for

1 operators monitoring noise exposure is completely
2 inadequate. The rule states, and I'll quote the whole rule
3 minus a couple of prefatory words, that the operator
4 establish a system of monitoring which effectively evaluates
5 each miner's noise exposure. This is vague. It's
6 unenforceable. It creates not basis for accountability. It
7 would almost be better for MSHA to conduct all measurements
8 of exposure rather than to have this language.

9 Let me show you what's missing. First of all, you
10 haven't said what "effective" is. Second of all, you
11 haven't said anything about the frequency of measurements or
12 about the instruments, which instruments should be used, how
13 they should be calibrated. You've said nothing about the
14 qualifications of the person to monitor exposure. You've
15 said nothing about the person's qualifications to calibrate
16 exposure instruments. You've said nothing about
17 calibration. You've said nothing about which occupations to
18 sample or what the operating conditions ought to be during
19 sampling, and you've said nothing about record keeping.

20 So I think in this industry, in coal mining, in
21 particular, we've just gone through a 25-year period that

1 has come to a head over the past several years concerning
2 sampling for respirable dust in which mine operators were
3 given extensive responsibility for measuring exposure to
4 respirable dust under much the same circumstances as this,
5 and extensive fraud has been found in that program, which is
6 regulated more than anything in the noise program. So it
7 would seem to me that this language for exposure monitoring
8 is simply an invitation to abuse.

9 Now, secondly, or third, wherever I am at this
10 point, oh, yes, well, the preference for engineering
11 controls is stated in one part of the proposed rule, in
12 62.120. This preference is significantly weakened by
13 provisions throughout the rule. In fact, it's mentioned
14 nowhere else in the rule that demonstrate, in fact, a
15 preoccupation with the use of hearing protectors as the
16 principle means of reducing exposure to noise. In fact, it
17 seems like the rule is more interested in documenting the
18 deteriorating of hearing rather than in preventing it.

19 As we stated above, the word "feasible," I think
20 "feasible" should be, in fact, removed from this section,
21 and, in fact, feasible should be considered at the

1 standard-setting stage rather than at the enforcement stage,
2 because if feasibility is a consideration when it comes to
3 enforcement, then in each and every enforcement activity,
4 someone is going to have to consider feasibility. This is
5 an unnecessary burden.

6 I think feasibility should be presumed, and it
7 should be up to if a mine operator is going to claim that
8 something is infeasible, it should be up to him to
9 demonstrate that rather than simply say -- it appears that
10 what the mine operator could do now is say, "Engineering
11 controls are not feasible; therefore, we're going to hearing
12 protectors as the principle means of protecting miners'
13 hearing, and it seems to me that's what the operator could
14 do with this rule, is simply write the rule, write the
15 letter that says it's not feasible; we're going to do
16 hearing protection, and there would virtually be nothing
17 that you could do to prevent that from happening.

18 Now, another matter, as it pertains to engineering
19 controls, is that the way it's currently worded, you write
20 down "engineering controls" or "administrative controls" and
21 put them essentially on the same level, as if they were

1 equivalent. They are not equivalent, they should not be
2 treated as being equivalent, and they should be treated
3 separately. Let's see.

4 Now, I think that support for engineering controls
5 could be written into the rule in several ways. As I
6 mentioned, it should be presumed that engineering controls
7 are feasible. It then should be up to the operator to
8 demonstrate that it's not in any given situation. An
9 operator might have to submit its effort for review,
10 document the situation, give it to the agency for review,
11 have miners and their representatives comment on that, and
12 make a decision based upon what the miner says and what the
13 mine operator says and what miners say about a proposed
14 modification in a way from the presumption of feasibility.

15 Now, this rule, as in many other safety and health
16 regulations, this rule should be a technology-forcing rule,
17 and I don't see any evidence that you're forcing the
18 development of engineering controls for noise exposure.

19 A second place that engineering controls could be
20 supported is by including it in the hearing conservation
21 plan. Now, under OSHA, there are several features under the

1 OSHA hearing conservation plan that are not present in this,
2 specifically monitoring exposure and search for engineering
3 controls to reduce the generation of noise; and I think both
4 of those features in the OSHA plan should be included in the
5 hearing conservation plan here for miners.

6 Now, there are a number of problems which I'll
7 just mention in passing. First of all, I think miners
8 should be given a much broader range of choices for hearing
9 protectors. One plug and one muff is really not much of a
10 choice at all. I would think, given the variability in the
11 performance of hearing protectors, given the variability in
12 miners' preferences and so on, I think there should be a
13 broader range of choices amongst hearing protectors.

14 And, okay, I think that gets me to the end of my
15 comments. Should I wait for any questions?

16 MR. CUSTER: Thank you, Dr. Weeks. I would like
17 to remind anyone who has commenced since the hearing
18 commenced, there is a hearing sheet outside the auditorium.
19 The table would be to your extreme right-rear. We would
20 like for you to sign that sheet, please, if you haven't
21 already done so. We would like to recess for a 15-minute

1 period -- make that 10.

2 (Whereupon, at 10:55 a.m., a brief recess was
3 taken.)

4 MR. CUSTER: Again, I'd like to point out for the
5 latecomers that any of you who wish to offer a statement and
6 have not yet been placed on the speakers list, if you would
7 kindly make arrangements with Mrs. Fontaine at the extreme
8 right of the table, she will be happy to accommodate you,
9 and then you will be given the opportunity to speak once the
10 schedule of the speakers is complete.

11 MS. SILVIE: Let me make another comment right
12 now, too, and that is to reiterate that we are extending the
13 post-hearing comment period to August 1. Now, we are being
14 noticed in the Federal Register to this effect, but as I
15 said earlier this morning at the outset, we are extending
16 that post-hearing comment period until August 1, and I will
17 make such an organization again before the hearing closes.
18 Thank you.

19 MR. CUSTER: A note in passing, that anyone who
20 wishes to have a transcript made available for their own use
21 will need to make arrangements with the court reporter. We

1 are going to have a transcript obviously for our purposes
2 which will become part of the record, but we cannot
3 duplicate that for you. You will have to purchase your own
4 copy through the reporter.

5 The next schedule speaker is Linda Raisovich
6 Parsons of the United Mine Workers of America.

7 MS. PARSONS: Good morning. My name is Linda
8 Raisovich-Parsons. That's spelled R-A-I-S-O-V-I-C-H, a
9 hyphen and P-A-R-S-O-N-S. I'm here today on behalf of the
10 United Mine Workers of America. I'm a third-generation coal
11 miner and have been employed in the coal-mining industry for
12 over 21 years. I began my mining career in 1976 as an
13 underground coal miner with U.S. Steel Mining Company.
14 Later, in 1980, I completed coal mine inspector training at
15 the National Mine Health and Safety Academy, and I worked as
16 an inspector for the UMWA in our former District 29,
17 covering Southern West Virginia.

18 For the past 14 years, however, I've been employed
19 in the Union's Department of Occupational Health and Safety
20 as a legal legislative assistant. Part of my duties in this
21 position is to coordinate the MWA's participation in the

1 rulemaking process. MSHA's original notice of proposed
2 rulemaking for underground coal mine standards appeared in
3 the July 9, 1982 issue of the Federal Register.

4 I took this position in January 1983.
5 Consequently, I've had the privilege of reviewing and
6 responding to nearly every standard the Agency has reviewed.
7 During that time, the Union has on many occasions been at
8 odds with MSHA over some of the changes that it has
9 proposed. However, after reviewing the proposed noise
10 standards, I was quite disturbed by the illusion this
11 proposal creates that improvement has been made. A close
12 look at the rule reveals that any improvement to reduce
13 miners' exposure to noise is quickly defeated by the lack of
14 sound-monitoring and enforcement requirements.

15 Perhaps the most counterproductive part of the
16 proposal is the lack of sound-monitoring requirements. The
17 rule proposes a system of monitoring noise which is
18 "performance oriented," or in other words, self-enforced by
19 the mine operator. The mine operator will be solely
20 responsible for establishing a system of monitoring noise
21 and taking appropriate action under the rule whenever they

1 find themselves out of compliance.

2 I find this quite disturbing, especially after the
3 lessons that should have been learned by the senior system
4 for monitoring respirable dust. Under those rules, mine
5 operators have been perpetrating fraud for 25 years. I
6 would hope the Agency could see that such a proposal is an
7 invitation to abuse, especially when closely engineering or
8 administrative controls are at stake where noncompliance is
9 found. A good analogy to this would be to eliminate the
10 highway patrol and ask everyone who exceeds the speed limit
11 to pull over, issue themselves a ticket, and pay a \$500
12 penalty.

13 I don't think too many speeding tickets would be
14 issued. Similarly, I don't think very many operators are
15 going to voluntarily declare that they have a noise problem
16 and they would spend money for engineering controls.

17 Furthermore, adding to this dilemma, MSHA's role
18 will be limited to taking periodic measurements whenever
19 they deem appropriate and checking the operator's record at
20 the mine site. Since there will no longer be any reporting
21 requirements, the Agency will have to rely on the

1 inspector's assessment of whether the mine is in compliance
2 with the noise standards.

3 I have traveled with MSHA inspectors and know the
4 enormous responsibility they have to complete timely
5 inspection of an operation. They generally have a zillion
6 records to review and a huge amount of territory to cover in
7 a specific time period. I fear that the noise records will
8 become the least of their priorities and will be lost in the
9 shuffle of getting their inspection completed in a timely
10 manner.

11 Consequently, the Agency will have no reliable
12 means of effectively monitoring the noise program. UMWA
13 believes that the only means of reliably monitoring noise
14 levels in a mine will be by MSHA taking responsibility for
15 conducting surveys and enforcement of the standards. There
16 are a number of other problems with the proposed rule.
17 Since my associates have and will be addressing these in
18 more detail today, I will only summarize my main concerns,
19 which include, one, the Agency has proposed the elimination
20 of any reporting requirements for noise survey results.

21 This is one of the main means the Agency has to

1 monitor the noise level at a mine. Elimination of this
2 requirement is in direct conflict with Section 206 of the
3 Mine Act, which requires: "Beginning six months after the
4 effective operative date of this title and in intervals of
5 at least six months thereafter, the operator of each coal
6 mine shall conduct, in a manner prescribed by the secretary
7 of health, education, and welfare, tests by a qualified
8 person of the noise level at the mine and report and certify
9 the results to the secretary and the secretary of health,
10 education, and welfare.

11 The reliance on records kept at the mine will
12 severely limit the Agency's ability to assess noise levels
13 in the industry, especially when they are only kept while a
14 violation exists and thereafter for six months. Two, the
15 proposal ignores several recommendations made by NIOSH.
16 NIOSH recommends that the presbycusis factor not be used
17 because the data on age-related hearing loss describe only
18 statistical distributions in populations and cannot be
19 generalized to the experience by an individual in that
20 particular age group.

21 We also recommended that the rule adopt a 3 dBA

1 exchange rate instead of the proposed 5 dBA exchange rate.
2 A 3 dBA exchange rate has a stronger scientific foundation
3 and is more protective and is used in most other industrial
4 countries. The UMWA agrees with these NIOSH recommendations
5 and urges the Agency to adopt them in these rules.

6 Three, under 62.120(b)(1) of the proposal, the
7 operator must provide training to the miner whenever his or
8 her exposure level exceeds the action level. The Agency
9 goes into extensive argument in the preamble as to why this
10 training should not be included as part of the Part 48
11 annual refresher training, but the interns -- only permits
12 it in the rule. The annual refresher training does not
13 permit enough time to adequately cover the subjects now that
14 is currently required to be jammed into an eight-hour
15 session. This has, and has been, a complaint about the
16 annual refresher training among the majority of the
17 industry, union and management alike.

18 I don't see how MSHA expects to squeeze the
19 enormous training requirement in this training and expect it
20 to be served justice.

21 And, last but not least, the Agency proposes that

1 all records be maintained at the mine by the operator.

2 Section 62.200(a)(2) proposes that the mine's representative
3 will have access to training records compiled under Section
4 62.130 and copies of notices made pursuant to 62.120(f)(2).

5 The miner's representative will not have access to
6 audiometric test results without written consent of the
7 affected miner; however, these records will be maintained by
8 the operator and provided to MSHA without restriction.

9 We would like the Agency to provide explanation
10 for this proposal. If there is a question of medical
11 confidentiality, such a proposal actually promotes the
12 violation of confidential medical records by establishing
13 the mine operator as the record keeper. Audiometric test
14 exams are medical records. Like all medical records, they
15 should remain confidential and released only with the
16 miner's written consent.

17 The mine operator is neither a physician nor an
18 archivist of medical records. His fundamental
19 responsibility is to operate the mine in a safe manner. The
20 only reason the mine operator should know of noise-induced
21 hearing loss is to report under Part 50 rules. This

1 information can be provided to the operator by the
2 audiologist without violating confidentiality. To require
3 the mine operator to be the keeper of confidential medical
4 records is a violation of medical ethics.

5 Noise is a health hazard. Exposure to noise is
6 under the operator's control. The operator should keep the
7 record of exposure to make intelligent decisions about
8 controlling noise and complying with exposure limits and
9 leave the medical records to the medical community.

10 Under Part 90, when a miner shows evidence of
11 development of pneumoconiosis, notice is provided to the
12 miner alone. The operator nor the miner's representative
13 has knowledge that the miner has been determined to be a
14 Part 90 miner until that miner chooses to exercise his
15 option to transfer to a less dusty area.

16 We believe the noise standard should be patterned
17 in a similar fashion which maintains the miner's medical
18 confidentiality. The rules focus on exposure levels in
19 controlling noise instead of miners' hearing impairment.

20 The Union has many other problems with the
21 proposed rule; however, as stated, my associates in our

1 comments will address those.

2 In closing, I'd like to say that being a coal
3 miner, a daughter and granddaughter of coal miners, and
4 raised in a coal-mining community in southern West Virginia,
5 I have witnessed firsthand the tragedy of occupational
6 illness among coal miners. My father, who died at the age
7 of 56, was disabled with black lung and hearing impaired
8 from -- with the stoker.

9 Unfortunately, the loss of lung function and
10 hearing are permanent. The only way to avoid this tragedy
11 is through prevention. I urge the Agency to go back to the
12 drawing board on these rules and make them more acceptable.
13 Thank you.

14 MR. CUSTER: Thank you. Mr. Ed Plowcha. I'd like
15 to point out that the assistant secretary of labor from
16 Mine, Safety and Health is, indeed, in the audience in the
17 rear, Mr. J. Davitt McAteer. The deputy assistant secretary
18 is also in the audience, seated behind Davitt, Andrea Ricoh.

19 All right, sir.

20 MR. PLOWCHA: My name is Edward J. Plowcha.
21 That's P-L-O-W-C-H-A. I've been a coal miner for 22 years

1 up in Homer City, Pennsylvania, the Luzarne 6 extension mine
2 owned by the Helvatia Coal Company, which is a subsidiary of
3 the R&P Coal Company. I'm a member of the local Union 488.
4 I'm chairman of the Safety Committee. I've been chairman
5 for about a year. I've been on the Safety Committee for
6 four years and two years at a previous mine.

7 I want to tell you how engineering controls have
8 resulted in a noise problem at our mine. On July 2, 1996, a
9 MSHA inspector did a supplemental noise survey in the two-
10 left section of the Luzarne 6 extension mine. The results
11 showed a noise exposure level of 173 percent in the
12 environment of the continuous miner operator. The
13 continuous miner was along Air Ducts 525. When the last
14 part of the -- was discovered, it gave off a loud, high-
15 pitched howl or a wail.

16 The first reaction of the company was, of course,
17 to issue everyone ear plugs. The maintenance foreman at the
18 mine decided he could design a scoop or a deflector that
19 could deflect noise away from the workers. It was just
20 metal welded together, welded onto the frame of the machine
21 over the scrubber discharge outlet. It worked very well.

1 The difference was noticeable, very, very noticeable.

2 When the inspector came back on July 11th, he ran
3 another noise survey, and the noise exposure level was 81
4 percent. This showed that it's possible to engineer out
5 noise problems. This is important because ear plugs not
6 only block out harmful noise; they also block out helpful
7 noises, noises necessary for communication and safety.

8 When I bolted the roof, there was a variety of
9 different types of rock above the seam, above the coal seam,
10 mostly mixes of slate and sand rock. The sand rock would
11 give off a loud, a high-pitched squeal when you drilled it,
12 but if you wore your ear plugs, you couldn't hear the
13 difference of what you were drilling. It was hard to
14 determine exactly what kind of roof you had.

15 If ear plugs would have been required, I don't
16 think we could have been able to detect changes in the roof
17 that could cause roof failure.

18 Ear plugs, in effect, induce a state of temporary
19 hearing loss. It is much more difficult to communicate. A
20 person running a machine with ear plugs may not hear an
21 individual calling to stop him, maybe in an emergency

1 situation. A person with ear plugs may not hear when the
2 roof may warp or chip. He may not hear a machine coming at
3 him. He may not hear a lot of things.

4 In the mine environment there are so many
5 variables, it is impossible to imagine all the things that
6 could happen. Ear plugs are a second best. Why subject the
7 miner to needless hazards by requiring ear plugs when
8 engineering controls are possible. Questions?

9 MS. PILATE: I would like to ask you some
10 questions about the mine where you work. How many employees
11 work at your mine? About how many?

12 MR. PLOWCHA: About 160 union, maybe 25 company.

13 MS. PILATE: Does your mine cover noise on its
14 annual first returning?

15 MR. PLOWCHA: I don't know for sure.

16 MS. PILATE: Does your mine offer annual
17 audiometric exams?

18 MR. PLOWCHA: No.

19 MS. WESDOCK: I just have one simple question.

20 MR. PLOWCHA: Okay.

21 MS. WESDOCK: You said that you developed an

1 engineering control for the continuous mine machine.

2 MR. PLOWCHA: Pardon?

3 MS. WESDOCK: The machine that you were talking
4 about that you developed an engineering control. How long
5 did it take you to come up with that engineering control,
6 and did you have any idea of the cost?

7 MR. PLOWCHA: I don't know what the cost would be.
8 It was designed by the maintenance workers at the mine, and
9 it was less than a week. I'm sorry.

10 MS. WESDOCK: It was less than a week?

11 MR. PLOWCHA: It was less than a week.

12 MS. WESDOCK: Okay. Thank you.

13 MR. CUSTER: Thank you. Mr. John Hitchings.

14 MR. HITCHINGS: My name is Jon Hitchings. That's
15 J-O-N H-I-T-C-H-I-N-G-S. I'm a United Mine Worker for 16
16 years, Safety Committee chairman at the Early Number 1 Mine.
17 That's Keystone Division, R&P Coal Company.

18 Just a few things I wanted to talk about, like Ed
19 did, that there is ways of maintaining these machines as far
20 as the noise, and it's not -- you know, the cure is not to
21 put hearing protection on the people. I work with people

1 that do have hearing problems, and I encounter dangerous
2 situations with them. At our mine, with the different
3 conditions that we've had over the years like miners out of
4 compliance, machines out of compliance, one problem I always
5 had was the persons affected were always the mine operators,
6 okay, the six people, whatever it is.

7 What about the person that takes his place if that
8 person is off? That could be four months, five months.
9 They are not accounted for. Okay? When you're downsized
10 the way we are in our mine, that happens. You're changing
11 people in and out all the time. These people are affected
12 by that, but yet they are not in the figure, you know, when
13 the test was taken at the time. I feel that it should be,
14 you know, everyone in that section, not just a certain
15 machine, because you have a lot of things involved.

16 We stagger. Okay? Other people come run the
17 machines; they are involved in that, but yet it might not be
18 an eight-hour day, but they still, over the long haul, they
19 are involved in it. Back then, when I first started in the
20 mines, you had pan lines and things like that. We weren't
21 recognized as having a problem. We were never tested for

1 the noise back then, you know, and over the years it
2 affected you.

3 Now, you have the machines that today that they
4 run so fast that you can't keep the coal chain full of coal
5 in order to keep the noise down. There's a lot of different
6 problems with that, but I think one of the biggest problems
7 is educating the people as far as your miners, regardless of
8 company, union, on wearing the hearing protection. If
9 that's your choice, that's fine. If the company makes that
10 a policy, which we have in our mine, anyone in by the last
11 open cross-cut is to wear the hearing protection.

12 We have older people, I talk to them every day.
13 Their theory is, well, I'm getting older. What's the
14 difference anyway? Well, it makes a lot of difference.
15 Now, if something needs to be enforced on that, if you're
16 going to use that as your option other than fixing the
17 machine, the hearing protection, it needs to be enforced,
18 not that's the cure to keep MSHA from issuing a citation as
19 well; we have them wearing hearing protection.

20 Now, I'm going to be honest with you. When they
21 are around, they wear it; when they are not, they don't.

1 And it's not because they don't feel that they should; it's
2 because there's too many factors against you, you losing that
3 sense of testing the roof or listening to the roof, the roof
4 conditions in the mine. You need those. Whenever certain
5 people are around, they wear it; when they are not around,
6 they don't, and the company doesn't enforce that. They will
7 stand right there beside them.

8 Just a couple of more things. We've had two or
9 three miners, continuous miners in our mine that have been
10 out of compliance. Okay? And it's too costly -- I hear
11 people talking about it's too costly to change them, but yet
12 why when the machine goes out for a rebuild and it comes
13 back, it's in compliance? I don't understand that. There's
14 millions of tons mined over that machine, and we have to
15 wear the hearing protection. It can't be fixed, but yet
16 when it goes out for rebuilding and it comes back, it's
17 okay. There's got to be some way of getting that
18 straightened out before it enters the mine. I don't know
19 how. I'm not an engineer, but I've seen that three or four
20 times.

21 And one last thing, you're going to be listening

1 to a guy I work with, and he does have significant hearing
2 loss, and if he would fall under this changeout, as far as
3 if the person is affected and he is taken out of the area, I
4 think there is a big problem with that because due to the
5 downsizing of your people, what do you do if there's not
6 enough people? Do you just leave them on there? Who is
7 going to enforce that? Who is going to enforce that he is
8 taken out of that affected area at that time?

9 Now, it doesn't happen now, so I think you need to
10 look into that a little bit closer as far as fixing the
11 machines, not moving people around to get them out of the
12 affected area. Go to the source of the problem; don't move
13 the people around.

14 One last thing on this person that you will be
15 talking to, he has been in the mines quite a while, and what
16 I need to know, he is affected by it; he has 58 percent
17 hearing loss. What are you going to do for him? This is
18 under the new rule. What about him down the road? What
19 happens when our mine shuts down, and where is he going to
20 work? Nobody is going to take him. He does fine, he works
21 hard, but nobody is going to take care of him as soon as

1 this mine is done. There should have been something done a
2 long time ago. Thank you.

3 MS. PILATE: I'm curious to know how many
4 employees work at your mine.

5 MR. HUTCHINGS: Approximately 145.

6 MS. PILATE: Does your mine cover noise in its
7 annual refresher training?

8 MR. HUTCHINGS: No.

9 MS. PILATE: Does your mind off an annual
10 audiometric exam?

11 MR. HUTCHINGS: Just to the people that are
12 affected as part of the machines out of compliance. You
13 know, the machine might not be there now, but those are the
14 only ones that still get tested.

15 MS. PILATE: Thank you.

16 MR. CUSTER: Thank you. Mr. Jim Miller.

17 MR. MILLER: Hi. My name is Jim Miller, M-I-L-L-
18 E-R. I'm from the UMWA, and I have over 18 years in the
19 mines, and I have a significant hearing loss. It's real bad
20 and everything. The only thing I hear about is wear ear
21 plugs and stuff like that.

1 Well, that won't help me in the mines, stuff like
2 that, because you've got to be able to hear the booth and
3 stuff working. When you hit that sand rock, like he was
4 talking about, to pull the steel out, if you're in gas, you
5 could blow the place up. So I'm not the only one who is
6 going to be having a problem then. Other people's lives are
7 going to be in danger, too.

8 So instead of wearing hearing plugs and things
9 like that, I think they should try to quiet down the
10 machines so I don't have to wear them or anybody else does.
11 That would help us.

12 And another thing I'd like to talk about, talk
13 about all the machinery and stuff. I was in there for 19
14 years, and I've been around pan lines, jackhammers and
15 stokers and everything like that. They never protected us
16 from that stuff. Well, my hearing is going now, so what are
17 they going to do for me and people like me that have hearing
18 loss? Are they just done in the mines now?

19 And another thing on the paper, it says about
20 smaller operators and everything like that. It shouldn't
21 matter if the company is big or small; they should try and

1 protect everybody's hearing, not just the ones in the big --
2 that can afford it and stuff like that. That's all.

3 MS. PILATE: Are you employed at the same mine as
4 the previous speaker?

5 MR. MILLER: I can't hear you.

6 MS. PILATE: Are you employed at the same mine as
7 the previous speaker?

8 MR. MILLER: I still can't hear you.

9 AUDIENCE: Yes, he is.

10 MS. PILATE: Yes. Okay. Thank you.

11 MR. CUSTER: Thank you. Mr. Jim Lamont.

12 MR. LAMONT: My name is Jim Lamont, L-A-M-O-N-T.
13 I work for the United Mine Workers of America. I'm the
14 international health and safety rep. I have 23 years'
15 mining experience, 10 years of which I served as the
16 chairman for the Mine Health and Safety Committee at the
17 mine I came from in southwestern Pennsylvania.

18 In the proposed noise standards, many areas need
19 address and change for the sake and protection of the
20 miners. You just heard Brother Jimmy Miller, a miner with
21 19 years' mining experience who suffers with hearing loss.

1 How would the baseline audiogram work for him? Where are
2 the standards that pertain to him and people like him?

3 Jimmy has a documented 58 percent hearing loss.
4 He has to wear a hearing aid all the time. Any further
5 deterioration of his hearing would basically render him
6 totally deaf. Had there been engineering controls
7 implemented years ago, there would be a lot fewer folks
8 experiencing what Jimmy Miller has to live with every day.

9 A few weeks ago, I received a phone call from a
10 safety committeeman up in my area. He was at the mine
11 operation. What had happened was that the crew was pulled
12 into the office by the operator. They were told they were
13 going to have a noise survey done in their one particular
14 section this day. They were also told during this shift
15 they were required to wear hearing protection.

16 My question to the committeeman was, do they
17 normally wear hearing protection on a normal basis in the
18 section? He says, No; the operator wanted him to wear it
19 just today. My comment to him was, don't do anything out of
20 the normal. Have them operate the way they normally do,
21 without the protection so you have an accurate survey.

1 It's so easy for the operators just to hand out
2 hearing protection like ear plugs; it's a quick, easy fix.
3 It's been abused and will be continue to be abused until
4 mandatory engineering controls are imposed. It's real easy
5 for someone to put up a side at the last cross-cut and say,
6 "Hearing protection required beyond this point." It's real
7 easy to hand out ear plugs, stuff cotton in your ears, wear
8 ear muffs, or a combination of both. That's not going to
9 take care of the problem. We need to take care of the
10 problem at the source.

11 I've seen people operating pieces of equipment in
12 a mining section. If you are operating a piece of equipment
13 that's noisy and you have ear plugs in and the roof starts
14 working, how would you be able to hear the roof? I don't
15 think you could. This brings back another story that just
16 happened a few weeks ago at another operation.

17 The crew was in the bell entry. They were on a
18 continuous hauling section. There was a major cave, a
19 substantial cave in this bell entry. The cave went from the
20 face out by the three cross-cuts. They lost two pieces of
21 equipment in this cave. We were very fortunate we didn't

1 lose any lives. Nobody got injured.

2 Two bridge operators were on the mobile bridges.
3 The one back-bridge operator heard the news, heard the roof
4 working. He hit the kill switch, which deenergized all the
5 equipment. He was able to alert everybody. He screamed,
6 hollered, "Get the heck out of there. It's coming in."
7 Now, had that been the crew I just talked about a little bit
8 ago who was told they had to wear ear plugs that day, they
9 might not be around today. If they were wearing ear plugs,
10 they might not have heard that roof work. They could very
11 well be dead.

12 It only makes good sense to reduce the noise at
13 the source. The need is to implement engineering controls .
14 It is very possible, and it would behoove everybody. We
15 know it's possible because the operation of the mine that
16 Brother Ed Plowcha comes from, he spoke about the
17 engineering controls they implemented there. It was very
18 simple. It was very inexpensive.

19 From what I have seen and believe, it was only a
20 piece of half-inch metal put on an angle to deflect the
21 noise from the scrubber. Real easy. The other people were

1 not required. They did not have to wear ear plugs. It did
2 not diminish any safety. We feel that ear plugs do diminish
3 the safety. It does diminish the safety of the miners.
4 What we need to do is enhance the safety of the miners, not
5 take it away from them.

6 Hearing what's going on inside the coal mine is
7 very important to the active, working miners. We were
8 always taught, from Day One, when you go into a mine, what
9 you want to do is sight-sound-vibration method of testing
10 the roof. And if you're wearing ear plugs, you're taking
11 away one of your senses, which I believe does diminish the
12 safety of the miner.

13 As I said, for many years I served as the chairman
14 of the Safety Committee on Operation. I worked for an IM,
15 an international representative. One of the proposed rules
16 under access to records would require me to have written
17 permission to see an individual's records. Why is it I
18 would be required to obtain written permission to have
19 access to an individual's records when no one else has the
20 same criteria imposed upon them?

21 This proposal, I feel is unfair. It provides

1 everybody else with an advantage over me, and it limits my
2 ability to provide proper representation to an individual.
3 I do have an obligation to represent these people, and I
4 feel that would help diminish my obligation, my advantage to
5 help represent them.

6 Is this proposal introduced because the records
7 are considered confidential medical records? If that is the
8 case, then no one else should have access to these records
9 without written permission. It's just to make it quick and
10 easy and simple, we would like to see that part deleted.
11 That's all.

12 MR. THAXTON: Mr. Lamont, I'd like to go back to
13 the survey that you mentioned. Was that an operator survey
14 or an MSHA survey that was being conducted?

15 MR. LAMONT: That, I'm not sure, but just
16 guessing, I would feel that it was a supplemental survey
17 done by MSHA. I don't really think the operator would tell
18 him to wear hearing protection if they were doing it.

19 MR. THAXTON: So are you indicating that they got
20 the crew together and was told in advance that they were
21 conducting a noise survey?

1 MR. LAMONT: That's what I understood.

2 MR. THAXTON: Would you care to tell us which mine
3 this was?

4 MR. LAMONT: Not at this moment, no.

5 MR. CUSTER: Janice Bradley.

6 MS. BRADLEY: Good morning. My name is Janice
7 Bradley, B-R-A-D-L-E-Y. I'm the technical director for the
8 Industrial Safety Equipment Association. The is the leading
9 national organization representing manufacturers of personal
10 protective products and equipment. Since its founding 1933,
11 ISEA has been dedicated to protecting the health and safety
12 of workers at all work sites, including factories,
13 construction sites, and in particular mining operations.

14 We appreciate the opportunity to review the
15 proposed rule on health standards for occupational noise
16 exposure in coal, metal, and nonmetal mines and submit the
17 following comments. I agree that feasible engineering
18 controls should be used to reduce noise exposure to as low
19 as reasonably achievable. However, we strongly object to
20 Section 62.120, part 831, which states that a miner's noise
21 exposure shall not be adjusted on account of the use of any

1 hearing protector.

2 We believe that when hearing protectors must be
3 used to further reduce noise exposure, that they should be
4 credited as to the amount of attenuation that they provide
5 the employee. MSHA's proposal to disregard all predictors
6 of hearing protector performance does not assist or benefit
7 anyone who administers or is enrolled in a hearing
8 conservation program. In fact, there are many reliable
9 methods available today for evaluating hearing protector
10 effectiveness, all of which get credit for the use of
11 hearing protector devices.

12 In many cases, the use of hearing protectors is
13 the most feasible method to reduce noise exposure in work
14 places such as mines to discount the protection that these
15 protectors provide creates numerous undesirable effects.
16 Such an approach does not account for the real and
17 appropriate protection that these devices provide when they
18 are used in conjunction with the comprehensive, hearing
19 conservation program.

20 If the reduction in exposure that the hearing
21 protector achieves is not taken into account, then why

1 should they be used at all? We are concerned that MSHA is
2 not properly judging the usefulness of hearing protector
3 devices, and it certainly sends the wrong message to the end
4 user on the effectiveness of hearing protectors. By not
5 accounting for the protection that a hearing protector
6 provides, MSHA is effectively giving all hearing protection
7 devices a de facto noise-reduction rating of zero.

8 Such an approach would put the employers, as well
9 as the manufacturers of hearing protector devices, in a
10 precarious legal position in which plaintiffs could claim
11 that the noise-reduction rating is effectively zero, as
12 determined by a federal agency.

13 In contrast to MSHA's proposed wording, OSHA gives
14 credit for hearing-protection devices when they are used by
15 employees to reduce the overall noise level that an employee
16 is exposed to. Because of the safety factors that OSHA may
17 assign, and it's not always assumed that the protection
18 achieved is equal to the stated NLR, and unlike the proposed
19 MSHA rule, OSHA does not completely discount the benefit of
20 using hearing-protection devices.

21 In summary, some workers rely on the use of

1 hearing-protector devices to reduce their overall exposure.
2 We promote the use of protectors as an effective and cost-
3 efficient method of reducing the overall level of exposure
4 and believe it's an essential part of any noise-exposure-
5 control program in the work place.

6 Thank you for the opportunity to comment.

7 MR. THAXTON: I have a couple of questions for
8 you. First, I'd like to go back to the methods that are
9 used for rating --

10 MS. BRADLEY: Yes.

11 MR. THAXTON: -- hearing protectors. Do you have
12 a recommendation as to which method is most suitable?

13 MS. BRADLEY: I represent about 12 manufacturers,
14 all of whom totally agree on the best method, except that
15 whether it be the EPA method, the night-fit method, the
16 experimenter-fit method, or there is a new method that the
17 S-12.6 Committee just published in a 1997 standard. My
18 point being not to recommend a particular method of
19 evaluating hearing-protector attenuation, but many of them
20 are available, and all of them give credit to the use of
21 hearing-protector devices.

1 MR. THAXTON: The second question goes to your
2 statement that hearing protectors may be the most feasible
3 method. What are you using to determine the fact that it
4 may be the most feasible method?

5 MS. BRADLEY: Again, it depends on exactly what
6 type of operation you are involved in. Certainly the
7 gentleman that described the efficient and quick engineering
8 control that was implemented at his particular mine is the
9 desired method of reducing a worker's overall noise
10 exposure. However, in some instance, it is not feasible.

11 I am not a miner, so I can't give you specific
12 examples. However, we've supplied comments as well to NIOSH
13 in the occupational noise exposure control to the paving and
14 asphalt industry, and in some instances in that case as well
15 there are cases where a person, maybe not for his whole
16 shift, but while he is working in close proximity to a
17 certain piece of equipment that happens to increase his
18 overall noise exposure, he may choose to wear ear
19 protection. We feel that is an appropriate method.

20 MR. THAXTON: Are you then using feasible as
21 saying that the noise level is not able to be reduced or

1 that the fact that cost involved in lowering the noise
2 level, engineering-wise, is greater than the cost of hearing
3 protectors?

4 MS. BRADLEY: I don't think anyone would argue
5 that, you know, throwing ear plugs on people is probably the
6 cheapest method available, and certainly if that's what
7 miners wanted, our manufacturers of hearing protectors would
8 certainly be happy to oblige them. However, that only
9 protects one individual, and it doesn't account for
10 exposures of all the individuals in proximity to the piece
11 of equipment that happens to be particularly noisy.

12 MR. VOLOSKI: I'd like to follow up on one of your
13 answers to Bob's questions. You said that you have several
14 methods of evaluating hearing-protector effectiveness, but
15 all of those methods having done in the laboratory. How
16 would MSHA test effectiveness of a hearing protector on an
17 individual miner? If they do engineering noise controls,
18 that's a simple process, but it would not be real simple if
19 we tried to do it on hearing protectors.

20 MS. BRADLEY: We agree that engineering controls
21 should be implemented. We're not disputing that at all, but

1 we believe that there is a place for hearing-protector
2 devices, and when they are used, they should be credited as
3 such.

4 MR. VOLOSKI: Do you want us to give credit for
5 hearing protectors prior --

6 MS. BRADLEY: I didn't say "prior." I said if
7 they are chosen to be part of --

8 MR. VOLOSKI: -- to making a measurement.

9 MS. BRADLEY: If they are chosen to be part of an
10 overall conservation program and you are relying on them to
11 reduce an overall exposure to noise of a worker, then it
12 should be counted. If you are relying on them as part of
13 your program to reduce overall noise exposure, you should be
14 given credit for that. If your engineering controls are
15 successful in reducing the noise levels below their hearing
16 protection would be required, all the better.

17 MR. CUSTER: Thank you.

18 MS. BRADLEY: Thank you.

19 MR. CUSTER: Alice H. Suter.

20 MS. SUTER: Good morning. I am Dr. Alice Suter,
21 an audiologist specializing in the effects of noise on

1 people. A brief resume is appended to this testimony. I am
2 here to testify on behalf of the American Speech-Language
3 Hearing Association and on behalf of the other member
4 organizations of the Coalition to Protect Workers' Hearing,
5 the Acoustical Society of America, the American Industrial
6 Hygiene Association, the National Hearing Conservation
7 Association, and Self-Help for Hard-of-Hearing People.

8 We represent over 100,000 professionals,
9 audiologists, acoustical engineers, industrial hygienists
10 and scientists, as well as individuals with hearing loss.
11 The Coalition submitted written testimony to MSHA on April
12 21, 1997, and I will present a condensed form of that
13 testimony now. I have also submitted my own comments
14 separately as an independent professional.

15 I have had nearly 30 years of experience in the
16 field of occupational noise, participated in the process of
17 criteria development at both the U.S. EPA and NIOSH, and as
18 manager of the noise standard at OSHA, I also have
19 experienced the throes of rulemaking.

20 I would like to thank the panel for the
21 opportunity to offer my comments and suggestions, and I

1 would like to express my appreciation for the enormous
2 effort involved in bringing this proposal to fruition. I'll
3 start with the scope of the standard.

4 We support MSHA's proposal to establish a uniform
5 noise standard for coal, metal, and nonmetal mines. A
6 uniform noise standard for the mining industry should
7 facility understanding of and compliance with regulatory
8 requirements. We believe that consistency between MSHA's
9 noise standard and the hearing conservation amendment
10 developed by OSHA is desirable for the same reasons.

11 Because many mine sites are covered by both OSHA
12 general industry and construction regulations. However, we
13 understand the need for and support certain provisions where
14 MSHA's proposed standard may be more protective than OSHA's
15 current standard.

16 In the definitions section, I'd like to address
17 hearing conservation program, the definition of. We
18 recommend that MSHA incorporate the definition of a hearing
19 conservation program used by OSHA which includes the
20 following components: noise exposure assessment and
21 monitoring, engineering and administrative noise controls,

1 audiometric testing, audiogram review and employee feedback
2 and referral, issuing of personal hearing-protection devices
3 with individual fitting and training of wearers, the
4 supervision of consistent utilization, education and
5 motivation of employees, and record keeping.

6 The term "hearing conservation program" has been
7 used in general industry since the 1970's to refer to the
8 components required for compliance to 29 C.F.R. 1910.25,
9 OSHA's general industry noise standard. To redefine the
10 term only within the context of the proposed rule confuses
11 the issue and may be counterproductive to MSHA's endeavors.
12 To equate the term "hearing conservation program" with
13 audiometric testing, as defined in MSHA's proposal is to
14 imply that all that is needed to conserve hearing is to test
15 hearing.

16 Without a knowledge of the miner's noise exposure,
17 application of engineering and administrative controls is
18 needed, and the use of hearing protection devices, all that
19 audiometric testing will accomplish is to document the
20 development of miners' noise-induced hearing loss.

21 MSHA's proposed redefinition of the term "hearing

1 conservation program" to mean simply audiometric testing
2 reinforces the myth that audiometric testing has value in
3 and of itself. As part of a comprehensive hearing
4 conservation program, however, audiometric testing is
5 critical for monitoring the effectiveness of hearing
6 conservation for individual miners and for mining companies'
7 programs.

8 Now, the definition of "hearing protector." The
9 definition should be changed to read: "Any device or
10 material capable of being worn on the head or in the ear
11 canal that is sold solely or in part on the basis of its
12 ability to reduce the level of sound entering the ear that
13 has attenuation values measured according to Method B,
14 Subject MSHA Standard 12.6 1977, "Methods for Measuring the
15 Real Ear Attenuation of Hearing Protectors."

16 Standard Threshold Shift, or "STS." Many mine
17 sites are covered by both MSHA and OSHA regulations, and the
18 individual miners may move between jobs regulated by each
19 agency. For that reason, we appreciate the practicality of
20 using the same hearing shift criterion by both agencies for
21 purposes of recordability and with respect to baseline

1 audiogram tracking and revision.

2 However, research as well as reports from
3 individuals with hearing loss reveals that a confirmed age-
4 corrected STS is not a sensitive indicator of early hearing
5 damage, but rather reflects a very substantial hearing
6 change. We specifically disagree with MSHA's statement on
7 page 66439, that its proposed definition of STS "permits the
8 early identification of individuals at risk so that
9 corrective actions can be taken."

10 An "age-correction STS" as defined by OSHA and
11 proposed by MSHA represents a significant amount of
12 cumulative hearing change from baseline that may affect
13 communication competence. The Coalition has already
14 testified to OSHA about the need for employers to prevent
15 STS by reacting to early shifts in hearing with employee
16 followup actions, including counseling, refitting of hearing
17 protection devices, and retraining in the correct use of
18 these devices.

19 The next section, "Limitations on Noise Exposure,"
20 I'd like to address the PEL. In the preamble of the
21 proposed rule, MSHA acknowledges that a permissible exposure

1 level of 90 dBA does not protect at least 15 percent of the
2 mining population who will develop material impairment of
3 hearing if exposed to it in a working lifetime of 85 to 90
4 dBA. MSHA's arguments for not requiring a PEL lower than 90
5 dBA are not convincing.

6 The preamble states that an 85 dBA PEL would be
7 more expensive, and about two-thirds of the metal and
8 nonmetal mine operators and three-fourths of the coal mine
9 operators would need to use engineering and administrative
10 controls to reduce noise levels to the PEL. The
11 implementation is that it would be too much trouble. This
12 is not a convincing argument, considering that the intent of
13 the proposed rule is to preserve the hearing health of
14 miners.

15 We recommend that MSHA consider adopting a PEL of
16 85 dBA and investigate the effect of allowing a longer
17 phase-in period for this change to take place, for example,
18 over a 10-year period. MSHA's consideration of the use of
19 an alternative phase-in period would allow the industry
20 ample time to investigate new and viable engineering control
21 technology that could reduce miners' noise exposure and

1 remove miners from the noise area.

2 Next, the exchange rate. MSHA admits in the
3 preamble that the 3 dB exchange rate is more protected than
4 the current 5 dB exchange rate and that the consensus of
5 scientific opinion supports it. The Agency provides several
6 sound arguments for changing to the 3 dB exchange rate.
7 OSHA's rationale for not promulgating it, or I should say,
8 proposing it, however, is that it may not be feasible.

9 OSHA states that engineering and administrative
10 controls would need to be used much more frequently and that
11 the percentage of miners covered by the proposed rule would
12 double. MSHA also states that the amount of time miners
13 could be exposed to higher, in other words, more hazard
14 sound levels, would be reduced.

15 Once again, this is not a convincing argument for
16 exposing miners to hazard noise levels. Continuing to use
17 the 5 dB exchange rate solely for reasons of feasibility
18 gives this method a false appearance of accuracy. The
19 science is often forgotten once the practice has been
20 established.

21 In the experience of many Coalition members

1 providing hearing conservation programs, a very high
2 percentage of workers in production industries is already
3 included in hearing conservation programs. Therefore, it is
4 unlikely that a change to the 3 dB exchange rate would cause
5 a percentage of miners covered by the proposed rule actually
6 to double.

7 We recommend that MSHA consider adopting the 3 dB
8 exchange rate and investigate the effect of allowing a
9 longer phase-in period for this change to be implemented,
10 for example, over a two-year period.

11 Next, the ceiling level. The concept of a 115 dBA
12 limit was put forward in the 1969 "Walsh-Healey" noise
13 standard, which became an OSHA standard in 1971. In the
14 preamble to the hearing conservation amendment, OSHA
15 reiterated the 115 dBA limit. Table G-16A of the rule,
16 OSHA's rule, included sound levels up to 130 dBA printed in
17 italics to signify that these levels are to be included in
18 the assessment of worker noise exposure, even though the 115
19 dBA limit remained.

20 The concept of the 115 dBA ceiling level is rooted
21 in that aspect of the OSHA regulation that considers only

1 noise signals that are continuous or varying rather than
2 impulsive. MSHA's intent for the 115 dBA ceiling level is
3 unclear. Therefore, we would like to pose the following
4 questions in an attempt to help the Agency better define its
5 intent.

6 One, does MSHA intend for the 115 dBA ceiling to
7 be an absolute limit? If so, what is to happen when this
8 level is exceeded? Two, if any exposure to levels above 115
9 dBA occurs, is the employee to be included in the hearing
10 conservation program regardless of TWA? Three, does MSHA
11 really mean any exposure above 115 dBA is considered a
12 violation regardless of duration? Does this include impulse
13 noise?

14 There are many possible reasons for false
15 indications in modern dosimeters. In a mining environment
16 there is the potential for the microphone to be bumped
17 against many surfaces, which will result in a displayed peak
18 succeeding 115 dB, yet no acoustic energy will have reached
19 the ear. Possible solutions to clarify the intent of the
20 rule include raising the limit to 130 dBA for short-duration
21 sounds.

1 Next, operator exposure evaluation. Over the
2 years, MSHA has performed extensive research and displayed
3 considerable expertise in the area of noise-exposure
4 monitoring, especially in the subject of microphone
5 placement. Therefore, it is surprising that the Agency is
6 not provided guidelines for noise-exposure monitoring
7 instrumentation of calibration. Proper identification of
8 all workers who should be included in the noise-exposure
9 monitoring and adequate assessments of their noise
10 assessments are critical to the success of the hearing loss
11 prevention program.

12 The use of engineering controls and hearing
13 protectors could be overlooked if noise measurements are not
14 made or are made poorly. In addition, MSHA's estimated
15 benefits of the program depend on proper assessment of
16 miners' noise exposures.

17 We recommend that MSHA provide more detailed
18 recommendations regarding noise-exposure measurements. We
19 refer MSHA to the procedures described in ANSI S-1219-1996,
20 "Measurement of Occupational Noise Exposure," and recommend
21 that this standard be referenced in a nonmandatory appendix

1 to OSHA's final rule.

2 Employee Notification. This is the only section
3 in the proposal in which MSHA details requirements for
4 maintenance of records of an employee's noise exposure. All
5 that MSHA is proposing is that a record of exposure
6 notification be kept for the duration of the miner's
7 exposure above the action level and for at least six months
8 thereafter. We recommend that noise-exposure measurements
9 be treated like medical records and retained accordingly.
10 They are critical to the assessment of causality of hearing
11 loss.

12 In addition, data spanning a number of years of
13 surveys can better document employee exposures and can
14 provide a more reliable statistical estimate. We recommend
15 that noise-exposure records be established and maintained
16 with audiograms for 40 years to assist employers and MSHA in
17 evaluating the effectiveness of HCPs.

18 Now, with regard to feasibility, MSHA's focus on
19 engineering controls is an improvement for the coal-mining
20 industry. However, the fact that the coal-mining industry
21 has been allowed to lag behind the rest of the mining

1 industries for so long and the manufacturing industries as
2 well does not justify a standard that is inadequately
3 protective. In addition, trading off the noise-monitoring
4 requirements in order to justify engineering controls is
5 inadvisable.

6 One critical component of any health standard
7 should not have to be traded off to justify the adoption of
8 another. MSHA's definition of feasibility is quite lenient.
9 Individual mine operators would be required to use only
10 those engineering and administrative controls that are
11 technologically and economically feasible for them. As with
12 OSHA, the burden would be on MSHA to prove that the controls
13 would be feasible in case of a contest.

14 The statute requires the Agency to make a
15 prediction based on the best available evidence about the
16 ability of an industry to comply "within an allotted time
17 period." MSHA either has not evaluated or has not provided
18 information about the industry's ability to comply over
19 specific time periods other than the proposed effective
20 date.

21 Warning Signs. MSHA should reconsider its

1 position on warning signs. We recommend that the following
2 language be included in the final rule. Where appropriate,
3 warning signs should be posted in locations where sound
4 levels routinely exceed the sound level corresponding to 100
5 percent noise dose within an eight-hour period.

6 Now, Section 62.125, "Hearing Protectors." MSHA
7 is to be commended for recognizing the inadequacy of
8 currently labeled hearing protector attenuation data for
9 purposes of predicting performance of hearing protection
10 devices -- I'll call them "HPDs" -- in the field. However,
11 MSHA's approach of disregarding all predictors of hearing
12 protector performance is not the best solution either.

13 In the proposal, MSHA requested comments on a
14 scientifically based yet practical method for determining
15 hearing protector effectiveness under mining conditions.
16 Although a standardized field method is not available at
17 this time, there is a new, laboratory-based method described
18 in ANSI S-12.6-1997. It's called "Methods for Measuring the
19 Real Ear Attenuation of Hearing Protectors." This method
20 was unavailable eight years ago, when MSHA first requested
21 comments on its advanced notice of proposed rulemaking.

1 The new ANSI standard provides an estimate of
2 field performance on hearing protector attenuation based on
3 subject-fit testing in the laboratory. The subjects are
4 persons who are audiometrically proficient but naive with
5 respect to the use of hearing protection. The development
6 of this procedure and the justification for its use are
7 discussed by Royster and colleagues, 1996, in a paper that
8 was heavily cited by MSHA.

9 The correspondence between laboratory subject-fit
10 data and field performance has been demonstrated by Berger
11 and Franks, 1996. We recommend that MSHA include in the
12 final regulation requirements for testing according to ANSI
13 S-12.6, 1997. The current EPA regulations, which have not
14 been updated since 1979, due to the defunding of the
15 Agency's noise program, do not even recognize the 1984 ANSI
16 standard on hearing protector attenuation testing, let alone
17 the new 1997 ANSI standard.

18 If MSHA includes in its regulation requirements
19 for testing according to ANSI S-12.6, 1997, it would, one,
20 require mine operators specifically to request such data
21 from hearing protector manufacturers; and, two, be an

1 impetus for EPA to update its outmoded labeling regulation.
2 We believe it would be appropriate to phase in this
3 requirement over a two-year time period, in other words, one
4 year beyond the effective date specified.

5 In the interim, it would be acceptable to use
6 existing label values reduced by 50 percent, as is OSHA's
7 policy. MSHA should include language as a new paragraph (b)
8 in Section 62.125, "Hearing Protectors," to read as follows:
9 "When TWAs exceed 90 dBA, or when persons experienced in STS
10 hearing protection devices shall be assessed for adequacy by
11 using attenuation data derived from Method B of ANSI S.12.6-
12 1977. The actual computations can be made using the noise-
13 reduction rating, subject-fit method, as recommended by a
14 task force of the National Hearing Conservation Association
15 and related professional organizations.

16 The NRR, "noise reduction rating," SF, "subject
17 fit" is the number that is subtracted from the sound level
18 in dBA in the employee's environment.

19 Next, I'd like to address hearing protector
20 selection. Selection from at least one ear muff and one ear
21 plug, although it does meet the current OSHA requirements,

1 is insufficient and does not promote MSHA's goals of
2 protecting hearing. This is especially true of ear plugs
3 because of two factors: (a), the wide variety of styles
4 influence the manner in which the plugs fit into and seal
5 into the ear canal; and (b), the difficulty off inserting
6 them properly.

7 Another consideration is that for those few
8 situations, in other words, TWAs above 105 dB, in which MSHA
9 requires the use of a muff and a plug, there would be no
10 choice for the miner. In other words, the miner would have
11 to wear the single choice of ear plug that was offered,
12 combined with a single choice of ear muff.

13 A preferable requirement would be to choose from
14 at least four different models of hearing protectors,
15 including at least two types of ear plugs and one type of
16 ear muff.

17 Next, hearing protector use at low levels. OSHA
18 has determined that sounds above 80 dBA may be harmful to
19 some, but such sounds should be integrated into the overall
20 exposure estimate. Although such conclusions are
21 justifiable, the requirement that goes with TWAs of 90 dBA

1 and above cannot remove them as long as they are exposed to
2 sound levels at or above 80 dBA is inappropriate and
3 counterproductive for the following reasons.

4 One, at sound levels below 85 dBA, HPDs will
5 degrade the ability to hear and discriminate sounds,
6 regardless of the hearing ability of the wearer. Warning
7 sounds will be more difficult to detect, and it will be more
8 difficult to communicate. For listeners who are hearing
9 impaired, the situation will be even worse. Thus, not only
10 is a safety risk incurred with little gained in overall
11 protection provided, but the practice will be
12 countermotivational, making it more difficult to encourage
13 and enforce the use of HPDs when needed and appropriate.

14 Secondly, the logic is flawed. A miner exposed
15 for eight hours at 84 dBA would not have to wear hearing
16 protection, and even a miner exposed for eight hours at 89
17 dBA is not required to wear HPDs, yet a miner exposed to 91
18 dBA for seven hours would have to wear HPDs for any exposure
19 to sound levels even as low as 80 dBA in that same day.

20 How does the supervisor distinguish between the
21 employee exposed to noise levels of 80 to 84, who must wear

1 hearing protection because he or she has other exposures
2 that raise the TWA rate above 90 and the employee exposed to
3 noise levels of 80 to 84 dBA who does not need to wear HPDs?
4 This becomes an impossible enforcement scenario.

5 Emphasis should be placed on proper and consistent
6 use of HPDs and excessive noise, which means noise levels
7 greater than or equal to 85 dBA and particularly above 90.

8 Next, audiometric testing programs. First, tester
9 qualifications. We recommend that all personnel who perform
10 audiometric tests or supervisor the performance of such
11 tests be appropriately trained and qualified. Technicians
12 should be CAOHC certified and positions should possess
13 experience and expertise in hearing and hearing loss.

14 The Annual Audiogram. The annual audiogram should
15 be obtained during the work shift whenever possible.

16 Comparing the annual audiogram done under these
17 circumstances is the most effective way to detect temporary
18 threshold shift and intervene before the shift becomes
19 permanent. It is important to remember that the purpose of
20 the HCP is to prevent hearing loss, not to document it after
21 it becomes permanent. This paragraph should be amended to

1 include: "The annual audiogram may be obtained at any time
2 during the work shift." And I would like to add in the
3 preamble: "Mine operators should be encouraged to perform
4 the audiogram well into their work shift or as far into
5 their work shift as possible."

6 Audiometric Test Procedures. Use of the term
7 "scientifically validated procedures." The use of the term
8 "scientifically validated procedures" is too vague. It will
9 probably result in confusion and contention and possibly
10 litigation. MSHA needs to clarify this term. If employers
11 are not given specific requirements for the conduct of
12 audiometric tests, the results are likely to be meaningless.

13 MSHA should require audiometric tests to be
14 conducted in accordance with the following ANSI standards or
15 the most current version at the time of promulgation of the
16 regulation, and you all have those in front of you. I won't
17 read the whole thing, but ANSI S-3.6 and ANSI S-3.1 has to
18 do with the criteria for permissible ambient noise during
19 audiometric testing, and we recommend that if you do adopt
20 that standard, that a relaxation of 5 dB permitted at the
21 500 hertz frequency, and also ANSI S-3.21.

1 You should note that the contents of these
2 standards include references to acoustical calibrators and
3 sound level meters for the use of calibrating the
4 audiometric equipment.

5 Audiometric Test Record. The audiometric test
6 record for each miner tested, Section 62.150, should be
7 consistent with the record-keeping requirements outlined by
8 OSHA but should also include the model and serial number of
9 the audiometer used for testing; and, once again, it is
10 important that the employer maintain accurate records of the
11 measurements of the background-sound-pressure levels in the
12 audiometric test rooms.

13 Record Retention. Because of the importance of
14 accurate records, both for employers and employees, we
15 recommend that noise exposure assessment and audiometric
16 records be maintained for at least the duration of
17 employment plus 30 years. And you may remember earlier we
18 recommended noise exposure assessment records be maintained
19 for 40 years. This will assist MSHA in evaluating the
20 effectiveness of its regulatory requirements.

21 Evaluation of the Audiogram; Determination of

1 Audiogram Validity. Because of the importance of proper
2 supervision and training of technicians, we recommend that a
3 technician be allowed to determine the validity of an
4 audiogram only through the use of predetermined criteria
5 developed by an audiologist or a physician with expertise in
6 hearing and hearing loss. This also holds true for the
7 determination of an STS or a reportable hearing loss.

8 Next, followup corrective measures when STS is
9 detected, in addition to the refitting and retraining
10 requirements in paragraph (a) and the reselection of an HPD
11 in paragraph (b), a new paragraph (c) should be added,
12 indicating that should the fitting and condition of the HPD
13 currently in use be found to be adequate, the miner should
14 be encouraged to select an HPD with greater attenuation.

15 We also suggest adding the following wording to
16 paragraph (a): "Retrain the miner, including the
17 instruction required by Section 62.130 and" -- this is the
18 new wording -- "check the condition of the hearing protector
19 and replace if necessary."

20 Finally, we would like to suggest a new section on
21 hearing conservation program evaluation. MSHA has failed to

1 define a methodology for detecting problems in the HCP that
2 could prevent significant hearing loss before it develops.
3 If MSHA is serious about hearing conservation, the Agency
4 should define a proactive procedure for detecting problems.
5 MSHA noted in its preamble to the proposed rule that it
6 would be difficult for a small mine operator to implement
7 the audiometric data base analysis procedure specified in
8 ANSI S-12.13, which is called "Evaluating the Effectiveness
9 of Hearing Conservation Programs."

10 However, the operator of a small mine could, in
11 fact, implement one of the simple procedures described in
12 ANSI S-12.13 by hand without the need of a computer analysis
13 in a matter of hours. Also, there are other steps that
14 employers may use in taking an inventory of their HCPs. We
15 recommend that the following be added to the proposed rule:
16 "At least annually mine operators shall conduct an audit of
17 their hearing conservation programs. The evaluation shall
18 include progress in noise reduction by engineering means, as
19 well as an assessment of audiometric test results."

20 In addition, MSHA should include language such as
21 the following in a nonmandatory appendix. It is possible

1 for mine operators to comply with various elements of the
2 hearing conservation program and yet miners may still lose
3 their hearing. For this reason, MSHA is requiring mine
4 operators to evaluate the effectiveness of their hearing
5 conservation programs at least annually. The evaluation
6 must include any progress in engineering noise control and
7 an assessment of the audiometric test results.

8 MSHA has not specified a method by which mine
9 operators should carry out these evaluations. To date,
10 there are no final standards on hearing conservation program
11 evaluation, although there was a draft ANSI Standard S-
12 12.13. MSHA has chosen not to make compliance with the
13 standard mandatory because the standard recommends a noise-
14 exposed population of at least 30, and it is most effective
15 within at least five to six years of audiometric data.

16 Mine operators whose programs meet these criteria
17 would be well advised to use the methods outlined in ANSI S-
18 12.13. Mine operators or their hearing conservation program
19 supervisors should also take a practical inventory of the
20 program's various elements.

21 The following are questions that mine operators or

1 hearing conservation program supervisors should pose when
2 reviewing the implementation and outcomes of the HCP. Is
3 the program complying with the standard in every respect?
4 Is progress being made on the noise-control program? Are
5 miners accepting their hearing protection devices and
6 wearing them effectively? Are there impediments to wearing
7 hearing protectors? Are supervisors and foremen involved in
8 the program? Based on audiometric test results, how many
9 STSs are there in a year? What percentage of the program
10 does this represent? Are miners who have STSs being
11 counseled, and do they receive appropriate followup?

12 That's the end of my testimony, and I would be
13 glad to answer any questions that I can.

14 MR. CUSTER: Thank you, Dr. Suter.

15 MS. SUTER: Now, is there time for me to ask you
16 some questions?

17 MR. CUSTER: Yes.

18 MR. SUTER: Okay. First, I'd like to know the
19 reason for rejecting the Royster and the NIOSH definition of
20 STS. My understanding is that they are both more protective
21 and more efficient than the current OSHA STS and the STS

1 that you have proposed.

2 MR. CUSTER: We would like for you to go ahead and
3 continue to pose the questions, and these will be addressed
4 at a later time, along with the -- after the post-hearing
5 comments have been received --

6 MS. SUTER: Okay.

7 MR. CUSTER: -- for the sake of abbreviating our
8 time here, if you would prefer to do it that way, or you may
9 submit them in writing if you wish.

10 MS. SUTER: Either way. Which would you prefer?

11 MR. CUSTER: We would like you to make them a part
12 of the record today, if you wouldn't mind.

13 MS. SUTER: Okay.

14 MR. CUSTER: Thank you.

15 MS. SUTER: Another question is I would like to
16 know what is the technical support for selecting 25 dB as
17 the reportable shift in hearing level. A third question.
18 Once again, the term "scientifically valid," as applied to
19 the noise measurements that you expect mine operators to
20 use. So my question is, the reason for the complete lack of
21 noise-measurement requirements in the standard, and,

1 specifically, I have a problem with your statement in the
2 preamble, "Mine operators are expected to utilize survey
3 methods and instrumentation which are scientifically valid
4 and based on sound, industrial hygiene practice."

5 And I guess I'm wondering how you're going to
6 define "sound, industrial hygiene practice" and what happens
7 if mine operators don't use what you consider sound,
8 industrial hygiene practice.

9 I'm reminded of a section that was in the OSHA
10 noise standard for many, many years requiring employers to
11 use continuing effective hearing conservation programs, and
12 this was debated back and forth for years and years as to
13 what that meant, and the vast majority of employers didn't
14 implement hearing conservation programs.

15 And even with the hearing conservation programs
16 spelled out in such detail as OSHA does now, a very, very
17 frequent citation is lack of hearing conservation programs,
18 and my feeling is that probably it has to do with the fact
19 that noise measurement procedures are not very well spelled
20 out in the OSHA standard either.

21 Another question is, who decides what

1 scientifically valid data procedures are with regard to
2 audiometric testing, and what aspects of the program are
3 subject to this policy, and whether or not this is
4 enforceable and how MSHA proposes to enforce such
5 procedures, even if MSHA does define them?

6 I noticed in the preamble that there was language
7 about not wanting to stifle technology and impede
8 improvements in methodology. Well, my question is, how does
9 that relate to something like minimum requirements for
10 background levels in audiometer rooms?

11 And, finally, on what grounds, what studies has
12 MSHA determined that lowering the PEL or selecting a 3 dB
13 exchange rate would be or may be infeasible. Thank you.

14 MR. CUSTER: Thank you, Doctor. Kevin R. Burns.

15 MR. BURNS: Okay. I'm Kevin Burns, Director of
16 Safety and Health for the National Stone Association. NSA
17 is pleased to be here today and to present our comments.
18 These comments will be presented on behalf of the 630 member
19 companies of NSA. NSA advocates that members maintain a
20 strong commitment to safety and health in the work place,
21 and we are committed to working with MSHA cooperatively to

1 ensure that the regulations governing the aggregates in the
2 industry are based on sound, scientific principles.

3 With me today are Kelly Bailey. He is manager of
4 occupational health for Vulcan Materials Company and the
5 chairman of NSA's Safety and Health Committee. Also with me
6 is Dr. Curtis Smith, an audiologist in private practice in
7 Auburn, Alabama; and David Hudson, an electrician with
8 Vulcan's Graham Quarry in Virginia.

9 Once again, NSA appreciates this opportunity to
10 participate in this important rulemaking, and I'd like to
11 turn it over to Kelly Bailey at this time.

12 MR. BAILEY: Good afternoon. I know it's lunch
13 time. You don't have to stay here; they do.

14 It's a pleasure for me to be here. I'm a
15 certified industrial hygienist. I've worked in the
16 industrial hygiene field for over 23 years. I will try to
17 be brief as possible, but I want to point out all the little
18 devils and all the little details and ask you to exercise
19 all of them that you can. So it will take a little time but
20 not as much as is allotted.

21 Starting with our definitions, the definition of

1 "medical pathology," we feel is, as a condition affecting
2 the ear, is very broad, and it needs to be better defined to
3 pertain to physical abnormalities or conditions such as ear
4 infection, perforated ear drum, or what have you; but
5 "medical pathology," we feel needs to be clarified.

6 Hearing Conservation Program. NSA recommends that
7 MSHA include the same basic elements as OSHA in its hearing
8 conservation program or definition of one. This consistency
9 will facilitate the use of existing employee-training
10 programs for operators that have OSHA facilities and MSHA
11 facilities so we don't confuse our troops.

12 Qualified Technician. NSA recommends that MSHA
13 delete the following from the definition of a "qualified
14 technician," that is, "or by another recognized organization
15 offering equivalent certification." It is unclear to us
16 what "recognized organization" means, and being ambiguous
17 could lead to poor quality, and the enemy of quality is
18 variation. So we feel that we should stay with something
19 that we know.

20 Reportable Hearing Loss. This definition gives us
21 great concern. The definition basically automatically

1 assigns the cause of a loss to the employer's work site
2 without regard to the existing elements of a good hearing
3 conservation program, such as exposure monitoring, training
4 on the noise hazards, hearing protection availability and
5 enforcement of use, or the installation of noise controls.

6 If an employer has in place these essential
7 elements of a good, effective hearing conservation program,
8 it is very unlikely that any hearing loss detected in an
9 audiogram would be due to work place exposures, and this is
10 certainly true of losses in excess of an average of 25 dBA
11 and the frequencies of 500 through 3,000 hertz.

12 The automatic requirement to report losses will
13 result in the improper association of nonwork-related noise
14 exposure and hearing loss to the work environment. This
15 reporting requirement will then inflate the hearing loss
16 incidents in the mining industry unjustly. Hearing loss is
17 unlike silicosis, in that considerable hearing loss can be
18 associated with nonoccupational noise exposures and known
19 ototoxic antibiotics, such as gentamicin and neomycin and
20 others.

21 Furthermore, this definition disregards the

1 protective measures adopted by the employer. If the above
2 elements of a good hearing conservation program are not in
3 evidence at the work site and there is a confirmed hearing
4 loss of 25 dBA average or more in the 500 to 300 hertz range
5 in both ears, then that loss should be reported.

6 Additionally, if the minor has experienced acoustic trauma
7 at the work place affecting one or both ears, that loss
8 should also be reported. That's how we would suggest that
9 you fix reportable hearing loss.

10 Supplemental Baseline Audiogram. We feel that
11 using the same terms as OSHA would be advisable and
12 facilitate training, so a revised baseline is, I think, what
13 OSHA uses.

14 "Feasible controls," which is referred to in the
15 standard, needs to be defined. The judgment of whether all
16 feasible controls have been applied in a particular
17 situation needs to account for the prior controls installed
18 by the employer related to the situation under review. MSHA
19 has used a 3 dBA reduction as a guideline for determining a
20 significant improvement of noise overexposure and if the
21 control is feasible.

1 MSHA must realize that it is much easier to obtain
2 a 3 DBA reduction if nothing has been done in the past by
3 the employer to reduce the exposures than it is to obtain an
4 additional 3 dBA reduction after already having installed a
5 series of controls.

6 The determination of feasibility should take into
7 account the history of the overexposure control efforts made
8 by the employer for the situation. So we recommend a
9 definition be added to the standard.

10 Section 62.120, "Limitations of Noise Exposure,"
11 under dose determination, we believe it is unreasonable to
12 require that the entire shift be sampled to assess the noise
13 exposure of an employee. Typically, the shift begins once
14 the employee clocks in, at which time he or she may go to
15 change into their work clothes, and putting a noise
16 dosimeter on is not a high priority.

17 Many times it's not practical to monitor an
18 employee's entire work shift due to the length of the shift.
19 It is recommended that sampling should encompass at least
20 two-thirds of the shift time to be representative of the
21 employee's noise exposure.

1 The National Stone Association agrees that the
2 noise dose should be integrated over 80-to-130 dBA range on
3 slow response. MSHA should identify the minimal
4 specifications of noise-measuring instruments that employers
5 should use. This will assist in maintaining noise-
6 measurement consistency and quality within the mining
7 industry.

8 NSA, on the PEL exchange rate, the NSA agrees with
9 the PEL and exchange rate proposed by MSHA. These values
10 are consistent with OSHA, and NSA believes that the
11 comprehensiveness of the MSHA proposal is such that the
12 objective of reducing hearing impairment in miners will be
13 realized. Under the action level, providing training on
14 noise hazards "at the time exposure exceeds the action
15 level" is not practical. Training should be provided to
16 miners upon being hired, with additional training on an
17 annual basis.

18 It should be recognized that there will be
19 occasions when additional noise training will occur, such as
20 the time when the audiogram is given, at the time hearing
21 testing results are provided to the employee, at the time

1 the employee is being sampled for noise, and in the course
2 of routine safety-and-health meetings.

3 Regarding the action level, under (b)(2), it is
4 unclear what MSHA means in this section. As written, the
5 section states that a miner must wear hearing protection
6 constantly if the miner has an STS or if the baseline
7 audiogram cannot be administered within six months. A more
8 practical requirement would be that the miner follow the
9 work-site rules for hearing protection use.

10 This section of the rule also requires the
11 employer to ensure the use of hearing protection by miners.
12 This is an unreasonable requirement and totally
13 disenfranchises the miner from the employer's hearing
14 conservation program. The employee should have the duty to
15 provide the appropriate hearing protection devices, teach
16 the miners how to use them, tell them about their
17 limitations, and enforce the use of hearing protection in
18 the designated high-noise areas. It was recommended that
19 the term "ensure" be changed to "enforce." The miner should
20 have some responsibility for using what is made available.

21 Permissible Exposure Level, (c)(1). The

1 requirement to post written administrative-control
2 procedures on the mine bulletin board and to automatically
3 provide copies to the employees is not practical in many
4 mine sites. In a single mine there could be numerous
5 administrative procedures, control procedures in place
6 affecting many different employees, and having all these
7 procedures attached to the bulletin board will lead to
8 confusion and possible misinterpretation, following the
9 wrong procedures, and so forth.

10 A much more workable approach would be that new
11 miners would be instructed on any administrative,
12 engineering, and/or hearing protection requirements in their
13 work areas, and at these work sites specific requirements
14 should be covered annually for all affected workers and a
15 routine safety meeting when these requirements change.
16 Records of the safety meeting would be maintained for a
17 year, and employees wishing a copy of the procedures will be
18 provided one, since they will be responsible for following
19 those procedures.

20 Section (c), "Permissible Exposure Level," (ii)
21 and (iii). The employer cannot enforce or force an employee

1 to take a hearing test, or for that matter, to wear hearing
2 protection. Therefore, requiring an operator to ensure that
3 a test is taken is not really feasible. You can't take an
4 employee, dragging and screaming, into an audiometric booth.
5 If they don't want to take the test, they don't have to take
6 the test. So we can't ensure that they will.

7 Ceiling Level. At 115 dBA, the allowable exposure
8 time is 15 minutes at 100 percent dose with a 5 dBA exchange
9 rate and an eight-hour work day, as per the Table 6.2-1,
10 reference duration in the standard. Not allowing any
11 exposure to 115 dBA, either protected or unprotected, is not
12 realistic in the mining environment where impact noise can
13 be generated by certain power tools and welding machines,
14 such as plasma-arc welding. It just can't be done.

15 MSHA should retain its current standard language
16 regarding impact noise and follow the OSHA rule with respect
17 to ceiling.

18 Operator Exposure Evaluation. The employer should
19 be able to apply commonly accepted industrial hygiene work
20 practices by sampling representative exposures from various
21 jobs at a work site rather than sampling each and every

1 individual. NSA agrees with MSHA's performance-standard
2 approach to this provision. MSHA, however, should again
3 specify minimal acceptable operating parameters for noise-
4 measuring instruments.

5 Employee Notification. Fifteen days for
6 notification of exposure finding is inadequate, especially
7 where the exposure exceeds the permissible exposure level or
8 the ceiling level. It takes more time to resolve and plan
9 for corrective action in many exposure circumstances. In
10 many cases, other personnel not located at the site must be
11 involved in the corrective action decisions. The 30-day
12 period should allow for all involved personnel the
13 opportunity to participate in the corrective action
14 decisions.

15 Good industrial hygiene practice dictates that the
16 requirement for hearing protection where the exposures
17 exceed the specified limits should begin once the
18 overexposure is known. So we're not precluding the use of
19 hearing protection until 30 days; we're saying use that as
20 soon as you know, but other controls in place need to be
21 defined, and other people need to be involved.

1 Automatically providing written exposure results
2 and corrective action plans to miners is extremely
3 burdensome and unnecessary paper work and could delay the
4 process of corrective action. Relaying the exposure results
5 and engineering and/or administrative actions to be taken
6 within 30 days of the noise survey should be totally
7 adequate to accomplish notification, for example, in a
8 safety-and-health meeting. The miners should be able to
9 take notes and request the results during the meeting.

10 Regarding hearing protectors, Section 62.125, this
11 section appears to be stating that in some cases miners must
12 wear hearing protection at 80 dBA, since the proposal is
13 that noise dose be integrated from 80 to 130 dBA. If this
14 is what MSHA means, then the provision would essentially
15 require hearing protection at all times on the job. There
16 are not many places that are less than 80 in a quarry.

17 (Continued on next page.)

18 //

19 //

20 //

1 MR. BAILEY: The NSA believes such a requirement
2 is extreme. Providing hearing protection when TWAs exceed
3 eighty-five dBA is more reasonable and still protective.

4 Ensuring hearing protection is properly fitted and
5 maintained, part C. The NSA cannot ensure that a miner will
6 always put his hearing protection on properly. The NSA
7 recommends that this provision be changed to reflect that
8 the operator be sure that the miner, the miners are trained
9 in how to obtain a proper fit and how to care for their
10 protectors.

11 Section 62.130 on train -- or, B -- on training
12 and certification. NSA believes that retraining of a miner
13 following an STS determination is impractical. Many STS are
14 temporary due to colds, headaches, temporary threshold
15 shifts and what have you. The NSA believes that the annual
16 training of all miners following the receipt of the
17 audiometric testing results should be adequate, that the STS
18 concept is included in the documented training program.

19 The initial training on noise for new miners is
20 also appropriate and training records should be kept for at
21 least one year to demonstrate compliance. Many mine

1 operators do not keep such training records at each mine
2 site and MSHA should allow flexibility in record keeping
3 practices so computerization and centralized filing systems
4 can be utilized.

5 Audiometric testing program, qualifications for
6 conducting an audiogram. It is important that the quality
7 be mandated since MSHA is proposing that the audiometric
8 records be transferred to successor operators and that the
9 baseline audiograms collected from previous owner's programs
10 be used for future comparisons, which we also have a problem
11 with and we'll talk about a little while later.

12 But the definition of a qualified technician should be
13 set.

14 Baseline audiogram, NSA disagrees with MSHA on the
15 prohibition of using effective hearing protection devices as
16 a means to satisfy the quiet period for a baseline
17 audiogram. Many quarries are quite small and within driving
18 distance to one another. In these circumstances, a mobile
19 testing van, which is usually used in the quarry
20 environment, can easily test the workers in three or four
21 quarries in a single day. This means that workers in some

1 quarries will be tested after their shift has begun.

2 Not allowing the use of the hearing protection to
3 satisfy the quiet period will dramatically increase the time
4 and cost to test workers since the van can only test prior
5 to the work shift at each facility. MSHA should follow OSHA
6 on this provision since the mining testers will most likely
7 utilize mobile detecting vans much more frequently than the
8 larger OSHA facilities.

9 Baseline audiogram, B4. It is recommended that
10 this section be deleted. The adequacy of existing
11 audiograms for laid off workers need to be determined on a
12 case by case basis. The workers that leave an operator's
13 work site over the winter shut down period and works at the
14 local airport, for example, or a rock music band can lose
15 considerable hearing in a matter of days if unprotected. It
16 is unfair to assign this loss to the employer's work site if
17 there is an effective hearing conservation program in place.

18 Annual audiogram, NSA agrees that operators should
19 only be required to offer the minor an audiogram versus the
20 requirement in Section 62.120 to ensure that the miner take
21 the test. There's some inconsistency in the requirement

1 there.

2 Section 62.150, audiometric testing procedures.
3 MSHA should adopt the testing criteria used by OSHA on
4 scientifically valid procedures. This would ensure that
5 audiometric testing is performed in a standardized manner
6 throughout the mining industry.

7 Audiometric test records. Certifications that the
8 audiometric testing procedure be performed in a
9 scientifically valid manner in each miner's record is
10 totally redundant and excessive paperwork. A single
11 qualifications file on the testing provider and the
12 procedure to be used by the testing firm should be adequate
13 to satisfy this requirement.

14 The requirement to have each miner's noise
15 exposure record as part of the audiometric record is overly
16 burdensome. Many operators have their exposure records in a
17 centralized record keeping system or on a computer database.
18 Exposure results will be communicated to effected miners in
19 the proposed rules, training and notification provisions.
20 Having to maintain a separate hard copy file is overly
21 redundant record keeping.

1 Utilizing a centralized record keeping system,
2 many miners -- any miners' exposure result could be easily
3 provided in a timely manner without requiring on-site files.
4 Audiometric testing records are typically maintained in a
5 central record location within a company. Requiring that a
6 duplicate set of records be maintained on-site is
7 impractical and redundant. Testing records can easily be
8 provided upon request and MSHA should be consistent with
9 OSHA's audiometric retention provision.

10 Section 62.160, the evaluation of the audiogram.
11 Recordable hearing loss and the assumption that all hearing
12 loss occurs while at work is totally without justification
13 and ignores the fact that many Americans experience hearing
14 loss from off the job exposures.

15 Receipt of audiometric testing results. That's
16 part A4. MSHA specifies that an operator must have the
17 audiometric testing results within thirty days of
18 administering the test. The operator has no control of when
19 the testing contractor provides the results other than
20 through changing contractors, the next time around, which
21 will probably be done.

1 In many cases, when mobile van testing is used, a
2 survey trip can take three to four weeks to complete before
3 the van returns and the data are processed and evaluated.
4 MSHA should not sacrifice quality for speed. The ninety day
5 period is more practical when the van's services are used.
6 MSHA should not cite operators on issues that they cannot
7 reasonably control.

8 Invalid audiograms and retesting. MSHA does not
9 define what constitutes an invalid audiogram and the
10 operator is required to act on something which is ambiguous
11 and open to a variety of interpretations. MSHA appreciates
12 the need to obtain -- or NSA appreciates the need to obtain
13 audiograms performed using standardized procedures by
14 qualified technicians. One of the primary reasons for
15 utilizing a mobile testing unit service is that these
16 critical quality concerns cannot be met in many areas where
17 quarries are located.

18 It is totally impractical and extremely expensive
19 for MSHA to require the operator to reschedule a testing van
20 to retest one or two miners who happened to have had a cold
21 or an earache on the day the quarry was tested, two or three

1 months prior. Most van services travel hundreds of miles to
2 complete a survey. MSHA should accept that there will be
3 some miners who will not have a valid test in a given year.

4 It's also highly probable that miners may miss the
5 testing van to obtain a test due to vacation, sickness, or
6 other personal matters. As long as the operator makes the
7 audiometric test reasonably available, the operator should
8 not be cited if an employee misses a test.

9 Section 62.170, follow up evaluation of the
10 audiogram, invalid audiogram. Part A, suspected
11 occupational-related reasons for an invalid audiogram. In
12 most circumstances, an audiologist or a physician will not
13 have an opportunity to examine the employee to assess whether
14 there is any medical pathology causing an invalid audiogram.
15 It is even more unlikely that an audiogram can be associated
16 with noise exposure or hearing protectors by simply looking
17 at the audiogram results. So it is unclear to NSA how MSHA
18 will enforce this section.

19 Section 62.180, MSHA -- determination of work
20 relatedness. Again, MSHA makes the assumption that all
21 hearing detriments are work related unless negatives can be

1 proven. The STS's can be the result of many non-noise
2 factors that may not be known by the audiologist's examining
3 audiogram. NSA believes that STS-related training should be
4 covered as recommended earlier in Section 62-130.

5 Section 62.190, notification of results and
6 reporting requirements, part A. MSHA should provide thirty
7 days upon receipt of the results by the on-site manager or
8 the operator to notify the employee of hearing or testing
9 results. This will allow the operator to coordinate with
10 health and safety specialists in a company, or consultants,
11 for conducting the required training set forth in the
12 proposed standard.

13 The reporting results -- NSA strongly disagrees
14 with MSHA's presumption that all hearing loss is job-related
15 and therefore must be reported under Part 50. If a miner
16 has a non-occupational noise exposure that would cause
17 hearing loss, how is an audiologist or physician to
18 determine what contribution the employer's work site had to
19 the adverse finding? Many physicians and audiologists are
20 not proficient in industrial hygiene assessments and noise
21 exposure and would not be able to make that determination.

1 And MSHA says they must make for finding it to be not
2 reportable.

3 MSHA also must define the term "aggravated by
4 occupational noise exposure". Does this refer to specific
5 sound levels and exposure periods? Or to any particular
6 dose?

7 Access to records. NSA does not believe a fifteen
8 day period is adequate for providing all records required
9 under this proposal for miners and a thirty day period much
10 more practical.

11 Automatically providing records upon termination.
12 NSA disagrees with the requirement to automatically provide
13 each miner with a copy of all records covered under the
14 proposal upon termination of employment. This is an extreme
15 requirement since many mines have high turnover rates and
16 would require a considerable increase of unnecessary
17 paperwork and logistics and it's questionable whether miners
18 would even read them, or be interested in the documents.

19 During the course of a miner's employment, as
20 required by the proposed rule, the operator will have
21 already provided the information. The miner should be

1 required to provide a written request for the records and
2 the operator should be allowed thirty days to satisfy it
3 upon termination.

4 Section 62.120, or 210. Transfer of records, Part
5 B. Use of the original operator's audiogram for baselining.
6 NSA believes that the operator should have the choice of
7 whether to use the previous owner's audiogram, audiometric
8 records for baseline comparisons. There are several reasons
9 for this position. Regardless of how structured the testing
10 regime is, there will be fluctuations in audiogram quality
11 among operators. An operator should not be required to use
12 tests that may be suspect of inferior quality.

13 In addition, many of the audiometric testing
14 results will be computerized using standardized forms within
15 the company. It may not be possible or practical to
16 computerize another company's records into an existing
17 system. The valid baseline test for a new miner can be
18 obtained within twelve months using a testing van as the
19 proposal allows, and it should be valid for an experienced
20 miner's baseline with the acquiring company.

21 Just a few other comments, and I'm going to be

1 done. Far less than ninety minutes, of course, my other two
2 companions are a lot less long winded than I am. From
3 reading the proposal, it is unclear how MSHA will issue
4 citations under the rule. Will MSHA continue to use the one
5 hundred and thirty-two percent dose operator value before
6 issuing the citation?

7 NSA strongly disagrees with MSHA's practice of
8 issuing citations to operators who have installed all
9 feasible engineering and/or administrative controls, and
10 still must rely on hearing protection to reduce hearing
11 exposures below the PEL. By issuing citations under these
12 circumstances, MSHA penalizes the operator for doing what
13 MSHA requests. Does MSHA believe that there are justifiable
14 circumstances where hearing protection can be used to
15 protect the miner? If the answer is yes, then no citations
16 should be issued for doing the right thing.

17 In weighing the adequacy of hearing protectors for
18 a particular circumstance, the level of exposure and the
19 attenuation of the hearing protection device should be
20 considered.

21 And that's -- that's my NSA comments. Long winded

1 comments, but we had two others. But I'll be glad to answer
2 any questions.

3 MR. THAXTON: I have just a couple.

4 MR. BAILEY: Shoot.

5 MR. THAXTON: One is a question to clarify what
6 you were saying. I'm not sure I heard what you were
7 recommending. It was in the posting of administrative
8 procedures, you were saying that it was too burdensome to
9 post all those in the mine bulletin board. But you gave an
10 alternative of training the miners in -- if I understood
11 right -- providing copies?

12 MR. BAILEY: Upon request. I -- I think that what
13 the NSA is saying is that there are many, many circumstances
14 where, in larger mines, that there's all kinds of
15 administrative procedures that are used. And these could be
16 -- these could be written, they may not be written, but
17 they're covered because the administrative procedures
18 require that you do this, and don't do that. And those
19 should be -- those will be covered in a routine safety
20 manual. And whether the miner writes his notes down, or
21 it's written in a written procedures, that's going to be

1 communicated if the operator expects it to happen.

2 So instead of having a miner go through a bunch of
3 procedures hanging on a bulletin board, trying to find the
4 ones that came to him, it's much, much more effective and
5 less open to misinterpretation and misinformation to
6 communicate to the miners that are effected that on your
7 work site, this is what's required. You've got signs up
8 there that say here's your protection, and you're only
9 working there four hours, or whatever the particular
10 administrative control is. So that's what we're
11 recommending.

12 MR. THAXTON: But a miner that would actually be
13 in that area, if he so chooses, he could request a copy of
14 that administrative procedure.

15 MR. BAILEY: If there's a copy of the
16 administrative procedure. Some of that administrative
17 procedure may be a sign out in the plant and the miner, in
18 communicating that procedure to the miner, he'd be more than
19 welcome to take notes of that. If there is a written
20 procedure, I don't believe that any of the members of the
21 NSA would disagree with providing him with a copy since we

1 want him to follow those procedures.

2 MR. THAXTON: The second question I had was in
3 relation to your ensuring that personal hearing protection
4 was being used. My question to you is, as the miner
5 operator, do you not have control over you work force in
6 matters of production? And do you not expect your people to
7 follow directions and do what you instruct them to do?

8 MR. BAILEY: Absolutely. And I will tell you
9 right now that we're probably not one hundred percent
10 successful in that.

11 MR. THAXTON: But barring where --

12 MR. BAILEY: Well, we're at a pretty high
13 percentage, because that's why we're so profitable.

14 (Laughter.)

15 MR. THAXTON: Realizing though that you're
16 actually the one employing these people, who else is going
17 to ensure that they're going to wear their hearing
18 protection properly? IT's your facility.

19 MR. BAILEY: I think the employee himself. We
20 train him. We provide it. We show him how to use it. It's
21 made available. He's told where to use it, when to use it,

1 and how to use it, and how to take care of it. And other
2 than walking around with him to ensure that he's wearing it
3 properly is a pretty outlandish requirement.

4 MR. THAXTON: The --

5 MR. BAILEY: I think if someone's -- I think the
6 operator's responsibility is if he sees an employee, you
7 know, flagrantly violating the rules of the work place, the
8 rules, for no matter what reason, hard hat, earplugs, safety
9 shoes, they ought to discipline them. But that, you know,
10 is when you see them. It's not when you don't see them.

11 MR. THAXTON: Thanks.

12 MR. BAILEY: I'm going to turn this over to my
13 colleague, Doctor?

14 MS. PILATE: I have questions.

15 MR. BAILEY: Oh, I'm sorry. I thought you guys
16 wanted to go to lunch.

17 MS. PILATE: You stated that you have 630 member
18 companies. How many of them are small, having fewer than
19 twenty employees?

20 MR. BAILEY: Do you have a --

21 MR. BURNS: More than ninety-five percent of them

1 meet the Small Business Administration's definition of five
2 hundred or less. As far as the twenty or less, I cannot say
3 --

4 MR. CUSTER: Could you please come to the
5 microphone?

6 MR. BAILEY: He takes care of all the dues paying
7 and such.

8 MR. BURNS: More than ninety-five percent of the
9 companies meet the Small Business Administration's
10 definition of five hundred or less. As far as the twenty or
11 less, I can't say -- I don't have a number for that. But
12 there are -- there are quite a few companies that are in
13 that range, I just can't give you a percentage.

14 MS. PILATE: Could you possibly present that
15 information in your post-hearing comments?

16 MR. BURNS: Yeah, we -- I'll make an attempt to
17 get that information and as precisely as I can.

18 MS. PILATE: Okay, I have two more questions. How
19 many of the member companies now offer noise training?

20 MR. BURNS: I'll have to supply that also.

21 MS. PILATE: And one last question, how many of

1 the member mines voluntarily offer audiometric testing?

2 MR. BURNS: Same thing, I'll have to find that
3 out.

4 MR. CUSTER: Kevin.

5 MR. BURNS: Yes?

6 MR. CUSTER: Kevin, has NSA made comments in
7 regard to the SBA definition of small mines? Do you recall
8 that?

9 MR. BURNS: In this rule making?

10 MR. CUSTER: Or to MSHA's definition --

11 MR. BURNS: Not in this --

12 MR. CUSTER: -- of the SBA five hundred or --

13 MR. BURNS: Not in this rule making.

14 MR. CUSTER: Okay. You're aware that we did ask
15 for the industry or the mining community to make comments on
16 those issues? You know, in the comments that you submit
17 subsequent to this hearing, perhaps you would want to
18 address that.

19 MR. BURNS: Okay, we have not submitted comments
20 to this rule making yet.

21 MR. CUSTER: Right.

1 MR. BURNS: This is our first commentary now.

2 MR. CUSTER: Okay.

3 MS. SYLVIE: Let me clarify something, if I could.
4 Relative to the issue of regulatory flexibility and the
5 brief amendments, we have asked for people to comment on the
6 MSHA tradition or definition, or the SBA, as you correctly
7 put it. The SBA definition of fewer than five hundred. So
8 when you -- when he asked for the mining public's comments
9 on that, so when you do submit your comments to us, you give
10 an opinion as to what --

11 MR. BURNS: Yes, I will.

12 MS. SYLVIE: Okay.

13 MR. BURNS: As soon as I get the information from
14 MSHA, I'll submit it to you.

15 (Laughter.)

16 MS. SYLVIE: That's all in the proposed rule.

17 MR. BURNS: Yeah, I know. And I will get you the
18 employment information. I will take care of that.

19 DR. SMITH: Good afternoon. I am Dr. Curtis
20 Smith. I here representing the National Stone Association.
21 I'm a hearing impaired audiologist who wears bi-normal

1 hearing aids, right this minute. I'm in private practice in
2 Auburn, Alabama and the preponderance of my business is
3 industrial audiology consulting, and I have over thirty-five
4 years teaching and consulting.

5 In fact, I was an MSHA consultant on the ANPRM of
6 this proposed standard. I have consulted mining companies
7 who operate over two hundred mines. I have conducted
8 numerous noise surveys and analyzed thousands of audiograms
9 of miners in this industry. As a professional audiologist,
10 I have some serious concerns about the proposed rules that I
11 would like to address at this time.

12 Number one, recordable hearing loss. The proposed
13 rule automatically assigns the cause of hearing loss to the
14 employer's work place when there's been a change in the
15 average hearing threshold levels of twenty-five dB of two
16 thousand, three thousand, and 4,000 Hertz. Please note that
17 the American Academy of Otolaryngology Head Neck Surgery, as
18 well as the American Medical Association, used the pure tone
19 thresholds at five hundred, one thousand, two thousand, and
20 three thousand with a low fence of twenty-five dBA as a
21 criteria for hearing impaired.

1 It is inconceivable to me that using the same
2 tests results from the miners' audiograms in the proposed
3 rule could show a considerable hearing loss, but it would
4 not show a hearing impairment using the AAOHNS or AMA
5 criteria. In my judgement, this cannot be justified based
6 on the current literature.

7 A more meaningful criteria for mine-related
8 hearing impairment should include (a), the change in hearing
9 thresholds should be in both ears, (b) the hearing threshold
10 level should be about the same in both ears, (c) the hearing
11 loss should be sensory-neural in both ears, and this can be
12 determined by tympanometry or tuning forks right on site.
13 And (d) the employer should have a history of working in
14 noise levels high enough to cause noise-related hearing loss
15 equal to or greater than eighty-five dBA tone rated average
16 for several years, without wearing hearing protection.

17 The MSHA-proposed rules suggest that no hearing
18 conservation programs -- no matter how rudimentary -- is in
19 place in any mine site, which is certainly not the case.
20 Now, I do realize that there are some cases, although they
21 are rare, in which a person can have a hearing loss in one

1 ear and it be mine-related, and some of those instances are
2 impacted sound levels due to repeated insertion of insert
3 earplugs. But to have that degree of hearing loss, at
4 twenty-five dB change is unlikely.

5 I bet I don't see that one time in a thousand
6 workers. I see a lot of impacted sound levels. Every day
7 that I examine ears -- and I sometimes examine as many as
8 eighty ears a day -- that I don't see that much change is
9 very rare. So that's not the biggest deal in -- it's
10 unlikely to be.

11 Another unilateral case that might occur as a
12 result of a mine injury would be acoustic trauma, such as an
13 explosion. And that is another instance.

14 And the third instance that I can think of -- it's
15 not likely now, but it used to be -- and that is truck
16 drivers who drive with the left window down. There's
17 sometimes about a ten dB difference in high frequencies, but
18 not twenty-five. That's very rare. When you see that
19 twenty-five, it's usually something else, like hunting.

20 Number two, my comment on ceiling levels for
21 exposure, briefly, since someone else already covered that,

1 the proposed rules state that at no time should a miner be
2 exposed to sound levels exceeding one hundred and fifteen
3 dBA. After reviewing hundreds of noise dosimeter printouts
4 of real world data, collected in many different work
5 environments, I'm convinced there are literally scores of
6 things that cause those instantaneous or compulsive noise
7 levels that equal to or exceed one hundred and fifteen dBA
8 like noise dosimeter microphone thumbs.

9 And since this is a fact -- and it's well known to
10 you now, several people have commented on it -- I recommend
11 that we use the OSHA rule of a maximum of fifteen dB minute
12 limit to the one hundred and fifteen dB.

13 My third comment is on personal hearing
14 protectors. And I hope I don't cover anything that's
15 already been covered on this. One of the main problems with
16 most hearing protector devices among some miners -- and
17 we've heard it today -- is that they're concerned about not
18 being able to hear warning signals, obviously, while they're
19 wearing their hearing protection, like rooftop.

20 As a result, many miners do not wear their hearing
21 protection properly or at all, so they can hear. And they

1 say it, they admit it, they tell us that. I'm not going to
2 wear that, I can't hear. I'd rather have a hearing loss
3 than be dead. So you might say that one of the main
4 problems then that hearing protectors have is that they
5 can't hear with them.

6 There's a new physics-based technology developed
7 by Dr. Meade Killion in Illinois, referred to as ER-20
8 earplugs. He refers to that ER-20 technology as musician's
9 earplugs. Rock and roll musicians are wearing these by the
10 scores now because they don't want to get a hearing loss,
11 but they want to hear the music. And that's similar to what
12 we're talking about with miners. We never dreamed it would
13 be possible to protect people's hearing and let them hear at
14 the same time. It is.

15 These hearing protector devices, these ER-20's,
16 and are now being manufactured. I do not represent any
17 manufacturer. They are now being manufactured, however, by
18 Cavott Labs and are now available inexpensively, where
19 people can get these -- plants can buy these things,
20 inexpensively now. And they will work. These hearing
21 protectors protect hearing while allowing the wearer to hear

1 speech as well as warning signals.

2 The problem may be with determining the hearing
3 protector effectiveness is that some of the measurement
4 techniques may not do justice to this type of technology,
5 but I believe like Dr. Suter recommended in this NCS.6 1977,
6 may cover this.

7 And the reason that it's really important to talk
8 about this is that in 1996, in Mobile, Alabama, a worker was
9 awarded \$1.55 million for injuries sustained from what he
10 called over-protection of hearing. It's a done deal. He's
11 got the money in his pocket.

12 I've just been contacted by a Birmingham attorney on a
13 very similar case. So really, this -- the ball is starting
14 to roll now. People are being over-protected in some
15 environments. They claim they are. They can't hear warning
16 signals. We never dreamed you could do both: protect
17 hearing and hear at the same time.

18 In certain levels of noise, I think we can now.
19 We are going to have to do a lot of studies to ensure this
20 is proper, this is true, but this is physics-based
21 technology that does allow both. Thank goodness.

1 One final comment on instrumentation. The
2 proposed rule does not address instrumentation for hearing
3 testing in miners. I believe that OSHA standards should be
4 used regarding specifications for audiometers and the
5 maximum allowable background noise for audiometric testing.

6 Now, I recommend one thing different than the OSHA
7 standard though, a little above that in terms of maximum
8 background noise testing. Using an artificial ear, some of
9 these companies now have artificial ears and they have a
10 built in ocuban analyzer so that when you're doing your
11 hearing testing on your employees, you can constantly
12 monitor whether the background noise of any of the octave
13 bands under test exceeds the recommended allowable limit.
14 If it does, you can stop the test.

15 So right now, since the technology is available
16 and since a person does an audiogram right now and you asked
17 him honestly, in a court of law, sir, can you tell me for a
18 fact that the maximum background noise was not exceeded at
19 anytime during this test? Well, if somebody said yes to
20 that, I'd say, how do you know that? You don't know.

21 But you can know now. There's new technology that

1 will let you know. So I would really seriously consider
2 adding that provision since it's available, it's
3 inexpensive. I would do it. Thank you.

4 MR. THAXTON: Dr. Smith?

5 DR. SMITH: Yes, sir?

6 MR. THAXTON: You made a couple of comments about
7 the number of miners that you -- or people that you see, and
8 especially the number of ears. I have two questions. One,
9 how many people do you normally see that are actually
10 miners?

11 DR. SMITH: Well, I don't examine a lot of miners'
12 ears.

13 MR. THAXTON: Mmm hmm. And of those miners that
14 you do examine, what type of mining are they involved in?
15 What type of work?

16 DR. SMITH: It's not -- what do you call it? Coal
17 mining?

18 MR. THAXTON: I'm sorry?

19 DR. SMITH: Coal mining. C-O-A-L.

20 MR. THAXTON: Coal mining?

21 DR. SMITH: Yes, sir.

1 MR. THAXTON: Thank you.

2 DR. SMITH: Sure.

3 MR. THAXTON: Any others?

4 MR. CUSTER: Would you be willing to provide us
5 with some additional information with regard to the court
6 case involving a verdict on proof of protection? As a
7 panel, we would be interested in reviewing that.

8 DR. SMITH: Okay.

9 MR. VOLOSKI: Is that the one with the loggers?

10 DR. SMITH: That was a logger case down in --

11 MR. VOLOSKI: Yes, Alabama.

12 DR. SMITH: Mobile, Alabama is where the case was
13 heard and they're not going to appeal it because -- they
14 were hoping they'd get an appeal and the company said let me
15 pay off that \$1.55 million right now because they were going
16 to come back with \$10 million and win. So I'm just saying,
17 we've got to address that.

18 MR. CUSTER: Thank you, Doctor.

19 DR. SMITH: Yes, sir.

20 MR. HUDSON: Good afternoon. My name is David
21 Hudson and I'm an employee of the Graham, Virginia quarry of

1 Vulcan Materials. I've worked in the rock crushing industry
2 for almost twenty years. Currently, I'm a plant electrician
3 at several quarries and sales yards, but I've had numerous
4 years of experience as a laborer, crusher operator, and
5 particularly, mobile equipment operator. I feel that I'm
6 very qualified to testify here today as to the importance of
7 having and wearing hearing protection and the effectiveness
8 of hearing protectors.

9 In my earlier days of working in a rock quarry,
10 hearing protection was virtually unavailable. If it was
11 available, I did not wear hearing protection, nor was I
12 encouraged to wear it. The business of crushing rock can be
13 very noisy and I recall going home from a full day's work
14 with my ears ringing, suffering from headaches, and
15 generally stress out.

16 I remember one time shortly after starting in this
17 business that my job required me to work near a vibrating
18 screen for nearly the entire shift. For those who are not
19 familiar with a vibrating screen, it's a piece of processing
20 equipment that probably contributes most of the noise
21 generated at a rock crushing plant. I can recall going home

1 and lying in my bed and hearing the constant noise of the
2 screen vibrating in my head. This is a feeling I do not
3 wish to relive.

4 Fortunately, my company started to understand the
5 hazards of noise exposure and began to issue and encourage
6 the use hearing protection. Now, if you're working in an
7 area that has been identified as a high noise area, wearing
8 of hearing protection is mandatory, it is not a choice.

9 Although Vulcan Materials strives very hard to
10 engineer out the noises that the employees are exposed to
11 with current technology, it is impossible to eliminate the
12 noise generated by the process of crushing rock. But
13 because of the company's efforts and the use of hearing
14 protection, I currently only have a limited high frequency
15 hearing loss and I plan on keeping what I have left.

16 Not only do I have good hearing, wearing hearing
17 protection has other benefits. I don't feel as stressed out
18 like I used to prior to wearing hearing protection. I've
19 noticed, as well as other employees, when I do wear hearing
20 protection, I can actually hear the internal workings of a
21 machine that I normally would not hear without the hearing

1 protection.

2 Believe it or not, I can hear if a bearing is
3 starting to go bad or if something's not running as smooth
4 as it should be, and it's saved the company substantial
5 amounts of money in preventing unexpected failures.

6 Hearing protection also enable me to hear backup alarms
7 and other warning devices.

8 Thank you for giving me the time to tell you how
9 it used to be in a rock quarry. I use hearing protection
10 every day and I believe it is a very effective way to
11 minimize the noise that enters your ears.

12 MR. BURNS: That concludes our presentation and we
13 appreciate the opportunity to appear here. I think I missed
14 some of the questions, but what were the questions you
15 wanted me to respond to? How many do audiometric testing,
16 how many are in the small mine range --

17 MS. PILATE: How many small mines are members of
18 the NSO.

19 MR. BURNS: Okay.

20 MS. PILATE: And how many of your members offer
21 noise training.

1 MR. BURNS: Noise training?

2 MS. PILATE: Yes.

3 MR. BURNS: Okay. Yeah, and really the best
4 source of, you know, employment numbers is from MSHA and
5 through -- and as far as operating companies, and that's
6 where I'll have to go to get it.

7 MS. SYLVIE: Yeah, the question I had asked had
8 nothing to do with the employment numbers.

9 MR. BURNS: Okay.

10 MS. SYLVIE: In the regulatory flexibility
11 section, we ask --

12 MR. BURNS: It just addresses the brief issue,
13 yes, I --

14 MS. SYLVIE: -- and we ask that you brief the
15 issue and we ask --

16 MR. BURNS: Okay.

17 MS. SYLVIE: -- commenters to comment on the
18 definition of a small mine --

19 MR. BURNS: Okay.

20 MS. SYLVIE: -- whether the use of MSHA's
21 traditional twenty numbers should be appropriate, or what it

1 should be, the SBA definition of fewer than five hundred.
2 We have gotten just a few comments on that, but we have
3 gotten some comments. People did not miss that. Some people
4 did not miss that, so there are some numbers that need to
5 comment on that.

6 MR. BURNS: Okay. We'll address that then. Thank
7 you.

8 MR. CUSTER: Thank you, Mr. Burns. The next
9 speaker is Mr. Bruce Watzman.

10 MR. WATZMAN: We need the overhead and the slides.

11 (Pause.)

12 MR. ING: Good afternoon. My name is Wes Ing.
13 That last name's spelled I-N-G. I'll present some testimony
14 and act as facilitator of this panel. I'll be speaking to
15 you today as the Chairman of the National Mining
16 Association's noise task force. I'm the Corporate Manager
17 of health, safety, and loss control for Eckobay Mines. We
18 operate four producing gold mines; three in the United
19 States, two in Canada. Two of those mines are open pit.
20 Two are underground.

21 My testimony today and that of my colleagues

1 reflect the collective views of the health and safety
2 professionals of the NMA member companies. I wish to thank
3 MSHA, the MSHA panel, for this opportunity to comment, and
4 for the sake of time, our comments today will not cover all
5 aspects of this proposal. We will be submitting extensive
6 written comments during the post-hearing comment period.

7 With me today are witnesses who will present
8 expert testimony on specific aspects of the proposal, as
9 well as provide comment on several specific requests for the
10 comments contained within the preamble. I will introduce
11 each of these individuals prior to their testimony so that
12 you can identify their extensive experience and expertise
13 with their testimony.

14 The one thing I would like to do today is take a
15 minute and thank the agency for the announced extension of
16 time to the rule making record. This will help identify a
17 meaningful record upon which scientific, economically, and
18 technologically competent decisions can be rendered.

19 But it's unfortunate that the Deputy Assistant
20 Secretary of Labor and the Assistant Secretary of Labor
21 couldn't be here with us this afternoon to hear the views of

1 the industry.

2 At this time, Mr. Chairman, I'd like to direct
3 your attention to the question of risk or necessity. Bruce?
4 Is there really a need for the rule making -- for this rule?
5 And I want you to go through your -- when I go through these
6 slides, I want you to keep that in mind.

7 This is the employment record of the metal, non-
8 metal, and coal industry for the last five years. For the
9 period from 1992 to 1996, employment in the metal, non-metal
10 sector averaged greater than 160,000 miners. Miner -- in
11 the coal sector, employment rates went from an approximate
12 low of 54,000 to of a high of about 118,000 in 1996. And it
13 -- part of these -- all of these numbers I'll present today
14 came from either the preamble of the proposed rule or from
15 MSHA itself.

16 You will see a slight different in the year-end
17 numbers versus what was in the preamble, and that's due to
18 the availability of year-end numbers, versus when the
19 preamble was -- so, the industry has been busy hiring miners
20 and increasing it's work force and contributing to the
21 growth of the mining industry in the nation's economy.

1 Bruce?

2 During the same time, MSHA was busy. Illustrated
3 in this slide are a number of -- oops, excuse me. Bruce, go
4 to the noise citation. That's fine, that's fine. Leave it
5 right there.

6 During this time period, MSHA inspectors were busy
7 collecting full shift noise samples from both coal, metal,
8 and non-metal mines. And in the metal, non-metal sector,
9 the number of inspector samples taken during 1992 was 14,622
10 and steadily increased to 18,510 full shift samples taken in
11 1996. And over the time period, averaged, on an average, of
12 15,000 samples a year. The coal sector averaged 31,682
13 samples during the same time period for an average 636
14 samples taken per year. By no means has the agency rested
15 on it's laurels in sampling the work force for exposure to
16 noise. Okay, Bruce.

17 And on the same hand, MSHA was busy writing
18 citations. Here, the noise citations written under Part 70,
19 subpart F, and parts 56 and 57, 5050 A and B. As you can
20 see plainly, over the years the number of citations have
21 declined. Go ahead, Bruce. The next one.

1 Moving on, using the number of citations issued
2 and the number of inspector samples, the following trend
3 seems to have appeared. In coal, the average ratio of
4 samples to citations during the same period was 18.21 and in
5 metal, non-metal -- put the next one up, Bruce -- the ratio
6 is 220.56.

7 In both sectors, the trend shows increases, an
8 increase from year to year. So, what conclusions can you
9 draw from this? First, the obvious. MSHA's having to
10 sample more to write a citation. And second, and most
11 importantly, workers are not being exposed to overexposures
12 in the work place as MSHA believes. Remember, from previous
13 overhauls, MSHA has not relaxed the inspector samples in the
14 work place. The trends indicate that inspector sampling has
15 increased.

16 On page 66353 of the preamble, current exposures
17 appear to be gradually declining in the metal, non-metal
18 industry where engineering or administrative controls are
19 the primary means for protection against noise induced
20 hearing loss. But the data indicate that all sectors of the
21 mining industry continue to have significant overexposures.

1 The bottom line is that workers are not being overexposed to
2 noise and MSHA's having to look harder to find
3 overexposures. Go to the last slide.

4 Part 50, notifications. And if you look here, in
5 this slide under Part 50, the operator is required to report
6 to MSHA if he receives any notification of a hearing loss by
7 a medical professional. First, I'd like to compliment the
8 agency in attempting to standardize the reporting
9 requirements for what defines a reportable illness.

10 Within MSHA's records, operators have reported
11 hearing losses of as little as .28 percent as awarded by
12 worker's compensation boards. The Part 50 claims filed by
13 operators over the last years, this slide can be very
14 misleading. As we know, over the last five years, segments
15 of the mining industry have closed properties due to ore
16 body depletion, or downsized due to economic hardships, et
17 cetera.

18 And the mining industry is no different than any
19 other industry. When mines are closed, employees are laid
20 off, worker's compensations claims are made. Some real,
21 some not. Several peaks in both the coal and metal, non-

1 metal mines illustrate just this fact. During 1994, and
2 1995, and '96 -- there, there, and there -- a major copper
3 operation downsized and modernized it's operation, creating
4 39, 22, and 38 of the Part 50 claims.

5 In the coal sector, in 1992 and 1995, two coal
6 mines closed in West Virginia, resulting in 106 and 88 Part
7 50 claims respectively. Whether the claims were true or
8 not, we were unable to verify them. But they were reported
9 to MSHA.

10 Even so, the number of claims filed versus the
11 total number of citations or number of samples taken is
12 still dramatically low. Again, why is there a true need for
13 this proposal? Okay. I'll be glad to take any questions
14 before I introduce the next --

15 At this point, I'd like to introduce Dr. William
16 Clark. Dr. Clark is the Director of Professional Services
17 for the Central Institute for the Deaf, which is based in
18 St. Louis, Missouri. He also serves as Chairman of the
19 Department of Speech and Hearing at Washington University.
20 Additionally, Dr. Clark serves as advisor to the National
21 Academy of Sciences, National Research Council Committee on

1 Hearing and Bio-Acoustics, and is a member of the ad hoc
2 review commission, and as a member of the ad hoc review
3 commission, the National Science Foundation, Division of
4 Behavior and Neural Sciences.

5 Dr. Clark serves in several professional
6 societies, including the Association for Research in Ear,
7 Nose, and Throat; Centurions of the Deaf Research
8 Foundation; the National Hearing Conservation Association;
9 and the American Speech Language Association. He has
10 published extensively, and has, since receiving his Ph.D. in
11 physiological acoustics from the University of Michigan,
12 committed himself to the goal of elimination of hearing
13 loss.

14 I would like to ask that a copy of Dr. Clark's
15 curriculum vitae be made part of the record. Dr. Clark.

16 DR. CLARK: Thank you very much. Because I'm a
17 college professor, I have to have visual aids here. I will
18 not really read this document. I've got a written document
19 that has been submitted to the record, but I'd like to use
20 the overheads to make the points that I would like to make
21 this afternoon.

1 First of all, as has already been mentioned, my
2 name is Bill Clark. I'm the Director of Professional
3 Services at Central Institute for the Deaf. And in that
4 role, I serve as the head of a school for profoundly hearing
5 impaired children. About seventy children who are all
6 profoundly deaf, and they are talk to speak and to read
7 lips. It is an oral school for deaf children.

8 And also, the Head of Central Institute for the
9 Deaf's clinics, where we also see about 6,000 patients a
10 year. And then at Washington University, I serve as the
11 Department Chairman for the Department of Speech and
12 Hearing. And in that capacity, I administer a graduate
13 program that gives -- that grants Masters degrees in deaf
14 education and audiology, and Masters and doctoral degrees in
15 communications sciences. Next slide, please.

16 I am appearing this afternoon as an individual,
17 but on behalf of these organizations: the National Mining
18 Association, the American Iron and Steel Institute, the
19 American Portland Cement Alliance, the National Industrial
20 Sand Association, and the Bituminous Coal Operators
21 Association.

1 I was asked by these individuals to come to this
2 meeting to express my personal viewpoints. So this is
3 really an individual viewpoint being expressed at the
4 request of these agencies. Next one, please.

5 MSHA has quoted extensively in the draft document.
6 In it's document, MSHA has quoted extensively the draft
7 document criteria for recommended standard occupational
8 exposure to noise, which was produced by NIOSH, and MSHA
9 also requested and received an analysis of the hearing of
10 coal miners, which was completed by Dr. John Franks of NIOSH
11 and which was provided to the record and exists in the
12 standard.

13 I was asked to review critically Dr. Franks'
14 report and also the underlying data which were provided to
15 me by the agencies listed in the previous slide. And that
16 analysis indicated that there were serious errors which
17 effected the outcome of the study and the conclusions that
18 were drawn therefrom, and I'd just like to articulate those
19 for you for a moment.

20 First of all, the title of the study was "Analysis
21 of Audiograms for a Large Cohort of Noise Exposed Miners",

1 which was presented to MSHA, but it was not published in any
2 journal. And, as a matter of fact, in the MSHA document, it
3 was referenced as a paper labelled, "Franks, 1996", but in
4 the references of the MSHA document, there is no reference
5 to Franks, 1996. Rather, there's a reference to a NIOSH
6 document, a letter provided by Linda Rosenstock to Mr. J.
7 Davitt McAteer, dated August 6, 1996. And that letter
8 includes the report.

9 In the summary of that letter, Linda Rosenstock
10 stated that the Franks study allowed the following
11 conclusions. One, that coal miners have hearing losses that
12 2.5 to three times worse than would be expected for "the
13 general public not exposed to work place noise." Secondly,
14 that coal miners were eight times more likely to develop
15 hearing impairment than the general public not exposed to
16 work place noise. And then third, that the hearing losses
17 observed in this evaluation of miners' hearing sensitivity
18 were consistent with the work life exposure of ninety-eight
19 to one hundred dBA. Next slide, please.

20 Now, when I evaluated the report, I found the
21 following errors, and I'd like to explain what these errors

1 are and what effect they had on the outcome of the report.

2 First of all, Dr. Franks, in this study, used as a
3 control population Annex A of the ISO 1999 Control Standard.
4 The Annex A of the ISO 1999 Control Standard is the same as
5 the Annex A of the previously referenced standard today, the
6 American National Standards Institute standard, S3.44, which
7 is titled, "Determination of Occupational Noise Exposure:
8 An Estimation of Noise induced Hearing Impairment."

9 Annex A of that particular document represents a
10 purely presbicooustic -- that is a purely age-related hearing
11 loss population. It is highly screened and it is not
12 representative of the population of individuals who come
13 from a random sample of U.S. adults. As a matter of fact,
14 Annex A of ISO 1999 assumes that hearing levels of eighteen
15 year olds are zero dBHL. And, as a matter of fact, surveys
16 of eighteen year olds, both in the United States and also
17 abroad in European countries, show that the hearing
18 sensitivity of eighteen year olds is worse than zero dB and
19 at four kilohertz, that difference is about six decibels.

20 Stated differently, if one used Annex A of ISO
21 1999 and compared it to a sample of eighteen year olds in

1 the United States and asked what amount of occupational
2 noise exposure would be required to produce the change in
3 the difference of hearing levels observed, the answer would
4 be ten years of exposure at eighty-five dBA.

5 That is, even though the eighteen year olds don't
6 have any occupational noise exposure, the procedure of
7 comparing a random sampling of eighteen year olds to the ISO
8 Annex A results in the estimation of a ten year exposure
9 history of eighty-five dBA. And it's simply due to the
10 differences in the screening or selection techniques for the
11 two samples.

12 The second -- there are better control
13 populations, and I'll talk about those in a few minutes.
14 The second error was Dr. Franks' use of inappropriate
15 statistical descriptors and comparisons. When Dr. Franks
16 evaluated the hearing sensitivity of miners, he reported the
17 mean data. And when he described Annex A of ISO 1999, he
18 used the median data. The median is the middle value, the
19 mean data is the average of the values.

20 Now, this is on page 66378 of the document. In
21 any sample of measures of anything, if the population is

1 skewed, then the mean and median are different. And, as a
2 matter of fact, if the population is positively skewed, as
3 our hearing level data, it turns out that the mean is worse
4 than the median.

5 And, as a matter of fact, I analyzed the hearing
6 levels of coal miners and found differences as high as nine
7 decibels. If one compares the hearing levels of the coal
8 miners with the hearing levels of the coal miners, where one
9 measure is mean and the second measure is median, one finds
10 differences, on the average, of about 6.5 dBA. But in
11 individual cases, up to nine decibels. And that difference
12 is strictly due to a difference in statistical estimation
13 and not any difference in the inherent distribution of the
14 hearing sensitivities of the groups.

15 So the -- when comparisons are made between a
16 measured population and a control population, one must use
17 the same statistical descriptives or errors will occur.

18 Third, in the report, Dr. Franks reported that he
19 evaluated 20,022 audiograms. These audiograms were produced
20 after a request was made to NIOSH and the sample that I
21 obtained only had 19,684 audiograms in it. And this was

1 produced by Dr. Franks. I don't know exactly where the
2 other thirty-eight audiograms went, but certainly the number
3 in the sample did not agree with the number that was in the
4 report.

5 Secondly, in the report, Dr. Franks stated that
6 through a filtering technique that he used, he reduced the
7 number of tests from 20,022 to 17,260 and the number of coal
8 miners from 3,449 to 2,879 -- or 2,871 -- and he reported in
9 the document that this represented an 8.8 percent reduction
10 of tests with an 8.3 percent reduction in miners.

11 Well, 8.8 reduction from 20,022 is not 17,260.
12 It's 18,260. I thought it was just a typographical error,
13 but 8.3 percent reduction from 3,449 is not 2,871. 2,871 is
14 about an eighteen percent reduction.

15 So these numbers are wrong. I don't know why
16 they're wrong and I don't know what errors were made, but I
17 point out that even in the summary of this report, there are
18 computational errors which lead me to question all of the
19 computations of the entire report. Next slide, please.

20 I was asked to review the 19,684 audiograms, and I
21 determined that they should be compared to an age group data

1 from an appropriately controlled population. And the
2 control population I used was actually an example of
3 database B and it's reported as Annex B of the ANSI S3.44
4 standard, which has been referred to previously today.

5 These data represent the typical hearing levels of
6 an unscreened population, except they are excluded from
7 occupational noise exposure. No one in the population had
8 more than two weeks of occupational noise exposure. This is
9 a better comparison population because it better represents
10 the hearing sensitivity of individuals who have factors
11 other than aging which affects their hearing and that's what
12 most of us are. So this is a more appropriate comparison
13 population for determining whether the difference in
14 measured hearing sensitivity in the population exposed to
15 mining noise, in this case, is different from that which
16 would be expected from the normal, random population of U.S.
17 adults who do not have occupational noise exposure.

18 I did that review and the appendix of my written
19 comments include the analysis, and I'm not going to belabor
20 all of us this afternoon with all of the numbers. But let
21 me just tell you that, first of all, some of my findings did

1 corroborate the findings of John Franks. I wanted to make
2 sure that that's reported. That is, I did find that coal
3 miners' hearing sensitivity was worse than the controls, and
4 that was particularly true at three, four, and six
5 kilohertz, and it wasn't true at low frequencies.

6 But it was also particularly true in the older
7 miners. Older miners have the worst hearing in the
8 controlled populations, age matched control populations.
9 And the younger miners had less worse hearing than age
10 matched control populations.

11 By using the same -- essentially the same
12 procedures that Dr. Franks used in asking the question, how
13 much occupational noise would one have to speculate was
14 present to explain the differences between the two
15 populations, one can then predict how much noise exposure
16 for a thirty or forty year working lifetime is necessary.
17 Using the ANSI S3.44 standard, one can predict -- can use
18 that standard to estimate how much noise exposure would be
19 needed to explain the differences in hearing sensitivity and
20 the answer to that question is that the coal miner data,
21 when properly assessed, suggests that the typical

1 occupational noise exposures for coal miners are on the
2 order of 89 dBA, time weighted average.

3 Now, this finding really agrees with the other
4 data that are in your document than the ninety-eight to one
5 hundred dBA estimate that was provided by Dr. Franks. And I
6 think the largest difference between the two estimates have
7 to do with the inappropriate selection of the control
8 population. Next one, please.

9 At the meeting of the National Hearing
10 Conservation Association this Spring, in Florida, Dr. Franks
11 participated in the forum and he discussed the MSHA
12 proposal. He also discussed the NIOSH criteria document at
13 the meeting of the National Hearing Conservation
14 Association. During the comment period, he was asked why he
15 chose the median comparison and why he chose Annex A as the
16 control group. And in response to that question, he said,
17 "We did it that way because MSHA told us to do it that way."
18

19 He then said that NIOSH was redoing the study and
20 would submit it to a peer review journal for publication. I
21 believe that this study should be submitted to a peer review

1 journal and that MSHA should consider it in it's
2 deliberations, but only after it has then gone -- after it
3 has gone through the peer review process. I don't think
4 that MSHA should rely on this preliminary study. I think
5 they should evaluate the published version.

6 I'd also like to add here something that I forgot
7 to say at the very beginning. And that is, I read the
8 written testimony of Dr. Robert Dolby, who was presented at
9 a previous meeting, and I am not going to repeat the
10 comments made by Dr. Dolby, but I want to state on the
11 record that I fully concur with all of the findings and
12 recommendations that were made by Dr. Dolby in his written
13 comments. And I wanted to make sure that I let you folks
14 know that I value his opinion and his statements are ones
15 that I would have made, but they were already made by Dr.
16 Dolby. Next, please.

17 There were a couple of other things that I'd like
18 to just go over briefly with you. And these have to do with
19 the use of hearing protectors versus engineering controls.
20 And I think that an important question here is -- at least
21 to me, as a scientist -- is what are the exposures like in

1 the mining industry? I think that if everybody is exposed
2 at ninety-eight to one hundred dBA and higher, then we might
3 have different recommendations than if most people are
4 exposed between say eighty-five and 95.

5 Reviewing the document, it appears that although
6 most of the exposures are mentioned in the preamble are
7 below a ninety dBA time weighted average, it appears from
8 table 2-11 that twenty-five to thirty-five percent of those
9 samples are over the limit. That is, they represent eight
10 hour time weighted exposures which exceed ninety dBA.

11 Also, it was reported in the preamble that 95.5
12 percent of the coal miners at risk of occupational noise
13 induced hearing loss are exposed to time weighted averages
14 below ninety-five dBA. So the problem of occupational noise
15 induced hearing loss in the mining industry appears to be
16 largely hazard to exposures that are below ninety-five dBA.

17 So I think it's reasonable then to ask the
18 question of whether hearing protectors can provide an
19 adequate reduction and can prevent occupational noise
20 induced hearing loss. That's very difficult to do and there
21 are few data in the literature upon which we can evaluate

1 whether hearing protectors actually protect the individuals
2 who work in these environments. Next slide, please.

3 I presented a paper at the Association for Asserts
4 and Odalaryngatology meeting in 1996. And in that paper,
5 co-authored by Dr. Carl Bohl, we used a database that was
6 provided by NIOSH. This database is a sample of hearing
7 levels of individuals who work in twenty-two U.S. and
8 Canadian industries. And it was produced by NIOSH for
9 scientific evaluation in 1986.

10 This large database includes more than 145,000
11 audiograms of individuals who work in various noise
12 environments and for various types of industries and also
13 with and without hearing protection. From that large group,
14 I found -- I evaluated the hearing levels of a group of
15 individuals who had worked at least eight years for
16 employees and whose first test was within one year of
17 employment and whose exposure level did not vary year by
18 year. And I also restricted the population to workers who
19 reported on their annual questionnaire that they
20 consistently wore hearing protection.

21 Now, this set of data allows one to look at the

1 hearing levels at year eight of exposure and compare them to
2 hearing levels when the employee was hired, at year one of
3 exposure. And the difference then would be the change in
4 hearing that was caused by aging, as well as any potential
5 exposure to noise and anything else.

6 We also age corrected the data with the procedure
7 that is recommended by MSHA at this standard. Next slide,
8 please. The data for -- I'm just going to show you one set.
9 This are data for 119 male workers exposed, according to the
10 questionnaire, at levels of ninety-five to ninety-nine dBA
11 and who consistently wore hearing protection. You see the
12 little hearing ear muff over the lower right hand corner of
13 the slide.

14 The red -- first of all -- I don't have a point.
15 It doesn't matter. On the -- now I do have a point here.
16 Maybe the point will work. We'll see. It's a tiny, tiny
17 point. We're going to start in the lower left hand corner.
18 The axis is test frequency, five hundred to 6,000 Hertz.
19 The ordinant is NIPTS -- noise induced permanent threshold
20 shifts. This is the age adjusted difference between year
21 eight measured threshold and year one measured threshold.

1 The red bars represent the predicted NIPTS from
2 the ANSI S3.44 document. This is the document that we used
3 to predict or estimate the affects of noise exposure on
4 hearing. So it was expected that we would have seen about
5 twenty-three decibels of NIPTS at four kilohertz for this
6 ninety-five to ninety-nine dBA exposure.

7 The yellow bars represent the measured NIPTS. The
8 age adjusted changes in hearing sensitivity for this group
9 of 119 males who started at average age twenty-six and who
10 worked through average age of thirty-four. And you can see
11 that there was virtually no NIPTS.

12 We also saw little or no noise induced permanent
13 threshold shifts for exposures of ninety to ninety-four, and
14 of course, for lower levels exposures, as well. These data
15 strongly suggest to me that at least for this group of
16 workers, the hearing protectors did work and they did reduce
17 noise induced hearing loss in this group of individuals.
18 Next slide, please.

19 Because of those findings, it seems to me
20 reasonable to -- that MSHA should modify paragraph C(1) of
21 section 62.120 to read, "If a miner's exposure exceeds the

1 PEL plus ten dB, the operator shall ... " and then follow
2 the same reportings. That is, I think that engineering
3 controls are required but I don't think that they are
4 justified for exposures below one hundred dBA on the basis
5 of the findings that I just reported.

6 And this recommendation is also consistent with
7 the directive, the OSHA directive, of one hundred dBA
8 exposure for engineering controls that is currently
9 enforced. Next slide, please.

10 All right, I'd like to make a few comments about
11 the criterion as well. MSHA has proposed the PEL level of
12 permissible exposure limit of ninety dBA as the exposure
13 limit for miners. I believe that this PEL is appropriate
14 and adequate to protect miners' hearing and I think it
15 should be retained. I believe that there is strong
16 scientific support for the ninety dBA permissible exposure
17 limit. Next slide, please.

18 First of all, these concepts of percent risk and
19 material impairment in hearing are quite complicated and I
20 think that there is some confusion in the MSHA document and
21 I'm going to provide some comments to you in the post

1 comment period to try to clarify it. For example, while
2 we're on this page, I want to point out that on page 66379
3 of the document, there is a chart R-1 which represents the
4 percentage of coal miners exceeding a twenty-five dB hearing
5 loss by the NIOSH document. The NIOSH determination of
6 hearing impairment, which is the average of one, two, three,
7 and four kilohertz.

8 And there's a statement that say -- I'm sorry, the
9 chart shows a comparison population on the bottom of it, and
10 that comparison population is Annex A of ISO 1999, which
11 I've already stated is inappropriate for comparison of
12 miners. If you use Annex C of ISO 1999, you'll find that
13 the hearing sensitivity in Chart R-1 of randomly sampled
14 U.S. adults really is quite close to the coal miners'
15 hearing sensitivity with the exception of the oldest coal
16 miners where the percent impairment from the S3.44 is about
17 fifty percent and the observed -- the data reported in Chart
18 R-1, the differences are smaller for younger people.

19 The point is that I think that there's no quite
20 the risk that MSHA has assumed for occupational noise
21 induced hearing loss because the risk is really the

1 additional risk over what's expected from aging alone. And
2 sometimes there is some confusion in the document about
3 those statements.

4 Let's go back over percent risk. Percent risk of
5 hearing handicap, if you use the old AMA formula, which is
6 five hundred and one and two kilohertz, it's one percent for
7 a time weighted average dBA lifetime exposure and three
8 percent for a ninety dBA exposure. If you use the newer
9 guidelines and also use ANSI S3.44 for calculating risk, the
10 risk is about five percent. A little less than five
11 percent, but about five percent, at eighty-five dBA and
12 about fourteen percent at ninety dBA.

13 But it must be remembered that there are
14 variabilities in the source data and in the interpolation
15 procedures. And these obtained risk values are really only
16 accurate -- this is kind of an educated guess -- of plus or
17 minus about five percent.

18 There is a recent study that was just published
19 this year by Mary Prince from NIOSH and this study is really
20 a re-analysis of the hearing levels of an industrial noise
21 survey and a hearing levels study that was done by NIOSH

1 from 1968 to 1972. Now, there are a bunch of problems with
2 that study that have been cited by a number of individuals,
3 including the fact that the study was supposed to be highly
4 screened and exclude people who had gunfire history. But
5 the exclusion criteria was five hundred shots a year or one
6 thousand shots over a five year period, and that's a pretty
7 good gunfire history. I disagree with that as an exclusion
8 criteria. So the point is, those data do include some
9 shooters. They do not exclude hunting and target shooting.

10 On the other hand, the early analysis suggested
11 the risk was quite high. Mary Prince has employed a more
12 modern statistical technique and suggested that the median
13 risk at eighty-five dBA exposure is about 7.4 percent, but
14 the ninety percent confidence interval goes down to two
15 percent. Next slide, please.

16 That is, if you asked the question scientifically:
17 what can we say with ninety percent confidence about the
18 risk of material impairment in hearing using the NIOSH
19 formula which Dr. Dolby has argued with and said that that
20 was too conservative. If you ask: what is the risk at
21 eighty-five dBA, you can say with ninety percent certainty

1 that the risk exceeds two percent. And at ninety dBA, you
2 can say with ninety percent certainty that the risk exceeds
3 about twelve percent.

4 This is a -- these risk factor values are a little
5 bit lower than what has been cited in the older data and I
6 think that they're more modern and should be used. Next
7 slide, please.

8 Okay, other support from the PEL. I'm going to
9 skip the first one. The American Conference of Industrial
10 Hygienists has used a justification for setting the PEL that
11 I don't agree with, but I'll leave that for the written
12 comments. Recent studies of hearing levels of industrial
13 workers -- and this one is important -- do show that they
14 have worse hearing than a random selected sample from the
15 population.

16 There's a book that was published last year called
17 "Effects of Noise on Hearing". It has a chapter by me from
18 the United States, and a chapter by Mark Lottman from
19 England. Lottman's is a national survey of hearing levels
20 of industrial workers. Mine was survey of industrial
21 workers in low noise environments on that same NIOSH

1 database. Both studies found the same thing: industrial
2 workers, even at the hiring date, have worse hearing than a
3 random sample of control populations.

4 That means if we look at hearing levels of workers
5 today, whether they're coal miners or anybody else, and
6 compare them to the control population, we're going to be
7 calling some of that loss due to occupational noise which
8 really it's not. It's just that the workers coming into the
9 job with worse hearing than what we thought they would have
10 on the basis of our samples from the random sample of the
11 population.

12 That's what I mean when I say comparing the
13 workers' hearing to the general population. I think the
14 effects of occupational exposure are overestimated. By how
15 much I really can't say.

16 The other thing that I've already mentioned is
17 that the ISO document and the ANSI standard, S3.44, assume
18 that eighteen year olds have perfect hearing and they do
19 not. Next slide, please. No, hang on a second. Skip to
20 the next one. There we go. There we go.

21 The logical conclusion is that there's not very

1 much -- I said really no risk, but there is a risk, but I
2 think the way to think about this is that there's no much
3 measurable risk at eighty-five, and that there's little risk
4 at ninety. And I stated it the other way from what we
5 usually state these things. I think that there's a tendency
6 to think about that hazard and to assume that everybody in
7 the work place at ninety is going to get a material
8 impairment in hearing. That's just not true.

9 Ninety-two to ninety-seven percent of workers who
10 work for a working lifetime in the ninety dBA environment
11 will not get a material impairment in hearing. And those
12 who do -- I mean, the criteria for material impairment is
13 just crossing that threshold. It is just not the case that
14 workers are being deafened by these noise exposures,
15 although I believe that there's enough risk at ninety,
16 ninety-eight, and above to justify hearing conservation
17 programs and a regulation of noise exposure.

18 And I think with the actual level at eighty-five that
19 we have the mechanisms to protect the hearing of
20 individuals.

21 The other thing that I think is important to keep

1 in mind is that few individuals spend an entire working
2 lifetime at the same job and so the risk might be even lower
3 than what we're estimating because the estimates are based
4 on the assumptions that individuals will stay in that noise
5 for the entire working lifetime.

6 Therefore, I believe that the MSHA proposed
7 standard which establishes a PEL of ninety dBA for eight
8 hours provides reasonable protection against sustaining
9 occupational noise induced hearing loss for a working
10 lifetime and lowering the criterion, in my opinion, to an
11 eighty-five dBA will not materially increase protection.

12 Now that position differs from the position that
13 you heard Dr. Suter make this morning and she said that she
14 represented one hundred thousand professionals. I'm a
15 member of several of the organizations that were cited and I
16 just want to make sure that you know that this is my
17 individual position. I'm not stating that this is a
18 position of the Boards of Directors of any of those agencies
19 and I really was not aware that the Acoustical Society had
20 taken the eighty-five dBA position. I just don't know. But
21 these are my individual positions. Next slide, please.

1 Okay, a couple of other things. I'd like to make
2 a few comments on the exchange rate. The MSHA has proposed
3 to retain the existing five dBA exchange rate because of
4 feasibility considerations. And in it's review, MSHA
5 concluded that the consensus scientific opinion supported
6 the three dB exchange rate. I don't believe that. I
7 believe that scientific opinion has been dominated by a
8 local minority and that as much as evidence exists which
9 supports the five dBA exchange rate, particularly for non-
10 continuous exposures, which I believe are commonly found in
11 the mining industry, the five dBA exchange rate, I believe
12 is the most appropriate choice for characterizing the
13 biological effects of noise exposure. Next slide, please.

14 The purpose of an exchange rate is to predict the
15 biological effects of noise. That is, the hearing loss that
16 it produces, not the amount of acoustic energy in the
17 exposure. And I agree that three dB is the appropriate
18 metria for calculating energy in an exposure. But it is
19 only appropriate for calculating hazard to hearing if
20 hearing loss is linearly related to exposure. And we know
21 it is not.

1 I'm not going to go through all these principles
2 of non-linearity, the acoustic reflex, stapes rotation, and
3 cochlear non-linear biomechanics, the olivocochlear system
4 are all biological systems that contribute to the hearing
5 sensitivity of humans are they are all non-linear. Not only
6 at high levels but also at threshold.

7 Consideration of these arguments, I believe, forces one
8 to reject the equal energy hypothesis as the unifying
9 principle. Next slide, please.

10 There are several studies that are cited in my
11 written comments which support the five dB exchange rate,
12 and these studies were ignored by NIOSH in it's review of
13 the exchange rate issue and were not cited by NIOSH even
14 though they were published long before the NIOSH criteria
15 document was issued.

16 The other important source of information is a
17 review published by CHABA, the Committee on Hearing and Bio-
18 Acoustics at the National Academy of Sciences. CHABA
19 reviewed all the data about hazardous exposure to continuous
20 and intermittent noise and concluded that the appropriate
21 exchange rate depended upon the level and temporal

1 characteristics of the exposure and it could vary from zero
2 to eight dB, depending on those characteristics.

3 But most occupational exposures are not
4 continuous. And I think that's especially true in the
5 mining industry and I believe that there are -- well, I
6 don't believe it, there are recent laboratory studies of
7 intermittency that show that intermittency is protected and
8 the three dB rate is, therefore, over conservative. Next
9 slide, please.

10 So, in conclusion about the exchange rate, I
11 believe that the three dBA exchange rate cannot be shown to
12 be a better predictor of noise induced hearing loss than the
13 five dB rate. I believe that changing to the three dB rate
14 ignores known non-linearities in the effects of exposure and
15 underestimates the protective effects of intermittence. And
16 I believe that MSHA is correct in it's decision to retain
17 the five dB exchange rate. Next one, please.

18 Next issue is age correction of audiograms. MSHA
19 noted NIOSH's advice against age correction, but allowed
20 them in this proposed standard. I wrote, "Way to go, MSHA".
21 Sorry, this was late at night when I wrote this thing. I do

1 think that this is correct. I believe that the optional use
2 of presbycusis correction tables is appropriate and it
3 should be retained.

4 I think that the NIOSH concern, if I understand
5 it, stems from what I called the inappropriate for
6 individual argument. That is, we know that individuals vary
7 in their susceptibility to hearing loss as they age, and
8 it's very hard to predict on a per person basis how
9 susceptible that person is to presbycusis. But, however, --
10 sorry, it's misspelled, the same late night -- everybody
11 does lose hearing as she or he ages, albeit perhaps at
12 different rates. And the net effect of eliminating age
13 correction in the STS calculation is to increase the STS, as
14 I identified it. And it necessarily will do that.

15 And in the perfect hearing conservation program --
16 and I agree that they probably don't exist -- but in the
17 perfect hearing conservation program, than every identified
18 STS would be spurious. Let me give you an example. Next
19 slide, please.

20 Consider a work force who all start working at the
21 age of twenty-five. They work for twenty-five years, and

1 they are completely protected from the effects of noise
2 exposure. The presbycusis protection at two, three, and
3 four kilohertz is fifteen dB for a twenty-five year old and
4 it's forty-seven dB for a fifty year old. That's a thirty-
5 two dB difference, divided by three. That's a little over
6 ten, so that's an STS.

7 If all workers were at the median, and the
8 baselines would not have been adjusted because they didn't
9 get STS's, then one hundred percent would have an STS after
10 five years without any occupational noise exposure at all.
11 In that case, every single one of those STS would be wrong,
12 would not be related to occupational noise exposure.

13 But in the real world, it's not that clear cut. I
14 agree, but I think without age correction, as we get better
15 and better hearing conservation programs, if we do not allow
16 age corrections, we're going to increase the percentage of
17 STS's that are spurious, and I think that that doesn't help
18 anybody.

19 Finally, I'd like to comment briefly on the
20 ceiling limit. And you've already heard comments today
21 about the ceiling limit. I think that there's getting to be

1 a consensus opinion that the ceiling limit should be
2 eliminated. MSHA has retained the ceiling limit on the
3 following basis, as I read the preamble.

4 One is the statement really from NIOSH that said
5 that no -- I'm sorry, MSHA's statement, based upon input by
6 NIOSH, it said that no scientific consensus exists on the
7 question of the sound level above which permanent damage
8 occurs, regardless of the duration of the exposure. And
9 NIOSH is finding that the critical level is one hundred
10 fifteen to one hundred twenty dB.

11 Both of these assertions are wrong and I'd like to
12 just add here that the way I read the document says that all
13 sounds are measured with a slow weighting on the sound level
14 meter and with it set to A weighting. So we're not really
15 talking about impulsive measures at all. The way the
16 current document is written, we're talking about measures of
17 continuous exposures with a one second integration time.
18 Next slide, please.

19 There may be some disagreement on the relation
20 between temporary hearing loss and permanent hearing loss
21 about what level is safe and whether fifteen minutes a day

1 at one hundred and fifteen dBA is hazardous, but I think
2 it's important to remember that no one disagrees that two
3 seconds at one hundred and sixteen dBA will not hurt you.
4 That's sort of a double negative there. I'm trying to say
5 that that exposure is safe, it just doesn't cause any harm.
6 And that exposure not only happens commonly, everywhere,
7 including in this room if I happen to get too close to
8 somebody when I say hello to them, but it also doesn't cause
9 any hearing loss and it is also prohibited by your current
10 regulation.

11 The CHABA publication, I think, covers these
12 issues and supports this exchange rate calculation up to one
13 hundred and thirty dBA which is implied in the rest of your
14 regulation and I believe the ceiling rate should be
15 eliminated. Next slide.

16 The other issue about the hundred and fifteen dB
17 being the critical level, this concern really is based upon
18 studies of impulse noise which were carried out on
19 chinchillas. Now, I've published about twenty papers on
20 chinchilla hearing sensitivity and it is generally known
21 that chinchillas are more sensitive to noise than humans.

1 It's not surprising that that critical level is as low as
2 one hundred and fifteen dBA in chinchillas, even though
3 these exposures are completely safe for humans. So I don't
4 think that that argument should be made about the ceiling
5 limit. I think NIOSH should change their document, and
6 therefore, I recommend that the requirement for the proposed
7 standard of one hundred and fifteen dBA should be
8 eliminated.

9 Oh, there's a -- I have a note that was just
10 handed to me saying that I should identify the difference in
11 definition of material impairment in hearing. And it's MSHA
12 versus AMA versus OSHA, so I'll just mention briefly for the
13 record that the American Medical Association of material
14 impairment and hearing is based upon the hearing threshold
15 level that interferes with the ability to understand speech
16 under everyday listening conditions. Both the quiet and the
17 noise.

18 If you read the AMA document, when three kilohertz
19 was added to the formula, one of the rationales for that was
20 that it better predicted speech intelligibility and noise.
21 So the purpose of that formula, that set of formulas, with

1 the twenty-five dB fence, is to correlate the pure tone of
2 audiometric results with the ability to understand speech or
3 inability to understand speech under everyday listening
4 conditions.

5 NIOSH has used a different definition of material
6 impairment of hearing, which is one, two, three, and four.
7 And the justification for four kilohertz, as I read it from
8 NIOSH, was that four kilohertz was one of the first
9 frequencies affected by noise. Well, it may very well be
10 one of the first frequencies affected by noise, but unless
11 that has something to do with speech perception, that is not
12 an appropriate rationale for including that frequency.

13 And, as a matter of fact, the Prince formulation
14 of the material impairment formula used by NIOSH states that
15 NIOSH is using the material impairment formula which was
16 approved by the American Speech and Hearing Association.
17 That formulation was really, I believe, in 1984 a task force
18 recommendation to NIOSH and I don't believe NIOSH ever
19 adopted that as a national policy.

20 And furthermore, NIOSH changed the formulation by
21 adding what's called an articulation index weighting function

1 on each of the frequencies, which is maybe all right, but
2 there is no one who ever evaluated whether that particular
3 metric has anything to do with speech intelligibility.

4 So there are a lot of formulations out there and I
5 think it's very important for MSHA to think about these
6 formulations, and I recommend that you adapt the American
7 Medical Association, the American Academy of
8 Odalaryngatology definition of material impairment in
9 hearing and use that throughout your document.

10 Do you want me to do the slides? Okay, let's go
11 on. Then I would just like to thank you for the opportunity
12 to speak and can address any questions if you want to, now
13 or I'll wait a few minutes until the last presenter.
14 Whichever. I'll sit. All right, thank you.

15 MR. ING: Thank you, Dr. Clark. Our next speaker
16 is Dr. Timothy Rink. Dr. Rink is the founder and President
17 of HDI Incorporated, a private company that provides mobile
18 testing services on health and hearing conservation on
19 clients located in the Midwest.

20 Dr. Rink's previous professional experience
21 includes adjunct Assistant Professor for speech and hearing

1 section, Department of Hearing Communication at the Ohio
2 State University and Director of Audiological Services for
3 the Ear, Nose, Throat and Head and Neck Surgeons,
4 Incorporated. I would also like to have Dr. Rink's
5 curriculum vitae attached as part of our record, which we'll
6 supply you with. Dr. Rink?

7 DR. RINK: Thank you, and let me also express my
8 gratitude for having the opportunity to present some
9 information to the panel today.

10 I was invited in basically to overview an article
11 that I had published in the Journal of Occupational Health
12 and Safety reviewing the audiometric records on a large
13 database of clients that we provide services to. And in
14 preparation of presenting that information and expanding on
15 that information to you, I would simply like to overview the
16 fact that in 1983, the Hearing Conservation Amendment to the
17 Noise Act came into play and essentially elevated hearing
18 conservation programs onto equal footing, or at least onto
19 compliance footing with engineering and/or administrative
20 controls.

21 And I would say to you today that if you went into

1 the manufacturing sector, who I work with predominantly, and
2 ask the plant personnel how they're dealing with the noise
3 problems in their work place that the vast, vast majority
4 would respond to you that we have an ongoing hearing
5 conservation program. They're certainly not looking away
6 from engineering controls when they're effective, efficient,
7 applicable, and of course, rolling around that word, when it
8 becomes feasible.

9 Now, having said that, I would also like to point
10 out that when the Hearing Conservation Amendment was
11 adopted, it did point out four key components of an
12 effective program being monitoring the work place, providing
13 personal hearing protective devices to individuals, training
14 the employees on the effects of noise and ear and how to use
15 that protective equipment properly, and establishing an
16 audiometric testing program parameters that revolve around
17 that. And I'm not going to define that. I think we're all
18 familiar with those.

19 I would like to point out though that when you opt
20 to establish and maintain a hearing conservation program in
21 a noisy work place, the vanguard of that program is the

1 personal hearing protective device. In other words, what
2 you're really saying is that we've opted to protect the
3 individual and to train him how to do that properly, and
4 then separately and, I think, very importantly, to establish
5 an outcomes measure base, that is the audiometric testing
6 program, to determine the effectiveness of what we're trying
7 to do.

8 In other words, if we are measuring people
9 changing, and that change is something that is an
10 unacceptable rate, then the program is not working. It's
11 not effective.

12 So having said that, I'd like to present some
13 information to you now that reviews the audiometric records
14 that we've gathered over the past seven years. The article
15 that I published was a five year review and it did not
16 include 1990 because when I sat down to write the article, I
17 figured that a time frame of five years was probably an
18 appropriate time frame. And since that article was
19 published, I've updated for 1996.

20 I'm going to move simply through this to the very
21 next slide so that I can run the seven year total and use

1 that over here on the far right side as the basis for
2 explaining what you would see if you looked at each and/or
3 any of the years that were presented.

4 Over the past seven years, we have evaluated the
5 results of four hundred and eighty-six thousand hearing
6 tests that have been given to industrial environments
7 throughout predominantly the Midwest United States and I
8 would add that we've reviewed data coming in from every
9 state in the United States, as well as Canada, Puerto Rico,
10 to name a few.

11 And over that period of time, and since 1990,
12 we've established a protocol at HDI whereby our audiology
13 staff sits down and when an STS has been identified
14 following an age correction, our staff, by professional
15 review, establishes whether the shift pattern that has been
16 identified is a shift pattern in hearing that is consistent
17 with occupational noise exposure or whether we're looking at
18 a pattern that is not consistent with occupational noise
19 exposure.

20 Without getting too clinically technical, we're
21 simply looking for bilateral high frequency shift patterns

1 whereby at least one ear, of course, has the standard
2 threshold shift of ten dBA or greater. And if you ask me if
3 both ears have to have that ten dBA shift or greater pattern
4 to be considered classic noise induced hearing loss, the
5 answer's no. In my own personal judgement, I feel that
6 about half of them are. We typically see a twelve dB high
7 frequency shift in one ear and maybe an eight or nine dB
8 shift in the other ear. So you have symmetry often. Very
9 often. Six thousand and eight thousand, and we'll show
10 thirty dB drops that are not part of the OSHA frequencies
11 that are being reviewed.

12 So the symmetry can be viewed easily, and of
13 course, we do this on a computer screen and when we do the
14 review, we have the entire audiometric history chronically
15 right in front of us. So you can see these notches
16 occurring and you can follow them quite easily.

17 Over the past seven years, our audiology staff, by
18 review, has identified twenty-three thousand, one hundred
19 and twenty four tests that have been consistent with
20 occupational noise exposure or 2.73 percent of the
21 population being tested. Another group of forty-two

1 thousand, four hundred and seventy-eight people, or 5.02
2 percent of the population demonstrated OSHA STS's that the
3 pattern did not have the bench marks of noise exposure.
4 That is to say, they were unilateral, flat hearing loss
5 patterns or bilateral patterns with a preponderance of low
6 frequency change which, of course, is mechanical in nature.

7 We are not making diagnostic comments here. We
8 don't know whether that flat pattern has occurred because of
9 an upper respiratory infection or an acoustic neuroma. Our
10 goal is not to make a diagnostic statement but simply to
11 identify when an STS is clearly and classically the type of
12 change that we would expect to see from exposure to
13 occupational noise.

14 Now, from the past twenty years -- by the way, the
15 total number of STS's, if you merge those two groups
16 together, was sixty -- help me -- sixty-five thousand
17 people, and it was 7.75 percent of the test population which
18 correlates quite closely with the statistics showing about
19 ten percent of populations being tested recording STS's.

20 HDI has always offered and provided re-testing of
21 people demonstrating standard threshold shifts. Unlike the

1 MSHA proposal, the OSHA standard very clearly outlines a
2 procedure for allowing, permitting, re-testing to determine
3 whether or not a shift that has occurred on an annual test
4 is persistent or not persistent. We've coined, of course, a
5 term, persistent threshold shift, based on that definition.

6 As you can see from the twenty-three thousand
7 people that were identified as showing initial shift
8 patterns on their annual test, when that population was re-
9 tested, eleven thousand confirmed by re-test. Eleven
10 thousand, three sixty-six. It went from two seven three,
11 2.73 percent, to 1.3 percent. Almost fifty percent exactly
12 confirmed by re-test and fifty percent did not.

13 When you talk in terms of reportability or
14 recordability, if you opt not to re-test the population,
15 even a noise induced shift population, and you take an
16 annual test and deal with that test as if an incident has
17 occurred, you're wrong fifty percent of the time.

18 The other thing that I would point out is that
19 those individuals showing shift patterns not consistent with
20 noise, as you might well expect with upper respiratory
21 infections, hay fever, head colds, what have you, that

1 population dropped from 5.02 down to 1.32. About eighty
2 percent of the people showing shift patterns on their annual
3 test that it qualified as an STS do not confirm by re-test.
4 The total number of STS's dropped from 7.75 to 2.66. Could
5 we go to the next slide?

6 I'd like to present this to you now graphically,
7 because it makes some very important visual impact, I
8 believe. Over the same seven year period of time, our
9 industry average for those people showing changes not
10 consistent with noise -- and these are STS's as defined by
11 OSHA -- was 5.02 percent, right across there. As you can
12 see, with a little bit of variance, we've been fairly
13 consistent in the number of people being reported in this
14 category. The yellow represents those that on re-test
15 confirmed.

16 And of course, when you do a follow up
17 examination, you're either going to confirm by re-test, or
18 go back and tell the individual that they've had a temporary
19 threshold shift. Eighty percent of the people in this
20 category are being told that a temporary threshold shift had
21 taken place.

1 Now, what I would like to say to you is that this
2 tells me that when about a hundred and twenty-five thousand
3 people are being tested annually, that if we took a
4 population of non-noise induced individuals and the
5 population in the end was large enough, this probably
6 represents something close to what we could expect to see as
7 standard threshold shifts occurring in people who have no
8 noise exposure.

9 These are people who have STS patterns.

10 In other words, they've exceed the ten dB threshold
11 shift at two, three, and four thousand, but the pattern has
12 nothing to do with an occupational exposure.

13 I would also point out that when a test takes
14 place in a population of industrial employees, there are
15 going to be people there who have these types of problems,
16 upper respiratory infections, head colds, what have you, and
17 that you can't control that population. They're there,
18 they're among the people you're testing. Now, let's move on
19 to the next slide, please.

20 This slide represents the individual showing
21 standard threshold shifts as defined by OSHA and the pattern

1 is consistent with occupational noise exposure. And I think
2 that you can see very clearly that over the past several
3 years, there's been a very noticeable decrease in the number
4 of STS's recorded. And equally impressive to me is the fact
5 that each year that a number or a percentage is identified,
6 the confirmation drops off to fifty percent almost on a
7 clock-like basis.

8 What we would like to point out is that during the
9 past seven years while our industry average has run at about
10 a 2.7 percent, there has been a downturn in the number of
11 STS's recorded and for the sixth year in a row, the number
12 of persistent threshold shifts has dropped. Last year, out
13 of a population of one hundred and thirty-six thousand
14 people tested, we only have .95 percent of the population
15 demonstrating a threshold shift that was confirmed by re-
16 test that was consistent with occupational noise exposures.

17 What I believe this is pointing out is the
18 effectiveness of hearing conservation programs in industries
19 where the programs are effectively managed and adhered to.
20 Thank you.

21 MR. ING: The final speaker is Mr. Bruce Watzman.

1 Bruce is currently the Vice President of Safety and Health
2 for the National Mining Association. He's intimately
3 familiar with the interests and concerns of miners and the
4 needs of the mining industry and of MSHA. Mr. Watzman is a
5 member of the American Industrial Hygiene Association, the
6 American Conference of Governmental Industrial Hygienists.
7 He serves on various boards and committees and his function
8 is the health and safety of miners.

9 MR. WATZMAN: Thank you. As Wes indicated, my
10 name is Bruce Watzman. It's spelled W-A-T-Z-M-A-N. I'm the
11 Vice President for safety and health of the National Mining
12 Association. In the interest of time, I will submit my
13 complete statement for the record, but will only touch upon
14 a few points.

15 We appreciate the opportunity to come before you
16 today and we will be providing more extensive comments on
17 the department's economical analysis to accompany the rule.
18 These will be followed up by the close of the comment
19 period. Today, however, I will focus my remarks on two
20 areas. First, technical feasibility and second, the
21 presentation of limited audiometric and noise survey results

1 from analysis conducted by two operators whose miners
2 utilize hearing protection.

3 As I mentioned earlier, we will file detailed
4 comments on the economic analysis. Review of that document
5 has been a difficult task because of the detail contained in
6 the document and the assumptions employed by it's authors.
7 While we differ with many of the conclusions, we nonetheless
8 applied their efforts. Analyzing an industry as diverse as
9 the mining industry is an extraordinarily difficult task.

10 The Department of Labor's statement of regulatory
11 priorities, published on November 29, 1996, stated that new
12 rules must be both effective and minimize the burdens on the
13 regulator community. Further, DOL stated that they would
14 explore new approaches that achieved regulatory controls at
15 lower costs and with greater flexibility for the regulator
16 community.

17 It's with these goals in mind that we are
18 analyzing the economic analysis. Our initial conclusion is
19 that the proposed rules fail to achieve these goals, namely,
20 regulating at lower cost and with greater flexibility.
21 While the rule is performance oriented, it precludes the use

1 of proven noise containment technology to reduce miners'
2 exposure and thus limits rather than enhances operators'
3 flexibility.

4 Let me give one example that will be discussed in
5 greater detail in our comments. During the last eighteen
6 months, one of our member companies has undertaken an
7 equipment modernization program to, among other things,
8 reduce noise exposures. They've spent \$5 million to date,
9 replacing thirteen pneumatic junk jack-laid drills and
10 several of it's loaders. The pneumatic drills were replaced
11 with electric hydraulic drills. This resulted in a noise
12 reduction from one hundred and twelve dBA to ninety-eight.
13 Replacement of the loaders resulted in a reduction from one
14 hundred and three to ninety-eight.

15 In both instances, having spent \$5 million to
16 date, for state of the art equipment, the engineering
17 controls do not achieve compliance with the permissible
18 exposure level. I should note that the company's
19 expenditures, theirs alone, exceed fifty percent of OSHA's
20 estimated compliance costs for the entire industry and
21 because the equipment has not achieved compliance, the

1 operator is still required by the agency to utilize dual
2 hearing protection.

3 The preamble to the proposed rule, and more
4 specifically, question number 13 discusses the concept of
5 feasible engineering controls. IT states, "MSHA has
6 considered three factors in determining whether engineering
7 controls are feasible at a particular metal and non-metal
8 mine. First the nature and extent of the overexposure.
9 Second, the demonstrated effectiveness of available
10 technology. And third, whether the committed resources are
11 wholly out of proportion to the expected result."

12 The example just discussed calls into question how
13 the agency quantifies the third criteria and it's
14 application throughout the industry. Mr. Ing spoke earlier
15 about the question of risk. And the Mine Act talks not only
16 about -- not only the Mine Act, but the courts have also
17 provided guidance and direction in meeting this threshold.
18 So too has guidance provided -- been provided regarding the
19 question of feasibility. The Mine Act provides that, "In
20 addition to the attainment of the highest degree of health
21 and safety protection for the miners, other considerations

1 shall be considered. One being the feasibility of
2 standards."

3 As the legislative history of the Act shows,
4 Congress intended technologic and economic feasibility
5 should be considered. Thus, costs and technical feasibility
6 are to be carefully considered and the impact of new
7 standards must be reasonably related to the standards
8 expected. It is this area that technical feasibility of
9 compliance with the proposed rule that we have our greatest
10 disagreement with the proposal.

11 If you'll put up the first slide, Wes. What we
12 have done, and these are missing from the docket, is gone
13 back for the last five years and looked at technical
14 feasibility reports where individuals from MSHA's technical
15 support office have gone out to work with operators in the
16 metal, non-metal sector of the industry because inherent in
17 the preamble is the assumption that metal, non-metal has
18 succeeded in engineering noise out of the work environment.
19 What these reports show is that that is not the case.

20 The Eswell reductions have been achieved, in the
21 first case from 103.1 dBA to one hundred and two. What we

1 find time and time again is the conclusion of the reports
2 and the recommendations of the reports are that hearing
3 protection must continue to be worn for maximum operator
4 protection, even though applied controls did provide good
5 reduction. You can go to the next one.

6 Once again, time and time again, with various
7 pieces of equipment, while reductions were achieved, some of
8 them feasible under MSHA's definition of dBA reduction, the
9 fact of the matter is that the engineering controls, after
10 quite a bit of expenditure, did not obtain compliance with
11 the standard and hearing protection was to be worn. The
12 agency recognizes the valuable role of hearing protection,
13 yet through this rule, it is precluding operators of using
14 that as a principle means of control.

15 Dr. Clark and Dr. Rink have shared their thoughts
16 on hearing protectors and effective hearing conservation
17 protection program. We share their beliefs and are working
18 diligently to provide the agency with the database and
19 analysis of thousands of miners who utilize personal hearing
20 protection. The preamble to the proposed rule requested
21 this data. The procedures which must be followed in

1 obtaining permission to share the data and the need for
2 analysis are lengthy. We appreciate the extension and we
3 will work diligently to provide this information to the
4 agency within the time provided.

5 Today, I'd like to share with you some very
6 limited data. The data comes from two companies that operate
7 both surface and underground coal mines. In one case, the
8 company conducted a survey of miners with the highest noise
9 exposure. In the other, all miners were surveyed. In the
10 first case -- if you'll put that up, the next overhead. Oh
11 excuse me, go ahead, the findings.

12 (Pause.)

13 In the first case, sixty employees consented to
14 have their audiograms reviewed. Their results were adjusted
15 for age based on what we believe is the appropriate method,
16 which I'm sure is adopted.

17 The observations. Unadjusted for age, fourteen of
18 the sixty employees show a ten dB or greater shift in one
19 ear. Adjusted for age, three employees show a ten dB or
20 greater shift. Unadjusted for age, eleven show a ten dB or
21 greater shift in both ears. Adjusted for age, no employees

1 show a ten dB or greater shift in both ears. And lastly, no
2 employee showed a twenty-five dB or greater shift in either
3 ear. Next slide.

4 Similarly, in the second case, one hundred and
5 forty-four employees consented to have their audiogram
6 records reviewed and utilized for a study. Once again, age-
7 based factors were utilized as provided for in the proposed
8 rule. Similar results can be seen. Unadjusted for age,
9 twenty employees show a ten dB or greater shift in one ear.
10 Adjusted for age, nine show a ten dB or greater shift in one
11 ear. Moreover, the results of one record is suspect and is
12 being looked at. Adjusted for age, no employees show a ten
13 dB shift or greater in both ears and no employees show a
14 twenty-five dB shift or greater in either ear.

15 These are quite compelling and if we reflect back
16 on what Dr. Rink just testified, there were no follow ups
17 done in these cases. So, in fact, the numbers may be lower
18 than presented here, or they may be somewhat higher, but we
19 don't know that because these companies don't retain the
20 conduct follow ups analysis as Dr. Rink does for his
21 clients.

1 We're concerned that the agency's goal, which we
2 share, is being approached through the wrong means. Our
3 analysis indicates that in many instances, short of
4 installing fully enclosed caps, the industry has exhausted
5 all feasible engineering controls. Moreover, in many
6 instances, the installation of caps will present safety
7 hazards which do not currently exist. This runs counter to
8 safety practice and is inconsistent with the Mine Act which
9 mandates that new standards not result in the diminution of
10 safety. It is our hope that by all feasible engineering
11 controls, the agency does not envision the installation of
12 fully enclosed cabs on all equipment and we would ask that
13 guidance be provided on this question.

14 NMA urges that MSHA to reassess this proposal in
15 light of the requirements of 101(a) of the Act. In
16 promulgating a mandatory health standard under that section,
17 MSHA must first identify the hazard and quantify that
18 hazard, i.e., to determine whether unregulated working life
19 exposure to the hazard is sufficient to cause a miner to
20 suffer material impairment of health or physical incapacity.
21 Both the identification and quantification of the risk must

1 be based upon the best available evidence.

2 While the health and safety of miners is of
3 paramount consideration, MSHA must also consider the
4 feasibility of the proposed standard, as well as the
5 experience gained under the Mine Act and other safety and
6 health-wise. Most obviously, of course, the MSHA statute
7 and MSHA's -- the OSHA statute and OSHA's experience.

8 Additionally, the agency need not restrict it's
9 standards simply to a permissible exposure level, but also
10 may consider, where appropriate, the use of appropriate
11 protective equipment. In any event, when revising the
12 existing standards, a new standard may not result in the
13 diminution in the level of health or safety that's already
14 provided. We believe that the following questions are
15 crucial to the promulgation of a sound and effective
16 standard must be addressed.

17 First, has the agency established by best
18 available evidence a significant risk of material impairment
19 of health to justify these proposed revisions to the
20 existing standard? Second, has the agency established by
21 best available evidence that the proposed rule will provide

1 tangible benefits, and if so, to what extent? Third, is the
2 proposed standard technologically feasible? Particularly
3 with respect to the elimination of credit given for hearing
4 protection and determining compliance with the current
5 standard.

6 Fourth, notwithstanding the Mine Act subordination
7 of economic feasibility with respect to health standards,
8 has the agency adequately addressed the cost of the proposal
9 to the industry and it's customers? In particular, has the
10 agency complied with the direction of Congress, the cost
11 analysis be employed in "taking into account alternative
12 means of accomplishing the primary goal of minimizing worker
13 exposure to unsafe working conditions"? In this case, the
14 use of hearing protection.

15 Fifth, with respect to the elimination of hearing
16 protection as a means of compliance with the noise standard,
17 has the agency justifiably foreclosed alternative means of
18 compliance for all operators, but in particular small
19 operators, in contravention of the Regulatory Flexibility
20 Act, Subreefa, and Executive Order 12866? Has the agency
21 unjustifiably ignored the experience gained under other

1 health and safety laws, particularly the OSHA statute? Has
2 the agency proposed a standard that will provide less
3 protection than the current standard, especially in the case
4 of coal, which allows for hearing protection as a means of
5 compliance?

6 In closing, NMA strongly supports the MSHA -- that
7 MSHA consider adopting the current OSHA standard, including
8 the policy set forth in the agency's field operation manual.
9 A number of our operating member companies must comply with
10 both OSHA and MSHA, and we see no justification for having
11 to design fundamentally different compliance programs to
12 protect workers on contiguous sites.

13 In the alternative, we would recommend that MSHA
14 revise it's proposal so that it's requirements and goals are
15 compatible with the OSHA program. In particular, we
16 strongly urge MSHA to incorporate hearing protection into
17 both the compliance and hearing conservation components of
18 the rule. Either alternative would provide the correct
19 answer to the questions I referred to earlier.

20 Although we will be filing extensive post-hearing
21 comments on this crucial proposal, we thank you on behalf of

Heritage Reporting Corporation
(202) 628-4888

1 our members for providing us the opportunity to testify and
2 would be happy to respond to any of your questions at this
3 time. Thank you.

4 MR. VOLOSKI: Could you please submit your
5 overheads in the --

6 MR. WATZMAN: We have them all.

7 (Pause.)

8 MR. WATZMAN: I've provided you a copy of my
9 statement, of Dr. Clark's statement, Dr. Rink's overheads I
10 will be providing you, and we will submit in short order Mr.
11 Ing's statement that he presented and his overheads. I
12 can't get this microphone to stand still. Did you break it?

13 MR. VOLOSKI: I'd like to ask Mr. Rink a question.
14 On these STS's, when you went back and looked at them to see
15 if they were, in actually, an STS --

16 DR. RINK: Okay, please --

17 MR. VOLOSKI: -- you have found some STS's and
18 then you went back to see if the STS's were persistent.

19 DR. RINK: That's right.

20 MR. VOLOSKI: On the retest, did you do a fourteen
21 hour quiet period?

1 DR. RINK: No? No, that was done as a routine
2 follow up picking up threshold shift personnel, as well as
3 picking up people who missed their annual test when that was
4 being done. So the answer's no.

5 MR. THAXTON: Okay. Thank you.

6 DR. RINK: Okay.

7 MR. THAXTON: While you're up there, Dr. Rink, to
8 keep you from running back and forth --

9 DR. RINK: Okay, that works.

10 MR. THAXTON: That's okay? The data that you put
11 forth as part of your overheads, can you tell us what group
12 of occupations that those people represent?

13 DR. RINK: In the Midwest, it's predominantly
14 manufacturing. If I had to break it out into groups, the --
15 to answer your question, are you getting around to whether
16 there were miners in there?

17 MR. THAXTON: No, I'm asking the type of --

18 DR. RINK: Okay, well, I did try to get a hold of
19 that information. Less than one percent of our test
20 population are miners. These are predominantly
21 manufacturing locations throughout the Midwest United

1 States.

2 MR. THAXTON: Can you give us an idea then of the
3 average noise level that these people have been exposed to?

4 DR. RINK: They all had been exposed above eighty-
5 five decibels in hearing conservation programs.

6 MR. THAXTON: Can you be more specific though?
7 Had they been exposed to what were ninety-five dB without
8 consideration of hearing protection?

9 DR. RINK: I could do it with the database
10 analysis, but what we used the information I just shared
11 with you for is to do bench mark reviews for our clients as
12 to whether they are meeting the kind of information we're
13 seeing from the industry in general. In other words, what
14 we like to do, outcomes measures like I presented to you, as
15 a basis of evaluating the effectiveness of people that we're
16 working with. And as I said before, we're preparing right
17 now to do it by SIC code as well as in general.

18 So if we return a report to an individual company
19 and the number of standard threshold shifts they're
20 reporting is running about 1.1 percent and they're hitting
21 the target, there we think the program is showing an

1 effectiveness that's related to a fairly large population.
2 If, on the other hand, we go back and find that three or
3 four percent of the population is demonstrating standard
4 threshold shifts consistent with noise, and yes, I talk
5 about these, then we want to do a program review and
6 undoubtedly I can relate to you that my experiences will be
7 to go out and find out that people weren't wearing their
8 hearing protector devices and the program has slipped away.

9 (Pause.)

10 DR. RINK: Next?

11 MR. THAXTON: That's all. Dr. Clark? I found it
12 interesting that you had the listing for the ACGIH in your
13 overhead, but you did not give a reason as to why you
14 disagreed with them. Would you care to elaborate on why you
15 --

16 DR. CLARK: Yes, I'd be happy to. The basis for
17 the ACGIH recommendation was to select an exposure that
18 would produce less than two dB of noise induced permanent
19 threshold shift. That basis is not made upon any estimation
20 whatsoever of material impairment of hearing or on the
21 ability of individuals to communicate in quiet or in noise.

1 It's simply based upon an estimation of predicted noise
2 induced permanent threshold shift.

3 The only justification I could find for it was if
4 you go to the ISO document, or the ANSI standard, and ask
5 the question: how much NIPTS is predicted for an eighty-
6 five dB exposure? It turns out that it's about two dB,
7 which is -- which it seems to me to be a circular argument.
8 The point is, the point I'm making is that I don't think
9 that a number of noise induced permanent threshold shifts
10 decibel value, particularly a small value, for thresholds in
11 the two, three, or four kilohertz region, should be used as
12 a basis for establishing a criterion value.

13 MR. THAXTON: Secondly on this, and Dr. Rink may
14 actually want to respond to this as well as it goes to both
15 of your comments and presentations, basically, you indicated
16 that your analysis of the Franks data indicated that people
17 were exposed to a predicted level of up to eighty-nine dB
18 that undoubtedly people would have been exposed to less than
19 ninety-five dB.

20 DR. CLARK: Well, I averaged.

21 MR. THAXTON: On average --

1 DR. CLARK: Those are the average data, or median
2 data, right.

3 MR. THAXTON: Would you agree, as a professional,
4 that controlling exposures though that are ninety-five or
5 less dB through engineering controls is much more obtainable
6 than exposures that would be of one hundred, one hundred
7 eight dB as we've seen on some examples?

8 DR. CLARK: Unfortunately, my expertise does not
9 include at all expertise about engineering controls for
10 equipment. So I really -- I don't want to speculate. I
11 mean, if you asked the question: is it like that a device
12 that produces ninety-two dBA of sound can be reduced to
13 eighty-nine more likely than a device that produced one
14 hundred ten can be reduced to eighty-nine, the answer's
15 obviously yes.

16 I think that the issue of reducing it down two PEL
17 gets mixed in with this issue about how easy it is to do
18 engineering reductions. But once again, I don't do
19 engineering noise control and I would like to defer that
20 question to other people who can answer it better than I.

21 MR. BAILEY: I'm in the same boat.

1 DR. CLARK: Okay, but I certainly would say that
2 if you've got a one hundred and five dB exposure, you're
3 going to have a lot tougher time engineering that down to
4 ninety, obviously, than you are for a ninety-one or ninety-
5 two dBA exposure.

6 MR. VOLOSKI: Mr. Watzman, at the beginning you
7 talked about one of your member companies noise controlling
8 jack-laid drills by getting electrical -- electric drills
9 and you had some nice reduction of about four dBA, and you
10 talked about loaders. Could you identify the type of
11 loaders? Are they front end loaders? Are they loading
12 machines in the coal mine? What type of machines are they?

13 MR. WATZMAN: I don't have that for the record. I
14 have that, but I don't have it with me, so I will provide
15 you details on both the type of equipment and the
16 manufacturer of the equipment.

17 MR. VOLOSKI: Thank you.

18 MS. PILATE: I have one question for Bruce
19 Watzman. On the \$5 million cost figure that you provided us
20 for replacing fifteen pneumatic drills and there's another
21 type of engineering control you mentioned, what is included

1 in that \$5 million cost? Is that only equipment cost?

2 MR. WATZMAN: That is equipment purchase cost.

3 MS. PILATE: And how many, for that particular
4 facility, how many employees are -- work at that facility?

5 MR. WATZMAN: I do not know that information. I
6 will provide it to you.

7 MR. CUSTER: Thank you, gentlemen. We're going to
8 take a fifteen minute recess at this point. Or okay, at the
9 risk of losing someone, the panel has overruled me and we
10 will take a thirty minute recess. Thank you.

11 (Whereupon the hearing was recessed at 2:50 p.m.
12 for a thirty minute recess.)

13 //

14 //

15 //

16 //

17 //

18 //

19 //

20 //

21 //

1 //

2 //

3 //

4 //

5 //

6 //

7 //

8 //

9 //

10 //

11 //

12 //

1 criteria for measuring safety, Arch Minerals' operations
2 were the overall safest company in the coal industry in 1995
3 and it was ranked among the top three safest coal companies
4 in the nation for the last three years. Just last month,
5 both Captain Mine and the underground Conant Mine at Arch of
6 Illinois were determined to be the safest mines in their
7 respective classes in the state of Illinois.

8 I am pleased to be here this afternoon as a
9 representative on behalf of Arch Mineral Corporation. I
10 dwell on our record, not because I want to be boastful, but
11 instead to emphasize that we take safety seriously in our
12 company. In my position as Supervisor of Safety, it is my
13 responsibility to ensure that we are complying with the laws
14 and regulations which set safety standards for our
15 employees. It is my job to find ways to implicate practices
16 and attitudes in our employees which promote their safety
17 while in the work place.

18 I cannot overemphasize what I just said. Safety
19 in coal mining is no longer a matter of telling a miner what
20 to do or to refrain from doing. The success that we have
21 achieved in recent years is directly attributable to

1 continuous process of educating our employees to the risks
2 inherent in our work place, whether on the surface or
3 underground. Involving them in the implementation of
4 practices designed to minimize those risks and promoting
5 conduct designed to avoid injury.

6 It is because of our demonstrated record of
7 success that I am highly concerned about the proposed
8 regulation. Although I do not believe that it is MSHA's
9 intent to increase the likelihood of hearing impairment in
10 our mines, I believe this will be the inevitable outcome of
11 this rule because the rule as proposed will not recognize
12 hearing protection devices as a suitable means of reducing
13 noise exposure.

14 MSHA proposes to eliminate the single most
15 effective means we now have to protect our employees'
16 auditory function. It is also the tool which is most
17 flexible and easily utilized by our employees.

18 The proposed rule suffers from two fundamental
19 flaws. First, MSHA has overstated the risk to miners'
20 auditory function associated with a mine work place.
21 Second, our experience and data demonstrate the efficacy of

1 the current regulation, whether the regulation's judged by
2 the efficiency of the use of the hearing protection or by
3 the cost effectiveness of the devices. I would like to
4 illustrate these points by comparing the MSHA analysis found
5 in the preamble to the regulation with our work experiences
6 at Illinois.

7 In the preamble discussion found on pages 66373
8 and 66374, MSHA reports that the risk of material hearing
9 loss of twenty-five dBA for workers exposed to ninety dBA of
10 noise varies from as low as twenty-one percent to as high as
11 59.7 percent. In this document analyzing the proposed rule,
12 MSHA cites a study which reports a fourteen percent of
13 miner, aged forty or younger, employed after the
14 implementation of the current standard, have experienced a
15 material hearing loss.

16 MSHA uses this study to support it's conclusion
17 that the current standard has not met the objective to
18 reduce hearing loss. The problem is that this conclusion
19 may well be incorrect.

20 In 1972, NIOSH performed a risk assessment which
21 concluded that workers exposed to ninety dBA had a twenty-

1 nine percent risk of a material hearing loss. That was
2 based on testing at three different frequencies, one
3 thousand, two thousand, and three thousand hertz. MSHA has
4 now reached a conclusion of hearing loss in young miners
5 based upon different frequencies, two thousand, three
6 thousand, and four thousand hertz. My purpose in raising
7 this is not to determine which test more accurately detects
8 hearing impairment, it is to state the obvious question that
9 MSHA has changed the standard of measurement in justifying
10 the new rule.

11 And I'll depart from my written text here for just
12 a minute. Listening to what Dr. Rinks and Dr. Clark had to
13 say, this fourteen percent, if I understood their testimony
14 correctly, where on half of that percentage may well be due
15 to something that was not noise induced, and then on the
16 half percent that would be noise induced on re-testing,
17 there may be another half that factor out with re-testing.
18 This fourteen percent may well be something more like 14.5
19 percent of that. But that's just based on what I've heard
20 here today.

21 Continuing, moreover, it's conclusions depart

1 radically from the results that we have found at Arch of
2 Illinois. After MSHA proposed it's new rule, Arch of
3 Illinois conducted an audiometric survey of it's underground
4 Conant Mine. The average age of our sample population was
5 forty-seven years. Our employee population should be
6 regarded as a reasonable sample of the miners in our state.

7 Most came to Conant Mine when it was opened in
8 1991 with experience in other underground coal mines. We
9 have always required the use of personal hearing protection
10 in areas of the mine that have high noise levels. To avoid
11 the potential of selecting our sample, we opened the testing
12 up for everyone who works in our mine. We conducted the
13 testing on shift with a fourteen hour quiet time preceding
14 the test as proposed in the rule making. The results were
15 dramatic.

16 Of the total population tested, only one
17 individual was found to have incurred a material hearing
18 impairment in his hearing while working the Conant Mine.
19 That individual was sixty years old. He represents only
20 1.35 percent of the population tested and represents only
21 .66 percent of the total work force at the mine.

1 Whether one chooses to use the 1972 risk standard
2 developed by NIOSH, or the most recent risks predicted the
3 MSHA, our results demonstrate a far lower loss of hearing.
4 We can identify nothing other than our policy of using
5 personal hearing protection and the ready acceptance of that
6 policy by our employees to explain the difference in our
7 results from those predicted by MSHA.

8 I wish to return to my second point. The reason
9 why personal hearing protection has worked well in our
10 operations is because it is a tool that is easily utilized
11 both by management and by our employees. Hearing protection
12 is relatively inexpensive and consequently few operators
13 will resist purchasing devices for employees because of the
14 cost.

15 This is more important than you may realize,
16 because our business is fiercely competitive. The price of
17 coal has declined in real terms for more than a decade. Any
18 rule that may be adopted must recognize that the domestic
19 coal industry spans an enormous spectrum of firms. Some of
20 them are large, technology sophisticated, and profitable by
21 current standards. Others are very small, undercapitalized,

1 and truly, from an accounting perspective, may show very
2 little, if any, profitability. It is important that MSHA
3 maintain a rule which is of high likelihood of being
4 implemented and accepted at all levels of the industry.

5 Moreover, because personal hearing protection is
6 so widely accepted, manufacturers have incentive to
7 manufacture devices which are lighter, more comfortable to
8 use, and thus find greater acceptability by the individual
9 miners. Please do not overlook the value of having a device
10 which is already accepted by the work force in our industry.

11 As managers, we know that our policies have the
12 greatest likelihood of success when our employees buy into
13 that program. Our employees do not need long, statistical
14 presentations to understand the value of wearing hearing
15 protection. It is common sense to them. Moreover, it
16 supports our philosophy that safety is the responsibility of
17 everyone who works in our mines. It is not the
18 responsibility which falls exclusively on the company.

19 Let me restate that. It's the responsibility of the
20 miners, the employers, working together as a team.

21 It is our conclusion that the existing MSHA rule

1 on occupational noise exposure, found in 30 C.F.R. parts 70
2 and 71, adequately protects miners from hearing loss. We
3 further support the use of the hearing protection devices as
4 the best, most economical, and desirable method available to
5 provide the protection to our employees. No other device,
6 system, or technology of which we are aware begins to
7 approach the margin of protection afforded by the current
8 types of protective devices now available.

9 For this reason, we ask that MSHA abandon it's
10 proposed rule. If MSHA does not elect to do so, we suggest
11 that the current proposed text be replaced with a rule now
12 used by the Occupational Safety and Health Administration.
13 A key element of the current OSHA regulation is it's
14 acknowledgement that personal hearing protection is an
15 important and necessary means to provide adequate protection
16 to a person who works in persistently or intermittently high
17 levels of noise.

18 Furthermore, the adoption of the current OSHA
19 regulation would allow the mining industry to utilize
20 existing audiometric testing services that are now
21 available. This will reduce the burden associated with the

1 implementation of the new rule. At all other respects, we
2 fully support the comments and positions submitted today by
3 the National Mining Association, and I thank you for the
4 opportunity to comment on the proposed rule.

5 MR. THAXTON: Mr. Blaylock, a question.

6 MR. BLAYLOCK: Yes.

7 MR. THAXTON: Can you give us an idea of the
8 exposures, noise exposures, that you're finding in your
9 operation that you did the testing on?

10 MR. BLAYLOCK: On average, my continuous miners
11 for the last three years have been something under ninety-
12 one decibels, about 90.7. They are Joyce 12C and 12's, the
13 latest configuration of remote control. My roof bolters are
14 Simmons Rand and Norris, and they've been running about
15 89.9. And my coal haulers are Simmons Rand, and they've
16 been running eighty-seven. So the roof bolters and the
17 miners are really the high exposure areas.

18 MR. THAXTON: But even at that, they're extremely
19 -- they're fairly close to the current PEL?

20 MR. BLAYLOCK: Yes. Yes, they are. But we've got
21 a fairly consistent seam of coal that we're mining into and

1 there are times when we'll get angulations of say the grey
2 roof shale coming down in and when we get the shale or, in
3 some of our operations, if we get sandstone angulations,
4 then the noise levels are going to go up considerably. So
5 hearing protection is really efficient at that time.

6 MR. THAXTON: Have you then, in your analysis,
7 have you looked at the fact that the people that you're
8 testing have not been exposed to high noise levels from the
9 readings that you're giving us?

10 MR. BLAYLOCK: Well, I gave you the average.
11 There are a lot higher noise levels than that on a day to
12 day basis, from time to time. The average is like, you
13 know, ninety-four to ninety-six sometimes on the miners.
14 It's all a function of where the mining slack hold we're at.

15 MR. THAXTON: So are there surveys that you've
16 reported to MSHA, six month surveys, that exceed ninety that
17 you've had to go back and do supplemental surveys on them?

18 MR. BLAYLOCK: We've complied with all the
19 regulations on MSHA, is the answer.

20 MR. THAXTON: But have you had to turn in surveys
21 for miners exceeding ninety dB that you've had to submit

1 supplemental surveys for?

2 MR. BLAYLOCK: No, because of the dosimeter
3 factor, they've come in under ninety.

4 MR. THAXTON: The dosimeter factor?

5 MR. BLAYLOCK: The dosimeter factor on that. I
6 don't quite understand the question, I'm sorry.

7 MR. THAXTON: The supplemental surveys, when you
8 get a sample survey in coal that exceeds ninety dB, someone
9 is exposed to more than ninety dB --

10 MR. BLAYLOCK: Or a dose of one hundred and
11 thirty-two percent.

12 MR. THAXTON: No. In coal, if you have an
13 exposure greater than ninety dB, you're required to collect
14 a supplemental survey. If the supplemental exceeds one
15 hundred and thirty-two percent, it would show non-
16 compliance.

17 MR. BLAYLOCK: I'd have to check back with the
18 operation on that, on that part of it.

19 MR. THAXTON: Would you be willing to submit any
20 data which relates to the exposures that you found in your
21 mine in conjunction with the same people that went through

1 this test, this audiometric test?

2 MR. BLAYLOCK: I can do it by identifying --
3 without identifying the miner, and that will be part of the
4 data that is submitted to the NMA. When you get the NMA
5 data on that, you'll have that in it.

6 MR. THAXTON: Okay, thank you.

7 MR. VOLOSKI: I'd like to ask you a couple
8 questions. You started doing audiometric testing in 1991?

9 MR. BLAYLOCK: Yes, when the mine opened.

10 MR. VOLOSKI: Okay. In here, on page two, you
11 say, "We conducted the testing on shift with a fourteen hour
12 quiet period preceding the test, as proposed in the rule
13 making."

14 MR. BLAYLOCK: Right.

15 MR. VOLOSKI: Was that fourteen hour quiet period
16 with or without hearing protectors?

17 MR. BLAYLOCK: Without. What we did was we
18 scheduled -- we scheduled the guys to be tested at the start
19 of their shift. We held them up at the start of their
20 shifts and so they had a full sixteen hour period from the
21 last work shift and then we tested them before they went

1 underground.

2 MR. VOLOSKI: Okay, thank you.

3 MR. BLAYLOCK: All right.

4 (Pause.)

5 MR. CUSTER: Mr. Blaylock.

6 MR. BLAYLOCK: Yes?

7 MR. CUSTER: I have two questions. Number one, do
8 you use engineering controls of any kind for noise at your
9 operation?

10 MR. BLAYLOCK: Back to that question, like when we
11 spec out mining, we ask Joyce to include whatever latest
12 technology they have available on mining, like cavities and
13 sandfill. But above and beyond what the manufacturer can
14 provide to us.

15 MR. CUSTER: Another question then is when you
16 were quoting the noise levels of like ninety-one and eighty-
17 nine decibels --

18 MR. BLAYLOCK: Those are averages.

19 MR. CUSTER: -- as averages, are those actual
20 noise level determinations or are those the values that you
21 determined after the application of NRR values --

1 MR. BLAYLOCK: Prior.

2 MR. CUSTER: -- afforded by the hearing
3 protection?

4 MR. BLAYLOCK: Prior. That's the actual time
5 weighted average on the dosimeter taken -- the TWA overall
6 the different things, and that's just the average is my
7 understanding of that.

8 MR. THAXTON: I have one other question, I'm
9 sorry, I overlooked it. In your study of your underground
10 mine, you said that you conducted audiometric testing and
11 your review of that came up with only one person that has a
12 hearing loss as it's defined under the current --

13 MR. BLAYLOCK: Twenty-five dBA.

14 MR. THAXTON: Yes, but you also had in there that
15 it was well employed at this particular mine.

16 MR. BLAYLOCK: That's correct, because we had to
17 use the pre-employment data when we hired those people in.
18 That's what we had as basis to a baseline.

19 MR. THAXTON: So you're comparing their amount of
20 hearing loss with what they came in, compared to what they
21 came in at.

1 MR. BLAYLOCK: Right.

2 MR. THAXTON: When they came to work in '91, you
3 established as your baseline --

4 MR. BLAYLOCK: We did not use audiometric to zero
5 to establish our STS, no.

6 MR. THAXTON: Okay.

7 MR. BLAYLOCK: We used the baseline on the pre-
8 employment check.

9 MR. THAXTON: Okay, so these people only had
10 essentially five years of exposure at your mine.

11 MR. BLAYLOCK: Five to six years of exposure with
12 hearing protection. The whole purpose of the test is we
13 analyzed it to see how well hearing protection was done
14 during a normal period of time where we could say with
15 certainty that we knew what they had when they came and we
16 know what they've got now.

17 MR. THAXTON: Okay, thank you.

18 MR. CUSTER: Thank you. The next scheduled
19 speaker is Ken Vorpahl from Unimin representing National
20 Industrial Sand Association.

21 (Pause.)

1 MR. VORPAHL: Thank you very much. We'll be
2 brief, really. My name is Ken Vorpahl and I'm General
3 Manager for safety and health at Unimin Corporation and I'd
4 like to --

5 MR. CUSTER: Excuse me, sir. Would you spell your
6 name for the record?

7 MR. VORPAHL: V-O-R-P-A-H-L. And I'd like to
8 comment on the proposed occupational noise exposure on
9 behalf of the National Industrial Sand Association, or NISA.
10 The National Industrial Sand Association appreciates the
11 opportunity to comment on the proposed rule for health
12 standards for occupational noise exposure. NISA member
13 companies support MSHA's efforts to establishing a form
14 noise standard for the mining industry and we believe that
15 uniformity and consistency of rule should extend throughout
16 the department's regulatory agencies.

17 Specifically, NISA, in consort with many other
18 mining operators, favors the use of hearing protectors when
19 feasible administrative or engineering controls fail to
20 reduce sound levels within the PEL. We favor the MSHA
21 recommended five dBA exchange rate which is consistent with

1 OSHA. We favor the performance oriented PEL of ninety dBA
2 and we favor the use of hearing protectors as an alternate
3 to fourteen hours without work place noise exposure prior to
4 having an audiogram. And finally, we favor the record
5 keeping and reporting system required by the OSHA rule,
6 which is especially meaningful to those companies having
7 operations under both MSHA and OSHA.

8 NISA member companies, like most mining companies,
9 frequently are saddled with old and rugged machinery that is
10 noisy and controlling noise emissions from this equipment is
11 not always feasible or practical. And as this equipment
12 wears out and/or is replaced with equipment where noise
13 reduction has been incorporated during design, noise levels
14 within the industry will decrease.

15 In the interim, the use of hearing protectors
16 should be recognized as an alternate means of protection.
17 The use of hearing protectors, however, means that they will
18 be properly selected, fitted, and worn consistently with an
19 effective hearing conservation program.

20 The approach used by MSHA to reduce occupational
21 noise induced hearing loss through the use of administrative

1 and engineering hearing protective controls coupled with a
2 solid hearing conservation program is a sound approach. The
3 recommended five exchange rate and the ninety dBA PEL, in
4 addition to the above have reduced hearing loss throughout
5 the OSHA regulated community where industries and companies
6 are serious in their efforts to reduce occupational noise
7 induced hearing loss.

8 The situation within the mining community may be
9 somewhat different due to the predominantly real nature of
10 mining and the activities of many miners in the area of
11 hunting, sawing firewood, and other high noise activities.
12 And was mentioned before, separating non-occupational noise
13 insults from those stemming from employment requires real
14 effort. And here documentation of work place noise
15 exposures is essential. Also essential is the education of
16 employees about hearing loss, the process of prevention, as
17 well as other aspects of the hearing conservation program.

18 MSHA may want to address non-occupational hearing
19 loss and how this loss is to be excluded from occupational
20 losses, which MSHA in the current report, requires reporting
21 under Part 50. The reporting not substantiated by work

1 place dosimeter readings may present a totally false picture
2 of the prevalence of occupationally induced hearing loss.

3 Again, NISA supports the efforts of MSHA to
4 develop a noise standard for the mining industry. NISA also
5 supports many other commenting groups that favor the
6 development of an MSHA noise standard which is consistent
7 with the workable and effective MSHA noise standard. The
8 two main regulators within the Department of Labor should be
9 consistent with each other.

10 The proposed MSHA rule, considering the comments
11 stated, is a workable rule. These comments reflect NISA's
12 position regarding MSHA's proposed rule for occupational
13 noise exposure and we look forward to working with you to
14 finalize the rule applicable to the industrial sand
15 industry, which is protective of the hearing of NISA member
16 company employees, as well as being feasible and practical.
17 Thank you.

18 MR. THAXTON: I have two questions.

19 MR. VORPAHL: Okay.

20 MR. THAXTON: One, you indicated that you have a
21 lot of old equipment and as that equipment gets replaced,

1 the noise levels will improve --

2 MR. VORPAHL: Right.

3 MR. THAXTON: -- in your member industry. Given
4 that you realize that newer equipment is going to be less
5 noisy, can you recommend a phasing period that could be put
6 into place that would reasonably expect that over a five or
7 maybe ten year period that --

8 MR. VORPAHL: I don't know the shelf life of a
9 screen, for example, but we just replaced a whole screen
10 house where we did receive a noise citation in one of our
11 plants for screening and we replaced all screens in the
12 entire screen house and reduced the decibel level about
13 eight dB. Now we are well within about eighty-six or
14 eighty-eight on the sound level readings, not even
15 dosimetry.

16 So it sort of goes by the shelf life of the
17 equipment. I don't know of any quiet crushers, for example,
18 but we build control rooms so we protect workers that way
19 and most of our exposures in our industry to high noise
20 levels is, in fact, intermittent as opposed to continuous
21 because we use control rooms and so forth, whenever

1 practical to try to eliminate the noise.

2 But it's based on the life of the equipment more
3 than anything else. We are buying -- we ask the
4 manufacturers now what your noise levels are for your
5 equipment and I think our message is getting across to many
6 manufacturers and now they're sensitive to producing
7 equipment that has low noise levels. AT least in our
8 business.

9 MR. THAXTON: Second question, you indicated that
10 noise dosimetry was a very important part of determining
11 whether a hearing loss was related to occupation or off the
12 job.

13 MR. VORPAHL: Right, and that you do that -- it
14 needs to be in concert with the two.

15 MR. THAXTON: How many of your member companies
16 already conduct monitoring on their own?

17 MR. VORPAHL: Well, we do and we have forty
18 plants. Bob, do you have any idea?

19 MR. BLAYLOCK: Not really, no.

20 MR. VORPAHL: Practically every one of our plants
21 has at least one dosimeter in it. We have a bunch in our

1 office that we ship around.

2 MR. THAXTON: If you could provide us, you know,
3 some idea of the number of your operations that currently do
4 that, it would be helpful.

5 MR. VORPAHL: Okay.

6 MR. VOLOSKI: I have a question for you. On page
7 -- I think it's page three, you have a statement, "In the
8 interim, the use of hearing protectors should be recognized
9 as a means of protection". Are you requesting that the
10 older equipment be grandfathered by that statement?

11 MR. VORPAHL: I'm sort of saying that I agree, as
12 an industrial hygienist, engineering controls first,
13 administrative second, but don't just exclude the use of
14 hearing protectors way down on the bottom. I think they
15 should be -- when used properly, they do provide protection
16 from our experience, and I'd like to see them elevated a
17 little bit in your hierarchy of how they're used, I guess
18 that's what I'm saying.

19 MR. VOLOSKI: Okay, but you're not asking for a
20 grandfathering --

21 MR. VORPAHL: No.

1 MR. VOLOSKI: -- of the existing equipment?

2 MR. VORPAHL: No.

3 MR. VOLOSKI: Okay.

4 MR. CUSTER: I have a question in regard to the
5 isolation of process in the use of facilities that you
6 related to. And with the resultant reduction, I believe you
7 stated, in noise levels or noise to which --

8 MR. VORPAHL: No, noise to those people.

9 MR. CUSTER: -- noise to which those people are
10 exposed.

11 MR. VORPAHL: Right.

12 MR. CUSTER: Do you feel that the gain on the
13 noise side was the result of process isolation for the
14 reason of reducing exposure to quartz, for example, and --

15 (Simultaneous discussion.)

16 MR. VORPAHL: In our business, quartz is our main
17 consideration.

18 MR. CUSTER: Exactly, but --

19 MR. VORPAHL: But we also --

20 MR. CUSTER: -- the side benefit is to help you
21 out.

1 MR. VORPAHL: Is to noise, right. Thank you, Mr.
2 Vorpahl. The next speakers on this list are Tom B. Shade
3 and Rick Waugh.

4 MR. SHADE: First of all, my name is Thomas B.
5 Shade -- S-H-A-D-E. I work for Asilica Company. I am a
6 miner and have been a miner for twenty years. I worked in
7 that industry for that twenty years in noise and even with
8 the new controls that have been applied there,
9 administrative controls and personal protective equipment.

10 I've seen -- I was there before we had them and
11 I've been there since they've been enforced and I have more
12 questions on what is MSHA going to do to protect my rights
13 as an employee? I have heard these companies stand up here
14 and say we have spent this much money to protect these
15 employees, but where is my rights on hearing? How do I find
16 out where and how I can go to compensation about hearing
17 loss?

18 They talk about hearing loss is sometimes proposed
19 at home, then you have a hearing loss after you get to work.
20 How do you know you have a hearing loss at home? I've never
21 had a test at home? Where is the testing being done? I see

1 it being done at the plant, but I sent in -- the plant, when
2 we have our test, it comes down in a mobile trailer, four
3 guys in the same room, kicking the table, hanging the
4 hearing equipment up. I hear all those noises at the same
5 time the testing is going on. I hear trucks going by on the
6 highway.

7 We used to have it set up where we did it at the
8 hospital. It was nice and quiet. We have gotten away from
9 that standard to doing it back on site. I've come to work -
10 - I've worked four hours before I even go and get my test.

11 Not all of the things that have been said that
12 I've heard today are true statements. The companies want to
13 make a good policy and they have a lot of good policies, but
14 they don't follow through completely.

15 I've worked with a lot of guys that had -- one guy
16 in my shop whose already got a hearing loss and he didn't
17 have it when I started working there. But I have nobody
18 ever come down and said let's take you back up there and run
19 another test and find out whether it's work-related or home-
20 related. Where's our rights come in here at? Where's the
21 workers' rights come in?

1 Things aren't being done to justify the workers' rights
2 in the work place.

3 I'd like to see more things put up, more adequate
4 training, the right appropriate training. We used to have
5 an eight hour MSHA safety course. It went down to one hour
6 a month safety training course done by the company and it
7 doesn't cover near as much as the eight hour course did. I
8 get twelve hours, which comes out of your regulations, but
9 eight hours that I was getting told me more of what my
10 rights were under everything, noise, dust, the operation,
11 what is safe, and what is not safe.

12 There ought to be some tests done. I believe the
13 eighty-five decibels could be the right way to go. But
14 whether it's eighty-five or ninety, we need more information
15 coming down into the work place from the companies and from
16 MSHA themselves on what is the noise level. When should the
17 hearing protection be worn. Just a sign being put up on the
18 building saying this is a noise area, hearing protection
19 must be worn is fine, but as a mechanic at my plant, I don't
20 work in that noisy area. But usually when I go over, I see
21 the sign and sometimes I ignore it and other times I don't.

1 But I go in there.

2 I've seen tours come through. They put their
3 noise protection in, go in, and when you ask something,
4 you've got to take it off. It isn't any good once you
5 remove it. You're still getting that loud noise.

6 There's got to be more guidelines and more
7 protection for the people in the work place. There's got to
8 be. And I wish you'd take that under consideration. That's
9 all I have to say.

10 MR. CUSTER: Thank you, Mr. Shade.

11 MR. SHADE: One other thing, I know it's been more
12 of a statement than it has been a speech here, but to put in
13 respective what I'm talking about, we work for companies who
14 need to get the product out. We know it and we want to work
15 with them. Sometimes things are looked over, sometimes
16 they're not. But I see things looked over in the work place
17 that should not be. And it really hurts my pride as a
18 worker to believe that MSHA is out there for me and we come
19 down here and see four people out in the main lobby working
20 unsafely. That is terrible. Thank you.

21 (Applause.)

1 MR. VOLOSKI: Sir, you said you've got hearing
2 test at work and they never gave you the results of those
3 hearing tests?

4 MR. SHADE: They show what they did, and I just
5 had mine last week, a two year physical set up by the
6 company every two years. The man took it, brought it in and
7 showed it to me, and told me that I have a slight hearing
8 loss, which I had two years before, and it has seemed to
9 have dropped. But I have no other information, that
10 information is -- where ever it goes, it goes.

11 I do not know what the decibel points are in the
12 loud areas. I have a sign that says to wear your hearing
13 protection, but what is the decibel level supposed to be? I
14 have nothing on my board, my bulletin boards, or nothing
15 that tells my people, you know, this is a high noise area.
16 This is one hundred and fifteen, not eighty-eight or eighty-
17 nine.

18 MR. CUSTER: I notice that you're a member of
19 Teamster's Union --

20 MR. SHADE: Yes.

21 MR. CUSTER: -- so I assume that you do not work

1 for a coal company.

2 MR. SHADE: No, sir.

3 MR. CUSTER: And I would like to know if the
4 company that you work for conducts any type of personal
5 monitoring where you wear a noise dosimeter, for example.

6 MR. SHADE: We use dosimeters. I haven't
7 personally ever worn a noise dosimeters, but they do run
8 noise testing at that plant. Now what the results are, we
9 don't know.

10 MR. CUSTER: Thank you, Mr. Shade.

11 MR. SHADE: Thank you very much.

12 MR. CUSTER: The next speaker, Harry Tuggle,
13 United Steel Workers.

14 MR. TUGGLE: Okay, first of all, my name is Harry
15 Tuggle, Safety Specialist with the United Steel Workers of
16 the United States of America, Health, Safety and Environment
17 Department out of Pittsburgh, PA and certainly appreciate
18 the opportunity to be here to speak on this issue.

19 It's been very interesting today and I appreciate the
20 panel's tenacity to hang in here throughout the day on this
21 and probably a lot of the other hearings.

1 But I'd like to say that as soon as the scientific
2 community gets done bashing each other over the head on this
3 issue, that that apparently is not going to occur and
4 they're apparently going to continue, no matter what kind of
5 rule comes out, to be at each other's throat in contested
6 citations and so on before the judges on this. So the basic
7 bottom line is, out of all of this, is, I think, that miners
8 can certainly appreciate their faith in the agency and that
9 there will be a permittable rule come about out of this
10 issue and right along the lines of the format that the
11 agency has already started here.

12 You've had a number of discussions on the age
13 correction value and in the Steel Workers' opinion, that age
14 correction value in mining has no place in the standards.
15 If we was talking about situations of various given industry
16 or operations where you can almost bet that there would
17 never be an excursion beyond eighty-five, ninety decibels in
18 that given area, then yes, maybe the age factor would come
19 in. But mining, as well all know, is highly excessive noise
20 area. There is impairment there from on the job. It
21 doesn't matter if a guy runs his lawn mower without the

1 muffler, he shoots targets once in a while, or goes hunting
2 once in a while, the hearing impairments coming out of
3 mining is coming off that job.

4 I guess one of the two items within that given
5 area that really gives us a problem is where the standard
6 relates, where the provision relates, that in determining
7 whether an STS or reportable hearing loss has occurred,
8 allowance may be made for the contribution of aging, may be
9 made. Secondly, over in another area referring to the
10 miner, the differences calculated represent that a portion
11 of the change in hearing that may be due to aging.

12 These terms of "may" simply don't appear appropriate
13 within the standards, what miners and mine operators have
14 come to know as mandatory standards.

15 I think that if aging is going to be a factor as
16 far as miners are concerned, that within each various state
17 and there's comp laws that range from one spectrum to the
18 other in every state you go in, if the company wants to
19 argue that fact, if there's a comp hearing on that issue,
20 then they can bring it forward under their state laws or
21 whatever. But it doesn't have to be a benefit and built

1 into the system against the miner and within the regulations
2 itself.

3 On proposed Section 62.120(b)(1), on training,
4 here is an area that I think the direction is proper as far
5 as the agency has presented it and there's references in the
6 preamble about no cost or loss of wages regarding the
7 training and so forth referred to in the preamble. But the
8 miners are not going to see that preamble. Thousands of
9 miners are not going to see that preamble.

10 Until it's in the standard themselves, they carry
11 around -- a number of them carry around -- it's still our
12 position that that provision should be revised to the extent
13 that an operator shall provide the miner and then we're
14 adding in with, on the job training, with on the job, during
15 normal working hours, in a no cost or loss of wages to the
16 miner. We don't see -- if this is the intent, we don't
17 see no problem with that directness going into the language
18 itself.

19 On the hearing conservation program, 62.120(b)(2),
20 and again, I think there's a need to make the provision
21 clear here that when enrolled in the miner hearing -- in the

1 conservation program under the requirements of 62.140 and
2 190, that they go on and relate it if all testing relating
3 to such enrollment, whether provided on-site or off-site,
4 then it be provided during normal working hours with no loss
5 of wages or cost to the miners, including meals, mileage,
6 loading, if incurred, whatever.

7 Miners understand that. And this here is -- I
8 think we've got to look more to directing the standard as is
9 very appreciated by the agency effort early on, within the
10 preamble, that you want to develop these standards along the
11 lines of understandability to the miners and mine operators.
12 And with that type of clarity on things is things that they
13 begin to understand.

14 On the issue of 62.120(c)(1), administrative
15 controls. If, in fact, everything else has been tried,
16 engineering controls, feasibility studies and controls,
17 hearing protection or whatever and the rule calls for
18 certain levels not to be exceeded, and the individual must -
19 - the only other way for the operator to address this is to
20 move the miner around by administrative controls, take him
21 out and let the other guy suffer a little while, so be it.

1 Maybe that is the way it has to be handled. The job's got
2 to keep running.

3 By the same token, if it comes down to that, the
4 administrative controls there, the miners' pay and
5 protection must be upheld. If they're taking him off of a
6 \$12.00, \$14.00, or \$15.00 production hour job, they can very
7 easily under this administrative control procedure that's
8 being handed to them, tell the individual that you're going
9 to push a broom today. You know, \$7.00 an hour or whatever.
10 Or this week, or whatever length of time that they want to
11 slap on it. And the agency, the mine, the miner operators
12 are going to wind up with a lot of problems in this area
13 with discrimination complaints if there's not some
14 protection here, because it's going to be -- we feel it's
15 really going to be abused.

16 Conversely, in that same area, if you're bringing
17 in an individual and he's coming into a higher rated job and
18 you have to put him into a noise area, but that's only a
19 \$7.00 an hour job, he works for that same individual, so in
20 this shuffling measure that the operator is attempting
21 compliance on, then the shuffling that he does, the miner is

1 not going to suffer on this on the basis of wages.

2 Just to give an overview of steel workers, to give
3 an overview of steel worker opinion here, on the proposed
4 Section 62.120 itself, where it lays out the actual level
5 eighty-five dBA, the ninety PEL, the five dBA exchange rate,
6 and so forth, in -- I really don't in all honesty see the
7 agency moving back to the eighty-five even though the
8 scientific information supposedly is there. NIOSH
9 recommends it and somewhere down the line there's a lot of
10 pressure from the industry to stay at that level and so
11 forth.

12 Steel workers, and as many of you might know me
13 from the panel, I'm a negotiator, number one, and with the
14 ninety dBA, if all else fails, we would simply like the
15 agency to take a clear close look at the two dBA error rate
16 that's used because this puts the individual up to a hundred
17 and thirty-two percent exposure, should have been pulled out
18 of there in six hours versus eight hours.

19 Just as easily, while we're tossing these numbers
20 around, if the scientific evidence is there, there's a very
21 possibility that the PEL could be eighty-eight and in going

1 on ahead and using the two dBA, the ninety -- it's cut off
2 at ninety before citation issues come about and so forth.
3 If the five dBA exchange rate is maintained, and you're
4 using eighty-eight as the PEL, eighty-three would become the
5 actual level. If you used a three, eighty-five would remain
6 the action level.

7 Be that as it may, the initiative -- the
8 initiation level of eighty, you know, would stay in place,
9 but we simply wanted to say this to the agency simply for
10 some consideration. Serious consideration, let's put it
11 like that.

12 Also, on 62.120(f), can't let it go by without
13 raising the issue again here, but on an operator exposure
14 evaluation and employee notification, in the Steel Workers'
15 opinion, this is a very liberal provision on monitoring
16 program for the operator. They can be all over the board.
17 I do it my way, and I'm going to do it this way in copper,
18 and I'm going to do it that way in coal, and I'm going to do
19 it this way in iron ore, and it's all across the board.

20 There's got to be some continuity and some
21 rationale to it when they show you the program and so forth

1 that's understandable that it will be all over the board and
2 inspectors will be having to deal with those. Without a
3 request for a total rewrite and insisting that there be a
4 bench mark monitoring program that every mine operators --
5 you're going to have to follow it and you're going to have
6 to do it A through Z, and this is it, short of that rewrite
7 and short of anything else in that area, we simply feel that
8 when they do have a monitoring program that also clearly for
9 the miner, and possibly the mine operator, that when they
10 establish their system for monitoring which is to
11 effectively evaluate each miner's noise exposure, it's under
12 quote, which is added to your current proposal, under normal
13 operating conditions to which they are exposed.

14 You may not realize how specific that one line would be
15 as far as not being abused in a lot of areas.

16 Also, under that same provision where you're
17 stating that you'll give notification to a miner about his
18 overexposure exceeding the action level, it's also being
19 requested that, and even though it's referred to and we can
20 get to it or come about it, we that -- being miners'
21 representatives in the given mines from the given

1 international unions and so forth, we can eventually get the
2 information. But I think it would be easy enough if it's
3 purely stated that that information would be presented to
4 the miner and the miners' representative themselves, if any
5 in an operation, and in then that miner has someone to talk
6 to, or vice versa, the miner's rep, if he has a question
7 about the given situation he can go back and talk to an
8 individual about what's going on here.

9 And within that record keeping retention we still
10 believe that that six months is too short a time. There is
11 a basis for this information to fall through the cracks that
12 the inspector may or may not ever see, and we don't think
13 that the twelve month period for the holding of records,
14 which we already know if the miner's there for thirty years,
15 the operator, if they're in operation for sixty years, that
16 record will still be laying there. If not there, then in
17 the corporate office or somewhere. So asking for twelve
18 months out of that for the availability of that record for
19 the secretary and the miner, and the miners' representative
20 we don't believe is excessive.

21 On the issue of training under 62.130, to simply

1 leave it to -- on the basis of well, if you can fit it under
2 Part 48, you know, do so and if you get it approved by your
3 district manager, all well and good or whatever. A number
4 of us, including the panel and many out here in the
5 audience, and those that have left realize there really
6 isn't any room under Part 48 for this. And under Part --
7 demanding that it be under Part 48, or allowing it to be
8 under Part 48, many the sand, gravel, stone, other than
9 those that are very credible, in our opinion, operators,
10 will simply let training along with noise and the rest of it
11 continue to slide by as they have since I think 1981 or '82
12 on training issues under Part 48 at all.

13 So therefore, the Steel Workers are suggesting
14 that subparagraph (b) be included -- that language be added
15 to that paragraph to where it would read that the type of
16 training required by this part, and that's notwithstanding
17 30 C.F.R. Part 48, except in the application of new miners
18 training, that they would -- they shouldn't be giving this
19 for -- number one, for new miners training, but outside of
20 that, on an annual refresher, training shall be provided no
21 less than one hour and the initial noise training no less

1 than thirty minutes given at an annual retraining of a miner
2 are those as a result of a detection of a STS.

3 In our opinion, it's really the only way that
4 training in regard to information on hearing is that it's
5 going to be coming -- people is going to have to be aware
6 that the standard is changed, certain things is changed, and
7 there's going to have to be some initial training and miners
8 should be part and parcel of that, and to simply to shuffle
9 it under Part 48 it's going to become lost. It should be
10 over and above Part 48, except for new miners training.

11 And again, within that same provisional records
12 relating to that should be twelve months, which we don't
13 believe should be too much to ask versus six months.

14 Provision or proposed Section 62.150 on
15 audiometric test procedures, and that's paragraph D and
16 that's again in regard to the records. We'd like to see
17 twelve months versus six months.

18 Small mines entity, to boil our position down to a
19 brief statement on this that we simply feel that the agency
20 should not develop a small mine entity numbers simply for
21 the purposes of the final rule here. That each and every

1 mines, because we see a lot of flexibility here and whether
2 it's small, medium, or large, we see a flexibility where
3 each one of those types of mines could comply.

4 On the issue of transfer of miners under preamble
5 discussion at page 66359, and here until the close of the
6 record or whatever, the Steel Workers are going to continue
7 to press for this particular issue. We don't agree with the
8 agency that it's too big or too complex to administer and so
9 forth. We do believe that if a miner suffers ten dB or more
10 on STS hearing and there should be immediate evaluation in
11 their area of work.

12 As to that suffrage of hearing loss, if it's --
13 shows it's permanent, or whatever. And when it's shown as
14 permanent that they look at that area and based on the type
15 of area they work in, if that causes a hazard to that miner
16 to remain working in that area because of hazardous -- or
17 the lack of hearing and hazardous surrounding conditions,
18 whether it's rooftop or whatever the situation might be,
19 that then the miner or the mine operator, you know, would
20 take up action for transfer matters and transfer rights and
21 related pay and everything else that goes along with

1 101(a)(7) of the Act.

2 If there's a dispute on that, we simply would
3 contend that the miner then -- if the operator says you
4 know, I don't believe you, is it that hazardous in here, we
5 don't believe that that hearing loss is to that degree, or
6 whatever the situation might be, when it comes about the
7 situation there, we think the miners should have a right to
8 file the 105(c) complaint on that basis and pursue it in
9 that avenue of a right to transfer and a right to retain the
10 pay.

11 With that, I'm going to cut the rest short. I'd
12 like to thank the agency again for it's tenacity, again, in
13 hanging in here to the end of today's -- not only this one,
14 but the other hearings and so forth, and we appreciate and
15 we the miners and the other internationals await to look at
16 a very formidable rule.

17 MR. CUSTER: Thank you, Mr. Tuggle.

18 MR. TUGGLE: Aw, come on, somebody ask something.

19 (Laughter.)

20 MR. TUGGLE: Thank you.

21 MR. CUSTER: The next scheduled speaker is Mike

1 Sprinker, International Chemicals representative.

2 MR. SPRINKER: Good afternoon. I'm Michael
3 Sprinker, the Health and Safety Director of the
4 International Chemical Workers Union Council of the United
5 Food and Commercial Workers Union, who we recently merged
6 with. I'm also a certified industrial hygienist and in
7 addition to working for the Chemical Workers have spent
8 something like eight or nine years in industrial hygiene in
9 the enforcement section of one of the state OSHA plans and
10 did a lot of noise measurements.

11 The International Chemical Workers Council on
12 behalf of it's five thousand plus miners in metal, non-metal
13 sector welcomes this opportunity to testify on this very
14 important initiative. We believe the changes in MSHA's
15 noise standard are long overdue, and we also believe MSHA
16 through this role could help ensure the long term health and
17 safety of our miners, as well as that of the other miners
18 throughout the United States.

19 We also seek to have a reasonable and adequately
20 protective standard which relies on current knowledge in the
21 areas of noise hazards, protection, and control. And while

1 we support much of the proposed standard, we do strongly
2 believe that there are areas that need improvement in order
3 to meet the goals and requirements of the Mine Safety Act.

4 We believe the real issue which concerns miners
5 and operations find federal rules difficult to follow, but
6 truly desire to make work places safer and healthier is not
7 the length of the rule. I know we've all heard a lot about
8 how lengthy federal rules are, but how understandable the
9 rule is.

10 In other words, the Chemical Workers strongly
11 believe that MSHA and other agencies should not mistake
12 brevity for comprehensibility. This can leave to leaving
13 out issues of major importance and we ask that MSHA work to
14 ensure that rules are easily understandable, which the
15 agency appears to be trying to do here, but that the rules
16 also include any and all necessary items to ensure the best
17 protection possible for miners.

18 I'm going to comment on a number of different
19 areas here. The first limitations on noise exposure,
20 Section 62.120. While we are supportive -- a few typos in
21 here - of MSHA's proposal to tie the exposure limit to the

1 length of the shift, we strongly believe that the agency
2 should follow the recommendations of ACGIH, NIOSH, several
3 branches of the U.S. military, and ISO standards and adopt
4 the three decibel exchange rate, and as a member of those
5 groups, an eighty-five decibel PEL for engineering and
6 administrative controls.

7 Even at this level, MSHA itself estimates three
8 and one hundred miners are still estimated to be at risk of
9 hearing loss during the course of a working life. However,
10 this is much better than eighteen out of one hundred miners
11 that are estimated to be at risk at ninety decibels.

12 As my colleagues from the Mine Workers, and the
13 Steel Workers, have noted here, technology can be and is
14 driven by regulation. Examples exist in both MSHA and OSHA
15 regulations, such as noise, vinachloride, lead, and so on.
16 In fact a recent study showed that out of eight OSHA final
17 rules, the economic costs for compliance were significantly
18 overestimated in seven cases. So MSHA must show us that
19 economic costs of controls of engineering and administrative
20 controls at eighty-five decibels TWA are not -- are truly
21 not feasible. And we haven't seen evidence of this in the

1 rule.

2 In addition, MSHA notes in the proposed rule that
3 a significant loss of hearing can make miners more
4 vulnerable to injuries from conditions out of those miners'
5 controls, which is roof and ground falls. Thus there is a
6 critical need for engineering controls as a first means of
7 control.

8 We do believe that the scientific evidence does
9 support the use of the eighty dB threshold for noise
10 measurement and we're quite happy to see that in here. We
11 are concerned, however, that the use of dual protection may
12 provide a false sense of security, especially given the data
13 found by MSHA that indicates the very low level of
14 protection provided by some over-ear protectors. The
15 protection was found to range from somewhere around six
16 decibels to a negative one decibel. In other words, some
17 protectors might actually increase noise dose to the worker.

18 As far as operator exposure evaluation, we feel
19 this section is totally inadequate and would prove very
20 difficult to enforce. Even the OSHA rules for exposure
21 monitoring would be an improvement over the rule proposed

1 here. An adequate rule would specify which miners must be
2 modified and actually what I mean, which miners, not
3 specifically, but in general, guidance as to how to monitor.
4 You know, at least the basis for such selection.

5 Periodic monitoring must be specified or some
6 operators will perform no monitoring. And if you don't
7 believe this, a review of recent cases before the Review
8 Commission and before it's judges would indicate that some
9 operators believe that the dose monitoring standard in
10 metal, non-metal does not require them to ever monitor
11 exposures on their own.

12 We would prefer exposure evaluation at least once
13 a year, even if no changes in noise levels were thought to
14 have occurred. I no of no one who has calibrated hearing
15 which can detect the hearing change in sound levels from one
16 year to the next in the case where the change occurred
17 gradually.

18 Monitoring should be repeated or exposures should
19 be re-evaluated. And again, re-evaluation of exposure does
20 not necessarily have to mean full shift monitoring, but
21 there has got to be a real basis for evaluating exposure.

1 It should be re-evaluated when equipment changes, when work
2 schedules or duties change, when controls are observed to be
3 failing, when new noise sources are introduced, and so on.
4 And of course, there's some logic to that too, if you're
5 bringing in things that are much quieter or people or
6 working shorter shifts and so on, then you may have the
7 understanding that it's probably that evaluating exposures
8 have dropped.

9 We believe that MSHA can adopt an exposure
10 evaluation rule which will provide guidance to operators,
11 miners, and their representatives and which is enforceable.
12 Without such rules, unscrupulous operators will shirk their
13 duties and place miners at increased risk.

14 Records regarding calibration must be required as
15 well as the more important issue, that calibration
16 procedures must be followed. A requirement should also be
17 included that operators ensure that all controls are
18 evaluated at least yearly for effectiveness, as well as to
19 determine if new feasible controls have been developed and
20 are available.

21 Miners and their representatives must be given the

1 right of access to all monitoring results and to see what
2 monitoring is being done, observe that monitoring. They
3 must also be given the right to speak to those performing
4 the monitoring without fear of discrimination. In addition,
5 administration procedures must not be changed without the
6 evaluation of the effect of those changes on exposures and
7 without proper notice to miners and their representatives.

8 With Section 62.125 hearing protectors, the
9 selection of hearing protectors must be for more than one
10 type of muff and more than one type of plug. All ears are
11 not the same. The hearing protector more comfortable to the
12 miner is more likely to be used. Both common sense and
13 experience show us that. But as an aside here, I could
14 probably very easily pick out the muff and if I wanted my
15 miners to use muffs, I'm sure I could pick out plugs or
16 inserts which no one would ever select.

17 MSHA also needs to determine how it will allow
18 miners and operators to determine which protectors to
19 select. Many often think that the protector with the noise
20 reduction rating of NRR-31 is a thirty-one decibel
21 reduction. This isn't true. OSHA gives actually several

1 types of reduction at different times, and generally
2 employers pick the so-called best one, naturally. NRR minus
3 seven decibels, which is actually tied to the weighted
4 period used in the evaluation.

5 More realistic is the NRR minus seven decibels and
6 that whole number, divided by two, which may, by OSHA's own
7 research, still overestimate the protectiveness of the
8 devices. Without any requirement, miners will be put at
9 risk by operators who unthinkingly do what is the simplest.

10 As far as the training, Section 62.130, we agree
11 that training shouldn't be part of the Part 48 refresher
12 training as already too much is required in that training
13 for the time available. Miners, their representatives, and
14 operators -- and note here, I do say "operators" -- need to
15 be trained in all of the areas here listed in the rule, the
16 proposed rule, but also in other areas, which include the
17 function of engineering controls, the basics of noise
18 control technology, and techniques, and how to determine the
19 failure of controls.

20 This doesn't require making those trained in
21 acoustical engineers, but everyone needs to understand the

1 basics behind noise control. The rules must also specify
2 that the training must be effective, that is, comprehensible
3 to those trained. The true indication of training is not
4 having a name on a list, which, you know, has it's own
5 importance, but whether or not the trainee can understand
6 and use the information when needed.

7 We've lumped our comments from 62.140 to 62.180
8 into one sort of massive group.

9 Next, I'd like to sort of preface this section of
10 my comments with a story about an audiometric test provider
11 in the Northwest United States. It's actually roughly six
12 to eight years ago. This provider was alleged to have
13 "guaranteed" -- which it's not, in the contractual sense --
14 that it could reduce the number of standard threshold shifts
15 in the work place. This wasn't done through better
16 evaluations, better training, better use of engineering
17 controls, and so on, but allegedly through the manipulation
18 of audiometric exams. A good number of employers were duped
19 by this provider and some may very well have cooperated with
20 the provider by ignoring the obvious.

21 Among the charges leveled against this provider

Heritage Reporting Corporation
(202) 628-4888

1 were that the physician or audiologist reviewed the records
2 never did so. Tracings were not kept. Calibration records
3 were not kept or were falsified. Daily functional tests
4 weren't conducted, baselines were revised regularly, et
5 cetera, et cetera, et cetera.

6 OREG and OSHA, through the courts and the State
7 Attorney General's office sought and received an injunction
8 against the provider. This was only possible after lengthy
9 investigation followed by subpoena of records and employees.

10 The more common problem with other providers that
11 sometimes occurred with in-house audiometric folks was the
12 revision of baselines, which here I believe MSHA calls
13 supplemental baselines. Following any annual audiometric
14 exam that showed an increase in hearing loss, this was a
15 wonderful way to document hearing loss without addressing
16 the causes. And in that case, some of that was done through
17 ignorance and some of it was done through, again, some
18 unscrupulous folks.

19 And what's the lesson for MSHA in that? There are
20 audiometric test providers who will do anything for money,
21 including sacrificing the hearing of miners. What can be

1 done to help prevent this? We've got several suggestions
2 here. We believe that MSHA should not, as a part of the
3 rule, rarely if ever could a shift be classified as
4 permanent after only twelve months. Audiologists and others
5 who revise baselines for given workers on a regular basis
6 are suspect, at best.

7 MSHA should retain the right to sanction providers
8 that are determined to be fraudulent and should maintain a
9 list of such providers. This list should be provided on a
10 regular basis for both operators for posting and use. That
11 doesn't mean to use them, but to use them in terms of not to
12 use, and also to miners' representatives. Operators should
13 not be allowed to use such providers. If fraudulent
14 audiometric exams have been provided to miners, the
15 operators should be held responsible for re-testing and
16 notification as well as ensuring that the baseline for the
17 annual test is properly adjusted.

18 But the operation should also ensure that the
19 miners and their representatives are informed of the
20 problem. In this case, it may be because, you know, the
21 operator may have to go back against the company that

1 initially provided the fraudulent exams to recoup their
2 losses. We have no problems with that.

3 If employers believe that audiometric exams are
4 questionable, they should have a requirement to report such
5 concerns to MSHA for investigation. And here, we mean
6 investigation of the possibly fraudulent examiners.

7 While these may seem a burden on employers, we
8 believe they are necessary to ensure good testing is
9 provided to miners. We believe this is in the interest of
10 the operators as these or similar requirements are needed to
11 ensure good service for the money they pay.

12 The ICWUC agrees with NIOSH and other commenters
13 that presbycusis should not be used in determining whether a
14 standard threshold shift has occurred. The numbers on the
15 tables are merely a mean difference in hearing levels with
16 age and should not be applied to all exposed workers. To
17 allow presbycusis would ensure that more exposed workers
18 develop "legal" hearing loss needlessly.

19 In addition, some references state that the
20 incidence of presbycusis is higher in white males than in
21 women or African Americans. In fact, one reference is

1 preventing occupational disease and injury by Weeks, Levy,
2 and Wagner. Adopting these reductions in hearing levels
3 would in addition to penalizing individuals would penalize
4 our African American members as a group to an even greater
5 degree.

6 Operators should also know that annual exams
7 should be done during the work shift in order to catch
8 temporary shifts and intervene before they become permanent
9 STS's. This also brings up the concern that the rule should
10 state that the purpose is to allow intervention before
11 shifts do become permanent. And I think in some ways, with
12 the needed length of audiometric exams, people may get the
13 idea that, hey, this is how we're really going to deal with
14 the problem. But, you know, I think it needs to be made
15 clear that you are trying to intervene.

16 As far as Section 62.190, notification results and
17 reporting requirements, we believe that all hearing losses
18 which meet the definition of reportable should be reported
19 without reference or without subtraction or without
20 reference to the work-relatedness determination. The
21 operator, you know, in fairness should be allowed to submit

1 the audiologist's or physician's determination for MSHA to
2 consider. This, we believe, would help prevent fraudulent
3 evaluations, protecting both miners and employers.

4 With 62.200, access to records, we believe that
5 upon request by a miner's representative, at the very least,
6 copies of audiometric exams with true personal identifiers
7 removed should be provided to the representative as well as
8 the summary of audiometric results. That is without them
9 having to get a release from the individual worker because
10 you're not getting the identification. This would not limit
11 in any way the right of the miner to have his or her records
12 released upon request to the miner's representative or
13 anyone else he or she chooses.

14 The miners' representatives and the miners should
15 also have access to all exposure monitoring records, records
16 of control measures considered, administrative control
17 methods, and so on. We see no defensible reason to limit
18 the access of miners or their representatives to the records
19 which are needed to protect miners.

20 We also believe that miners' records should be
21 retained for the miners' working lives, plus a significant

1 period of time thereafter. Sort of an aside here, we rarely
2 see employers with any problem in retaining records of
3 discipline for the entire life of the workers on-site so
4 we're not quite sure why noise records and such are so
5 difficult to retain.

6 As far as transfer records, there may be one
7 slight flaw here and it may be covered elsewhere in other
8 MSHA rules. We believe the rules require operators, when
9 they cease business and there is no successor operator, to
10 send all relevant records to the miners who are or were
11 covered under the rule.

12 In addition, notice of transfer of records should
13 be sent to the relevant miner's representative,
14 International Union, MSHA, NIOSH, along with the list of the
15 names and addresses of the miners who were transferred. This
16 might help prevent needed medical records from disappearing
17 off the face of the earth. It may also save the burden of
18 shipping massive amounts of records to several different
19 places, too.

20 Other issues, we believe alternating audiometric
21 exams, follow ups, and so on should be done at the time of

1 regular work shifts to the extent medically indicated if
2 possible, and no miner shall suffer loss of wages or
3 benefits during such training exams, and so on.

4 We also believe, like the Steel Workers, that if
5 it's necessary to transfer a miner to a quieter work area,
6 the miner shall suffer no loss in wages or benefits. Miners
7 must also have the right to file discrimination complaints
8 to the agency if the miner believes he or she was improperly
9 transferred or has suffered any economic loss.

10 As far as this question of the definition of small
11 operators, we believe MSHA should at least retain it's
12 current definition. Five hundred employees to us
13 constitutes a major employer with access to significant
14 economic resources. I think there's also been concern --
15 I'm not sure if it's all been worked out as far what the law
16 actually meant -- as to whether that's five hundred at any
17 given location or five hundred corporate-wide. If that was
18 the case, most of our mining operations except a very few
19 would end up "being small operators" even though they are
20 major multi-nationals with -- I don't want to say a lock on
21 the market, but a significant, significant share of the

1 market.

2 To conclude, while we believe that MSHA has
3 attempted to draft a rule which could protect miners to a
4 large degree, we do not find it acceptable the risk of
5 eighteen out of one hundred miners suffering hearing loss.
6 While the argument is that hearing protectors will reduce
7 that rate of risk, we believe that MSHA needs to provide
8 evidence that eighty-five decibels with a three decibel
9 exchange rate is not economically feasible.

10 In addition, while our comments, I guess if they
11 were adopted, might cause some consternation in OMB, we
12 don't believe those in the office are at any risk of
13 occupational hearing loss. They should put themselves in
14 our members' shoes before they advocate less protection than
15 is economically feasible.

16 So I'd like to thank you for your attention and
17 your consideration of these.

18 MR. CUSTER: Thank you, Mr. Sprinker.

19 MR. SPRINKER: Oh, one thing that I just happened
20 to see that I scratched a note on was the issue of solvents.
21 I know that MSHA did address that in there, and maybe at

1 this point that the hearing conservation program, the
2 audiometric exams may be one way to help determine potential
3 losses. But I think MSHA may need to consider this when
4 there's more data available in this area. It's very hard to
5 quantify the effects of skin exposure and as well as the
6 effects of airborne exposure, and so on. But I think it is
7 an area where MSHA needs to continue to investigate and
8 consider rule making when the evidence is there. Thank you.

9 MR. CUSTER: Thank you, sir. Our next scheduled
10 speaker is Mr. Klaus Leiders from New England Stone.

11 MR. LEIDERS: Thank you, Mr. Custer, but I
12 consider my little speech as rather unscheduled because I'm
13 not only working for New England Stone, I also -- I'm here
14 on behalf of the National Building Quarry Granite
15 Association and we at this time do not have our official
16 statement ready yet. It's one of the reasons why I was
17 here.

18 And for the background of it, New England Stone,
19 we are not an aggregate company. What we do is we make
20 dimension stone, which is -- you can see this on the
21 governmental buildings in Washington, you can see it

1 everywhere else. We make tiles and what have you. And our
2 industry is regulated by both OSHA and MSHA which means --

3 MR. CUSTER: Let me just interrupt you and ask you
4 to spell your name for the court reporter.

5 MR. LEIDERS: Oh, of course, I'm sorry, I was just
6 doing something I shouldn't have. My last name is spelled
7 L-E-I-D-E-R-S. It's very simple. Okay, don't forget the
8 line here. I would spare you with all the concerns that we
9 have on the administrative parts of the proposed
10 regulations. I believe that most of the previous speakers
11 have already done an outstanding job on that, especially on
12 the medical part of it.

13 My concern, and this will be the only issue I will
14 focus on, is the technological part of it and that leads
15 straight to the engineering controls. Our industry is by
16 technology and by tradition is probably one of the noisiest,
17 right behind the Navy when you are on an airplane carrier.
18 The reason is understandable, we have only five tools in our
19 industry. That's the air burner, that's the diamond wire
20 saw, the water jet, the drills. Those are all hammer
21 drills, most of them air driven, some of them hydraulic

1 driven, it depends on which supplies you have. And those
2 are loaders. That's all we need. Five tools.

3 Explosions I don't consider this as a tool because
4 that's part of the whole process, and in our industry we do
5 not -- well, we try not to crack the stones so we do not use
6 a lot of explosives in comparison to the aggregate of what a
7 lot of this industry does.

8 So an air burner as it was used to run -- and I'm
9 sure that Mr. Custer knows it -- it used to run around one
10 hundred twenty decibels. By the years, we have been able to
11 reduce that noise to maybe about one hundred and ten, one
12 hundred and eight decibels. But that's where the limit is
13 of this technology. Now you probably have this concerns,
14 say oh, God, this loud technology, why do they use that? It
15 is essential.

16 And that is just the geophysical reason why we
17 have to have it. Granite, it's a plutonic that comes down
18 from way down from Mother Earth, it's under pressure. You
19 cannot just go down there and cut it with a saw. It
20 squeezes shut. And probably lots of people can imagine, but
21 stone can breath. It expands when you release this pressure

1 and then channels get shut.

2 Okay, just this as a very brief background on this
3 mission. We have tried to quiet it down. We are limit of
4 this. If this would, this eighty-five decimal limitation
5 would come into effect, we would lose one of our most
6 essential tools. We have tried to replace this tool with
7 what we call a water-jet. It's nothing but a high pressure,
8 sixty thousand PSI, high pressure application of water to
9 stone and as you know the old saying, constant drip cuts the
10 stone. And that's what we do, but we do it in very short
11 periods rather than thousands of years.

12 And this machine at this time because of the
13 technology also cannot go below one hundred and ten
14 decibels. That's something you need to understand. That's
15 a very high pitched sound. It goes -- it starts right
16 around six thousand kilohertz and goes up to about what the
17 human ear can hear.

18 Another thing is our drilling. We have tried
19 different technologies and all these technologies cannot be
20 reduced below ninety-five decibels at the source. And
21 ninety-five decibels is a bad compromise for the industry

1 because that means that you reduce the performance of the
2 machines to right around fifty percent and I mean, I'm
3 pretty much sure that you understand that this is also very
4 difficult for the industry to work with a fifty percent
5 performance. It's not profitable.

6 However, we are not whining that we can't do this
7 and we can't do that. That's not the reason that I
8 mentioned that. I just want you to understand that we are a
9 very noisy industry, but we do something about it. And that
10 is, we have strict -- actually, I speak for our own company.
11 We have a very strict policy when it comes to hearing
12 protection. A miner works in the underburner and doesn't
13 have earplugs plus a muff on would first be -- look here,
14 for this and this reason, you have to do it. If he doesn't
15 do it the second time, he gets the warning, verbal. And
16 then it's on to disciplinary actions taken.

17 And I do believe that in the proposed regulations
18 are they are you really must -- not should -- must take in
19 consideration that hearing protection is the only way for
20 our industry at this stage -- I'm not talking in ten years -
21 - but for surely it's predictable that within ten years

1 there will be new replacement for the current technology.
2 At this stage, we cannot. The only thing we can do for our
3 workers is giving them hearing protection with earplugs, ear
4 muffs, or whatever is available, and that so far -- that's
5 something that I wanted to address to you tonight,
6 unscheduled.

7 And one correction I need to make, I heard it
8 frequently from the representatives of the unions and I feel
9 that I have to address the panel that the statement that has
10 been made about the roof falls are false in the coal mines,
11 that that is a correction to be made. They are saying that
12 they cannot wear earplugs because they cannot hear the stone
13 fall. It's just the opposite.

14 I've been working in coal mines for fifteen years.
15 I've been in roof falls and I've never been hurt. You know
16 why? I wore the earplugs. At the noise level you have in
17 the coal mines, you cannot hear the sound of the stone
18 coming down unless you have earplugs on for a simple reason.
19 The sound level of the stone coming down sounds -- oh,
20 what's the right word for it? -- the sound itself is like
21 the creaking and cracking in the fireplace. That's all

1 there is. That's all the warning a miner gets.

2 If you have a coal miner and you don't have
3 earplugs on, you cannot hear it. That's a technical fact
4 and I'm a little bit -- as a coal miner -- I'm a little bit
5 embarrassed that the union came up with that lie tonight.
6 And that says an old coal miner. Okay? Thank you for your
7 attention. I can wait if you have any questions.

8 MR. CUSTER: Danke, Klaus.

9 MR. LEIDERS: Hmmm?

10 MR. CUSTER: Danke.

11 MR. LEIDERS: Danke schon.

12 MR. CUSTER: That exhausts the list of speakers
13 who we had either signed up ahead of time or come in later
14 and have gotten on the list. Is there anyone in the
15 audience that wishes to make a statement at this point? We
16 still have one minute to go until the official closing time,
17 but we will stay if anyone wishes to make a statement.

18 Okay. Thank you very much for your participation
19 and attendance today and with that, this hearing is
20 adjourned.

21 (Whereupon, at 5:00 p.m., the hearing was

1 adjourned.)
2 //
3 //
4 //
5 //
6 //
7 //
8 //
9 //
10 //
11 //
12 //
13 //
14 //
15 //
16 //
17 //
18 //
19 //

1 C E R T I F I C A T E

2

3 CASE NAME: MSHA Public Hearing

4 DATE: May 30, 1997

5 LOCATION: Washington, D.C.

6

7 I, Catherine S. Crump, do hereby certify that the
8 foregoing pages represents a true and correct transcription
9 of the events which transpired at the same time and place as
10 set out in the caption, to the best of my ability.

11

12

13 CATHERINE S. CRUMP

14

Certified Court Reporter

15

16

17

18

HERITAGE REPORTING CORPORATION

19

1220 L Street

20

Washington, D.C. 20005

21

(202) 628-4888

Heritage Reporting Corporation
(202) 628-4888

1

2

3