

# TRANSCRIPT OF PROCEEDINGS

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PUBLIC HEARING ON )  
MEASURING AND CONTROLLING )  
ASBESTOS EXPOSURE )

Pages: 1 through 20

Place: Virginia, Minnesota

Date: June 12, 2002

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## HERITAGE REPORTING CORPORATION

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THE UNITED STATES DEPARTMENT OF LABOR  
MINE SAFETY and HEALTH ADMINISTRATION

PUBLIC HEARING ON )  
MEASURING AND CONTROLLING )  
ASBESTOS EXPOSURE )

The parties met, pursuant to the notice,  
at 9:00 a.m.

Days Inn Hotel  
701 Hattrick Avenue  
Virginia, Minnesota  
Wednesday,  
June 12, 2002

MSHA headquarters:  
U.S. Department of Labor  
Office of Standards, Regulation,  
and Variances  
Mine Safety and Health Administration  
1100 Wilson Boulevard, 23rd Floor  
Work Station 2352  
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## 1 PANEL MEMBERS PRESENT:

2 Rebecca J. Smith, Moderator, Deputy Director  
3 Sharon Ainsworth, Technical Support  
4 Dr. Carol J. Jones, Health Program Manager  
5 Alfred D. Ducharme, Solicitor's Office  
6 James G. Lynch, Standards Office

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## 7 PUBLIC IN ATTENDANCE:

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8 Russell T. Jarvi, Jr., US/DOL/MSHA  
9 David T. Couillard, USDOL/MSHA/EFS  
10 Felix Quintana, MSHA-Duluth  
11 George Schorr, MSHA-Duluth  
12 Lary Zanko, NRRI-Duluth  
13 Timothy J. Carlson, Local 1938 Safety Chair  
14 Rick Westlund, Local 1938 Safety  
15 David Mlakar, Local 2660 Safety  
16 Karla McKenzie, Safety Manager NSPC  
17 Gerald Knaeble, Local 6115 Safety  
18 Julie Oreskovich, NRRI-Duluth  
19 Lauri Potter, U.S. Steel-Minntac  
20 Terry Severn, Cleveland-Cliffs, Inc.  
21 Gus Josephson, Ispat Inland Mining  
22 Wade Rosell, Minnesota Power

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P R O C E E D I N G S

(9:00 a.m)

1 REBECCA SMITH: Good morning. My name is  
2 Rebecca Smith. I'm the Deputy Director of the Office of  
3 Standards, Regulations, and Variances for the Mine  
4 Safety and Health Administration.

5 I will be your moderator for this public  
6 meeting. On behalf of Dave Lauriski, the Assistant  
7 Secretary of Labor for Mine Safety and Health, I want to  
8 welcome all of you here today. Also here today with me  
9 are several other individuals from MSHA. On my left,  
10 Dr. Carol Jones is the program manager for our health  
11 program for metal and non-metal. On her left, Al  
12 Ducharme is from our solicitor's office. Jim Lynch is  
13 from our standards office. On my right, Sharon  
14 Ainsworth is from our technical support organization.

15 This is the sixth of seven public meetings.  
16 The previous meetings were held in Pittsburgh,  
17 Pennsylvania; Spokane, Washington; Vacaville,  
18 California; Canton, New York; and Phoenix, Arizona.  
19 The last meeting will be held on June 20th, next week,  
20 in Charlottesville, Virginia.

21 The initial announcement of these public  
22 meetings was contained in an advance notice of proposed  
23 rulemaking published on March the 29th in the Federal  
24 Register. A subsequent Federal Register notice,  
25 published on April the 18th, announced that the date of

1 the Charlottesville, Virginia meeting was changed to  
2 June the 20th, and a public meeting would be held in  
3 Phoenix, Arizona on June 5th. These two Federal  
4 Register notices are available to you in the back of the  
5 room.

6 The purpose of these public meetings is to  
7 obtain information that will help us evaluate the  
8 following five issues: Number 1, whether to lower our  
9 asbestos permissible exposure limit; Number 2, whether  
10 we should replace our existing fiber analysis method,  
11 referred to as phase contrast microscopy, with a more  
12 sensitive method, which is transmission electron  
13 microscopy; Number 3, whether we should implement  
14 safeguards to limit take-home exposure; Number 4,  
15 whether our field sampling methods are adequate and how  
16 our sampling results are being used; and Number 5, what  
17 is the likely benefit and cost impact of any rulemaking  
18 action we would take on these issues.

19 These five issues were discussed in the March  
20 29th Federal Register document, and the scope of the  
21 issues we are addressing with this advance notice of  
22 proposed rulemaking is very limited. Therefore, this  
23 public meeting will be limited to hearing public input  
24 on these five issues I've just mentioned. In the  
25 advance notice of proposed rulemaking we asked several

1 questions related to these five issues, and we're  
2 particularly interested in responses and information  
3 related to these questions.

4 Now, I'd like to give you some background which  
5 has led us to be here today. In 1980 we requested that  
6 the National Institute for Occupational Safety and  
7 Health, NIOSH, investigate problems at vermiculite  
8 operations around the country because our sampling data  
9 at that time showed higher-than-average asbestos  
10 exposures among miners.

11 The result of the NIOSH study were published in  
12 1986 and verified our sampling results that indicated  
13 high occupational exposure prior to 1974 at a  
14 vermiculite operation in Libby, Montana. The highest  
15 exposures were in the mill. The NIOSH report showed  
16 that in 1974 the mine began to use a wet process to  
17 concentrate vermiculite in the mill, and occupational  
18 exposures dropped markedly.

19 The asbestos-exposed miners employed at the  
20 vermiculite mine in Libby, however, inadvertently  
21 carried the asbestos fibers home on their clothes and in  
22 their personal vehicles, thereby continuing to expose  
23 themselves and family members. At that time we had  
24 encouraged the operator to change from dry to wet  
25 processing of material and also to reduce take-home

1 contamination by installing showers and requiring the  
2 miners to change clothing before leaving the site.

3 In November of 1999 a Seattle newspaper  
4 published a series of articles about the usually high  
5 incidence of asbestos-related illnesses and fatalities  
6 among individuals who lived in Libby, Montana. Because  
7 MSHA had jurisdiction over that mine, the Department of  
8 Labor's Office of the Inspector General began an  
9 evaluation of the Mine Safety and Health  
10 Administration's role at the Libby mine.

11 The findings and recommendations of the Office  
12 of the Inspector General were published in March 2001.  
13 Three of their recommendations would require additional  
14 rulemaking by Mine Safety and Health, and those issues  
15 are the subject of this public meeting today.

16 The Office of the Inspector General  
17 recommendations were: Number 1, that MSHA lower the  
18 existing permissible exposure limit to a more protective  
19 level; Number 2, that MSHA use a more sensitive method,  
20 transmission electron microscopy, to quantify and  
21 identify fibers in our samples, rather than the phase  
22 contrast microscopic method currently used; and Number  
23 3, that MSHA address take-home contamination from  
24 asbestos.

25 As you may know, our current asbestos standard

1 for coal mining and for metal and nonmetal mining is 2  
2 fibers per cubic centimeter of air, and these standards  
3 date from the mid 1970s.

4 Recently we adopted new asbestos sampling  
5 techniques, and we've increased the scope of sampling  
6 for airborne asbestos fibers at mines in an attempt to  
7 better determine miners' exposures to asbestos. Our  
8 efforts have included taking samples at all existing  
9 vermiculite, taconite, talc and other mines to determine  
10 whether asbestos is present and at what levels. Since  
11 the spring of 2000 we have taken almost 900 samples at  
12 more than 40 operations employing more than 4,000  
13 miners.

14 Our preliminary review and analysis of these  
15 samples show very few exposures occurred during the  
16 sampling period, which were above the OSHA eight hour  
17 time-weighted average of .1 fiber per cubic centimeter  
18 of air. Our sampling results are now available to the  
19 public and are on our website at [www.msha.gov](http://www.msha.gov). Also the  
20 sampling results will be made part of the rulemaking  
21 record if we move forward.

22 The issues surrounding asbestos exposure are  
23 important to MSHA, and we will use the information  
24 provided to us at these public meetings to help us  
25 decide how to best proceed to address these five issues.



1 So we want to hear public view. These public meetings  
2 will give mine operators, miners and their  
3 representatives and other interested parties an  
4 opportunity to present their views on these five issues  
5 that we are considering for potential rulemaking action.

6 The format of this public meeting will be as  
7 follows: Formal Rules of Evidence will not apply, and  
8 this meeting will be conducted in an informal manner.

9 Those who have notified MSHA or signed up in  
10 advance of intention to speak will make their  
11 presentations first. After any scheduled speakers have  
12 finished, others may request to speak. When the last  
13 speaker is finished, we will conclude this public  
14 meeting.

15 If you wish to present any written statements  
16 or information today, please clearly identify that  
17 material for me. When you give it to me, I will  
18 identify the material by the title that you have  
19 submitted. You may also submit comments following the  
20 meeting. Please submit those to us by June 27th, which  
21 is the close of the comment period.

22 Comments may be submitted to us by electronic  
23 mail, fax or regular mail. Please note that the MSHA  
24 headquarters office in Arlington, Virginia has moved,  
25 and therefore, we have new address, telephone and fax

1 information that is different than what you have there  
2 in front of you in the Federal Register documents. In  
3 the back of the room is new fax address information for  
4 you.

5 A verbatim transcript of this public meeting  
6 will be available upon request. If you want a personal  
7 copy of the transcript, please make arrangements with  
8 the court reporter, or you may view it on MSHA's  
9 website. It will be posted there five days after this  
10 public meeting. The procedures have been the same for  
11 all of these public meetings.

12 I do not believe we have anyone signed up to  
13 speak at this moment, is that correct?

14 JAMES LYNCH: Correct.

15 REBECCA SMITH: What we will do is we will go  
16 off the record now, and we will wait, and if we have  
17 someone who is interested in speaking, please sign up,  
18 so indicate, and we will then open the record again for  
19 that information. So we'll go off the record now.

20 (Off the record.)

21 REBECCA SMITH: We'll go back on the record  
22 now. We have had a request to speak from Mr. David  
23 Mlakar. Mr. Mlakar, please. If you would state your  
24 name again and your organization for the record, please.

25 DAVID MLAKAR: My name is David Mlakar, and I'm

1 with Local 2660, working at National Steel, and I'm with  
2 the USWA.

3 First of all, on the issues, I definitely would  
4 agree with lowering the standard. Where we're at 2  
5 fibers per cc, I believe we should lower it down at  
6 least to the OSHA standard, to .1. Why are we -- I  
7 mean, with all the information on asbestos that has been  
8 out there, I mean, why are we sitting and subjecting  
9 miners to 2 fibers when the rest of industry is down to  
10 .1? I mean, under the act of 1977, you state right off  
11 in the beginning of that act, that you're here to  
12 protect the miners, first and foremost. And if you are,  
13 then I would agree with lowering that standard.

14 Also I do believe that the sensitivity, you  
15 should go to the higher sensitivity, and with limiting  
16 the take-home. All of these are great ideas. It's just  
17 a matter of let's implement them. Sampling, I would  
18 hope that in your regulations, though, that you would  
19 make them where, when new information becomes available,  
20 that you can utilize that information, where there would  
21 be some mechanism in the standard that you can say,  
22 okay, whether it would be a benefit to lower that  
23 standard or to, you know, say, well, with the new  
24 information we have, we could go the other way.

25 I mean, new information, stuff that we get, we

1 need to utilize it, and we don't. I mean, we're back in  
2 1973 with the TLDs that you've got, and we're sitting in  
3 2002, and there's no mechanism in there to utilize the  
4 new information that's become available. And I think  
5 there has to be some type of mechanism that you use.

6 Other than that, that's what you have me  
7 limited to as far as on these five subjects, I would  
8 have a lot more to say on other subjects, and I guess I  
9 can't say it here because I'm limited, because I would  
10 really give you an earful on the rest of it. So other  
11 than that, that's all I have to say.

12 REBECCA SMITH: Thank you, Mr. Mlakar. Can I  
13 ask the panel members, do any of you have questions for  
14 Mr. Mlakar? (No questions.) Thank you very much for  
15 your comments. We appreciate it.

16 We'll go back off the record again.

17 (Off the record.)

18 REBECCA SMITH: We're back on the record. We  
19 have Mr. Larry Zanko. Go ahead. If you don't mind  
20 again saying and spelling your name and your  
21 organization for the record, please.

22 LARRY ZANKO: Sure. My name is Larry Zanko.  
23 The spelling of my last name is Z-a-n-k-o. I'm a  
24 research fellow with the Natural Resources Research  
25 Institute. That's part of the University of Minnesota.

1 We're out of Duluth. And I work in the economic geology  
2 group there. My background is, I have a master's degree  
3 in geological engineering. And I've been with the  
4 Institute for 16 years.

5 We've been working on a project over the last  
6 year and a half where we've been looking at the  
7 properties of coarse taconite tailings from the five  
8 western Mesabi Range taconite operations, Ispat Inland  
9 Minorca, EVTAC, Minntac, Hibbing Taconite and National  
10 Steel Pellet Company. We've collected samples,  
11 representative samples, as representative as they can  
12 be, over the course of a year, collecting a sample every  
13 three months from every operation from their tailings  
14 line. And the idea was to look -- again, there's a huge  
15 potential for taconite by-products to be used as an  
16 aggregate source. In fact, these tailings have been  
17 used -- or the coarse tailings have been used in road  
18 projects around the Iron Range.

19 And one of the issues -- we've looked at the  
20 geology, the mineralogy, et cetera. And we know that  
21 from the concerns in the past, from various parties, as  
22 to whether or not there's any asbestos or asbestiform  
23 type minerals in the taconite, that was one of the  
24 issues we wanted to examine. And we had these samples  
25 sent to the RJ Lee Group in Monroeville, Pennsylvania

1 for analysis. The tailings came in two forms from the  
2 mine; that is, as-received, and the other, a minus 200  
3 mesh or minus 75 micron samples.

4 And the RJ Lee Group performed x-ray powder  
5 diffraction to identify various mineral components;  
6 polarized light microscopy, using EPA/600/R-93/116;  
7 scanning electron microscopy, as outlined in ISO/DIS  
8 14966, (Ambient air: Measurement of inorganic fibrous  
9 particles, scanning electron microscopy method). I just  
10 got this yesterday, so I'm just reading off of an  
11 e-mail. And transmission electron microscopy in general  
12 accordance with the analytical portion of ASTM D 5756.

13 Now, in general, the XRD analysis, and this  
14 confirms pretty much the work that we did as part of  
15 this project, was that the primary component of all of  
16 the samples is quartz, with varying amounts of hematite,  
17 magnetite and siderite, which are iron minerals. And  
18 the primary amphibole mineral identified by XRD was  
19 Minnesotaite. As it says here, XRD cannot differentiate  
20 between fibrous and cleavage fragment varieties of  
21 minerals. And the summary here is that no regulated  
22 amphibole was observed during these analyses.

23 Now, moving on to the PLM analyses, again,  
24 we're looking at -- they said trace levels of cleavage  
25 amphibole fragments observed in the Minorca and Minntac

1 samples were identified as, quote/unquote,  
2 "tremolite/actinolite." The cleavage fragments, four  
3 total in the entire PLM analyses, had moderate aspect  
4 ratios, greater than three to one length to width, but  
5 showed no evidence of fibular structure. And then based  
6 on the PLM analyses, no regulated asbestos minerals were  
7 detected.

8 SEM analyses. No asbestiform minerals were  
9 observed during SEM analyses. Several cleavage  
10 fragments were observed in the minus 200 mesh fraction  
11 that was sieved from the Minorca tailings; no cleavage  
12 fragments were observed in the pulverized Minorca  
13 sample. The chemistries for the cleavage fragments  
14 observed in the Minorca sample are consistent with the  
15 identification of Minnesotaite; again, a very common  
16 mineral on this part of the Iron Range.

17 And then finally, for TEM -- I'm just  
18 summarizing here -- no asbestiform minerals or amphibole  
19 cleavage fragments were observed during the TEM weight  
20 percent analysis.

21 Based on these analyses, no asbestiform  
22 minerals are present in these tailings. Also no  
23 quantifiable amount of cleavage fragments, with aspect  
24 ratios of greater than three to one, are present in the  
25 samples.

1           Basically that's the overall summary. The  
2 complete report will be as included in our report for  
3 our overall aggregate study that we're doing on the  
4 coarse tailings, and that will be finished in October of  
5 this year. Again, these results are just a general  
6 summary. The complete results from RJ Lee will be  
7 arriving shortly at our Institute. I guess that's all  
8 I have to say at the moment.

9           REBECCA SMITH: Mr. Zanko, if you would like to  
10 provide us a summary or that report that you're reading  
11 from, for the public record, we would appreciate having  
12 that.

13           LARRY ZANKO: Okay. When would you like that?  
14 I would prefer to -- this was, like I say, an e-mail  
15 that was a summary. The formal report, which all of  
16 this information is summarized in, will be arriving  
17 probably within the week.

18           REBECCA SMITH: We'd like to have it by -- we  
19 need to have it by the close of the record, which is  
20 June the 27th.

21           LARRY ZANKO: Okay. June 27th?

22           REBECCA SMITH: June the 27th, yes. And you  
23 can fax it to us, you can send it e-mail, hard copy,  
24 your choice.

25           LARRY ZANKO: Okay. I can do that.



1 REBECCA SMITH: If you don't mind.

2 CAROL JONES: Your sampling was all done as  
3 what we would call bulk sampling, right?

4 LARRY ZANKO: Bulk sampling.

5 CAROL JONES: It was not air sampling at all?

6 LARRY ZANKO: No, no. These were samples of  
7 the actual material itself. Not air samples.

8 CAROL JONES: And as you say, the force behind  
9 the study was to see if there was asbestos contamination  
10 prior to using this as road aggregate?

11 LARRY ZANKO: Well, it was one of the things  
12 that we felt needed to be addressed because the question  
13 would inevitably come up, particularly if the material  
14 was used beyond, you know, the mine properties,  
15 elsewhere in the state, even out of state. So the idea  
16 was to, let's examine. We have a pretty clear idea of  
17 what the mineralogy is of the western end of the Iron  
18 Range. Mineralogy changes as you go east. But in the  
19 western end of the Range we have a pretty -- we've got  
20 a good set of data that has been collected over several  
21 years and decades. But, again, in this study we wanted  
22 to address the analyses of these samples using the  
23 latest techniques available.

24 CAROL JONES: According to the definition of a  
25 fiber, the federal definition, it has to be three times

1 as long as it is wide?

2 LARRY ZANKO: That's correct.

3 CAROL JONES: At Least 5 microns long. Is that  
4 what you're calling a cleavage fragment? What is the  
5 distinction there in your definition?

6 LARRY ZANKO: In my definition? Well,  
7 technically, if you're going on anything with a three to  
8 one aspect ratio, isn't that considered to be  
9 asbestiform? Is that correct?

10 CAROL JONES: That's correct. I'm just trying  
11 to get at how you distinguish between -- how you define  
12 a cleavage fragment?

13 LARRY ZANKO: A cleavage fragment -- again, I  
14 am not an expert in this field. But a cleavage fragment  
15 is something that has more of a blocky shape, not  
16 flexible. An asbestos type mineral or asbestos fiber  
17 tends to have a very, very long length or aspect ratio.  
18 It has a fibrous look that is more linear, as opposed to  
19 a cleavage fragment, which can be, like I say, kind of  
20 chunky or blocky, and more irregular shaped. It just  
21 happens to be a fragment that's been broken to that size  
22 or length to width aspect. That's my understanding of  
23 it from my experience in dealing with, not only this  
24 project, but other issues over the last couple of years  
25 related to asbestos. I'm not totally ignorant of this,

1 but.

2 CAROL JONES: Thank you. That's fine.

3 LARRY ZANKO: Anything else?

4 DAVID MLAKAR: I have a question. Who funded  
5 the study?

6 LARRY ZANKO: Minnesota Department of  
7 Transportation. It was a MNDOT funded project.

8 REBECCA SMITH: Mr. Zanko, thank you very much.

9 LARRY ZANKO: Thank you for the opportunity.

10 REBECCA SMITH: Back off the record now.

11 (Off the record.)

12 REBECCA SMITH: We'll go back on the record  
13 now. Mr. David Mlakar has asked to speak again. Go  
14 ahead, Mr. Mlakar.

15 DAVID MLAKAR: Yes. This is Dave Mlakar, local  
16 2660, USWA. Just from listening to Mr. Zanko on his  
17 project, he had brought up a couple issues, and one was  
18 Minnesotaite. I would like to point out, too, there's a  
19 book on mineralogy and geology of the Iron Range, and  
20 was by Gruner in 1946, and he in there lists actinolite,  
21 and this is on the eastern end of the Range, actinolite  
22 and grunerite and cummingtonite on the eastern end of  
23 the Iron Range.

24 Now, I don't know of anything, and I don't have  
25 any information on the western end but what was said

1 here. But bringing up other amphiboles that -- I don't  
2 know what type of medical information is available --  
3 but if by bringing up other amphiboles -- I mean, that's  
4 like -- you're bringing up asbestos-like fibers or what  
5 is considered asbestos-like fibers, any of this. And  
6 maybe in your determination in looking at the six -- I  
7 think it's six asbestos forms that you're looking at --  
8 then maybe you should possibly start looking at other  
9 asbestos forms in your regulations, or at least coming  
10 up with some mechanism that says, hey, if there is a  
11 potential problem that we don't know anything medically  
12 about, that maybe we should have some type of mechanism  
13 for protection of the workers put into those  
14 regulations.

15 That's about all I have to say on that.

16 CAROL JONES: Mr. Mlakar, I wanted to just  
17 clarify something you said earlier, that I just want to  
18 clarify for the record. You said you thought we should  
19 lower the standard. I think you meant we should lower  
20 the PEL and actually raise our standard, is that  
21 correct?

22 DAVID MLAKAR: Right.

23 CAROL JONES: Thank you. That's all.

24 REBECCA SMITH: Thank you very much. I believe  
25 we will adjourn until 10 o'clock. At 10 o'clock we will

1 check back to see if we have any additional interest in  
2 speakers, and if so, we will reopen the record. If we  
3 have no additional interest in speakers at that time, we  
4 will close this public meeting at 11:00.

5 (Recess.)

6 REBECCA SMITH: Ladies and gentlemen, it is 11  
7 o'clock, and we've had no further requests to speak, so  
8 we are going to close the record on this public meeting.  
9 Thank you.

10 (Hearing concluded at 11 o'clock a.m.)

11

12 REPORTER'S CERTIFICATE

13 I, Kathleen M. Undeland, do hereby certify  
14 that the foregoing pages of typewritten matter to be a  
15 true and correct transcript of my stenotype notes taken  
16 on the date indicated.

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KATHLEEN M. UNDELAND

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