UNITED STATES DEPARTMENT OF LABOR

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MINE SAFETY AND HEALTH ADMINISTRATION

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PUBLIC HEARING

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PROPOSED RULE ON ASBESTOS EXPOSURE LIMIT

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THURSDAY
OCTOBER 20, 2005

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The above-entitled matter convened at 9:00 a.m. in the 25th Floor conference room at 1100 Wilson Boulevard, Arlington, Virginia, Rebecca Smith, Acting Director, Office of Standards, Regulations and Variances, presiding.

PRESENT:

REBECCA SMITH	Acting Director, Office of Standards
ALFRED D. DUCHARME	Solicitor's Office
CHRIS FINDLAY	Metal and Non-Metal Organization
CHERIE A. HUTCHISON	Office of Standards
PHUC PHAN	Office of Standards
MICHELLE SCHAPER	Educational Policy and Development
MARK WESOLOWSKI	Chief, Instrumentation and Analysis Branch

P R O C E E D I N G S

Time: 9:03 a.m.

MS. SMITH: Good morning. My name is Rebecca Smith. I am the Acting Director of the Office of Standards, Regulations and Variances for the Mine Safety and Health Administration, and on behalf of David Dye, who is the Acting Assistant Secretary for MSHA, I would like to welcome all of you to this public hearing this morning.

This public hearing concerns the lowering of the permissible exposure limit for asbestos.

I would also like to introduce others with me this morning who have worked on this proposed rule. On my right is Cherie Hutchison. Cherie is the Chairman of the Asbestos Rulemaking Committee for MSHA. She is an industrial hygienist, and she is with the MSHA Office of Standards.

Al Ducharme, on her right, is an attorney for the Solicitor's Office for the Department of Labor.

Mark Wesolowski is with our Technical Support Unit. He is the Chief of the Instrumentation and Analysis Branch and our Dust Division of our Pittsburgh Technical Support Center.

On my left, Chris Findlay. Chris is with

our Metal and Non-Metal Organization of MSHA. He is an industrial hygienist.

Michelle Schaper: Dr. Schaper is a toxicologist, and she is with the Educational Policy and Development part of MSHA.

Phan Phuc is our economist from the Office of Standards with MSHA.

I think we have a couple of other MSHA folks also in the audience.

This is the second of two public hearings that we are holding on this asbestos proposed rule. The first, the other hearing, was held on this past Tuesday in Denver, Colorado.

We announced these public hearings in our Notice of Proposed Rulemaking that we published in the *Federal Register* on July 29, 2005. The purpose of these hearings is to obtain public comment on this proposed asbestos rule.

We have copies of the proposed rule, I believe, out front, if you would care to pick up a copy.

Before we hear testimony from the public on this proposed rule's lower permissible exposure limit for asbestos, I would like to give you some background on this issue. I will give you a brief

overview of our historical enforcement actions at the Libby, Montana, vermiculite mine and our rulemaking activities concerning asbestos.

MSHA's predecessor agency, the Mining Enforcement and Safety Administration or MESA within the Department of Interior, monitored and enforced health and safety standards at mining operations, including the W.R. Grace vermiculite mine at Libby, Montana, from 1969 to 1977. At that time, the exposure limit for asbestos was 5 fibers per cubic centimeter of air.

During that time, sampling data showed high asbestos exposures among miners at the vermiculite mine in Libby, with the highest exposures occurring in the mill.

To reduce exposures, the mine installed or improved a number of engineering controls, such as exhaust ventilation and automatic bagging machines, and in 1974 the mine closed its old dry mill and began using its newly built wet mill to process and concentrate vermiculite, and occupational exposures dropped markedly.

All eight-hour, time-weighted average job exposure estimates decreased annually from 1972 to 1976. then in 1978 we lowered our full shift asbestos

exposure limit to 2 fibers per cubic centimeter. All eight-hour, time-weighted average job exposure estimates from 1977 to 1982 were less than one fiber per cubic centimeter of air in most areas of the mine.

In 1980 we requested that the National Institute for Occupational Safety and Health, NIOSH, investigate health problems at the Libby, Montana, mine and other vermiculite operations around the country.

NIOSH conducted this investigation and published their results in 1987. The NIOSH study verified the high occupational exposures at the Libby mine and documented increased incidence and risk of morbidity and mortality among vermiculite miners and millers exposed to tremolite actinolite.

In part because of the NIOSH findings and in part because of OSHA's 1986 final rule that lowered their asbestos permissible exposure limit from 2 fibers per cubic centimeter to 0.2 fibers per cubic centimeter, we included asbestos in our air quality rulemaking.

Our 1989 air quality proposed rule covered several health issues, including carcinogens such as asbestos. The air quality proposed rule would have lowered our permissible exposure limit for asbestos

from 2 fibers per cubic centimeter to 0.2 fibers per cubic centimeter.

The W.R. Grace vermiculite mine in Libby, Montana, ceased production in 1990 and closed permanently in 1992. The record for MSHA's air quality proposed rule closed also in 1992.

Although we split this massive rulemaking into several smaller rules, some were not completed and were withdrawn from the Department's regulatory agenda. Then in November 1999, a Seattle newspaper published a series of articles about the unusually high incidence rate of asbestos related illnesses and fatalities among individuals who had lived in Libby, Montana.

These articles raised public and Congressional awareness, and the Department of Labor's of Inspector General began an evaluation of MSHA's role at the Libby mine.

The Office of Inspector General published its findings and recommendations in March of 2001, and the Office of Inspector General recommended that MSHA do the following three things: Lower the existing permissible exposure limit for asbestos to a more protective level; use transmission electron microscopy instead of phase contrast microscopy in the initial

analysis of fiber samples that may contain asbestos; and implement special requirements to address take-home contamination.

Exposure to asbestos has been associated with lung cancer, mesotheliomas, and other cancers, as well as asbestosis and other nonmalignant respiratory disorders. Although there are no asbestos mines operating in the United States at this time, asbestos occurs naturally and is found in places where other commodities are mined.

Lowering our permissible exposure limit for asbestos would help to assure that fewer miners who work in an environment where asbestos is present will suffer material impairment of health or functional capacity over their working lifetime.

This proposed rule would reduce the full shirt permissible exposure limit and the excursion limit for airborne asbestos fibers and make several nonsubstantive changes to add clarity to the standard. We are not proposing to change the definition of asbestos or the analytic methods that are used in our current standard. Neither are we proposing additional requirements to prevent take-home contamination.

In response to the Office of Inspector General's recommendations, we published an Advanced

Notice of Proposed Rulemaking in the *Federal Register* on March 29, 2002, in which we requested information relating to the Office of Inspector General recommendations. We also held seven public meetings around the country to provide the public an additional opportunity to comment.

Following review of all written comments and relying on testimony taken at public meetings and on OSHA's 1986 asbestos risk assessment, we determined that it is appropriate to propose reducing the permissible exposure limit for asbestos and to clarify criteria for asbestos sample analysis.

In response to the Office of Inspector General recommendations and public comments, and to enhance health and safety of miners, we are proposing to lower the existing eight-hour, time-weighted average asbestos PEL of 2 fibers per cubic centimeter to 0.1 fiber per cubic centimeter, and to lower the short term limit from 10 fibers per cubic centimeter over a minimum sampling time of 15 minutes to an excursion limit PEL of 1 fiber per cubic centimeter over a minimum sampling time of 30 minutes.

To clarify the criteria for the analytic method in our existing standards, we are proposing to incorporate a reference to Appendix A of OSHA's

asbestos standard.

Appendix A specifies basic elements of a PCM method for analyzing airborne asbestos samples. It includes the same analytic elements specified in our existing standards and allows us to use other methods that meet the statistical equivalency criteria in OSHA's asbestos standard.

After considering approaches to prevent take-home contamination, we determined that nonregulatory measures could adequately address this potential hazard. Although we are only proposing to lower the permissible exposure limit for asbestos, we also discuss analytic methods and take-home contamination in this preamble and, therefore, those issues are acceptable subjects for this public hearing today.

The issues surrounding asbestos exposure are important to us, and we will use the information provided to us at these public hearings and in written comments to help us decide how to best proceed.

The procedure for each of our public hearings is the same. Those of you who have notified us in advance of your intent to speak or signed up today will make a presentations first. After all scheduled speakers have finished, others are free to

speak. We will conclude this public hearing when the last speaker has finished.

We will conduct this hearing in an informal manner, and formal rules of evidence will not apply. The MSHA panel may ask questions to clarify statements for the record, but there will be no cross-examination of speakers.

If you wish to present any written statement or information today, please clearly identify your material, and give it to me before the conclusion of this hearing. I will identify who submitted it.

You may also submit comments following this hearing, but please submit them by November 21, which is the close of the comment period. You may submit comments to us by electronic mail, FAX, or regular mail at the addresses listed in the proposed rule.

A transcript of this hearing will be made available on our website within several days. If you want a personal copy of the transcript, you can make arrangements directly with the court reporter.

Thank you for your patience and attention to these introductory remarks. We will now begin with speakers who requested to speak. To ensure that we

get an accurate record, if you would please say your name and your organization that you are affiliated with, and spell your name for the recorder.

Our first speakers this morning will be from NIOSH.

DR. WEISSMAN: Good morning. I am David N. Weissman, M.D., W-e-i-s-s-m-a-n, Director of the Division of Respiratory Disease Studies, National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention.

Accompanying me today are several senior staff from NIOSH. Our purpose for appearing at this hearing is to provide testimony to the Mine Safety and Health Administration regarding the proposed rule on asbestos exposure limit published in the *Federal Register* on July 29, 2005.

NIOSH strongly supports the proposal to reduce the MSHA permissible exposure limit from 2 fibers per cubic centimeter to .1 fibers per cubic centimeter. This twentyfold reduction in the MSHA PEL will make it consistent with the Occupational Safety and Health Administration PEL.

NIOSH also concurs with the proposal to incorporate reference to Appendix A of OSHA's asbestos standard, specifying phase contrast microscopy as the

method for estimating the concentration of airborne asbestos.

Reducing exposures to asbestos is important for preventing asbestos related diseases. As we all know, these include asbestosis, lung cancer which asbestos can cause in asbestos exposed workers, especially for those who smoke, malignant mesothelioma, cancer of the tissue lining of the chest or abdomen for which asbestos and similar fibers are the only known cause, and non-malignant pleural disease which can appear as a painful accumulation of bloody fluid surrounding the lungs but more commonly seen as thick and sometimes constricting scarring of the tissues surrounding the lungs; in addition, asbestos exposure associated with excess mortality due to cancer of the larynx and cancer of the gastrointestinal tract.

Most asbestos related diseases, particularly the malignant ones, have long latency periods, extending 10 to 40 years from initial exposure to onset of illness. Asbestosis and asbestos related malignancies are very serious diseases that are associated with appreciable mortality. Asbestos related cancers are often fatal within a few years of initial diagnosis, and asbestosis can lead to death

due to impaired breathing.

In the proposed regulation MSHA defines asbestos as six asbestos minerals, including chrysotile, amosite, crocidolite, anthophyllite-asbestos, tremolite-asbestos, and actinolite-asbestos. Individual fibers of these minerals are defined as particles with a length to width or aspect ratio of at least three to one, and lengths of at least five micrometers.

MSHA states on page 43953 that "although we have received comments regarding the hazards associated with cleavage fragments, we do not intend to modify our existing definition of asbestos with this rulemaking" and further explains on page 43972 that "substantive changes to the definition of asbestos are beyond the scope of this proposed rule."

NIOSH agrees with and supports MSHA's decision to limit the scope of the proposed rule to facilitate the proposed marked reductions in asbestos exposure limits. However, as noted by MSHA, issues remain in improving the definition of asbestos.

For example, the current definition doesn't include asbestoform mineral fibers such as winchite and ricterite, which were major components of the asbestoform mineral contamination of Libby,

Montana, vermiculite.

In view of these issues, NIOSH is presently reevaluating its definition of asbestos in non-asbestoform minerals, because this issue has implications that encompass numerous Federal agencies. NIOSH will work with other agencies to assure consistency, to the extent possible.

Overall, though, the proposed rule is an important and positive step and improves protection of miners from asbestos. NIOSH applauds the proposed rule, and strongly supports it.

I'll take any questions, if there are any.

MS. SMITH: Thank you, Dr. Weissman. Does the panel have any questions of Dr. Weissman? Thank you very much.

Our next speaker is Celeste Monforton.

MS. MONFORTON: Good morning. My name is Celeste Monforton. The last name is spelled M-o-n-f-o-r-t-o-n. I am testifying here today as a private citizen.

I am a research associate in the Department of Environmental and Occupational Health at the George Washington School of Public Health. From 1991 until December 2001, I was employed at the Department of Labor, first at OSHA and then at MSHA.

As I said, I offer my testimony as a private citizen. I am not being compensated in any way by any organization, corporation, group or individual to appear here today, and I have no economic interest in the outcome of this rulemaking.

On a personal note, I would very much like to thank the career MSHA employees who are involved in this rulemaking and in the agency's other efforts to protect miners from exposure to asbestos.

While I was at MSHA, I witnessed firsthand your commitment to the mission of the agency and your efforts to promulgate protective standards for workers. I appreciate the fact that you face significant political obstacles within your own agency, the Department of Labor, the Office of Management and Budget, and you also ensure substantial pressure from other groups who seek to preserve the status quo.

I also understand and recognize that there are other health hazards faced by miners, such as diesel particulate matter, coal mine dust, crystalline silica, which also must be addressed by MSHA, and given the agency's limited resources, this rulemaking on asbestos may not be your highest priority.

For that reason, I recommend the

following. MSHA should expedite this limited scope rulemaking and issue a final rule by March 30, 2006, and MSHA should incorporate into this limited rule OSHA's 1926.1101, which is their asbestos standard for construction industry, to protect miners and contractors from asbestos containing building material and equipment, and MSHA should commit publicly to propose by March 30, 2007, a comprehensive asbestos rule which incorporates the latest scientific information on the health effects of respirable fibers and in the state of the art analytical methods.

It has been more than three years since MSHA published its advanced notice of proposed rulemaking on controlling and measuring asbestos and it held its public hearings. It is a sad commentary, but exposes a truthful reality. The current regulatory system is inefficient and incapable of responding in a timely manner to protect workers from occupational health hazards.

In some cases, whole generations of workers have been exposed to disabling and deadly hazards, while employers, industry trade associations and their lawyers debate with regulators.

When I studied MSHA's current proposal on asbestos, I kept returning to the same question.

Given the current reality of the regulatory system, what can be done expeditiously to strengthen MSHA's enforcement tools in order to protect asbestos exposed mine workers? I elaborate below in my recommendations.

Recommendation 1: Expedite a limited scope final rule and issue it by March 30, 2006.

In at least 11 instances MSHA indicates that this rulemaking is limited in scope with the primary objective of establishing a permissible exposure limit that is equivalent to OSHA's. The regulatory text proposed will accomplish this objective.

I agree with MSHA's decision to propose this minor rule. I urge the agency, however, to expedite the process to ensure that it is in effect by March 30, 2006. That is about 120 days after the close of the post-hearing comment period.

I consider this a first step but one that is tremendous important and necessary to ensure miners' health is better protected. I note that in 2002 representatives of the mining industry expressed no objections to this approach.

I urge MSHA to put this limited scope rulemaking on the fastest Fast Track available, taking

full advantage of the mining industry's support for the change. I recommend, however, that MSHA include all mining operations, including underground coal mines, in the regulation.

Meaning no disrespect to the geology experts with whom MSHA consulted, the agency should not tie its own hands. If there is an instance in which underground coal miners were to be at risk of exposure to asbestos, the agency should have the enforcement tools it needs to protect coal miners' health.

Recommendation 2: Incorporate OSHA's 1926.1101 in this limited scope rule.

In the preamble to this proposed rule, MSHA describes several reprehensible instances where mine workers were exposed to asbestos containing building material during maintenance and repair activities. In one case, MSHA reports that a company official knew that ACBM was present. Yet they still allowed their workers to move the material without proper methods, protection or training.

Moreover, MSHA only became aware of the situation because of a miner who was brave and bold enough to notify MSHA. by the time MSHA learned of the hazard and arrived at the site, it was impossible

to detect any airborne asbestos.

How is it today, more than a century after the health effects of asbestos were documented, some mine operators would knowingly expose workers to ACBM and not take any precautions? I see it this way. First, employers realize there is little chance they will get caught. If nobody is watching, some will take shortcuts and risk the health and lives of their employees.

Second, employers understand that most workers will not complain to MSHA for fear of losing their jobs or being discriminated against in some other way. Third, these irresponsible mine operators know that MSHA does not have a regulation on the books to protect mine workers from asbestos containing material.

These factors combined give unscrupulous mine operators all the incentive they need to cut corners and place workers at significant risk. MSHA needs a regulation to specifically address demolition or salvage of structures where asbestos is present, removal or encapsulation of ACBM in construction alteration, repair, maintenance and renovation of structures or equipment that contain asbestos.

MSHA should incorporate the appropriate

provisions of 29 CFR 1926.1101 to its limited scope final rule and promulgate it no later than 120 days after the post-hearing comment period.

I cannot imagine that responsible mine operators would object to extending these protections to workers employed at mining operations. I suspect that the vast majority of firms, when faced with situations where ACBM has to be removed, already comply with the provisions of OSHA's standard or they hire a qualified asbestos abatement contractor to ensure the job is done properly and safely.

Formally incorporating OSHA's 1926.1101 into MSHA's limited scope rule is necessary, however, for those irresponsible mine operators who will only take precautions when compelled to do so because there is a regulation on the books.

The recommendations offered above are meant to capture some low hanging fruit and, frankly, it should have been done years ago. Adopting a 0.1 fiber per cc eight-hour TWA PEL and incorporating OSHA's 1926.1101 standard will not be onerous for the mining industry and, frankly, it would be ludicrous, legally and politically, for mine operators to object to these changes.

These two recommendations are designed to

provide the nation's miners with some of the same health protections afforded to all other workers in this country. MSHA should finalize these provisions by March 30, 2006. They are not controversial, and they are long overdue.

Recommendation 3: While the MSHA staff completes work on this limited scope rule, I urge MSHA's Assistant Secretary or Acting Assistant Secretary to commit to proposing a comprehensive asbestos standard which incorporates the latest scientific information on the health effects of respirable fibers and state of the art analytical methods.

In the preamble to the current proposed rule, MSHA concedes the many issues that are not addressed in this limited scope rule. These issues include items as fundamental as the definition of asbestos, pros and cons of different analytical methods, the use of bulk sampling for hazard screening, and many others.

As I note above, I agree with MSHA's proposal to issue this preliminary rule which is limited in scope. However, these other issues must be addressed in a follow-up rulemaking.

These issues include: The definition of

asbestos. There is substantial evidence that respirable fibers not currently classified as asbestos are associated with significant adverse health effects. As NIOSH noted in its June 2002 comments to MSHA, any durable inhalable fiber with characteristics similar to asbestos should be considered potentially harmful.

NIOSH further states that there is "no scientifically valid health evidence to exclude from a health standard so called cleavage fragments from the nine fibrous analogs of asbestos minerals, if they meet the microscopic definition of a fiber."

There is a wealth of new information on the adverse health effects of durable respirable fibers. MSHA should work in collaboration with scientists at USGS, EPA, ATSDR, NIOSH and other Federal agencies to develop an appropriate definition of the hazard, secure assistance from these agencies to develop an updated risk assessment for occupational exposure to the hazard, and set an appropriate permissible exposure limit and short term exposure limit.

Two: Provisions of a comprehensive health standard. As MSHA considers the content of a comprehensive health standard to protect mine workers

from exposure to naturally occurring asbestos, I encourage the staff to take this approach. Review in detail the cases in which such exposures occurred, and ask yourselves what enforcement tools did you need and perhaps did not have to ensure that workers were protected?

Here are a few provisions to consider. Use of bulk samples to assess the presence of the hazard. If a bulk sample of ore or a processed product collected in a portion of the mine where miners are working or likely to be working contain more than 0.1 percent of the regulated material, however that is eventually defined in the comprehensive standard, then mine operators must have a written plan in place to control effectively workers' exposure to respirable dust and fibers.

If MSHA suspects that asbestos containing ore is present on a mine property, MSHA has the authority to use any variety of Federally approved analytical methods to confirm or refute its concern for miners' health.

The purpose of this provision will be to help MSHA determine whether the hazard is present at the mine. A follow-up step, if necessary, will be assessing the work practices to determine whether

miners are likely to be exposed to the hazard or perhaps conducting air monitoring.

In some instances, again as specified in this comprehensive standard, mine operators would be required to develop and implement a written, mine specific plan which describes the work practices, such as water application to control dust or engineering controls such as environmentally controlled cabs on equipment, which will be used to control respirable dust and fibers on the mine property.

The control plan must address all facets of ore extraction, processing, loading, shipping and waste product handling, and describe how exposure to respirable dust and fibers would be controlled. If a mine operator fails to follow their own written plan, a citation would be issued, and a series of worker and public notification would commence.

My written testimony describes other provisions that MSHA should include in a comprehensive rule, including requirements to prevent take-home contamination.

Before I conclude my remarks, I have several additional comments. First, I encourage MSHA to create a scientific repository of asbestos samples collected during all future enforcement and compliance

assistance visits.

These bulk samples and filter cassettes should be made available for public health research purposes to scientists from Federal agencies such as USGS, NIOSH or EPA, to continue build a knowledge base about all forms of respirable fibers present at the nation's mining operations.

This repository could become a valuable resource for scientists who are examining new health effects data, comparing sample results by different analytical methods, or verifying new analytical techniques. This information may prove invaluable to MSHA, OSHA, and NIOSH in future rulemakings on this occupational hazard.

Second, I was bewildered by one portion of MSHA's preamble to this proposed rule. I cannot conclude my remarks without expressing its absurdity. The text specifically suggests that another tragedy like the one caused by W.R. Grace beginning in Libby, Montana, now spread to communities across the nation, would not occur today.

MSHA states, "If a mine's ore contains significant amount of asbestos-like minerals, there is a strong likelihood of potential liability risk, both from customers and workers, and the possibility that

the mine's product would be commercially unmarketable. In our view, these commercial reasons make it unlikely that a new Libby-like mining condition would arise in the future."

Yet in this very same MSHA document just a few short pages later, the agency describes the inability of pure market forces to protect workers' health. In one case, a customer purchased product from a mine. They sent a sample of the material to an independent lab for analysis, and tremolite asbestos was found in the product.

When MSHA learned of the matter, it conducted sampling at the mine and "found concentrations at the mill exceeded 2.0 fibers per cc a measured by PCM, and over half of the exposures in the mill exceeded 0.1 fibers per cc of asbestos."

The incongruity of these two passages is striking. On one hand, MSHA is trying to convince us of the effectiveness of market forces, while on the other, the agency's own experience illustrates that the economic theory does not match the reality in today's workplaces, when the hazard is microscopic and the adverse health effects do not emerge for decades after the exposure, and many years after the employer-worker relationship has ceased.

It is foolish to rely on economic theories to protect workers' health. Past and present experience tell us the same.

In conclusion, I support MSHA's proposal to issue this limited scope rule which will provide mine workers some of the same protections against asbestos exposure granted to all other workers in this country.

The agency must acknowledge and act, however, to address the significant limitations in the current definition of asbestos and the toxicologically irrational industry demand for "discriminatory fiber counting."

Specifically, MSHA should: (1) Expedite this limited scope rulemaking and issue a final rule by March 30, 2006; and incorporate into this limited scope rule OSHA's 1926.1101 standard, and commit publicly to proposing by March 30, 2007, a comprehensive asbestos rule which incorporates the latest scientific information on the health effects of respirable fibers and the state of the art analytical methods.

Thank you for providing this opportunity.

MS. SMITH: Thank you, Ms. Monforton. Questions from the panel for Ms. Monforton? Thank you

very much.

We have no other speakers who have signed up to give testimony this morning. Are there any in the audience who would like to sign up at this time or come forward to give remarks?

MR. BAKER: I'm sorry. I came in late, and I did sign in.

MS. SMITH: Okay. If you would give your name, spell it for the reporter, please.

MR. BAKER: My name is Tim Baker. It's B-a-k-e-r. I am the Deputy Administrator for Health and Safety for the United Mine Workers of America. We have submitted written comments on this matter, and I will try to be fairly brief in my testimony, but felt it important to at least address some of the issues that are in this proposed rule.

First of all, the Mine Workers is pleased that the agency has made at least an attempt to regulate or to further regulate asbestos exposure to miners. We agree with the decision to lower the exposure levels over the course of a shift or over the course of the period of time an individual works. However, we are a little bit apprehensive and confused by the method of which you are going to determine what that exposure level is.

We have suggested, I believe, in 2002 that the agency change the method for analyzing asbestos or determining asbestos and use the transmission electron microscopy. However, that is not in this rule, and to some degree we are led to believe it is because of cost.

In this particular instance, given the circumstances and what happened at W.E. Grace and nationwide, the Union is a little confused as to why any type of cost analysis approach was used in this particular issue. The cost in human suffering that has occurred as a result of noncompliance, overexposure, nonenforcement, lack of a rule that really protects workers, allowed people to suffer, not only individuals working at the operations but, in fact, the community and suppliers and everyone that was associated, basically, with the asbestos problem in the community has been exposed.

This caused huge heartache for those individuals and pain and suffering that I don't think any of us can even imagine. We are, quite frankly, offended when this agency or any agency says, well, you know, the cost of doing certain tests is extreme, basically ignoring the cost and the suffering that those individuals and their families and communities

have suffered. I think we need to point that out whenever we begin to look at a rule, especially in this instance, and we begin to say the price is too high to enforce something. I think we ought to look at the price that those individuals have already paid. So we are quite upset there.

As far as the short term exposure limits that have been lowered for 15-minute excursion, like many of the things that this agency does, it is nonenforceable. You will never find a situation where an individual is overexposed for a short term period of time, not because the overexposure doesn't occur, but because the sampling is not going to occur, and nobody is going to turn in an over exposure.

If the inspector or the individual who is in charge of that operation, from the Secretary's standpoint, is not on site when that occurs, there will never be an overexposure reported.

I am uncertain at this point how we tighten that particular aspect of this rule, but I think we all got to look at this in real terms. To put it in there is nice. It's nice window dressing, but just so we all understand it, no employer out there, no operator out there is going to turn themselves in on an overexposure for short term.

Testing over the long haul over an entire shift may be reportable, depending on what means are used to test, but the short term is simply not going to happen.

The other thing that we are extremely concerned about is the fact that the agency has determined that there is no need to get involved or hit the issue of take-home contaminants. To be honest with you, personally looking at this situation, I'm bewildered by this.

A community was destroyed. Many communities were destroyed, not because the individuals worked at the operation, not because they showed up on site either in the milling operation or the mining operation or any of those places, but because they simply lived in the community.

For the agency to say that we believe that employers will take necessary steps to protect workers and their families from take-home contamination is ridiculous. It didn't occur in the past, and if you do not regulate the situation, it will not happen in the future.

Benevolence is not part of this equation. This is about dollars and cents when you get down to it, and when it comes to dollars and cents, it has

been proven through history that, if it is not regulated, the dollars will override any other thing that's out there.

That employer is going to seek maximum profit at the risk of the individuals who work for them, as is the case here, as is the case with many of the issues that the mine workers deal with, whether it be black lung, whether it be roof conditions, whether it be a host of conditions that exist in the mine.

To simply say that -- and I believe it was brought up previously -- that market forces will force them to deal with this issue is not the correct approach. This particular industry has proven clearly that they cannot self-regulate, that they will not self-regulate.

While we can say that there is no more -- or you make the claim in the preamble that there is no more asbestos being mined in the United States, that does not exempt you from a responsibility to say that, in the event that people are around asbestos, in the event that they come in contact, we've got to regulate every area. And you have not done that. Quite frankly, you have not done that.

In many of these issues, I think what we do is we sit back and look at a situation and,

hopefully, the agency says, well, if we detach ourselves for a long enough period of time, people won't be passionate about it, and we an maybe fudge around the edges a little and not tighten the regulation. I think that's exactly what occurred here. But those individuals who have suffered through this with asbestos and asbestosis still do have advocates out there, and it is important to remember that this is about protecting them.

Like I said before, the market forces just don't show that there would be any change. I mean, I deal with mining operations daily. I have not met too many operators that are benevolent enough to make sure that the conditions are what they should be, unless they are forced to.

The other thing that we are a little upset about is the exemption for underground mines, coal mines. Be it stated in the preamble that exposure is unlikely, exposure is very limited, it is not an excuse to exclude any particular segment of any industry. if it's mining, it's mining.

If coal miners are exposed to asbestos at any level in any single operation, it should apply to those operations. We are still using parts that contain asbestos. We are still using -- Whether it's

in clutches for transmissions or whether it's in brake pads or whatever it is, they are still there.

It seems to me that in the confined spaces of an underground coal mine, it would be more hazardous than in an open area outside. So to exempt the underground mining industry, coal mining industry, is a mistake that we believe the agency does need to correct.

I guess, in conclusion -- and it's hard to say when you open up a hearing to say we are pleased that you tried to do something but, boy, you missed the mark. But we believe that to be the case here.

We believe that you have completely missed the mark, that issues that need to be dealt with weren't, and the agency really does need to have a rule on asbestos, but you need to tighten up all those particular areas that I have discussed.

The fact of the matter is that a rule is only going to be as effective as it can be enforced. What I have read even in the preamble and through the rule -- what I have read is a rule that basically has no teeth, and if my reading is correct, if my reading is right, I would suspect that we are better off not to have hearings, not to propose anything. Just allow the status quo to continue, because to a certain

degree, you throw out a regulation, and people think they have a protection.

People think that they are going to be protected more than what they are. So you give them a false sense of security, and 20 years from now the problem is still there, and you haven't corrected anything.

The final thing I would like to say is that we do disagree, I think, with the Inspector General's determination that MSHA -- More sampling or more presence by the agency wouldn't have done any good, and kind of let you off the hook. We don't believe that for a minute.

It is one thing to sample. It is one thing to look at exposures. It is another thing to know that there is an extreme hazard out there, and to be satisfied that, well, I've taken the required samples; we have a generation dying off from asbestosis. That's a shame, but I've done my job, and the rule says what it says, while the next generation is being sentenced to death, which is exactly what has occurred here.

The hazard existed. This rule should have happened years and years and years ago. A rule with teeth should have happened years ago. Whenever the

medical community, the agency and other individuals became aware of the fact that there was a hazard, there was no swift movement. There were studies and more studies and studies on top of those studies, but nobody moved to do anything.

So to a certain degree, culpability does lie with this agency for understanding that there was a hazard and not taking action to lower the exposure limits, not taking action to see that people were not overexposed.

So while the I.G. may say, you know, you're off the hook, from our perspective and from the United Mine Workers perspective, this agency is not off the hook. You are guilty of allowing this to occur as the operators who mine this and overexposed their people, and knowingly overexposed their people; because it was long ago -- It was long ago that you knew that these hazards existed, and nothing was done, quite frankly.

To say the rule is the rule, we applied the rule -- The rule wasn't stringent enough. It didn't protect, and for years you have known that.

I would be happy to answer any questions. That is about the extent of my comments. We do need to tighten the rule. You do need to look at those

areas where you allow operators to self-regulate.

My experience of 30 years, there is no operator that self-regulates. If you don't force it, it doesn't happen. Workers do not get protections, because the agency says, gee, it's market -- that wouldn't be good; they wouldn't do that again. It costs them too much money in the end.

I think that what we see in this instance and in this day and age is, if you get in enough trouble, you just go bankrupt and take your piggy bank home with you, and the workers are left with nothing anyhow. So I think we need to put some teeth in the regulation.

If there are any questions, I'd be happy to attempt to answer them.

MS. SMITH: Thank you, Mr. Baker. Questions for Mr. Baker? Thank you very much.

There are no other speakers signed up. Anyone in the audience, second thoughts on any remarks? Yes?

MR. CASTLEMAN: Good morning.

MS. SMITH: Good morning.

MR. CASTLEMAN: My name is Barry Castleman, C-a-s-t-l-e-m-a-n. I am here, like Celeste Monforton, at my own expense, on my own time, and I

am not representing anyone here but myself.

My background is that I have been involved in the public health struggles over asbestos for about 35 years. I have been involved in rulemaking before numerous Federal agencies. I have been a consultant to a number of Federal agencies, including OSHA, EPA, the Consumer Products Safety Commission, and the Department of Justice, on asbestos issues.

I was one of the initiators of the rule banning asbestos in drywall patching compounds in the 1970s, a product that many workers and consumers were exposed to, millions of people a year, and I was involved in representing the Natural Resources Defense Council at the EPA banning rule hearings in the 1980s.

My book on the public health history of asbestos is a thorough documentation of why you can't expect market forces to protect people from asbestos, why we need to have government regulatory agencies, and this is just fundamental to anybody who understands public health any better than knowing how to spell the words.

This book is in its fifth edition. It is twice the size of my doctoral thesis at the Johns Hopkins School of Public Health on the same subject 20 years ago. This has been peer reviewed by the best

lawyers and scientists that money can buy, and it is a thoroughly accurate history of what happened with asbestos as a case study of the public health failure which is continuing to this day.

As to MSHA, your proposal to lower the exposure limit from 2 fibers per cc to 0.1 is long overdue. As you know, OSHA enacted that limit 11 years ago. It was actually first proposed back in 1976, not proposed but recommended by the Director of NIOSH, Jack Finklea, to the OSHA Director who was at that time Morton Corn, in a memorandum which I cite here in my testimony.

It was also recommended again in 1980 by a NIOSH-OSHA work group which issued a booklet called "Workplace Exposure to Asbestos: Review and Recommendations," and held a press conference in April of 1980, again saying that the occupational exposure limits should be set down to 0.1 fiber per cc.

The current MSHA limit of 2 fibers per cc, according to OSHA, was associated with a lifetime occupational mortality from occupational cancer of 64 for every 1,000 workers exposed at that limit for a working lifetime.

For the lower limit of 0.1 fibers per cc, OSHA estimated that the mortality would be 3.4 deaths

from occupational cancer for every 1,000 workers exposed at the permissible exposure limit of 0.1.

A more recent estimate by NIOSH experts Leslie Stainer and others published in 1997 pegged the 0.1 fiber per cc limit as being associated with five deaths per 1,000 workers, just from occupational cancer of the lung that they would sustain. So that is a higher level of risk that had been projected by OSHA back in the early Nineties and in the Eighties.

If you assume a virtually linear dose response relationship as OSHA did, then you multiply by 20, the five deaths per 1,000, then you get the risk of 100 deaths per 1,000 from lung cancer, roughly speaking, that would be associated according to the NIOSH experts, with 0.1 fiber per cc permissible exposure limit. I mean for the 2 fiber per cc limit that you currently have.

So you have an appalling high occupational mortality associated with the current limit, and that estimate, based on the latest information, is higher than the estimates were that OSHA based its rulemaking on in the early 1990s.

Federal and state authorities have long recognized that there was a health threat to people doing mining and quarrying in various activities. I

mention a few here.

I mention the talc deposits in upstate New York as having been the subject of state government inquiry since 1940, and publications from 1943 on asbestosis and in 1967 on the excess of occupational lung cancer in those talc miners in upstate New York, published by state government officials. This has been continued with a finding of mesotheliomas as well in the same miners, published in more recent years.

Other examples of activities subject to your regulatory purview would be the quarrying of asbestoform, asbestos containing rock, in the area of Rockville, Maryland, in 1977. There was a big controversy over that. People in Montgomery County, Maryland, were quite upset about the use of this material as a road paving material and the possible exposures of the workers and the communities from this.

I can't believe this is the only place. IN fact, it is not the only place in the country where quarrying is done for road building materials, and this kind of exposure can take place.

This month research was published linking residents in areas with naturally occurring asbestos outcrops and an increased risk of mesothelioma, and

Dr. Marc Schenker in California is one of the authors of the study, and I give a website where Medical News Today reports this week on Dr. Schenker's research showing the high correlation of proximity, living in a proximity within a short distance of areas where natural outcrops of asbestos occur having a correlation with increased liability to develop mesothelioma.

Now, obviously, there are questions that can raised about the occupational exposure that people with mesotheliomas had which weren't answered by Dr. Schenker's research, but the study is compelling evidence that at least some people appear to be getting cancer just from environmental exposure to the disturbance of the rocks in the surface outcrops in certain areas of California.

In El Dorado County, California, where a lot of land development is going on, there have been studies by a pathologist, Gerald Abraham and Bruce Case, and they have looked at the lung tissues of pets that have died in this area, and they have looked at them for the amount of asbestos that they can find in the lung tissues.

They find that the longer these pets lived in this area, the more asbestos they had in their

lungs, and this is an area where this is just homebuilding and ordinary commercial and residential development activities are going on, and the land is being disturbed, and there is asbestos in it and, in some cases, quite a lot of asbestos in the soil there.

Dr. Abraham and Dr. Case have found that the amount of asbestos that these animals had in their lungs at the time that they died was greater than the amounts of asbestos that goats in an area of Corsica where environmental mesotheliomas have been documented - it is higher in these pets than it is in some of these goats.

So this is an indication of the human health risk that is associated with this kind of disturbance of the land in areas where you have asbestos present in the soil, and this is something that you people ought to be doing something about before we have an epidemic of mesothelioma in every place where this kind of activity is going on.

In Libby, Montana, we have seen a catastrophe unfolding, not just in the miners but in the community, and even in the people that live in buildings where there is insulation that they made with this vermiculite was installed.

In one native Canadian community,

indigenous people, reservations, have been provided with this material as part of a home that they lived in, and Raven Thundersky has gone on Canadian television on a number of occasions talking about how she and several members of her family are dying or have died from mesothelioma, and their only exposure is having lived in a building where this Zonelite insulation, this vermiculite insulation from Libby, Montana, was installed in the home.

How much of this kind of thing is still going on, I wonder? We still have vermiculite activities going on in the United States. There is a company called Virginia Vermiculite that's been the subject of news reports five years ago.

It's been the subject of MSHA investigations. They clearly have an asbestos exposure problem down there. What's being done about that? What should be done about it that's not being done about it? I'll say a little more about that later.

The situation in Libby: The presence of asbestos in the ore was known to state health authorities in Montana as far back as 1956. The company was originally called The Asbestos and Vermiculite Company back in 1919 when they opened it.

So, obviously, they knew they had asbestos.

It was known to OSHA in 1974 when they were cited for violations of an OSHA standard in the handling of this vermiculite material, and it was known to the EPA, certainly, by 1982 when memos were written about this within the EPA. And yet the use of this material went on until 1990 with widespread dispersion in many communities all over this country and Canada and elsewhere perhaps.

W.R. Grace not only failed to warn consumers about the presence of asbestos in this material, they marketed it to the public as asbestos-free.

In upstate New York, as I mentioned, Dr. Abraham and his co-workers have documented mesotheliomas in people who were exposed to the talc mining activities associated with -- well, the mining and processing of talc, and these mines have been the subject of reports going back to 1943 in the published medical and scientific literature.

A company mining talc in New York, R.T. Vanderbilt, has long denied that its talc contains asbestos or should be subject to Federal regulations on asbestos.

I have, through the wonders of legal

discovery, obtained a document from Johns-Manville Corporation where the people at Johns-Manville take a look at the talc product from Vanderbilt, and they look at various grades of the material, and their people -- their analytical people concluded that these materials all had substantial amounts of both tremolite and chrysotile asbestos in them, as well as anthophyllite and other asbestos minerals.

The Johns-Manville official, noting that he had numerous discussions with R.T. Vanderbilt people, concluded -- and this is a quote -- "It is apparent that the R.T. Vanderbilt presentations to OSHA, NIOSH, FDA, MESA" -- M-E-S-A, must have been what you guys were back in 1974 -- "are based on something less than the truth. I find it difficult to believe that they could be so grossly misinformed as to what their materials really are."

So this is what the industry people sometimes say about each other when they subject their materials to laboratory analysis and in the privacy of their own discussions within the company comment on what they find.

I mentioned Virginia Vermiculite. The USGS has recently published a map of asbestos deposits in the eastern United States. For some reason, the

map does not include Louisa, Virginia, where Virginia Vermiculite operates.

Workers at this site were reported as having asbestos exposure five years ago. This was well known to top officials at MSHA, and previous MSHA air sampling had followed poor methodology and yielded negative findings, but citations were issued in the year 2000 for failure to warn and protect the workers.

Seems to me, that should be the beginning and not the end of MSHA's activity in connection with dealing with that. Here again, as with the talc mines, you have a management and an employer that is denying the problem, not saying we tried to fix the problem and we are still working on it, but simply denying that they have an asbestos problem in the first place. That is a fundamental challenge to your authority.

I have something else I want to bring up, and that is notification. Having reviewed what I have just said, I think we have a deplorable failure to protect the health of workers, communities and consumers from asbestos contamination in mining and quarrying operations and the products of these business activities.

I again say it would be important for MSHA

to drastically lower its antiquated occupational exposure limit, its permissible exposure limit, as proposed. But there is more that you should do.

Workers and the public depend on the government to see through the denials of employers that say that they don't have asbestos, when they do, and protect the health of workers and consumers against asbestos contamination in talcs and vermiculite and quarried stone.

Given the lack of candor of the companies extracting these materials, one can only wonder what products people are making and using that contain this contaminated talc and vermiculite today.

MSHA's identification of an asbestos contamination of stone or minerals should trigger efforts in public notification and public health protection.

When bulk samples show a tenth of a percent of asbestos or more or air monitoring shows that work with the material yields even brief exposures to 0.1 fibers per cc or more, the business activity being monitored should be ordered to notify all of its customers that (1) the material contains asbestos, a cancer causing substance for which there is no known safe threshold of exposure; (2) they

should tell their customers appropriate measures should be taken to minimize worker exposure to the material to prevent breathing of asbestos dust; and (3) workers and consumers of products containing the material should receive warnings along the lines of (1) above so that they can take steps to protect themselves, possibly including avoidance of purchasing the labeled product.

So people should have the right to make the fundamental decision as to whether to accept the risk that such products entail, not just to deal with that risk as a necessity.

For its part, MSHA should immediately inform the company where the inspection is made about the dangers of asbestos to workers and consumers, and find out who the customers of the operation are. MSHA should then inform the relevant Federal agencies, including the Consumer Product Safety Commission and the Environmental Protection Agency, possibly others such as the Food and Drug Administration, immediately after a finding is made that a deposit of stone or other materials contains asbestos in the above concentrations, and after going through who their customers are with the operator of that site.

I am not saying that you publish a list of

the customers. I'm saying that you inspect a list of the customers, and notify the appropriate Federal authorities that might be dealing with products that that material is going to show up in, or public exposures that that material might cause.

Next I want to talk briefly about the short term exposure limit. At present the short term exposure limit is a peak exposure not to exceed for a period lasting 15 minutes, and the limit is 10 fibers per cc, and this is the same limit and sampling time that was established by OSHA in 1972.

MSHA now proposes to lower the short term limit to 1 fiber per cc but allow the sampling time to be doubled to 30 minutes. My beef is about the sampling time.

This copies the provisions of OSHA set 11 years ago, but the deadliness of asbestos exposure is now believed to be greater than it was then, here citing the NIOSH epidemiologists that I discussed earlier, having a higher risk associated with given levels of asbestos exposure.

OSHA estimated a lifetime exposure was 3.4 per 1,000 workers exposed from occupational cancers, but leading NIOSH experts say that the death rates would be two for asbestos and five for lung cancer for

every 1,000 workers exposed.

So that is more than twice the death rate previously estimated by OSHA for the same level of exposure, and that is not counting the mesothelioma deaths, which would be in addition to the lung cancer and asbestosis deaths for which figures are given here and for which no figure was given in the article that I cite.

So the debate -- So since the material is now thought to be more dangerous than it was when OSHA was rulemaking, I think that you should keep the 15 minute period for short term exposure limits from before, rather than doubling the time sampling interval to 30 minutes, as you are proposing to do by simply following the OSHA lead; because OSHA did that in 1994, based on the state of knowledge about the hazards of asbestos that OSHA laid out before 1994.

The last thing I want to mention is rulemaking -- regulation separate from rulemaking. I think that, because of the likelihood that there will be a lower permissible exposure limit soon, and I have confidence in you to do that, that -- and because the management in some of these talc mines and vermiculite operations I have mentioned, the Virginia Vermiculite and R.T. Vanderbilt in particular, are really trying

to deny that there is an asbestos problem, despite all the evidence, then I think that these two sites should be immediately and thoroughly inspected for asbestos exposure and put on notice that the rules are in the process of being changed, and that their exposure limit will soon be 0.1 fibers per cc.

So I think that, again because of the recalcitrance of these employers in even admitting that they have asbestos exposure going on, that this is warranted.

So thank you very much for your time. I am disappointed to see that the industry people here who are present haven't come up to speak. Perhaps now they will be moved to say something to you, but I congratulate the career Civil Servants at MSHA for trying to get this thing moving again, and I wish you all the best in completing your task.

If you have any questions, I would be happy to respond.

MS. SMITH: Thank you, Mr. Castleman. We appreciate it. Question? Thank you very much.

MR. CASTLEMAN: And I will have copies of several things I would like to leave with you.

MS. SMITH: Fine. Thank you.

MS. HUTCHISON: Are you looking for these

documents?

MR. CASTLEMAN: I think I am, yes. Let me just tell you what I've got here.

This is the 1974 document where the people at Johns-Manville are hooting at the people at R.T. Vanderbilt for telling a lot of lies to government agencies.

This is the Medical News Today report, "Exposure to Asbestos From Rocks Can Cause Malignant Mesothelioma" published two days ago or three days ago, describing the research in California that I was telling you about.

This is my CV. And the last item is the 1976 memorandum from NIOSH to OSHA recommending the imposition of a 0.1 fiber per cc permissible exposure limit as an OSHA standard.

Thank you very much.

MS. SMITH: Thank you. We will include those materials as part of the record.

Any other second thoughts about remarks?

We would like to thank all of you this morning for your remarks. Please be assured that they will be given very thoughtful consideration as we weigh the process of moving forward with this proposed rule.

Thank you all for coming today, and remind you all of the close of the comment period for written comments is November 21st. So additional comments still will be accepted on this proposed rulemaking until that time.

Thank you very much. This closes the record on this hearing.

(Whereupon, the foregoing matter went off the record at 10:17 a.m.)

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