AUDIO TRANSCRIPTION-MSHA-Road to Zero

Q. Good morning, everyone. And thank you, Kris, for your kind introduction. Typically, when I've addressed conferences since I've been with MSHA, I've focused on the activities within the Agency, specifically implementation of the MINER Act and rulemaking. But today I've taken the opportunity to address a different subject: the Road to Zero. What I want to do is give you an outline of a strategy for an effective Accident Prevention Program.

I think that I've been on the Road to Zero most of my career. Kris said 37 years. I started in 1965. I think we probably need to update that. It's a little bit more than 37 years. But when I started in the mining industry, we were averaging over 400 fatalities per year. And last year we had 67 fatalities. Certainly, 67 fatalities is unacceptable, but it illustrates that there has been significant improvement during my career. And I credit a lot of that improvement to the improved Federal Mine Health and Safety laws. But I also credit a lot of the improvement to the mining companies and operations that have went beyond the law to implement additional safety programs and safety protections. I credit the thousands of miners, supervisors and mine operators

that have worked hard to implement and comply with the Federal Mine Health and Safety laws and to follow through on their own individual safety programs.

A lot of what I'm going to be talking about are not original ideas on my part. Much of it goes back to what I learned as a young supervisor, working for Bethlehem Steel Corporation. And since at least one person in the audience here also worked for the same company and went through the same training program and the same manual, I want to recognize that a lot of these ideas originated in the Bethlehem Steel program, as far as the principles and the accident prevention tools. Throughout my career in the mining industry, I've modified a few of them and added some things to it as I've traveled around to Sentinels of Safety Award winners and learned things that they're doing. So it's really a combination of what I gained through the experience of working with Bethlehem Steel and what I've learned through my career.

There is something unique about the Bethlehem Steel program -- it was basically developed by managers for managers and it was taught by managers. There were 12 chapters in the manual. Each chapter addressed an accident prevention tool or a principle. And the way the process worked was that it started at

the top of the organization. It was taught by the CEO, the presidents and each person; each individual had the responsibility to teach it to their subordinates, all the way down through the organization. So I was on the receiving end. My supervisor taught the course to me. I, in turn, taught the course and the program, to my subordinates and people that I worked with. So the 12 chapters were covered one chapter in a month. You'd spend a day in the classroom, going over the principles learning about that specific accident prevention tool and then you'd spend the rest of the month out in the field, implementing the tool or the principle that you learned for that month. So it was a one-year process. And what I'm going to attempt to do is condense this down and give you an overview of this strategy in less than 30 minutes, I'm told.

I've listed three things here that I think are guiding principles. First of all, I have learned through experience that accident prevention has to start at the top in any organization. It's nearly impossible for miners or supervisors or people lower in the organization to do the right thing for safety, unless they know that they have the full support of their supervisors, managers and the entire organization.

Second, there has to be a commitment at every level in the organization. Some companies even ask employees to sign a commitment letter, which I think is a good idea. It has a little more meaning when you put a signature on your commitment to mine safety as opposed to just verbal commitments. But it's critical that you have that commitment at every level from the CEO down to the front-line workers. And any place that you fail to achieve that commitment, then you're subject to a breakdown in the process.

The third thing that I think is really a guiding principle for successful operations is individual empowerment. And this is something that wasn't a key part of the Bethlehem Steel, but as I've worked many years in the mining industry, I've seen successful programs. I've added that as really a key ingredient, a guiding principle, that if you don't empower the employees so that they feel they have the authority to correct unsafe conditions or at-risk practices, if they're not supported in that process, if they come forward with a suggestion on safety and they don't get that support and they don't feel empowered, then I don't think you're going to have a successful program.

I listed a few items here that I think are important to have an organized Accident Prevention

Process. The key word here is organized. And I think that a lot of people are out there, trying to do the right thing for safety, but they really haven't developed an organized approach. One of the things at the beginning of the process is to establish written goals and policies. What do you expect to achieve and what are the policies that are going to get you there? And that needs to be spelled out in writing. It needs to be shared with all employees.

Second, you have to provide a means to achieve those goals. You have to make sure that everyone has the resources and the time and the empowerment to implement the policies so that they can achieve the goals and objectives. And if an organization is unwilling to provide those resources and time and empower the employees, then I think that the program will not see the benefits that it would otherwise.

Third, is to establish written responsibilities. It's important that they are written and they have to be communicated to every level. So you'd have written responsibilities for the worker at the front-line. What are their safety responsibilities, the supervisor's, the manager's and so on? Now, many of the responsibilities are overlapping. You know, you can have a common responsibility. In fact, probably

most of them overlap throughout the various levels of the organization. But it's critical to have these spelled out in writing so that employees have copies and they're clear on what's expected and what their responsibilities are.

Fourth, you need to develop the knowledge and the skill requirements. That comes through training. Front-line workers have to be trained to know the hazards of their jobs and the safety precautions to mitigate those hazards. Supervisors need additional training in how to implement the accident prevention tools; simple things like communication skills. If we're going to expect our front-line supervisors to conduct weekly safety meetings and make safety contacts, you need to provide them the knowledge, the skills and the training so that they feel comfortable doing that.

Next, is to create a favorable safety motivation. And I think you can do that through education and training, various incentive programs, but I think really the most important thing is through personal example. If you have everyone in the organization from the top, down through management setting the right example, then I think that's a strong motivator for the workers at the front-line and it feeds off of

itself and it builds enthusiasm and support for the Accident Prevention Program.

And lastly, there has to be responsibility and accountability. Once we know what's expected as far as using accident prevention tools and the principles and following safe job procedures, every individual in the organization has to be held accountable.

I've listed what I consider some of the basic key accident prevention tools and I'm going to take a little time and talk about each of these. Starting with risk analysis, identifying the hazards of the job, process or facility -- those need to be spelled out. Once you've identified the hazards, you establish safe job procedures and rules to mitigate those hazards and then you have to have training to make sure that everybody understands the hazards and safe job procedures for their jobs. Safety observations then need to be made on a regular basis to follow up to see if the training is effective or if the instructions have been followed. That includes safety inspections, looking for unsafe conditions and lastly, accident investigation. When the first five tools break down, there's a failure, there's an accident, you need to find out what happened, why it happened and what can be done to prevent it.

I know we have a speaker on the program that's going to be addressing risk analysis in some detail. But very briefly, for me, I think sometimes people are turned off because we seem to overcomplicate the process, and we need to keep it simple. The old saying, KISS, K-I-S-S, used to be Keep It Simple Stupid. I've changed it to Keep It Simply Simple. I don't like using the word stupid. But I think that's really important. I go back to the Bethlehem program, we had what we called the Job Safety Analysis. For every job, we listed the significant risks for that job for each step, and listed out the mitigating safe job procedure or personal protective equipment or whatever that would be needed to mitigate that risk. That was a process done by front-line supervisors, with involvement and participation by the people that actually did the job. Most of the time, it was not more than two or three pages for a specific job, but it focused on the primary risks. When you're starting out particularly, you need to try to keep it simple and you need to get the workers at all levels of the organization involved in the process. And I think you need to start at the higher-risk type jobs at your operation, whether it be at the facility level or process level or down at the individual job level.

All those areas need to be looked at to identify the most significant risk. And if you're just starting to use this tool, that's certainly where you want to start.

A good way to do a risk analysis is to look at your history of accidents; what has caused accidents at your facility. Go through and identify the hazards that have resulted in these accidents, list them out, then list the corrective action or measures to prevent that type and mitigate that specific risk. Once you've gone through a paper exercise, then I think it's important to get out to the job site. If you go to the job site and you observe the operation, observe what's being done, how it's being done, I think you can find additional things that you'll recognize as significant risks that maybe you didn't discover when you reviewed the accident reports for your operation. It's important to talk to the people doing the job -- you can have group discussions, individual discussions. Talk to them about what they consider to be the risk. Ask them about near misses that they may have had. So once you've identified all that and you've listed out the hazards associated with a facility or an individual job and you've listed the mitigating procedures to be followed, then it's

important that you don't just put that in the file cabinet. To really get the benefit you've got to use that tool and the most important area is in your training programs. You can use it in your initial new employee orientation, in specific job instructions that you give. We term that as hazard training, and also for follow-up instructions in making planned safety contacts with employees.

The next key tool is safety training. Once you've identified the risk of the operation and you've established additional safe job procedures, people have to be trained so that everyone in the organization can recite to you the specific risks of their individual job and also the safe job procedures that are to be followed.

It seems like we sort of developed a culture or an idea in the mining industry that, well, if we do our new employee orientation and we provide task training and hazard training, that the job is done.

But that's just a start, in my view. We have to provide additional training through planned safety contacts. That's following-up on what you've taught employees in a new employee orientation and pre-job safety instructions. I consider planned safety contacts, weekly safety meetings, group safety

meetings, and individual safety contacts with employees to be continuing education. It's a way for you to continuously upgrade the training you've given individuals to give them new information and to come back and reinforce the training that they've already had as a reminder. To create an awareness.

Another key area I think is planned safety observations. I think it is important that we make these observations so that we can correct unsafe practices on the spot. I believe that they need to be systematic and they need to be regular.

I call them planned safety observations because whether you do it Friday for next week or you do it one week for an entire month, if you plan it out, you can plan it so that you make sure that you don't miss any steps in the process. You want to make sure that you've been able to have an observation of each step. You don’t want to keep reviewing and observing the same step over and over. And that's why, if you make a written plan, you can make sure that you've covered all the steps and you can use the Job Safety Analysis to look at those hazards that you want to plan deliberate observations for, to make sure that the established safe job procedures are being followed. And certainly you also need to recognize that there's

some jobs and some individuals that need to be observed more than others. An individual you've observed several times and they've shown and demonstrated that they understand how to do the job and they understand the safe job procedures, they don't need to be observed as often as an inexperienced worker or a worker that has perhaps had an accident. You want to follow-up --- if you've implemented corrective actions, reinstructed the employee, you want to follow-up to make an observation to ensure that that individual understands what they've been instructed to do. And certainly the high-risk jobs are where you should focus your most attention and particularly, jobs that are not routinely done day in and day out.

Those things that you do once a month, once every couple months, that's where you have the most risk of someone not following the proper safe job procedures. So I think the benefits of planned observations are that it's a way to check the effectiveness of the training that's been provided and it's an opportunity to correct on-spot, unsafe practices, and reinstruct employees. I think it's important, too, to use these as an opportunity to compliment individuals. When you see that an individual has followed the safe job

procedure, it's part of the motivation process. Take the time, pat him on the back, compliment him, say, hey, Joe, I just did a planned safety observation and I'm really proud that you followed every step of the process correctly. You used your personal protective equipment, so forth and so on. That doesn't cost a penny, but I think it's worth a whole lot in encouraging your people and motivating them.

The next key area is planned safety inspections. And again, these can be used to correct unsafe conditions on the spot. I think they need to be done systematically so that you cover all areas as often as they should be covered.

To develop a Job Inspection Analysis, you need to define what area it applies to, define the items that you're going to inspect, what conditions you're going to look for and how often you're going to conduct that inspection.

That's something that I feel very strongly that needs to be on a documented inspection checklist. I've made a lot of inspections over my career and if you're just going by memory, you're going to forget things, you're going to miss things. But if you have a documented checklist of what you're going to inspect, what you're going to look for, the conditions that you

want to focus on and certainly have a schedule so that you're making the inspections at an appropriate time.

This year MSHA will probably write close to 180,000 violations nationwide, and we're likely to assess close to $200 million. You've got to wonder how many of these violations could be prevented if we had people out in the field, machine operators using inspection checklists for pre-op checks or parts of their jobs, supervisors doing the same thing of their work areas, supported by general supervisors and managers that also demonstrate the use of this tool. I've got to believe that those numbers wouldn't be anywhere near what they are. So there's a lot of money that can be saved, not to mention the fact that it's a key accident prevention tool to prevent workers from being injured.

The next key accident prevention tool is investigation and follow-up. Either something has gone wrong, the other tools have broken down or weren't used. You basically find out what happened, how it happened, why it happened and what must be done to prevent it from occurring in the future. The primary purpose is definitely to prevent reoccurrence. And I think it's important to focus on near-misses. Sometimes the difference between a fatality and a near

miss is a matter of inches or a matter of seconds or maybe it's just a matter of luck. So we can learn as much from near misses as we can serious injuries.

So if you keep asking why, you know, why did it happen --- too many times I've seen where we jump at the first two or three things. Well, Joe Blow didn't follow safe job procedures. That's the cause. Well, why didn't he follow safe job procedures? Maybe it was a lack of training. Maybe the training wasn't effective. Maybe it wasn't followed --- or part of the task training that was given. There's a lot of reasons and you need to drill down, keep asking why. Every time you ask that question, you'll probably get four or five answers. You take each one of those answers, ask why that occurred, until you get to the point where you can't get any more answers. Then you'll likely be close to the root cause.

If you don't address the root causes, you're only focusing on the symptoms. And I think it's important to use what you learned from the accident investigation reports. Today, with all the computer systems, to build a database that you can review and identify where most of your accidents are occurring, what job classification, what job step, what Safe Job Procedure wasn't followed. That's an important tool.

And finally, a few comments on motivating employees to work safely. I think most critical is leading by example. You've heard the old saying that your actions speak louder than your words. You can do the right thing a hundred times and the first time you don't, then that's going to send a message that will carry more weight than all the good things you've done. So you've got to make sure that we always follow the right example, because people are looking to see what you really mean. Are you just talking a good story or are you willing to put forth the effort to do the right thing?

I mentioned earlier the idea of empowering employees. I think that's a strong way to establish a foundation of cooperation. When employees understand that they've been empowered to do the right thing for safety, then you've given them ownership. And ownership is a tremendous force throughout our society. Those things that we feel like we have ownership in, we're certainly more motivated to support.

And third, is you look at ways to increase incentives and decrease disincentives. There's a thousand ways to provide incentives from a pat on the back to monetary awards and various programs to

recognize good safety performance. To look to decrease the disincentives I think you can look at things like engineering tools, planning jobs properly.

If you go out on a job and you don't have all the right tools and materials to do the job, what happens? We improvise. And when we start improvising, that's when we end up with the wrong tool. If somebody has to get in the vehicle and go half a mile to the supply yard to get blocking material to block something we have raised up to work on, a good chance it's not going to happen. Through engineering we can build in devices, simple hole and pin devices on equipment that can reduce the incentive to take a shortcut. How am I doing on time?

A. A couple minutes.

Q. A couple minutes. Well, we're going to speed this up a little bit. I'm trying to get 12 months into 30 minutes. I think it's important that you have a process to evaluate your safety performance. And you do that through data analysis and statistics.

I'm saying what gets measured, gets managed. If you're not measuring it, you don't have metrics and you're not monitoring that, it's not likely you'll be effective in managing it. And it's an opportunity to also evaluate the accident prevention tools, whether

or not they were used or whether they were used effectively. And certainly audits, I think, play an important role, whether they are internal or external. Either one is good.

Once you have an accident prevention program up, you've implemented the tools, you've trained the people, so forth and so on, I can tell you it won't run on automatic pilot. You've got the plane in the sky, you put it on automatic pilot, it's going to crash. You have to be involved.

Every level of management has to be involved. They have to demonstrate their involvement. They have to show that they are also using the accident prevention tools. General Managers need to take time out to go out and make safety contacts and participate in weekly group safety meetings. So that participation and involvement is key in promoting the accident prevention tools to demonstrate to your people that you really believe that it's the right thing to be doing. And clearly communicate responsibilities. Keep checking understanding. Make sure people understand what they're to do. Develop an annual Safety Improvement Plan.

We have annual business plans; right? But you can do your accident data analysis, what you've

learned through your accident investigations, identify where you need to focus more attention the next year, what job classifications have the most accidents, what safety procedures are breaking down the most and make a written plan on what you're going to do the next 12 months and communicate that with your entire organization. And you have to arrange so that people have the time to use the accident prevention tools. If the focus is on everything other than using those tools, then that's where they're going to spend the time. You've got to put the focus on using the tools and making sure that people have the time to do that. Thank you.