BEFORE THE

FEDERAL MINE HEALTH AND SAFETY ADMINISTRATION

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IN RE: MSHA MEETING

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BEFORE: Kevin Burns, Member
Alfred Ducharme, Esquire, Member
Mario Distasio, Member
Gregory Fetty, Member
Richard Feehan, Member

HEARING: Thursday, October 14, 2010
9:03 a.m.

LOCATION: Omni William Penn Hotel
530 William Penn Place
Pittsburgh, PA 15219

SPEAKERS: Mike Wright, Anthony Bumbico, James Gallik, Truman Chidsey, Kelly Bailey, Louis Barletta, Jr., Joe Bourdage

Reporter: Kayla A. Godkin

I N D E X

I N D E X (continued)

E X H I B I T S

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P R O C E E D I N G S

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MR. BURNS:

I'm here to start this hearing. I'm sitting in for Pat Silvey, and obviously I can't fill her shoes, but I'll do the best I can.

Good morning. My name is Kevin Burns. I'm manager of the Small Mines Office in EPD, and I'll be chairing this hearing or this public meeting. On behalf of the Assistant Secretary, Joe Main, I want to welcome all of you to this meeting today.

Let me introduce the members of the panel. Greg Fetty is sitting here. He's the staff assistant from Coal District 3.

And Richard Feehan, he works in the Standards Group. He's working that alone now.

Mario Distasio, he's an economist with the standards group.

And then I have Al Ducharme. He's with the solicitor's

office, and he's helping out with this public meeting.

This is the third of the public meetings. We had a meeting in Arlington at our headquarters on October 8th, and we had one in Sacramento two days ago on Tuesday.

We're very excited about this meeting and the one that follows -- or obviously it doesn't follow, I'm reading from last week's script, and viewed them as an important step to help focus on prevention in addition to compliance.

This is our opportunity to find out what programs work and what results have been achieved. I hope in meetings and in submitted comments, we'll also learn things that you've tried that haven't produced results. And so people can learn from some of the things that have been tried and have not been successful.

We expect to learn from the experience of the mining companies

that have implemented effective state programs and also learn what has worked outside of the mining industry. This is an opportunity to focus on prevention efforts, to anticipate and recognize potential hazards, and to control them before they cause injury, illness and death.

Some companies have implemented programs to monitor the work environment, whether or not there are specific regulations that require this. They compile information about employee injuries and near misses and respond to the information they are gathering with prevention and focus.

As you know, MSHA published a notice in the Federal Register announcing the meetings and requesting the mining community to provide information which the agency could use to develop the proposed rule.

The agency has also invited representatives from academia, safety and health professionals,

industry and worker organizations and other government agencies to share their experiences and views on effective safety and health management programs.

This rulemaking supports the Secretary of Labor Hilda Solis' vision of good jobs for everyone. The Secretary's vision for achieving good jobs is through a strategy of creating workplaces where employers plan, prevent and protect the safety and health of employees.

Plan, prevent and protect is based on the principle that employers must find and fix threats to health and safety and ensure compliance with regulations before an inspector arrives at the workplace.

The plan, prevent and protect strategy begins with the premise that Congress directed mine operators to achieve, and to stay in compliance with the law, but it doesn't end there. It also embodies a

continuing intention to direct and control or eliminate threats to safety and health.

Some mining companies experience low injury and illness rates and low violation rates year after year. For those companies, preventing harm to their workers is more than compliance with safety and health requirements. It reflects the embodiment of a culture of safety from the CEO to the worker to the contractor. This culture of safety derives from a commitment to a systematic, effective, comprehensive safety and health management system, implemented with full participation from all the workers.

Several consensus standards have been employed or developed that address the safety and health management systems, and these are listed in the Federal Register and with the American National Standards Institute, ANSI, and Industrial Hygiene

Association, AIHA, Z10-2005, Occupational Health and Safety Management Systems. The International Standards Organization, ISO 9001:2008, Quality Management Systems Requirements and the British Standards Institute, BSI's Occupational Safety and Safety Assessment Series. There are others out there, too, that I'm sure you people are familiar with.

As many of you know, our sister agency in the Department of Labor, the Occupational Safety and Health, earlier this year held stakeholder meetings as part of their rulemaking on injury and illness prevention programs. They call it I2P2. The I2P2 rulemaking is OSHA's version of the safety and health management program.

I can assure you that MSHA and OSHA will collaborate during the development of these proposed rules and will learn from each other and from each other's stakeholders.

Effective safety and health programs generally include management commitment, worker involvement, hazard identification, hazard prevention and control, safety and health training with program evaluation to improve the program.

After all the presentations, you'll have an opportunity to ask questions or to present your views.

At this time, I'd like to hear from our first presenter. And as you come to make your presentation, would you please pronounce your name, who you work for and spell your name, so that the court reporter can accurately reflect the information? And the same goes for anybody from the audience that asks a question. Please do the same thing. Speak slowly, spell your name.

And if you use any acronyms or things that are associated with mining industry, please keep in

mind that she's not from the mining industry, and so you might want to explain some of those things, too. Thank you very much.

The first speaker will be Mike Wright. Mike is with the Steelworkers, and glad to hear from you today, Mike.

MR. WRIGHT:

Thank you, Mr. Burns. Do I get a microphone or is this ---? Okay. I can talk loud.

BRIEF INTERRUPTION

OFF RECORD DISCUSSION

MR. WRIGHT:

Okay. Let's try this again. My name is Mike Wright. I'm the Director of Health, Safety and Environment for the United Steelworkers. Wright is spelled with a W, W-R-I-G-H-T.

The United Steelworkers, despite our short name, is a union that represents 850,000 workers in many different aspects of the economy, not

just steel, but also paper, forestry, rubber, chemical, oil, nuclear fuels, nuclear weapons, for that matter. And for these purposes, we represent the majority of unionized metal and nonmetal miners in the United States and the majority of miners of all kinds in Canada.

I want to thank you for having this public meeting and also for allowing me to go first. I've got another meeting in Washington. I'll present testimony later on today, and I just wanted to do both things.

This is a day of great joy as we celebrate the rescue of the 33 miners trapped for 69 days at the San Jose Mine in Chile. It doesn't diminish that joy or our admiration for the courage of the miners and the bravery of the six rescuers who rode the escape capsule down into the mine or the skill and commitment of the engineers who planned and executed the rescue, but to remember that prevention

and not rescue is the ultimate goal of mine safety.

Even as we give thanks for the lives of the 33 rescued miners, we mourn the miners killed at the same mine in previous accidents. The 65 miners killed in 2006 at the Pasta de Conchos Mine in Mexico. And of course, our own miners killed at Sago, Upper Big Branch and all the other mining accidents with 60 deaths so far just this year. Most of those victims never had a chance to be rescued.

So even on this day of great joy and thanksgiving, it's highly appropriate that MSHA is holding this public meeting because the best way to prevent mine accidents is through a strong safety and health management system. The way we best do important human activities in general, is by assessing, planning, measuring outcomes, revising goals. That's what a safety and health management system is really all about.

Sadly, safety and health management systems are not a major part of safety and health regulation in the United States. The OSHA process safety management standard contains elements of a comprehensive system, but it only applies to the hazard of gas, rock and chemical accidents and only a small percentage of OSHA-regulated workplaces.

MSHA's required mine plans includes elements of a comprehensive system in mining, but more will be needed. Mostly we regulate safety and health through a rulebook.

We thought about this issue a lot in general and in other industries, not so much in mining. As this work goes forward, we plan to do a lot of work with our miners about what works in the mining environment and what doesn't and what general elements of a comprehensive system are best

adapted to mining and how they could be adapted.

But I want to tell you about two research studies that we've done in the Steelworkers. Neither of these is published. We hope they will be at some point, but nevertheless, I think the results are constructive.

Since 1980, we've been collecting data on all fatalities that happen in the Steelworkers Union. God help us, we've had more than 1,000 since 1980. Not just in mining, but in all industries in both the United States and Canada.

Back in 2006, we took a random sample of those and analyzed them and asked a couple of questions. One of the things we asked was, was this fatality the direct result of a violation of an OSHA or MSHA or an equivalent Canadian standard? Astoundingly, in just about half the cases, the answer was no.

Now, when somebody dies

in a workplace, the government goes in. They can usually find contributing factors. They can also find other things that are serious health violations in that site, in that worksite, and cite those violations.

But in about half our cases, a violation of a specific standard was not a root cause. That's not so surprising when you think about it.

When we establish a new safety standard for a particular hazard, deaths from that hazard can go down. That's what standards are supposed to do. When we established a confined space standard, for example, under OSHA, deaths from confined spaces drop dramatically.

The things that get people killed in the steel industry are things that are largely not regulated by specific standards; water and metal explosions, railroads, things like that. So it's not surprising. But

what it also tells us is that depending on compliance with a rulebook, simply following the rules, simply following the standards, simply being in compliance, really isn't enough. To really prevent fatalities and serious accidents, we have to do more. We have to assess the risk that exists in every part of the operation, and we have to respond to that risk, irrespective of whether that risk is addressed by a specific standard. And that's really what a safety and health management system is all about.

In that same look at our fatalities, we also asked the question of would an inspector in the workplace or a joint safety and health committee walk around or an observation program have identified the cause of that accident? And in most cases, the answer was no, because those causes were not apparent until the accident actually occurred.

A good example,

something breaks at 3:00 a.m. Management says we got to get this back in production. So they take three maintenance workers and sort of throw them at the problem. It may be something that they've never seen before, never done before. The time isn't taken to analyze the risk or to plan the job safely. Then something happens.

A large proportion of our fatalities were under process interrupt conditions and unusual circumstances, things that a comprehensive risk assessment style of audit would have identified or at least should have identified, but that would not have been apparent in a simple walk around inspection.

And what that tells us is that worker involvement, worker participation in the safety and health management system is really essential. Because when those upsets happen, it's the people who are on the scene who

need to quickly evaluate the risks and decide what has to be done. And so worker participation with lots of training to help people identify hazards and identify solutions is really essential in any management system.

Another piece of research --- and this I think ought to be alarming for everyone who works on a safety panel. Back about eight years ago, we had a series of serious accidents in an American steel company. That company has floor plans or had floor plans. It's now been absorbed by --- I'll be specific. The company was National Steel. One of those workplaces was a mine, but we did not separate out the mine from the other workplaces.

After those accidents, union and management cooperated in doing a very comprehensive safety sweep in all four of those locations and found literally thousands of problems

and got them corrected fairly quickly. But we knew we had to do more, and one of the things we did is we did a survey of the workers.

Some of the things in that survey were very specific. For example, we asked workers who were on particular crews, if they had enough tools to do the job, being very specific about what tools were needed. So the survey was somewhat different with people in different occupations and it was certainly different for miners than it was for people in steel making plants.

But we also asked some more general questions that were the same for everybody. One of the questions we asked was have you ever done a job, an unsafe job, knowing it was unsafe, but gone ahead and done it anyway? And roughly 60 percent said yes. I suspect the true number is actually higher, and some people did

not admit to it. But roughly 60 percent said yes.

And then we gave people a sort of a multiple choice question asking why did you do it? And some of the choices were I didn't want to lose pay or incentives, pressure from management, didn't want to look like a wimp, didn't want to let down my work team and a series of others.

The answer that garnered the most responses, an issue to give us all pause, was no other way to do the job. In other words, the majority of workers across the board, not just in mining, are doing unsafe jobs knowing they are unsafe, because they believe that it is the only way to do it.

That tells us that we need to have a system for assessing the risks of different jobs, for determining what the best control is, and for making sure that workers are basically educated in doing those jobs, that the jobs are changed, and the

people know that they're changed, know how they're changed and know how to do the job safely and participate in that process. Because in at least my experience, the way you really find out about the safety of the job is to talk to people who are doing it. And that's what a safety and health management system really ought to do.

There are, of course, at least two management systems. In the record, they were referred to in Mr. Burns' opening statement. They are the ANSI Z10 standard --- and I should say that I and a second guy in the Steelworkers Union were involved in the development of ANSI Z10. And ANSI is the process of essentially updating and revising Z10 as well, so we know that's going to be done. The other is the OHSAS 18,000 series. We're not involved in the development of that, but that is another standard that needs to be looked at as MSHA moves forward.

I want to add one more to that list, and I'll put this on the record. In 2001, the International Labor Organization wrote guidelines of occupational safety and health management systems. They're both at the governmental level, but especially at the level of the enterprise in the individual workplace. We think that's a good model as well. It's a little more general than the other standards, but it's certainly worth having in the record.

There is a recent development, and I want to spend the rest of my time talking about that. Back two weeks ago, three weeks ago, there was the sixth joint conference between the United States and the European Union of Occupational Safety and Health. These are things which in the past have been planned primarily between OSHA and OSHA's counterparts in the European Union. But this year it included significant participation from

MSHA as well.

I didn't sense that there were participants from labor and industry and from government from both sides of the Atlantic. The conference was divided into work groups. One of those work groups was on safety and health programs, and in particular, on risk assessment. And I want to read the conclusions of that work group. Now, I should say this is not --- this isn't some kind of an established international law or statement or anything like that. It's only the report of the work group. But the work group included fairly significant, really knowledgeable people, again from both sides of the Atlantic, and from all three parties. I think it's worth getting on the record.

And I should say this is also a preliminary statement. There are a few editorial --- well, not really editorial, grammatical things that the Secretary is going to do

before it's going to be published, and it will be published in the proceedings of the conference by the end of the year. Let me read it. I also have copies, which I'll have available to everybody out here. And of course, I'll make it available for the record as well.

Number one, the work group strongly believes that safety and health management systems can significantly contribute to safety and health in the workplaces.

Number two, we encourage the competent authorities in the US and EU to continue with the development of requirements for safety and health management systems. Safety and health management systems should address both traditional hazards and issues of work organization, which affect safety and health. This is especially important because changes in work organization can increase risks to workers.

Two essential conditions

for an effective safety and health management system are management commitment at all levels of the organization and the participation of workers and their representatives.

Number five, there is limited statistical peer-reviewed evidence on the impact of safety and health management systems on actual injury and illness rates. This is due in part to the unreliability of injury and illness rates and to the long latency period for many occupational diseases. Nevertheless, there is extensive anecdotal evidence that safety and health management systems are effective in eliminating hazards and reducing risks.

In addition, incident investigations frequently identify the lack of or ineffective application of a safety and health management system as a contributing factor. Taken as a whole with the understanding that additional research is always

desirable, the existing evidence provides strong support for safety and health management systems.

Number six, safety and health management systems are fully justified on the grounds of safety and health. In addition, the elimination and control of hazardous conditions has ancillary benefits, including reducing a societal group of disease and disability and improvements in corporate productivity, quality, morale and reputation.

Number seven, while risk assessment was the primary focus of the work group, risk assessment is one aspect of an effective safety and health management system. For example, risk assessment is useless without a mechanism for eliminating or reducing risks.

Number eight, safety and health management systems should be mandatory in all workplaces. The requirements should be flexible and

should be designed to facilitate compliance by small and medium enterprises.

Number nine, key elements of an effective safety and health management system include, first of all, employing mechanisms for leadership and participation by all levels of management and by workers and their representatives; defined roles, responsibilities and authority; the identification of applicable legal requirements and their application; a process for hazard identification and risk assessment; procedures for investigating work-related injuries and illnesses, accidents, incidents, process upsets, deficiencies and concerns.

A method for evaluating the safety and health implications of the initial design of and changes in technology, processes, materials, equipment and work organization.

A mechanism for

addressing the results of risk assessments, investigations and evaluations and assuring that identified risks are reduced or eliminated through a hierarchy of controls, giving substitution of engineering controls and changes in work organization priority over a personal protective equipment.

A method for addressing the safety and health of contractors and contracted work.

A process for assuring that safety and health is considered in decisions, including design specifications, product selection procedures and quality control.

Appropriate and effective educational training. Appropriate metrics, including leading indicators like results, process deviations, exposure information and the time it takes to correct problems.

The method for documenting and tracking problems and

corrections. The process for assuring communication and transparency throughout the application of the management system. Regular evaluations to the safety and health management system will be able to continue its improvement and the process for assuring that sufficient resources are allocated to implementing and sustaining the safety and health management system.

Ten, given the importance of accurate information, workers should be encouraged to report injuries, illnesses, accidents, incidents, deficiencies and concerns. There must be no policy, practice or program which penalizes or discourages such reporting.

Eleven (11), risk assessment and preventative action are essential in any workplace and are required by law for all workplaces in the European Union, and I hope one of the things that MSHA really

investigates as it goes along is how the European Union is doing this, because it's a pretty good model.

Twelve (12), risk assessment can be made more effective and less burdensome through user-friendly interactive tools such as those currently used in the Netherlands and under development by the European Agency for Safety and Health at Work. Simple and easy to use tools are especially important for small and medium enterprises.

Thirteen (13), risk assessment tools should be developed for both routine operations and for non-routine tasks, such as infrequent maintenance procedures and responding to upset or emergency conditions, which often involve higher risks.

Fourteen (14), the development of risk assessment tools by the competent authority should be done with the participation of employers and worker representatives. Likewise, the

development of risk assessment tools by employers should be done with participation of worker representatives.

Fifteen (15), the application of risk assessment tools to particular enterprises or tasks is the responsibility of the employers, but it should be done with the participation of worker representatives.

And finally, number 16, the development of risk assessment tools is an important area of the US-EU collaboration. That collaboration and the development of such tools in general must be appropriately resourced.

The collaboration should begin with --- three bullet points. Developing and exchanging information on the effectiveness of safety and health management systems.

The second, further discussion of leading indicators that predict safety and health management

system performance. And finally, continued work on the application of safety and health management systems to concrete issues, in particular, chemical safety at work and the problems of work organization.

Sorry I spent so much time reading it into the record, but I think it's important. And like I said, there'll be copies here.

That pretty much concludes my statement. I want to thank you all again for allowing me to participate in this meeting and for all the wonderful work that MSHA does.

MR. BURNS:

Thank you, Mike. I just have, I guess, one comment or a question. I know the research process that you talked about has not been completed. It's still in draft form. But if you could submit some of those statistics that you gathered from that in the previous draft and it’s still good information you can submit that to

us. That'd be very helpful.

MR. WRIGHT:

We will.

MR. BURNS:

Thank you. Anybody else have any questions? I guess I did have one other question on the data. Are you separating out the data by industries?

MR. WRIGHT:

No.

MR. BURNS:

No. Okay. I was just curious how --- if it varies from one industry to another. Is there anything that jumped out at you?

MR. WRIGHT:

We can do that only if ---. In the first case, we could do that only if we had not done a sample. We needed the data to be updated, to be statistically significant to the year when you're looking at fatalities. Thank goodness we have small numbers in terms of statistics. So the only way we

could really do that is to take a pretty large sample of all of them. I think we took 200, which --- and I think in that case, we're going to have to do the --- to make it publishable is to do it in a more kind of scientific way.

We would, for example, get several people --- get more people to review each one. We'd go through kind of a census process about answering questions. We have to blind it in some way. So redoing that I think in an absolutely scientifically unimpeachable way is going to take some effort. We're going to work on it, but that will take some time. Nevertheless, I think the results are probably going to ---.

The other one was done in a scientifically accurate way. There's a lot of data still to be analyzed. That one can be published probably fairly easily the way it is.

MR. BURNS:

All right. Thank you.

MR. WRIGHT:

And I just want to say in the second one, we did not separate mining from the others once again because of the numbers problem. But also because to do this right, we were asking some pretty sensitive questions, you know.

When you ask people if they've ever broken a work rule, you know, you need to make sure that they're assured of absolute confidentiality, so when we did it, it was workers talk to workers; managers talk to managers. The people doing the interviews who were workers, but were trained in techniques to do one of these, certainly asked the questions, filled out the questionnaire, gave it to the people being interviewed --- the person they interviewed, to make sure it reflected their views. And then it was sealed and put in an envelope. And from that point on, the individual

couldn't be identified.

MR. BURNS:

Thank you. Anything else? Anybody from the audience have any questions for Mike? Bruce.

MR. WATZMAN:

Mike, you touched upon ---.

MR. BURNS:

Bruce, can you identify yourself?

MR. WATZMAN:

Bruce Watzman, W-A-T-Z-M-A-N. Mike, your last comment touched up on where I wanted to direct this question. And as I ask it, it's not to ---. I think the work you're doing is very valuable and will be an educational, informative record. And I don't want you to get the perception that I'm trying to shift the discussion, because I'm not.

But I'm curious. As you did your survey and your analyzing of this, you talked about half of the

fatalities didn't --- you couldn’t tie it back to a violation of an existing standard. I'm curious as you’ve analyzed your data, how you looked at behavioral factors and what you were able to conclude from your analysis of behavioral factors?

MR. WRIGHT:

We did look at that, Bruce, and I think ---. And we continue to look at that every time we have a fatal accident, so that's important for us. We tend not to like the term behavioral safety, in part because we think it conveys the wrong message to the worker. When we were all kids and our parents talked about our behavior, it was never a good thing. And so we just think the word is wrong.

But we talk about factors when we ---. In the majority of our fatalities one element is that somebody sort of close to the scene did something wrong. Okay? And when I say

close to the scene, if you want to, you know ---. The statement that human error is part of every fatality is absolutely true, but sometimes that error is committed by the Board of Directors, right? We don't have many people killed by meteorites. So if you follow the chain far back, you know, you can find somebody who made a wrong decision, did a wrong thing. But there's a British safety expert named Trevor Kletz, who once said that saying official injuries are caused by human error is like saying falls are caused by gravity. So it's true, but it doesn't help you control very much.

Like I said, there's a significant number of fatalities, probably well more than half where the worker involved or the co-worker made a mistake.

The next question is how do you address that? And to us you address that in two ways. Number one, you make mistakes less likely, and you

don't do that by exhorting people to work safely. That doesn't really work. You do it by identifying factors that cause people to work unsafely. And there are things like fatigue, conflicting job duties, lack of proper training, lack of understanding of the risks, all those things. So you first examine those.

Second, you try to create a workplace that's safe. We're all human. We're going to make mistakes. And it is impossible for somebody to go through even a year without making a potentially lethal mistake. If the first mistake you make is going to be one that gets you in a serious accident, then there's a problem with the workplace.

So we very much believe in safety through design and trying to create mistake-tolerant workplaces and workplaces that really embody the failsafe system. So if the system fails, you have a fail safety in the

---. That's certainly what we do. And we think those elements ought to be part of the safety and health management system. You really have to address human factors as well. Short question, long answer.

MR. BURNS:

Any other questions? Okay. Thank you very much, Mike.

MR. WRIGHT:

Thank you.

MR. BURNS:

I look forward to seeing you the day of.

MR. WRIGHT:

Thanks. And I'm very sorry I have to leave. I really would like to have heard the other presenters today.

MR. BURNS:

We'll have the transcript, and all comments will be in the record. So anybody here can follow the Federal Register and reach the comments page, and they're all in

there.

MR. WRIGHT:

I'll do that. Thank you.

MR. BURNS:

Thank you. Our next speaker will be Anthony Bumbico, Vice President of Safety from Arch Coal.

MR. BUMBICO:

Good morning.

MR. BURNS:

Good morning.

MR. BUMBICO:

Good morning. My name is Anthony or Tony Bumbico. Last name is spelled B-U-M-B-I-C-O. As Kevin mentioned, I'm the Vice President of Safety for Arch Coal. Arch is based in Saint Louis. We're the second largest coal company in the US. We operate in six states and we have about 5,000 employees. And I'm here to share some of the ideas that Arch has implemented to improve our safety performance. We've had some success with these

concepts. I would state upfront, however, that many of these ideas do not lend themselves to regulations.

The concepts I'm going to discuss revolve around the ideas of leadership, employee involvement, problem solving and developing a culture to do the right thing.

We believe that organizations can be taught how to do these things. They can be encouraged and convinced to do these things. These types of ideas would not, in my opinion, be as effective if required by law or regulation.

I've worked for Arch for six years, and it's been a pleasure working for an organization that embraces safety as a value. At Arch, safety is a core value. It's who we are. Our goal is to reach the perfect zero. Bringing home safely everyone, every day, and we think this goal is achievable.

Historically, Arch's

safety performance has been very good. Our total incident rate, which measures lost-time, preventable injuries has improved 77 percent since 1998.

Over time, the Arch incident rate has performed well below the industry average. Now, when we look at our five-year average for lost-time injuries, we've generally stayed about 70 percent below the industry average. We plan to continue to improve upon this trend, because we believe firmly that our mines are profitable because they're safe.

We didn't get to where we are overnight. Our process was constructed in layers. The building blocks were put in place over time. I'd like to take a few minutes to discuss each of these components. They include Division operation safety plans, a cross-operational safety audit process, a safety improvement process, and a behavior-based safety process.

When I arrived at Arch,

they already had what, in my opinion, was a solid safety foundation. The centerpiece of the process was a requirement that each of our operations meet the minimum corporate standards. These standards were in the form of the seven safety principles. The principles are listed on this slide and were incorporated in efficient safety plans adopted by each of our operations. Over time, the operations have built on this foundation.

In 2004, Arch implemented the continuous safety improvement process. This is a systems-based, goal-oriented process that follows an annual cycle. It focuses on identifying and closing measurable gaps in performance.

Every year, each operation develops an SIP or Safety Improvement Plan. They evaluate key performance measures and establish three to five improvement targets per year. Their SIP identifies what types

of improvement interventions they plan to implement to achieve each of their targets.

Corporate safety. This is done at the beginning and midway through each year to discuss their strategy and their progress. At the end of the year, we evaluate what they've accomplished and start the process all over again.

Cross-operational audits are another technique that we've adopted. Now, this is a layer built on top of the safety audit process that was already in place at each of the operations.

The concept is pretty simple. You take people from mine A, B and C, and we go to mine D. It provides a snapshot of the safety process of the mine being audited, and we use it to evaluate the health of the mine's safety plans, safety improvement plan, their basic safety process components and their behavior-based

safety process.

The audit structure is pretty straightforward. It starts with an operation overview, hazard training, review of that operation's SIP, the safety plan. Then we conduct a site inspection, interview a sample of employees, meet with the management team to provide feedback, discuss their best practices. And at the end, prepare a report of the audit.

Our audit process focuses on these key safety process components. We've developed a series of checklists to help the auditors evaluate the operation standards in these basic areas. We've also developed several questionnaires that we use to interview a cross-section of employees.

Our objective is to obtain a snapshot of the operation's health and safety process. It's not intended to be a wall-to-wall inspection. Our aim is to evaluate

what the employees of that operation know about the health and safety process of their mine.

We also focus attention on identifying and sharing best practices and providing constructive feedback to the management team.

We generally try to do four to five of these cross-operational audits per year. We don't do it on a rotational basis. If an operation is having safety issues, we tend to pick on them more frequently than the others.

Additionally, we use safety professionals to conduct these audits. We've now evolved the process to the point where hourly employees and key operations and maintenance personnel participate in the audit teams.

The audit process serves many purposes. Most importantly, in my opinion, is to identify and share best practices, involve more employees in

the safety process and visibly demonstrate Arch's commitment to safety.

I won't go into much detail, but I will mention a few other things that we've implemented to try to maintain our momentum as we address specific risks.

Arch holds an annual Safety Summit with key managers, safety professionals and behavior-based safety personnel. This is an opportunity to review our accomplishments and establish new objectives.

We also hold annual regional safety workshops to develop our safety professionals. And in addition, we've developed specific processes to deal with the risks associated with contractor safety, emergency preparedness, crisis communications and explosives safety.

The processes I've mentioned were all in place by 2006. They've helped us to improve, but we

still weren't satisfied. We still felt that we were having too many injuries, and that we had reached a plateau with regard to our safety performance. We believed that one injury was one too many, and we were confident we could improve on where we were. That's why we adopted behavior-based safety as the next step to get us to the next level.

Behavior-based safety is a process. It starts with the daily tasks that each employee performs. Each site has a management sponsor and the steering team. The committee develops a set of critical behaviors that are used in the observation process.

Observers identify exposures that may lead to injuries. They provide feedback of whether the behaviors are safe or at risk.

The data gathered for observation specifically is a training software that helps us to identify trends. And the trends are analyzed to

identify improvement opportunities and problem-solving solutions.

The decision to implement the behavior-based safety process was by operational decision at Arch. Between 2006 and 2009, we fully implemented behavior-based safety in each of our operations. It took an average 12 to 18 months to fully implement the process in each operation.

The process that we implemented was not just another safety program. It was designed by a company called Behavior Science Technology. It's a systems-based improvement process. It starts with a comprehensive organizational assessment, contains a leadership development component and involves a structured improvement process.

Employees are trained in data collection and problem-solving techniques and the process ultimately contains an evaluation.

Phase One of the process we implemented involved conducting a comprehensive survey to help us assess each operation's safety culture and leadership style. The OCDI, or Organizational Cultural Dimension Survey, and a leadership diagnostic were the key factors that predicted safety performance.

We followed up with a Behavior-Based Safety and Coaching workshop with key managers from within our organization. And in addition, each site sponsored leadership and interpersonal skills training for the supervisors to show them how they can support the process.

Phase Two is where you establish the process structure. Each site designated a management sponsor. In some cases, this was the General Manager. At other sites, it was the Process Manager recognized as the safety leader. The sponsor serves as a liaison between the steering team and

the management team.

Each site also selects a facilitator. This individual helps to guide the Steering Team. At our sites, we use both hourly employees and supervisors in this role.

The Steering Team normally consists of volunteer hourly employees. The committee is the key component that makes the process work. They develop critical behavior inventories that are used in the observation. They also introduce the process to other employees and train other employees as observers.

Phase Three is the guts of the process. It involves conducting observations. Observers gather data of exposures and at-risk behaviors that contribute to injuries. Near-miss incident reporting is also encouraged. The objective is to gather meaningful information to facilitate problem solving. The focus is on barrier identification and removal.

At Arch, our BBS process also contains an evaluation component. A consultant was assigned to each of our operations during the implementation phase. They provided feedback to the management team during implementation. They also provided coaching support for team leaders.

As each operation's implementation nears completion, a comprehensive sustainability review was conducted. This review contains recommendations on how the operation can keep the process moving forward.

And finally, 18 to 24 months after the process is initiated, we conduct a repeat OCDI, organizational cultural assessment. This helped us to evaluate whether the site’s leading safety indicators had improved.

Our consultants were helpful in guiding us through the implementation process, but in order to make this process really work, you have

to adopt it as your own.

At Arch, we're taking additional measures to make the process sustainable. We're attempting to integrate it into our safety culture in our normal safety process. We're adopting upstream measures of safety performance and additional indicators. We're trying consistently to provide visible safety leadership, and we're encouraging each process to adopt their own unique identity.

Some of the ways that we're integrating the process into our overall safety process is we're inviting and we now have the steering team participate in our annual Safety Summit. Regional safety workshops that we conduct now involve facilitators as well as observers. We conducted corporate training for team managers on how to support the process.

And in addition, we trained four Arch personnel as internal consultants so that they can help us to

make this more sustainable as we go on.

Right now we're in the phase of developing a program for advance facilitator training, so that we can take our facilitators to the next level.

A few other examples of how we're involving our observers in the safety process is we're asking the steering teams for input on injury and near-miss reporting. We're also holding observer network meetings to exchange ideas, sponsoring regional facilitator meetings to exchange best practices, and we've started to invite facilitators and other observers to participate in our cross-operational audits.

Another step we've taken is to develop upstream component targets. In addition to traditional measures like incident rates, we're asking each of our operations to establish targets for observation of contact rate, observation of quality,

the percentage of the workforce that they have trained and active as observers and the percentage or the number of barriers that they have removed.

In the long term, we think these types of upstream measures will be better predictors of safety performance.

I think probably the most significant thing we've done is to actively demonstrate visible safety leadership. Our President, CEO, John Eaves and Senior Vice President of Operations, Paul Lang, routinely visit the sites, meet with the steering teams, find out what their issues are and discuss what we can do to support their process.

We've even gone as far as having three of our facilitators come to a Board of Directors' meeting and offer a presentation on what they're doing in the field.

Each of our teams has

adopted a unique identity. We haven't attempted to follow a cookie-cutter approach. They go mine by mine. We don't compare progress in one site to another site. And each site has basically adopted a name and symbol to try to capture their unique character.

The SLOPE Team is the team that we have in Mountain Laurel in West Virginia. That stands for Safely Leading Our People to Excellence.

The DAWGS team is in Dugout in Utah. And that stands for Developing Awareness While Generating Safety.

The results that we've seen, we've been at this about four years, and we're seeing a number of positive results in many areas, one of which is a continued improvement in our traditional indicators.

The biggest benefit that we've seen is increased employee development. We have more people involved in peer-to-peer observations.

They're actively identifying exposures and providing feedback. This is a no name, no blame, no sneak-up process. No discipline results from the observations. The only goal is improvement.

A few hard numbers from the behavior-based standpoint, we have 3,800 hourly employees covered by this process. We've trained over 4,200 people as observers. They've conducted over 94,000 observations in a four-year period, observing over 120,000 employees. But most significantly they have, during that period, removed 2,151 barriers to safe performance.

Basically by a barrier, what we're talking about is anything that impedes or makes safe performance more difficult. It can be a physical issue, a process issue or a cultural impediment. And the basic removal method depends upon whether the barrier is enabled or within the power of the individual; whether it's difficult, it

takes some type of management intervention to remove, or whether it's impossible.

A few barriers that I'll throw out here as examples, at one of our underground mines, observers identified an equipment condition that created a pinch point. A locomotive had an opening in the canopy that enabled an individual to stand up and expose their head to the top. In fact, we had an employee who actually had his head stuck between the canopy and an overpass. The solution was to re-design this canopy so that there was no opening, and thus eliminating the barrier.

One of our surface mine employee observers identified a mounting/dismounting barrier. They identified a loader without a proper type of a handrail. The solution was to install a handrail that enabled the proper three-point contact.

In one of our prep

plants observers identified a fall hazard that existed for a long period of time. The steering committee arranged to eliminate the exposure by having guarding installed.

And these are just a few of the over 2,100 barriers that our people have removed in the past four years.

The bottom line is our safety process has become more strong during this period. We have more hourly people involved. It's improved the communications level. We've upgraded our problem-solving skills. And generally, the observers hold themselves to a higher standard. The bottom line is we have people enthusiastic about our safety process.

Kind of a corollary benefit is, during this training process, we identified a number of good people that are emerging as safety leaders, and a number of those who trained as observers and facilitators

have now moved on to supervisory or safety professional positions.

And here's just a few comments that our facilitators have offered in the process, what they think about it. Generally, they cite improved communications within all levels of the organization, more people involved in safety. It provides a venue for hourly people to use their talents on safety. And overall, facilitators have been very positive about the process and the impact it's had, not only on work at the mine, but also in their everyday life.

At the end of the day, Arch's foundation principle is to get everyone home safely every day. What we've seen thus far in the four years is improvement as a result of our behavior-based safety efforts. The other layers in our safety process have also helped us to maintain a solid foundation. And each day we're continuing to eliminate at-risk

behaviors and move ourselves closer to our end game, which is zero injuries on the worksite.

I will close in saying that while these concepts have been effective to Arch and we would encourage other companies to consider them, many of these concepts would be very difficult to regulate as a matter of regulation or law. Thank you for the opportunity to talk to you and share our views.

MR. BURNS:

Thank you very much, Tony. Does anybody have any questions for Mr. Bumbico?

MR. DISTASIO:

Tony, first of all, can you supply some of the data? You were talking about that the results showed up in the traditional data, so if you can supply some of that for the record, we'd appreciate it.

MR. BUMBICO:

It's actually in a

couple of the slides in the earlier presentation.

MR. DISTASIO:

I saw those.

MR. BUMBICO:

Yes.

MR. DISTASIO:

I thought you meant you were talking about other ones on the traditional ---.

MR. BUMBICO:

If we have other numbers that we can share we will.

MR. DISTASIO:

That would be helpful. I noticed in your presentation two things that have come up in a number of other presentations, and one of them is contractor safety. Can you talk a little bit about how you deal with contractor safety?

MR. BUMBICO:

Sure. The approach is generally structured similar to our operation safety plans. We have a set

of standards, that each of our operations is required to develop a nonspecific contractor safety plan to incorporate. And those deal with training requirements, documentation requirements, and also they incorporate the concept of conducting a risk assessment of the various contractors when they come on site prior to their commencing work. So that the level of measures we take to try to deal with that contractor vary according to the level of risk.

So in other words, a contractor that is coming in ---. Say a shaft or slope would have a higher standard they were held to versus someone who is just making a delivery.

MR. DISTASIO:

And do your statistics include any of that? Do you include some contractor statistics in the overall statistics?

MR. BUMBICO:

What we do is if a

contractor is directly working under our supervision, they're included as part of our statistics. If they're working as a separate entity, they're not included.

MR. DISTASIO:

The other thing I want to ask you about is you mentioned each process has a unique program. So you have basically an overall corporate strategy and then allow the individual units to develop their own unique processes?

MR. BUMBICO:

That's exactly right. And we feel very strongly that in order for the safety process to be truly effective, then it has to be something that the employees buy into and recognize as their own. So we've put a general framework in place, a series of guidelines, but we've encouraged each of them to try to manage that process in their own way, so that it fits with their own culture.

We've got operations, like I said, in six different states. And there are frankly differences between our people in the east versus our people in the west versus our people in Wyoming. So we've encouraged them to try to recognize those differences and make the most of their strengths.

MR. DISTASIO:

Thank you.

MR. FEEHAN:

I have a question. Would you talk a little bit about how you train your observers. What's that training like? How do you choose your observers and what's that program? What's that part of your program about?

MR. BUMBICO:

Initially we had some selection of what we thought would be good candidates to be observers and we encouraged people to become involved. When we started this, we didn't have a rush of volunteers coming forward. As

we've gone on, however, we've had more and more people become involved.

Generally we start with a general overview of the process to orient all the employees to the process. And then there's more specific training on how to approach an individual to conduct an observation, how to deal with somebody that might be resistant, that might be a difficult person to observe.

We teach our people to do this in a manner that's not speaking up, to ask permission to conduct the observation, and trying to give them some of the interpersonal skills to be able to deal with people on providing feedback and encouraging them to provide positive feedback of safe behaviors. And those are all interpersonal techniques that have to be taught.

We also teach them how to use the software from a data analysis identification and problem

solving standpoint.

MR. FEEHAN:

All right.

MR. FETTY:

I have a question. Can you talk a little bit about what this has done as far as your violation rate? Have you seen a reduction in the number of violations that you receive at your sites?

MR. BUMBICO:

Well, we've been able to maintain what was already a pretty good rate in terms of violations. I think that we've seen a lot of stepped up enforcement over the past three to four years. Additional scrutiny from the agency is the result of something that maybe would happen. And I think within that context, we've been able to maintain what we considered was an already pretty small violation area.

We've had some operations that have actually adopted these same techniques for injury

prevention for violation reduction. Our Dugout Mine in particular, we find some of these same techniques in recent violations.

MR. FETTY:

And also, have you involved MSHA at all in any of your sites into a Behavior-Based Safety program, like Mr. Becker or maybe someone from the district?

MR. BUMBICO:

We have some operations that actually conduct observations of the inspectors. We try to share with MSHA what we're doing. I know we've had --- Kevin Strickland has been to a couple of our mines and has asked questions about our process with the people involved. We had Joe Main who was at our Safety Summit last year, and he got to see some of what we're doing. So we have tried to share this with MSHA.

MR. FETTY:

And one final question.

You stated earlier that you don't compare the performance of one mine to another. But do you set like a bar from a corporate standpoint in each individual mine as required to, you know, meet or exceed that particular level of achievement? Or do you set indicators for each individual mine, and do they have to meet or beat their own indicators?

MR. BUMBICO:

They have to meet or beat their own indicators. And what we do is we try to hold up the ones that are doing well as examples and drag on them, and it kind of flows naturally. When people see an operation getting recognition for doing something the right way, they tend to emulate what they're doing. So we try to use that type of positive feedback as a way to encourage good performance across the board and share best practices.

MR. FETTY:

Thank you.

MR. BURNS:

Tony, do you have any recent statistics on the ratio of near misses to number of incidents or number of injuries in your various mines?

MR. BUMBICO:

We keep near-miss statistics. I don't know that we've sat down and compared the number of near misses we've having to the number of injuries we're having, but we encourage near-miss reporting. We've seen a general increase in the number of incidents that are being reported.

And I think a lot of this has to do with trying to instill a confidence factor in employees, that if they report something that might make them look a little foolish, that they're not going to have retributions as a result of it. So we try to treat that as a no name type of situation, too. And we've seen a general increase in the number of those incidents.

MR. BURNS:

The other question I had for you is am I correct that when you made the presentation of the various operations there's a differing level of who is involved from a management standpoint, whether it be the Vice President of Operations or the superintendent or somebody else; is that correct?

MR. BUMBICO:

Well, I think the role that I referred to was the role of management sponsor. And that's kind of an advocate on the management team that can run interference if they're seeing any difficulty in selling some of their ideas or some of their recommendations. And in most cases, that ended up being the general manager of the site.

In some other cases, that was one of the process improvement directors. And that decision was made on an operation-by-operation basis. It was based upon who they felt their best advocate was.

MR. BURNS:

Okay. I was wondering if you noticed any correlation as far as maybe the sites that have the highest level of management involved that maybe are performing better than the others or anything like that?

MR. BUMBICO:

No. The one case where I can recall that, one of our process improvement directors was assigned as a management sponsor. He actually matriculated to the general manager's role in a couple of years. So that was kind of seen as a developmental role that that person could fit into.

MR. BURNS:

One other question. You stated that this system has been in place for four years, and obviously you've made some changes based on audits and system reviews. Anything that you identified in there in your program that weren't working or you found were barriers to the system that

you corrected overall, in general?

MR. BUMBICO:

I think the biggest mistake we made during implementation was not involving the supervisors to the degree they should have been. And we've since gone back and corrected that. But initially, there was some confusion as to what their role was in the process. And we had to go back and clarify how the process was there to help them and give them ideas on how they could support the process.

MR. BURNS:

Okay. Thank you very much. Anybody from the audience? All right. Thank you very much, Tony. We appreciate it. Our next speaker will be James Gallik with the Ironworkers Local No. 3.

MR. GALLIK:

Good morning. Can everyone hear me okay?

MR. BURNS:

Yes.

MR. GALLIK:

My name is Jim Gallik. I'm with the Iron Workers Joint Apprenticeship, right here in Pittsburgh, Pennsylvania. I was asked to give this PowerPoint presentation for Frank Migliaccio, our National Director of Safety in Washington, D.C. Frank couldn't be with us today, so I'm here to give Frank's presentation.

Apparently, it's not going to work until I put my memory stick back in, but while I'm preparing this, I'm going to give you a little bit of a different presentation than you're used to hearing or used to seeing. From what I can see, we're a little bit different. We're not a mine owner, naturally. We don't do mining operations, but we provide construction services at many mine sites across the country, so ---.

I'm going to give Frank's PowerPoint presentation, but I'm going to venture off a little bit,

because I'm a trainer by trade. So I'm going to go off the presentation a little bit and give you some training ideas as well.

This is about the hazard awareness challenges that the Ironworkers union program has. And we're going to start off with a gentleman called Walter Wise. He's our General Secretary. He's also a trustee of our National Training Fund. But more importantly, for this meeting, he's the chairman of the Iron Workers MSHA committee. He served an ironworker apprenticeship from '74 to '76, and he worked in the coalfields from '81 to '89. So Walter, who's our international representative with MSHA, is very familiar with the hazards associated with working in your mines and on your sites.

Just a little brief history. We were formed February 4th, 1896, right here in Pittsburgh. We only had six locals and only

represented 3,650 members. Okay. However, when we were formed, safety was the number one issue. Okay. And in 1911, our organization was losing one percent of its membership a year to jobsite fatalities.

To compare that to today, 174 local unions totaling 95,500 active members, safety is still our number one issue. And 100 years later in 2009, we had 12 fatalities or only .0125 percent of our membership. And once again, our guys are employed by thousands of contractors under collective bargaining through local union hiring halls.

Just some of the things we do. We erect structural steel. We install concrete steel reinforcing bars. We install and move heavy machinery. We install metal siding, glass curtainwalls, conveyors as well. We erect metal siding and glass curtainwall and we erect metal buildings.

I'm going to explain a little bit to you about our safety program that's nationwide. It starts with IMPACT, which is the Ironworkers Management Progressive Action Cooperative Trust. They fund our national training program.

Okay. Now, I'm sure our safety training is going to be a lot different than a lot of the companies have in place because one of the things you have to realize is our members work for several different contractors and on several different sites throughout the country.

And I know it was mentioned earlier that some sites have low incident rates and very good safety programs, and other sites have higher incident rates and not so good safety programs. And the same thing with the contractors we work for. Some of those have very low incident rates and good safety programs, and some of them not so good.

So we have to take the burden of training on outside the employer. We need to take the burden of training and safety awareness and prepare our members for any type of contractor or any type of site they might be working on.

Our national training fund is responsible for three types of training to enable our members to work safely. One is through apprenticeship, another is through journeyman upgrading and a third is issuing safety certifications.

Now, this is what I do for a living, and that's why I'm going to try to expand on this a little bit, because I'm responsible for all the training in this region. And I'm assuming from what I've heard so far this morning that most of you in the audience today are safety professionals or maybe direct safety programs at mine companies and on sites across the country. But I'm more of a trainer.

And one of the things that I've learned and I give presentations on about training is I'm working much like the people working in your mines. I like to call it a three dimensional occupation where, you know, we're always working with our hands. We're always working with visible items, and we're doing things.

But what I notice within the Ironworkers and what I've been working to change is most of our safety training was two dimensional. Okay? And if you follow me on this, you'll see where I'm going with it, but most of our training programs were two dimensional by using PowerPoints, which I do use. I'm a big fan of them for training, because it's two dimensional. Reading papers and reading notes, it's all two dimensional.

Now, there's lots of occupations that are two dimensional. And not to be derogatory to anybody,

but safety professionals and people such as, you know, in this room, you're accustomed to this type of environment. And for you to sit through a training program that's set up two dimensional, you're at home and you're comfortable, and you may get a lot out of it.

But when you take a three dimensional worker such as a miner or an ironworker or any other trade and you put him in a two dimensional training, a lot of times they don't get what you're trying to get.

I'm not a numbers guy. I'm not a metrics guy. I'm not a statistics guy, but I train a lot. And so one of the things that we try to do, and it seems to work extremely well, is we set up our training to be three dimensional as much as we can. We try to create a training atmosphere that's conducive to learning for the three dimensional worker; lots of visual, lots of three dimensional mockups in

the classroom, lots of hands-on activities, lots of things.

You know, we looked back to --- you know, we looked at the type of individuals that we're trying to create safety training for. Look at the type of individuals. Look at where they came from.

And I know speaking for Ironworkers (and I'm sure this would apply to miners as well), but we have a lot of individuals that maybe back in high school or maybe back in their school days, they didn't adapt well to the academic type of classroom, you know. The type of individual that when they walked into a classroom and all they seen was a chalkboard and a podium and a screen and an instructor, they kind of shut down a little bit.

But the same individual that would walk into a metal shop or wood shop and look around and see all the stuff and say, wow, this is, you know, this is me. This is where I feel

at home. So you know, we try to structure our training the exact same way. We try to put them in an environment that they're used to. Now we do that in our Apprenticeship and we do that in our journeymen upgrading as well.

In years past, we had lots of training programs for the journeymen that had 15, 20, 25 years experience. We'd bring them into a room. We'd put a PowerPoint up on the board, and we'd --- you know, we'd put papers in front of them and sit them at a desk. And we tried to give them refresher safety training, and they'd zone out, and they don't get it.

Okay. We then adapted our training, and like I said, it's three dimensional. And we found out now that when you take a guy that's been doing this for a living for 25, 30 years and you try to bring him in a classroom and try to retrain him, you know, they don't want to hear it. Hey,

I've been doing this for 25 years. You're not going to teach me anything.

But when you adapt your training to their way of life, to what they're used to in the field in a three dimensional training, you'd be surprised at the response that we get from guys, saying, wow, I didn't realize either how much I didn't know or how much I forgot. Because we didn't really present any different material, we just presented it in a different way, and we adapted our training to the type of individuals that we're trying to train.

Some of the things that the National Training Fund makes available to us is instructor training with a standardized curriculum, training materials, recordkeeping, program audits to make sure that all across the country we're all doing what we need to do. This is handed down to the local unions, to the local union joint apprenticeship, which is what I

do. And then it's our job to distribute it to our local union membership.

Our National Training Fund, we conduct train-the-trainer classes at three regional training centers. We spend a lot of time and a lot of resources making sure that our trainers are professional and can do the job.

Our three training Centers; Saint Louis, Oakland, California and Northern New Jersey, instructors continually from across the country attend these training facilities and get upgrade training on how to be better instructors.

We also have an annual instructor seminar. This year it was at Eastern Michigan University and Washtenaw Community College. And there's just a picture of one that was held back in San Diego a few years back with all the instructors that we bring together to teach them professionally.

In addition to the three and four-year apprenticeship programs, which require 204 hours of classroom instruction and journeymen skills upgrading, okay, we offer certifications. And one of the things that we noticed in our apprenticeship and journeymen upgrading training over the years is the face of training has changed. Fifteen (15), 20 years ago and even further beyond that, our training was basically skills-oriented training to give them the skills to go out and perform the job. That changed.

Our training is strictly all safety-based oriented, and a majority of our time instructing our apprentices and our journeymen is not just acquiring skills needed to do their job, but it has to do with welding certifications. We offer 40-hour HAZMAT training, lead hazard training, OSHA-10 and OSHA-30 training, CPR/First Aid, scaffold

user/erector/dismantler training, post-tensioning installation, sub-part R steel erection, aerial lifts and MSHA safety training as well.

So we took a lot of our skills training --- and I'm not sure exactly in the mining industry how much skills training you have. If a guy's going to be getting on to a new task, you may have different types of training, but we base all of our training strictly on the safety aspect of it, on that end.

And this is just some examples on the PowerPoint of our training centers and what we do. And we try to create journeymen ironworkers that are professional, have a good attitude and have skills.

Our International Association and local unions dedicate nearly $50 million a year to membership training, money that was negotiated through collective bargaining agreements and allocated by the

membership to training. And like I said, a majority of that training is strictly from the safety standpoint.

These are some of the things that we do in your mines. We make conveyors, shaft and table change outs, maintenance, installation, and actually a little bit of everything.

We have an approved training plan. The Iron Worker 30 CFR Part 48B Plan has been expanded to also meet the requirements of 30 CFR Part 46.

We have 83 local unions that have approved training plans. We have one right here in Pittsburgh. Our union has an approved MSHA training plan. We have approved MSHA instructors. Once again, we have one right here in Pittsburgh as well, in our apprenticeship. Ray Walters (phonetic) is our approved MSHA instructor when we do give new miner training.

Two hundred ninety Iron

Worker instructors have been certified and approved by MSHA. Our membership training is incorporated into local union apprenticeship classes. 7,745 ironworkers have completed new miner training and refresher classes. And they also receive a new miner training card when they complete our training.

Since 2000, union ironworkers have worked over 13 and 1/2 million man hours on mine sites, and we've only suffered one fatality, and we're very proud of that. We're hoping to strive that we can have a presentation in the future and have zero fatalities.

A couple things that they wanted me to bring up was the hazard awareness challenges. What's so hard about preventing worker accidents? You know, does the worker want to be hurt? We all know the answer to that. Does his employer want anybody hurt? No as well. And does the owner want

anyone hurt? Okay.

Accidents do happen everyday. These next few slides that he put in there are a little bit gruesome, so I'm going to kind of go through them quickly, but ---.

The gentleman from the Steelworkers that first spoke, he made the comment that they interviewed ---. They did a survey with accidents, and they said over 60 percent of the respondents said they knew they were doing an unsafe act. And he said that number was probably higher than 60 percent. And to some people you may think, well, that sounds a little unreasonable. It sounds a little high, that that many people knowingly do an unsafe act.

But if you think about yourself at your own home, and if you really think hard about it, how many times you knowingly commit an unsafe act? Maybe something as simple as getting out the weed whacker to cut

your grass and not putting safety glasses on or a shield over your face. That's an unsafe act, but yet we do it every day. Or maybe getting out your stepladder to go up and maybe clean out your gutters, and you go one step too high where they tell you you're not supposed to. Or even as simple as taking the stepladder and leaning it forward, leaning it against the house to go up, which is an unsafe act. The stepladder is only supposed to be used opened up.

But we ourselves do it every day at our house. And workers are going to continue to do it on jobsites unless we can correct the behavior. Because for every 600-near misses, for every 1,000 unsafe acts, or 600 near-misses, there's 30 minor injuries, there's ten serious injuries and there's one fatality.

I was at a safety presentation one time. I just want to share this with you. And the gentleman

that gave the safety presentation he had a plastic jug, and in it was 1,000 little balls about the size of a marble. And in those, there were 600 that were painted the one color, 30 that were painted another color, 10 that were painted another color, and there was one --- just one of those balls out of a thousand was painted red.

And in that safety presentation, he went around the room, and as he's talking and giving his presentation just randomly sticking that jug in front of somebody and saying pick out a ball. And you could see the hesitation on somebody's face when they stick their hand in that jar thinking, boy, I hope I don't pull out the red one.

And he said that every time that a worker commits an unsafe act, they're sticking their hand in that jug. And they're taking a risk of pulling out that one red ball. With

the worker behavior on the jobsite you tend to think it's not going to happen to me, but in that safety presentation when you're sticking your hand in that jug, you realize, hey, wait a second. There is a slight chance that what I'm about to do is going to result in pulling that red ball out of the jug. It's going to result in a fatality. And you got to start changing the behavior of the worker.

Okay. No one wishes accidents to happen, but who's to blame? Okay. It's human behavior. You have to correct the human behavior. And like I said, we all do the same at home. We all lean a stepladder up against the house and go up a step or two. We all might mow the lawn with the mower or trim the grass and not put safety glasses on.

We need to correct that within our workers. We need to modify our human behavior. We need to define, correct behaviors. We need to train

those behaviors.

And the next bullet point says punishment or reward. We try to establish an alternate. If you continue to do unsafe acts, you don't work. It's different with us, because our members work for several contractors. And our contractors are starting to, you know, take the responsibility of, hey, you did an unsafe act. You're gone. And our union follows the same principle. And then you just pray it works, because eventually it does.

Some of the challenges that existed with the building trades, the construction trades coming on to your sites to do work on mine sites. Some of those transitions ---. Some of those challenges that existed were worker attitudes, OSHA contradictions because we're familiar with the OSHA standards, and there are some differences amongst the MSHA standards.

Our members were exposed

to a new environment with lots of unfamiliar equipment and an assumption that they knew everything about safety and hazards. And by the same token, for people that work in the mines, whenever a construction company might come in to perform construction, they have the same barriers. They have worker attitudes. There's MSHA contradictions with the OSHA standards that we had. Your mine workers might be exposed to a new environment. They might be also around unfamiliar equipment as well and an assumption of knowledge from their standpoint.

So as a result of that, the MSHA-Iron Worker Alliance was established on July 18th, 2004, and this is when two enemies came together to form a safety alliance. It was designed to share best practices and technical knowledge, develop and disseminate safety and health information and foster a culture of prevention.

Just this year in Michigan in our annual instructor training program, we did have MSHA train-the-trainer class. We had five master instructors, two ironworkers, three were employees of MSHA. It included 20 hours of MSHA classroom training, but additionally, it included 20 hours of what we call personal development classes taught by college professors on how to present the material. It just happened the material that they were presenting it, you know, to me is everything, which was why I talked before about having a 3-D atmosphere to make it an easier training.

Instructor qualifications for us with the MSHA program, you have to be at least a local union apprenticeship instructor a minimum of five years. You need to be recommended by the joint apprenticeship committee. You have to have worked in the trade at least five years, and you have to be

an OSHA 500 instructor and a First Aid/CPR instructor as well.

And strictly to insure that everyone returns home every day from work. And that's brought to you by the Iron Workers Union and IMPACT. Thank you.

MR. BURNS:

Thank you very much, Jim. Does anybody have any questions for Jim?

MR. DISTASIO:

I have a couple.

MR. BURNS:

Okay.

MR. DISTASIO:

Jim, I know you said you're a three dimensional guy. Did you do any sort of analysis of the change in your accident rates when you went --- from when you went to skills training to safety training to now this three dimensional training? Have you noticed any improvement?

MR. GALLIK:

I myself don't have any statistics on that particular thing. What I've noticed was just worker reaction that received the training. You know, we found out that --- and especially with the journeymen, who think they know everything, they have all the experience, and you're wasting their time by giving them additional training. When the training was complete, the response was the same as it was before. Hey, you're wasting my time. I just wasted ten hours on a Saturday, you know. Keep in mind when our guys do training, they're doing it on their own time. They come in to the union hall. They're not on company --- on anybody's payroll, so to them it's a real burden.

And just from their reactions as far as, you know ---. It was just as I thought, you know, you wasted my time, you didn't teach me anything new, to, when we went to the three dimensional approach, to them

saying, wow, I really learned something. I'm glad I came. When they gave up a Saturday when they could be home doing something, and at the end of the entire day say, wow, I really learned something.

And the biggest effect that we noticed was they were going back out on the field the following week and telling their fellow journeymen, hey, that's a pretty good class. You ought take the time, and you ought to go take it.

So that to me was the satisfaction, that we were successful with giving the three dimensional training. Because they retained something, and they passed it on to one of their colleagues, said, hey, you need to do this as well.

MR. BURNS:

Jim, on the training for your people when they go, I'm assuming for the mine safety training, you do 20 hours of training and then four hours

of site specific, probably done by a contractor; is that correct?

MR. GALLIK:

When we do our new miner training to our members, there was a video that was developed between the Ironworkers and MSHA that was approved by MSHA that takes the place of the actual mining facility tour. And it's a video that pretty much encompasses everything that they may come across on a mine site.

And actually, the actual training is 30 hours. The train-the-trainer was 20 hours. The actual training that we do with the MSHA program is actually a 12-hour MSHA-oriented training. We have ten hours of OSHA training, eight hours of First Aid/CPR, and then the video, which suffices for the actual tour of the mine.

MR. BURNS:

Okay. Thank you very much. Anybody else have questions?

Anybody from the audience have any questions? Okay. Thank you very much. I think people need a break, and I'd like to ---. Go ahead, Jim.

MR. GALLIK:

I'd just like to add one thing. I don't know where everybody came from today and how long they're going to be around or how long this is going to take place, but our training facility is two miles up --- not even two miles up the road. We're at 2315 Liberty Avenue, which is where I'm going to be going after this is over.

And you know, if you just want to get an idea of what our classrooms look like that we conduct this training and get an idea of what it looks like when you walk into a classroom and see 3-D training. If anybody is interested, you're welcome to come up and take a look. I'll be glad to give you the tour.

MR. BURNS:

How far away is that?

MR. GALLIK:

Probably not even a mile, a mile and a half. You know, if you go down William Penn Place to Liberty Avenue, and if you go up Liberty Avenue to 23rd Street, we're between 23rd and 24th Street, so ---. If you want to see some 3-D training rooms, we have lots of them.

MR. BURNS:

Thanks a lot. As I said before, I'm going to take a ten-minute break. And unfortunately, there's no clock in here, but I think everybody carries cell phones or wears a watch, so if you could please stick to that. And if this goes on for another two hours, we'll take another break. But I want to give the court reporter a little bit of a break, because she's over there typing away and trying to keep up with everything we're saying. So let's come back in ten minutes. That will be five to 11:00. Thanks very much.

SHORT BREAK TAKEN

MR. BURNS:

Okay. Our next presenters are going to be a tag team from Vulcan Materials. First, we've got Truman Chidsey. And some of you may have known Dick Seago (phonetic). Dick Seago retired and he replaced Dick. And his tag teammate will be Kelly Bailey, who will be handling most of the health issues; is that correct, Kelly?

MR. BAILEY:

Correct.

MR. BURNS:

So please go ahead and start.

MR. CHIDSEY:

Thanks, Kevin. Good morning. My name is Truman Chidsey, C-H-I-D-S-E-Y, and I'm the Corporate Director of Safety Services for Vulcan Materials Company. I appreciate the opportunity to share with this group what Vulcan has developed and

implemented over the years as far as a safety management control system. As Kevin said, Kelly Bailey is going to follow me up and discuss our health management control systems.

Throughout my presentation you're going to hear --- hear me say and see the word SHE, S-H-E. That's obviously for safety, health and environment. And I'm just going to focus on the safety part.

Just a real quick introduction to Vulcan Materials. We're a publicly traded company since 1956. We're based in Birmingham, Alabama. We're the nation's largest producer of construction aggregates. We're a major producer of asphalt and ready-mix.

We have 334 aggregate production and related facilities serving 22 states, including District of Columbia, Bahamas and Mexico. Out of those 334 facilities, actually 234 of them are MSHA regulated facilities.

Current numbers, we employ about 8,000 company-wide employees. A couple of years ago it was much higher.

What our management control system ---. And if you're like me, I was introduced into the world of safety by Mr. Frank Byrd and Mr. George Germain, with Vulcan. Practical Loss Control Leadership; for any company that is looking at starting a loss control program or management system, this is basically a textbook on how to do it.

But anyway, we would define management controls as a basic function of management. And you do that through planning, organizing, leading, directing and controlling. And it's the controlling part of management systems that I'll focus on today and share with you what, you know, management control systems Vulcan has developed over the years and is now a part of our process.

The controlling as far as function is not something we do to employees, but it's something we do to work process in order to achieve the safety and health that we want.

Now, keep in mind that an organization can't create management control systems overnight. It takes some time. But the first and foremost important step is that there must be a desire for a company to control its losses.

Now, I've been involved in several acquisitions in my 15 years in safety and health for Vulcan Materials in both large and small companies. I've found that organizations say that they have a desire to control losses. They look good on paper. They've got their policies and procedures in binders up on the bookshelf. But when you actually start looking into the processes and going back, you find that the processes are lacking in many

cases.

But this process has been evolutionary over time, and I feel that we're still at the early stages of this process. And one factor that has affected this process is that since 1956, we have organized our company into eight decentralized divisions. And as far as producing and marketing our products, this has worked well and is a key component of our business strategy. But we've also had eight different ways of dealing with safety, and eight different ways of how to invent the safety wheel.

But about five years ago we started the process of bringing the divisions together as far as safety and working toward developing safety management systems as one company, rather than eight separate companies.

Five steps that lead to control of an activity for management are identifying and specifying the program elements and activities to

achieve the desired results, establishing performance standards, measuring performance, recording and reporting, evaluating performance as measured compared with established standards. And when we do have good results, commending those desired results, but also constructively correcting substandard performance.

There have been a number of studies made to determine the components of a successful safety program. These activities or program elements that you see on the screen have been identified in these studies that when properly done, have been repeatedly proven to achieve optimum results not only for safety and loss control, but also for quality, production and cost control.

The highlighted elements are the ones I'll touch on today real quickly. Vulcan has management systems in place that are listed. Leadership and administration. Vulcan's conviction

is that an effective commitment to a strong safety and health stewardship must start at the top and then embraced by every employee in the company. And Vulcan has done that by establishing separate committees at different levels.

The first committee that was established was the Board's SHE committee. Vulcan was one of the first public corporations to establish at the Board of Directors level --- in fact, it was established in May of 1990 --- a separate committee to review and monitor management stewardship, policies and performance.

The company's commitment to responsible safety and health stewardship is led by our Board's SHE committee. The current member of that committee are Mr. Allen Franklin who chairs the committee. He's the retired chairman and the CEO of Southern Company, Mrs. Ann McLaughlin Korologos, who is a former

U.S. Secretary of Labor and is currently the chair of RAND Corporation Board of Trustees, Mr. Richard T. O'Brien, the president and CEO of Newmont Mining Corporation and Mrs. Kathleen Wilson-Thompson, Senior VP and Chief of Human Resources for Walgreens.

And their responsibilities include reviewing the company's policies, practices and programs with respect to safety and health affairs and monitoring compliance with safety and health laws, regulations and company policies. They maintain a strong relationship with their counterpart in management, SHE committee. This SHE management committee is compromised of Vulcan's senior managers that report to the CEO, Don James.

Now, their responsibilities include reviewing company policies and practices and programs, respective safety and health,

as well as monitoring compliance of the safety and health laws and regulations, but also dealing with challenging and serious safety and health issues that do arise from time to time.

Now, this is an important process for any company that also have an effective management system. Just real quickly now corporate SHE staff is organized. We have vice president of SHE and engineering who reports to the senior VP of operations. And my position reports to the VP of SHE. The director of industrial health and hygiene, Kelly Bailey, reports to that person. And we have a manager that reports to that person as well. In each department, we have specialists that can help us get things done.

Many divisions that I've mentioned spread out over across the United States. Each division has their own safety and health manager, and they have their own staff and safety and health representatives to keep us in

compliance with our own policies and rules and regulations.

And you can see our different business lines that we're involved in. All the divisions are involved in aggregate production, but several of them are involved in ready-mix. We do have two divisions that have underground aggregate production facilities. We're also involved in Mexico with three cargo ships that we're able to load in Mexico and offload stone throughout the Gulf states. And we're also in California involved in landfills. So we're fairly diversified.

One of the earlier projects that SHE management committee was asked to do was to write a SHE policy. And I wasn't involved in the process, but I'm sure it was not an easy undertaking getting eight different divisions together and working that out.

But this policy was

established in 1995, and has remained as such since then, you know. We require all locations to post this policy and periodically review it with all employees.

And just some of the excerpts out of that is strive to produce its products safely and maintain a concern for the public health. Endeavor to provide employees with a safe and healthy working environment. Provide education, training and leadership to employees to enable them and motivate them to understand and comply with the laws and regulations. And promote the adoption of, and adherence to, sound safety, health and environmental practices by onsite contractors and tenants.

And how that's implemented is that the responsibility for implementation of these policies shall rest with the Presidents of the company operating divisions. And it’s the responsibility of every employee to

comply with applicable laws, promote these policies and report to management any company practices that may be in violation of laws or company policies. So if a company is looking at having an effective safety management system, it needs to start with an effective policy standard as well.

Establishing goals by senior leaders is a very important part of any safety management system, but it is a challenge. But a challenge that comes with that is ensuring employees at all levels know what the goals are and they understand what their role is in achieving those goals, and that the goals are embraced by every employee.

And just an example, one method that was instrumental in getting the message out to the employees and that they knew about Vulcan's commitment to injury reduction was having every employee sign our NSSGA safety pledge, which is to reduce the MSHA injury incident rate by ten

percent each year. And by signing that pledge, not only did we have, you know, the CEO signing it, but every employee in all our plants sign that pledge. By having them do that, it got the employees more engaged in the process. And I think it meant more and added more weight to it than simply just seeing a list of goals on a piece of paper posted on the wall.

Another tool that is very powerful and that we have at our disposal and we've used several times is to put together safety videos starring our CEO, who's emphasizing our commitment to safety, you know, reviewing safety and health performance, use of PPE as a recognition and control. We produce these videos, DVDs and get them out to every facility, but we also put it on our company Internet where the employee can view the video at any time. I think when companies can get their leaders, their CEOs to get up in front

and talk to their employees on safety, it means a lot. It's very effective.

Starting in 2006, Vulcan established best practice teams comprised of experts from the divisions. These teams meet regularly to draw on the successes of the divisions, to help develop best practices, to discuss issues, and basically to ensure we are headed in the direction our SHE management committee directs us. One important aspect of these best practice teams is that safety and health is represented in almost all the teams, especially in our operations team in that the representative from our operation team is a representative on our safety and health best practice team.

One point I wanted to make is that you can have all the management systems you want, but if safety isn't weaved into the fabric of the operational processes, then you will be fighting an uphill battle.

As mentioned earlier, one of the tenets of our SHE policy is for all employees to comply with applicable laws and policies and report to management any company practices that may be a violation of laws or company policies. And Vulcan's commitment to this policy is reflected through our business conduct program. And it deals with, you know, several issues, such as antitrust reporting or recordkeeping, discrimination, sexual harassment, just to name a few, but it also deals with safety laws and policies.

And through a company called EthicsPoint, employees can anonymously call the helpline to report any situation or violation. And a process is started whereby all the senior managers of the company, as well as the applicable divisions, are alerted of the situation. And management does follow up and take appropriate corrective actions. And through EthicsPoint, the process is

documented from start to finish.

In addition to this, each employee is required to periodically complete a questionnaire that specifically asks if they have any knowledge of violations of laws and company policies. And the same process is followed in following up and ensuring those corrective actions were taken.

Worker involvement. It's our practice that all, you know, job descriptions have safety responsibilities spelled out in job descriptions and that all employees do get annual evaluations and they're evaluated on their safety performance. We're very heavily involved with the safety committees or SHE teams or coordinators. To me this is a very effective process where you get hourly employees engaged in the safety program at their facility where they can have a say-so on their program and come up with solutions to the problems that,

you know, they run into.

We also just recently have gotten into behavior-based safety programs and coaching. I think behavior-based safety programs are kind of new in the process. But I think one of the benefits of the behavior-based safety program is the fact that when you have employees who are making observations and they're looking at proper PPE and out in the line of fire, or you know, proper lifting techniques, those kind of things that, you know, when they go out and do that job, it means more to them. And they retain it better, the fact that they’re going to use PPE. They’re going to use proper lifting techniques. They're going to stay out of the line of fire. And I think that's a real benefit of behavior-based programs. But it also includes coaching, training that we give employees, how to give proper coaching and proper feedback. And our goal is to continue with behavior-based

programs each year.

Hazard prevention and control I'm sure that you have many companies talking about SLAM and TAKE TWO (phonetic) during these meetings, but they are very effective.

And getting employees to stop what they're about to do, think about the hazards, think about the actions they're going to take and how to control those hazards. And one thing that we implemented about four years ago are work plans. And what our work plans have done for us, I think, has been very instrumental in reducing the number of injuries that we have seen in our Repair, Maintenance, Construction period.

If you look at our statistics, you know, over the years, we've roughly run --- about 60 percent of our injuries are involving repair and maintenance. And the work plan was a tool that we adopted to get employees to not jump into the job, but stop and

go through the process of a risk assessment, identifying what the tasks are in doing the job. Identify the hazards. Identify how you're going to control the hazards and document that into a work plan. And then the most important part is working the plan. So this has been a very beneficial tool for our divisions.

Something else that we started in about 2006, is our SHE manual. As I mentioned, each division had their own safety and health policies. And as I said, in 2006, we started the process of gathering all those polices and procedures and picking the best one and organizing them into a Tier One, Two and Three process.

Whereas a Tier One is a policy or procedure or practice that would be implemented and followed by all facilities involved A Tier Two would be a division policy that if they want to take a Tier One and make it

more restricted, then they have that option both ways. Our goal is to write a Tier One, so that it will apply to a Tier Two as well, and they won't have to write a Tier Two. But a tier three is any specific procedures or policies that a plan may have. They can write their own Tier Three.

And what this has done for us? I think every company has gone through this. When you do put together policies and procedures, they typically get put in a manual on paper format. And they get put on a bookshelf, and rarely do they get looked at or updated.

And our SHE manual is all electronic, it's on our Internet. So anyone can get on there and go to a SHE manual link. Click on that. It will bring up the corporate Tier One policies and procedures and also the division tier two. Each division has a tab where they can house their Tier Two policies and procedures. But if you

look at another level, into the Tier One under safety, it pulls up all our Tier Ones that we have under general safety. And the one that I highlighted is, you know, is our standard to work on an electrical distribution system above 600 volts. Click on that. And then pull up the most recent policy, procedure and practice that we have in place.

I think the committee would essentially then get a document control. That is kind of as handled as when we implemented this process, we also implemented a document control process where each Tier One is assigned its own separate document number. And that any revisions that are made to a Tier One, Tier Two or Tier Three is captured and documented on the revision page. So it always makes sure that we always have the most updated and revised tier one on our Internet so someone is not looking at an outdated copy of it.

Another tool that we have in our hazard prevention and control has to do with engineering controls. Engineering controls are a very important part of an effective safety management system. Where hazards are controlled by PPE or administrative controls, that means there's an opportunity to make some changes to equipment and machines to permanently eliminate a hazard, so you don't have to wear PPE or use administrative controls to control that hazard.

And that's really been our focus in Vulcan, to identify those contingents where we can make a permanent change and completely eliminate that hazard.

We've also partnered with NIOSH in 2006 to implement an ergonomic process. And an ergonomic process is a process that's not involving an office ergonomics because obviously there are ergonomic issues

that employees face when they're out there in the plant, doing repair and maintenance jobs, operating equipment, operating the plant equipment. It is a process involved of reporting ergonomic issues, excessive vibrations, excessive force type hazards that can lead to strains and sprains, and coming up with fixes for those type of hazards. And just some of the examples that we've come up with. Obviously Vulcan doesn't have a patent on any of these examples, but it's just some good examples. I'm sure that many other companies have adopted some of these as well.

But if you just take a look at the process of taking samples off a conveyor belt. Anybody that wants to make a quality product has to have a QC program, which means you have to get samples out of the pile or off the conveyor belt. The process of just loading up a five-gallon bucket with stone and off a conveyor belt, you can imagine the hazards associated with the

twisting and bending and lifting that's involved there. And just a simple engineering control of implementing an automatic belt sampler has totally eliminated that hazard. It's also improved our efficiency in production as well, because you don't have to lock down and tag that conveyor to get a sample done.

Remote control switches have eliminated a lot of the hazards that we have been faced with over the years. On a hot summer day in the southeast, you're constantly putting water down on the roads, on piles, And that water truck driver is constantly going back to the fill point and getting off his piece of equipment, going and opening up the water valve, filling the water back up and off he goes. And just a simple and inexpensive process of putting a remote control that keeps him in the truck has totally eliminated that process of getting on and off the equipment which

you know has generated a lot of injuries in the past for us.

Blind spot cameras, a very simple, inexpensive process that has eliminated a huge hazard for us. We in the past have had a lot of incidents of our loaders and haul trucks backing up into customer trucks and small vehicles. And the blind spot camera has basically just eliminated that. So our process is to get those implemented on all our mobile equipment.

Screen access and fall prevention. When we purchased a screen at a plant, it doesn't come with a safe access. It doesn't come with fall protection. And you have to get up on the screens every day to check out the wire. And so through the process of this ergonomic process and engineering controls, we've added safe access as well as fall prevention, so you don't have to wear a harness and look for a proper tie-off point, vantage point.

You can just not even have to worry about fall protection in this case. So those are just some of the examples of some very basic engineering controls that we've perfected.

As far as employee training, just real quickly, the mandated training, as we all have to follow under Part 46. The weekly monthly tailgate meetings, all our divisions use that as a tool. One point I'd like to make is that we've historically used the MSHA safety meeting material, too. And I think it'd be a great opportunity to get those updated as well. And I'd be willing to help out on that process, too, and be looking for some volunteers.

But importantly, SHE operation meetings where divisions get their managers, plant managers and area managers together periodically and discuss safety and health issues. That's a very important process.

Task training booklets. We have task training booklets for a majority of our jobs, especially mobile equipment operators, our haul trucks, loaders and dozers, very comprehensive mobile equipment training.

But we also have a very extensive training library at the Birmingham corporate office where divisions can get online and request any DVD or video on a number of safety and health training topics. And we also have an online folder where all the divisions have stored all their training materials that they've used for many years on training and such things.

Of course, the supervisory training we get involved in goes into the safety and health roles and responsibilities of a supervisor.

Departmental evaluation. We have a very comprehensive audit process. We have three audit types, which is the Company Level, Division

Level and the Facility Level. And that audit process establishes the cycle and the minimum standards. Then you'd be following with responsibilities and the management system elements that we audit in a unit.

Another important part of a management system is doing benchmarks. I think it's important for any company to reach out to other companies and just compare notes, compare best practices and statistics and just see how you compare and see if there's anything you can learn to improve your processes. With this benchmark, we'll also be doing it again in November with Fluor Corporation, 3M and U.S. silica. And this is something that I'm sure we'll continue to do as well.

As far as our safety performance you'll see that the red line is our pledge, our goal. And for August year to date, our goal is 1.6. And this is MSHA reportable, OSHA

reportable injury rate. We're actually at 1.3 at this time. So we're doing a very good job of meeting and exceeding our goal.

As far as MSHA reportable injury rate, our goal was 1.4, and we're currently at 1.0 on our MSHA reportable injury rate. As far as our MSHA citation rate, how we compare to the aggregate industry, here today the aggregate industry is around three citations per inspection, and we're at one and a half citations per inspection, which is actually up from 2008, but down from last year.

That's all I had to present. In summary, I can say that I think it’s obvious that an effective management system will lead to accident reduction and to loss control. I think that one size does not fit all. What works good for Vulcan may not work for another company. So I think it just needs to be kept in mind that one size doesn't fit all. But thank you for the

opportunity.

MR. BURNS:

Thank you. Anybody have any questions for Truman?

MR. DISTASIO:

Just a couple. You said your goal is a ten percent reduction in a year. Do you think it's realistic to be able to continue that goal into the future? Eventually it's going to get harder and harder.

MR. CHIDSEY:

It will, and we look at that every year and evaluate that.

MR. DISTASIO:

And the other question is you said that some people have programs that look good on a shelf, but not in practice. How would you go about making a paper program into your own program?

MR. CHIDSEY:

I think you have to get Involved down at ground level with Vulcan employees. You'll see the

processes and see if they truly have adopted what they say they did. That's the only way you really could know.

MR. BURNS:

Yes. I have a similar question. How does Vulcan evaluate the safety and health programs in companies when they acquire them? What are some of the things that you had to do, depending upon the company that you bought? I'm sure there's a procedure, but your efforts were probably different from one acquisition to the other.

MR. CHIDSEY:

It depends upon the size of the acquisition, but one of the first tasks is obviously gathering all the, you know, safety performance information that you can get through either, you know, intellect, science or whatever records that they may have. In some cases, they don't have much records.

But I mean it's gone

from extreme of shutting down a plant --- you know, one facility, shutting it down for several weeks just to go in there and make engineering controls to get it up to at least MSHA standards. And you know, it takes longer to get it up to some of our standards.

MR. BURNS:

Are you finding that you have to do additional training or anything like that, safety training?

MR. CHIDSEY:

We just go ahead and just treat them ---. We start off at the very beginning and just basically treat them as they have not received any type of training before and just start them off as a new employee. That's been my experience on all the acquisitions I've been involved in.

MR. BURNS:

Anybody from the audience have any questions? Thank you, Truman.

MR. CHIDSEY:

Thank you, Kevin.

MR. BAILEY:

My name is Kelly Bailey, K-E-L-L-Y, B-A-I-L-E-Y. I'm the Corporate Director of Industrial Hygiene and Health Services for Vulcan Materials Company. And what I want to share today is the occupational health side of safety and health. And the program that Vulcan has in place is one that evolved over a 30-year period. And so for someone to start today with what we look like is going to be a rather arduous task, I would think.

But what I want to try to do is take folks through some of the key elements of a successful occupational health management system, if you will. If you're starting one, what do you do? How do you do that? And of course, it's absolutely essential that you have management commitment. You're not going to get anywhere at all without backing by the senior management and from them all the

way down, so ---.

Beyond that, I think Truman has addressed all of those committees and commitments from Boards and the SHE Management Committee who all pertain to occupational health as well.

And so I want to talk a little bit about how you go about starting to look at what you need for a management system in occupational health. And I'm going to talk about specifically the aggregate industry. And two of the major components of that are, of course, exposure monitoring, industrial hygiene monitoring and medical surveillance. There are many other elements in an occupational health program that I'm not going to get into in any kind of depth, such as product warning, the ergonomic issues, smoking cessation and other things that impact health.

But when we look at the key elements of an occupational health

program, like I said, beyond management commitment, the two critical ones are exposure monitoring and medical screening. And then, of course, the controls of what your data shows. If you have overexposure circumstances, you need to install controls and make sure they are effective.

Data analysis is crucial to knowing where you are and knowing your trends. And are you getting better or not getting better? And so a system that allows data to be compiled and examined and understood and interpreted is essential, particularly in a company the size of Vulcan and with all the data that's coming in.

And then health hazard training, which is always a challenge. In safety training, it's a little bit more direct. There's a visible injury.

And in occupational health, most of the things we deal with are chronic hazards. And getting folks to respect those hazards takes another

extra step sometimes in training. And we work with our divisions on providing them the tools to help them with that.

Now, I want to look at management systems. These are four management systems, and they vary in quality, and I'm sure you folks have seen all of them in action. The head in the sand one, well, that's one that I don't want to know what's going on. And it works for a while, but there's another part of the management still exposed. And so eventually that catches up with you.

And then there's the firefighters. And the firefighters are, you know, we're going to deal with it when it's a problem. And that can overwhelm you if you keep on catching on fire actually.

And then the folks that are going to comply with law and do what they're supposed to do, but that's it. Everything else is not going to be done. And you know, in my experience,

especially with an occupational health program, but I think also safety, is that won't get you there. It may cut down on your citations, but you're not going to have a good program in place if your whole goal is compliance with regulations as the end game.

And then, of course, the progressive management style, which I hope that Vulcan certainly meets. We sure strive to. And others also have good performance in their statistics in safety and health.

When we look at the aggregate industry what things can hurt you from a health standpoint, these come to the top of the list. Silica dust, of course. Naturally occurring asbestos, if you're in a particular rock type, that can be present. It's rare. Thank goodness. And occupational noise, which is the most prevalent occupational health hazard in mining. Welding fumes, particularly in confined spaces. Diesel exhaust in the

underground mines and ergonomic issues, which Truman talked about earlier.

So how do you figure out a management system? What do you do to develop a management system that would address these things? And so it really comes down to before we even leave the office is ask yourself some questions like what do we have? Do we have underground mining? Well, then diesel is important. Do we have some metamorphic rock? Then maybe naturally occurring asbestos is occurring.

And who's involved? Who's doing what? Who's engaged with these processes that have these substances? When do these things occur and how often do they occur? Where do they occur? In confined spaces, non-confined spaces? How is that happening? Are you shoveling stuff? Are you spraying stuff? So how does that happen?

And then how much exposure is there? What frequency do

you have of dealing with this? And so some of those questions basically come down to those answers. It's really a qualitative risk assessment, and that's what you do first. Figure out what you got to do as far as the program goes.

So what are my sources of exposure? Well, the various things we listed there. And where are my highest potential exposures? The plant manager, they're there every day. They pretty much know. The employees certainly know.

Where is your highest source of exposure? Where is your highest noise exposure? So getting those questions answered can --- is part of that risk assessment.

How many of your operations have these issues? Which jobs are in the high exposure area and how many people are in the jobs, and how are they being exposed or potentially exposed at this point? What are they doing to increase their

risk? Are they dry sweeping the buildings. Are they not using respirators or hearing protection? There's things that are pretty easy to find out that pertain to this risk.

What controls are in place? Just qualitatively how effective are they? Is it very loud there? Is it dusty there? Are there fumes? Are there no engineering controls for catching welding fumes? Those things can be pretty easily looked at to get a gauge on how effective they may be, and consequently what risk they might propose.

MSHA has data. OSHA has data. OSHA less so, but that's something that certainly needs to be looked at. Was it indicated? You know, most of the health hazards in the aggregate industry deal with chronic health hazards of how long have people been exposed to these things? It's important to have a feel for that and that certainly pertains to risk.

How many people? Where are they? What jobs? Did you have claims for occupational illness? That's important. And another very important point is how old were those people, because beginning claims for a chronic illness that have early age people and is not due to previous exposure, that's a concern.

Who do you hire, and what's their past exposure history? Not to exclude people, but it is a measure of risk and where these folks have had exposure, because this exposure is typically cumulative over a lifetime.

Smoking, of course, is certainly a lung hazard. And it's not only important to know if you smoke or not, but how much you smoke, because it affects the ability to defend your lungs. And silica, welding fumes or anything else that gets breathed down there Smoking is not helping.

So once you've answered

these questions, and perhaps visited the sites, you really ought to know at that point, do I have a real risk for an occupational illness in my group and do I have an idea of where that risk may be located, and how many people should be incorporated in a program? How many people are going to need to be sampled?

And get an idea of the exposure control effectiveness. That information gives you enough direction to design an exposure monitoring program to address these risks. And with that, you can determine what the costs are.

When you go out and do sampling and collect samples in industrial hygiene, your mission is to ---. There are several strategies that we employ at Vulcan. One is a targeted sampling program. It's basically go find where there's problems. Is it an acquisition? We require that they be sampled within

three months of being acquired. The sooner the better, because we want to know what the people were exposed to prior to Vulcan fixing the place if we can, if it's safe to operate. And it's also to answer specific exposure questions, maybe employee complaints, any kind of question you target in sampling.

When we have an overexposure circumstance or a possible overexposure circumstance, then we require that circumstance be tracked and re-sampled once controls are installed to measure effectiveness.

And once you've pretty much solved your overexposure issues or possible overexposure issues, it's very important to look at the entire workforce. And this is primarily for epidemiological purposes. But for Vulcan, when we do medical testing- we talked about this - we test everybody at an operation. And it's important to know the low and medium and the high-

exposed characterization of those exposures, so that you can look at the medical data with that --- with those response relationships.

To do exposure monitoring, you need to have qualified people. The National Stone, Sand & Gravel Association with MSHA has a joint venture, I guess, or agreement to help people learn how to sample for dust and noise primarily. That same kind of training can certainly help with welding fume sampling.

So you've really got to have people that know what they're doing when they collect samples. So Vulcan has its own qualification course that takes a week, and people have got to pass.

And then you must be committed to solving problems. It's not just a question of collecting data and that's it. You need to, as I said, find the problems and solve them.

Now, here's a picture of

one of our competitors' sites. They begin with a sampling, and he wants to shoot for the highest potential. In our experience over time and in a typical aggregate mine, these are the types of jobs that really need to be looked at in your exploratory monitoring program. Helpers, laborers, drillers, QC technicians. Let me know when I'm going to too fast. Plant maintenance, mobile equipment without air-conditioned cabs, plant operators without air-conditioned booths, any confined space work is something that certainly needs to be looked at. Sandblasters, bagging and binsetters.

When you do target sampling, I can say the objective is to find problems, not have good numbers. Or if you want to just kid yourself, don't turn the pump on, and you'll have good numbers. So go out and collect samples.

Once you find those problems, they must be tracked and

fixed. And decide before you start what you're fixing. We have our internal standards in Vulcan that we have to meet, and then we continue on to the engineering control path where it's feasible, to the administrative control where it's allowable, and finally personal protective equipment where --- that's our last resort.

But the local management really is where the rubber meets the road. They have the wrench to fix the problem and the resources too. And you know, the exposure monitoring team is basically to find the sampling of the exposure circumstances.

Within Vulcan for dust, we have an internal limit of below 80 percent of the shift-adjusted limit. We have what we call a case closing form that tracks a circumstance that's over that. And once that's solved, it's described what was done to solve the problem. The re-monitoring of it

involves administrative controls or personal protective equipment. And the employees and their supervisors and the safety and health people all have to sign off on this form that tells them what they're going to be doing. And that has to be approved by the corporate industrial hygiene office.

And with respect to noise, those are the two highest number of samples we collected. Sound-level meters need to be below 85 with high idle equipment. We find that that's a safe level, a real quick measurement unless you have a radio tuned real high to Dolly Parton or something. It's way above 85 even though you have a nice cab.

Noise dosimetry results below 76 percent of the dose, which is the equivalent to 88 decibels on an eight-hour day. And basically the same type of process with respect to case closing.

So how much does this

cost, you know, to do this kind of thing? I mean if you want to go out and get equipment for monitoring five employees, and this is for dust and noise and cyclones and calibrators and so forth, it's about $13,000 to outfit someone with that kind of equipment.

And it takes about three days of training on sampling. That's primarily the NSSGA of the program. At Vulcan it is a whole week.

Laboratory analysis depends on what your volume is, but it's around $65 each for a dust sample. And of course, your sampling days are typically long. And the cost finally of installing controls? It may be costly or it may not be.

Moving on to the medical testing side of this which is very important. We do tests for lung exposures for silica, looking for silica. We're also looking for lung function tests and, of course, hearing tests, which everybody has to do.

The objectives for the medical testing are basically to establish that baseline. All new employees coming in to Vulcan in the productions side have to have x-rays, pulmonary function and hearing tests done, among other tests that are done. But that's the occupational health baseline tests that are done. And there are reasons that they're done at the early stage. And corrective measures can be implemented to give the most benefit.

We also see a lot of non-occupational health problems. Many of the workers that work at our site do not go to doctors. It's not the typical crowd that goes to medical clients unless they absolutely have to. So having this type of monitoring and medical service to the employee is viewed as a benefit for the employees.

And of course, it's the ultimate auditor of whether you control your exposures. And you certainly

don't want to use that as a control plan. And again, data for epidemiological studies.

The type of testing. Chest x-rays, 14 by 17 so they can be read by the International Labour Organization guidelines, a B reading. That's looking particularly for dust inhalants.

Pulmonary function testing is basically how well your lungs work and we can determine ---. It's not very specific with respect to diagnosis, but it certainly helps with looking at the overall health of the individual.

Audiometric testing meeting the OSHA criteria and other tests, blood pressure and so forth we use. So our basic medical screening basically covers the risks that you've identified in your qualitative risk assessment.

Periodic medical screening. We use Industrial Health

Council based out of Birmingham for medical monitoring. The benefits of that to the employees, if you don't get trained about the hazards of dust, noise and so forth, the question is well, have I been affected? And so the medical program certainly answers that question to some degree. It certainly allows early intervention of any potential serious problems. And I'm happy to say that we save people's lives with aneurysms and lung cancer and pneumonia and lots of things that we've seen over the 30 years of doing this.

And for the company, there's a benefit that we know what is the health status of our workforce as it relates to the potential exposures there. That's very critical. Is your workforce health improving? It allows you to see health trends and provides company data for defenses, defenses of the company program.

And the company's

benefits is only realized if you have a high participation rate. And at Vulcan Materials, we're over 95 percent participation. It's a voluntary program, and people view it as a benefit. And it's something that's being done for them as well as for the company.

Keys to the high participation rate for occupational medical testing? Don't charge them anything. No one wants to pay anything. And make it voluntary, but promote it aggressively as a benefit. You don't want to be dragging someone kicking and screaming into an x-ray. You're going to try to get a good test. And the same thing with a hearing test and other things. So it's important that it be promoted as a program, as a benefit, and that's what it is.

The test people have to be courteous and have to know what they're doing and provide that qualified testing. And I would advise

everybody to stay away from needles and urine samples. That's typically not --. You don't get a lot of volunteers when you start off that way. They might not want to help you. So certainly as the program matures, then that might be ---. We've had flu shots given on some of these tests and so forth for anybody who wants them.

Also, do not bring your occupational health program together with a drug screening program. That's a real no-no. Even though the people don't take drugs are ---. We don't have a lot of high participation of drug takers, but it's just something that is not perceived as a benefit there. And some people do, and some people don't.

Make it easy to participate. The language barriers need to be eliminated. And for a company like Vulcan that's all over the country, a multiple testing service is really a high value for us. If it's a

smaller company and you're regionally located, then a clinic that can do the tests is certainly one that would.

But the benefits of a mobile testing van are many in that the test can be done in a consistent manner. The enemy of quality is variability, and so if you can eliminate that variability it's critical. In trying to assess what the company mixture looks like, it's important that everybody does it similarly and have the same standards. So high quality testing at all sites.

All the records are maintained at a single site with your mobile testing clinic. Uniform reporting of results, it's going to the operation, so you can do it on different shifts and do it on different schedules.

And also the ability to expand the program if you want to incorporate a wellness program, it's

already going out to the sites. The employees are familiar with the process. And also, I guess most important these days is cost. You can send someone to the doctor's office, and I'm sure all of us have experienced sitting there for an hour waiting to be called. And you don't have that with this kind of testing service.

Medical costs by tests. I mean that varies, of course, by maybe geography, how far your mobile testing folks are or whether you do it by mobile clinic or not.

But here's some typical costs. $200 to $300 to do a baseline that incorporates the x-ray, the pulmonary function test, the hearing test and so forth. And respiratory screening tests, as I mentioned, they're there. When we do one periodically in mobile testing, it's running $70 to $100 per employee.

If we find an employee that potentially has a dust-related

abnormality, and it's hard to determine that just from the film, then we will send them to a pulmonary specialist to determine the etiology of that abnormality. And fortunately, we don't see that very often any more.

Audiometric testing runs $20 to $30 depending on the provider. And of course, you always have the cost of initial claims that may come from your medical testing.

And if you've never tested the employees and you really don't have a good feel for your exposures, you could have folks that have legitimate claims, and resolving that as the program is in place and working, that should be a decreasing issue.

Results of all these efforts. What do you get from all this? A management system of occupational health has many, many benefits. And some of them are direct costs, some of them are indirect costs,

but certainly high on the list is prevention of occupational-related disease. If you find disease, you can slow it by knowing about it and preventing exposures. The employees become much more aware of the hazards, of health hazards.

You have a timely assessment of exposures, particularly if you have an in-house ability to monitor. You have defense against unwarranted claims and certainly elimination of new claims. Improved employee community relations. In quarries, we're by necessity next to neighborhoods. And if you control your exposures inside your fence, then you certainly improve them outside your fence.

Comprehensive occupational health database established. Remember we're dealing with client hazards, so looking at exposures and health effects over long periods of time, it’s very important in

having that database established.

Citation defense is also an issue. If MSHA has a sample that makes no sense, then at least you have some data there to argue about.

In-house expertise developed and enhanced respect of the company, and I think also credibility with regulators, particularly if you're doing things that you're not required to do by law, but are just the right things to do.

More benefits. Certainly, the impact of new regulations can be determined. Reduction in the number of smokers is always helpful to the bottom line. Early detection of non-occupational diseases which is critical for the employees as a benefit. It allows the expansion of the program and facilitates it in certainly improved use of personal protective equipment. And we find that the data of having a program like that allows us to present

our position in zoning hearings and so forth about opening new quarries.

All this, we look at our occupational health program. Why would you want to do this? And you know, there are some industry challenges that are there, first, with silica, of course, which has been designated as a lung carcinogen by a number of groups. And certainly, you know, people can view that, that it's a carcinogen and that really needs to be --- dust control is the answer to that.

We have a lot of smokers. Our blue collar workers typically smoke at about a 40 percent rate versus the general population of about 23. And you know, getting people to stop smoking and the high degree of smoking is important. Of course, when you give up smoking, then you gain weight, and so you got to work on that, too.

Hearing loss, of course, is important. The whole issue is

certainly an issue that the industry faces that occupational health programs certainly address.

Community relations. In our sites, they're a 24-hour regulator, but typically not too far away.

Internet access to data is very available and getting more so, so having your act together is important. And ergonomics, of course, is important.

Recommendation. These are some of the things that Vulcan does. We have a lot of sample analyses that are done. We use RJ Lee Group just down the road here in Monroeville. And diesel particulates, we use Clayton Labs. Our medical testing provider is the Industrial Health Council, which I might say is a nonprofit medical organization. And if you can say nonprofit and medical in the same sentence that's saying something.

And particulate

sampling equipment, this is the type of equipment we use, the Gilar 5, which we're looking at increasing through a large volume pump, the SKC aluminum cyclones and DryCal's --- that's part of that $13,000 equipment there --- the Quest Edge Dosimeters and our employees love those things. And we use a Radio Shack sound-level meter at every site at Vulcan. The plants conduct their own surveys annually to make sure that they're tracking those circumstances where we may have to have noise controls.

Recommendations with respect to some of the other things that we do in our occupational health program. Smoking cessation. We've been very successful with a 48 percent quit rate with a company called Free and Clear. It's a pharmaceutical and a telephone consulting. It's been in place now for about four years. It's been very successful.

Office ergonomics. This

is basically throughout the company. It's an Internet training program. It's based in England, and they basically e-mail the desktop user or the laptop user and teach them the hazards of poor office ergonomics and how to assess their own environment and actually how to solve their own problems to the extent that they can. So it's been a very successful program at a very reasonable cost.

Material safety data sheet management, we use 3E Company. We have a lot of material safety data sheets that we have to keep track of.

So does this thing work? Well, this is Vulcan's data going back to the '80s. You can see it's been going in the right direction. We have a lot of acquisitions during through the course of this, particularly in '99 and 2000. And we're running about three percent over standard with Vulcan's data.

This is Vulcan's hearing

data. This, in fact, is a very interesting graph. The red line represents the over standard data from Vulcan on personal dosimetry. We're running about two percent this year so far. And the blue line is for anybody who's overexposed. Are they wearing proper personal protective equipment-earplugs, ear protection? And, of course, if you have anything on red, you should have 100 percent on blue. And so far this year it's been a very successful result of this management system.

The green line you can't see too well, but that's the actual hearing impairment, which was about 36 percent back in 1986. We're running about 18 percent right now. Of course, hearing loss is permanent. It doesn't decrease that rapidly. In a blue collar population in the United States, for people who are exposed to less than 85 decibels, they're going to have 15 percent hearing impairment just because

they do motorcycles or now, usually it's NASCAR, loud music, chainsaw or have loud wives or spouses. And all of those things will cause hearing loss. And so you know, 18 is not that far from 15, so we're moving in the right direction here.

This is the MSHA dust standard data. Over time, Vulcan is blue and the yellow is the industry. Back in the early days, you had a lot more rock silica in the industry. But this year we've had --- in 2009, we had one standard, one sample that was over, so it was less than one percent.

The other thing that's good about the industrial hygiene program is being able to determine how you are relative to new standards that may come about. This particular graph shows what the industry and what Vulcan's position is or status is relative to various silica standards that may be considered. And you can see that it's cut in half. The

industry level loses about 11 percent based on 2009 data, and Vulcan is at 3.

Noise exposure data. Same kind of graph of MSHA data. You have the industry. You have Vulcan. And we're doing quite well. We had a little burp there in 2007, but we're back on track.

And this is another interesting. This is really pulmonary function data. One of the issues that arose was we had a very large person fall off a ladder and they hurt themselves. And this large person who was about 350 pounds, was a haul truck driver.

And I started thinking, well, I wonder if there's any relationship between the injury and BMI. BMI is something that you get from weight and height. You also have to get weight and height when you do a pulmonary function test. In looking at the data for injury by BMI group, you can see that there is a rather highly

correlated relationship between the cost of an injury and how big that person is. Once you get past 42 there, there's not that many people that are that big. I mean that's pretty much Jabba the Hutt. But you can see that there is a relationship with respect to BMI.

And when we looked at this with respect to medical claims and pharmaceutical intake, you can see that the relationship is similar. And this is bottom line cost. And this points to a need for a wellness program. And there's going to be large benefits that you can realize from that, from a cost standpoint and a health standpoint. So this data is going to be used to basically expand the wellness program and to incorporate things like obesity. But we're not going to tell them that they can't eat potato chips.

Well, that went very fast and I'll be glad to answer any questions.

MR. BURNS:

Does anybody have any questions for Kelly?

MR. DISTASIO:

I have one. You talked about using your data as a defense against claims and as a defense against citations. And we've had other people say the exact opposite. One of the reasons people don't develop such programs is they're afraid that their own data is going to be used against them particularly by MSHA. Can you speak to that?

MR. BAILEY:

Certainly, I can. You know, that's a program ---. That kind of goes back to the head in the sand. Don't tell me. I don't want to know. And you know, you have to go out and find your problems, but you have to fix them. And if you're not going to fix them, then the data can be used against you.

And if you've got a

program that's going to go out and find those problems and solve those problems ---. Which if you're not going to do that, then why collect samples in the first place. You know. if that's not the end game, then, you know, don't turn the pump on.

And so, you know, it is a --- there is a lag time between finding a problem and fixing a problem, but that shouldn't be the reason that you don't do it.

And I think with respect to the defense of citations is that, you know, you have ---. And fortunately, Vulcan's been doing this for 30 years. And you have, you know, 10,000 limestone quarry truck driver samples that you just don't see. I mean, you can have a serious chat, and usually that comes out to some reasonable resolution.

MR. BURNS:

Does anybody else have any questions? You've heard a lot

about cost. Mario's questions, a lot of them usually ask how much does that cost, but I think you probably overwhelmed him with the numbers. Anybody from the audience have any questions?

I guess I only have one question for you, Kelly. You mentioned that it's a challenge, the employee training is a challenge to make people aware of these illnesses that are going to be 20 years down the road due to exposure. What are some of the things over the years that you've learned is a better way to make that impression on a young person, that this stuff is going to catch up to you?

MR. BAILEY:

Well, there are some tools out there. I think the NIOSH hearing loss simulator is an important thing. I think that, you know, just like one of your earlier presenters, hands-on type of --- how to put in an earplug. They have new devices coming

out that actually measure how well your earplug works, and it's a quantitative measure of the attenuation of an earplug, and it takes just a few minutes to do. And you have the person put their plug in and say come over here and put the earmuffs on them. And you can measure just how much attenuation you're getting. It's very impressive to people.

There's a new device that's available that we're experimenting with. It's called the 3M noise badge. It's very simple. It hooks onto your lapel there or collar, and it flicks green when it's under 85 and flicks red when it's over 85. What you do there is you empower that employee to know when he should be wearing his ear protection.

Testimonials of folks who are willing to do those testimonials about why I should participate in a chest x-ray program. People's lives have been saved, and

they're willing to share that story with folks. And that always hits home with the things that you do.

MR. BURNS:

Okay. Thank you. Any questions from the audience? Yes. In the back. Could you identify yourself, please?

MS. SCOTT:

My name is Carmen Scott. Safety Manager for Suwannee American Cement in Branford, Florida. The question is on the smoking cessation program. Can you expound more on that, because we're having a hard time getting employees involved with that particular program? It's working for you. Can you tell us how you're doing that?

MR. BAILEY:

Are you using Free and Clear?

MS. SCOTT:

We have a wellness clinic in Branford that's assisting us

with the program, but it's not ---. We can't get it off the ground.

MR. BAILEY:

Well, one of the things you must do on that is you must treat the entire family. If you do it just by the employee, it's not going to work, because they go home. Their kids are smoking, their spouse is smoking, and they're not going to stop. So you treat the whole family.

And, you know, it is a --- we have a incentive with respect to a decrease in their insurance. Treating them, I guess, with $25 a month and $50 if they're spouses or children.

The folks at Free and Clear, they are very professional. There is a pharmaceutical component to this, and it may involve patches. It may involve gum. It may involve Chantix, which has been rather successful in people being able to drop that habit.

Every year we have a benefit sign-up plan. We do all kinds of things. You sign up what you can do next year. And we always come up with the smoking cessation program in looking at their insurance cost. And people are ready to do their New Year's resolution of no tobacco.

MS. SCOTT:

Does this apply to the smokeless tobacco as well?

MR. BAILEY:

Yes, it does.

MS. SCOTT:

Okay.

MR. BAILEY:

And it's been very successful, a very high rate for smoking cessation. Typically, if they do the program, it's a 32 percent quit rate. And the quit rate is measured after a year of not smoking.

MS. SCOTT:

Okay.

MR. BAILEY:

So 48 percent is very good. Of course you have the die-hard guys and ---

MS. SCOTT:

Right.

MR. BAILEY:

--- you're never going to get those, so ---.

MS. SCOTT:

Thank you.

MR. BURNS:

Any other questions?

MR. BAILEY:

Thanks a lot for the time.

MR. BURNS:

Thank you very much, gentlemen. At this point, we've got two or three more speakers left. I think we're going to go through lunch and try to finish up. But in order to do that, we're going to give the court reporter another 10-minute break. So right now it's 10 after 12:00, so let's get back here at 20 after 12:00. Thank

you very much.

SHORT BREAK TAKEN

MR. BURNS:

Okay. Our next presenter is Lou Barletta, who is Vice President of Safety for CONSOL Energy. And I appreciate your making a presentation.

MR. BARLETTA:

Thank you, Kevin. Good afternoon to the panel. And again, my name is Lou Barletta, Vice President of Safety at CONSOL Energy. I want to thank MSHA and the panel for the opportunity to present what we do at CONSOL Energy as it relates to our safety culture, safety program and what our future needs are.

Safety, we take very serious. And three years ago, we did an independent survey across the company, and we found out that, number one, we weren't as good as we thought we were. And number two, that our employees had a different impression on

how we approached safety and how we approached compliance. So that started with executive management meetings and putting a bunch of initiatives together, really with what we call our absolute zero safety policy. At CONSOL Energy we have approximately 8,500 employees. 6,500 employees are on the coal side of the business and the balance of 2,000 employees are on the gas side, transportation side and industrial supply side. Our absolute zero safety policy applies to all CONSOL Energy employees.

First of all, safety is our number one value. Safety has no rank. We instill in our people that if they have a safety concern, they must communicate it. Safety is definitely supported by mine management, from J. Brett Harvey, our CEO. And I would say today that if you would interview anyone from our company, I would say that they've seen a change in our

program, that safety is just not another program. Our culture is here to stay.

Our executive management is very instrumentally involved with safety to the point that we have a process that involves our executives, from myself, as Vice President of Safety, to our CFO to our Counsel to our CEO to our employees. Find out how the employee is doing to what we learn about the accidents, where we need to improve. And we share that with management teams. We also talk on a positive note of what employees and myself can do to keep us accident-free.

Employees are empowered. This used to be, and still is under our labor grant with the United Mine Workers, a negotiated provision of the contract. But no longer at CONSOL Energy do you need a contract to be empowered. Our CEO expects all employees --- we give them the right to be empowered. One of the policies we

have is the responsibility for that right, to report when you use the equipment and something's not right or if it doesn't look right. And there's times through human behavior, okay, when people don't basically exercise that right. So responsibility is an area that we work on, continue to work on. And we really need to depend on our people to make the right decisions.

Accidents are an exception to the norm. You don't get Absolute Zero from that type of behavior. I'm going to continue to work on that.

And the bottom line is about providing a workplace that all employees go home safely, and we've heard that time and again. And I believe in our industry it’s focused.

We have many safety management programs. Some are proactive, some are reactive. Some involve employee participation.

About two years ago we

realized that we were overwhelmed with the enforcement of the agency. We had feedback from our employees that safety needed individual attention. And that time, we put on the Absolute Zero mentors. That's a safety professional we have at all locations. And their responsibility is to work with the employees, observe the employees, understand and communicate with employees what the best practices are and participate in accident investigation. That has worked well and continues to work well.

Since then, we've added to the staff as a contractor, industrial trainers. We use NovaCare. And we'll bring in industrial trainers basically to help with ergonomics, to help with wellness, to help with body positioning. You realize that body positioning is a major area of concern in safety not only at CONSOL, but I think within the industry.

These employees work

hand in hand with their mentors underground and out on the surface. And we see that communications with our employees, their own personal ones have made the job easier.

In addition to that, earlier this year we studied a couple companies outside of CONSOL with peer review. Basically all the locations had a peer review or some form of it. And a peer review works with the mentors. It's employees that volunteer to go out to the workforce, independently of mine management, and take the feedback from their observations, and then we discuss that at the steering committees. We discuss that among our management groups, and we learn from them.

Sometimes peer review members believe a lot of the workers are snitches, but we have to work through that, because there is definitely a value in peer review.

In addition to that, at

our represented mines, we have a very active ACE. And they're engaged not only in safety but in compliance. And we appreciate the effort that they provide at those locations. They do Absolute Zero training. We realize the mandated annual refresher does not get us what we need, and it gets us what I feel is the bare minimum. And what we do is we make it more specific to the mine foreman, the superintendent, the safety personnel, HR personnel, to discuss issues or problems at that location. Discuss the best practices. It's more of an interaction. What did you see? What did you say? And we've been doing that now for two years. It's an additional eight hours, and there's times that MSHA has come in. Very frequently they have participated, and we feel that absolute zero takes us beyond the mandatory requirements.

Our SWI program is a Safe Work Instruction program. It's a basis for training. It starts off with

hazard recognition. Prepare to present, follow up and monitor throughout the year and throughout the employee's career. We let our employees participate in the safe work instructions. Our employees teach us what's right and wrong and the co-workers are part of the training process based on experience.

Our ACE management program is basically Accident Cause Elimination. It's no different than a cause analysis. Typically, when an accident occurs where an employee is injured, in most cases, you gather the data. And then basically when the employee comes back is when we get the people involved. And we have a team set up at every location, and we look at the core aspects of the accident starting with how the employee started the day all the way through what went wrong. And then based on that, we get the corrective action plans and recommendations. That involves

employees, supervisors, mine management and laborers involved throughout.

We started just recently our risk analysis, risk elimination. Basically it's broken down into three parts, the routine jobs, non-routine jobs and specialty jobs. We feel that if we can get our employees focused on the day to day in all three of those categories, that they can see ahead, that they may be able to prevent an accident to them or to somebody else.

Stickers are put on people's hard hats, put on equipment. And it's a nine step process. You have a Red Zone, and you identify --- you observe all your surroundings, what can happen. You have the Red Tools. Are you trained? Is there any stored energy? A lot the accidents we see in the industry with stored energy, people do not recognize. And this is where we need consistency in doing that.

Body positioning ensure that that’s communicated when we're

working with workers. It's relatively new, but we know in order to improve and be our best, we need to move ahead, because I think in the industry itself, it's all included.

We have a unique communication system at CONSOL, and it's been in effect for a little over a year. We call it CONSOL TV, and basically it's a network throughout the entire company, from the corporate office to the coal mines to the prep plants to the surface mine that plays 24/7. And we also have gas operations on our boats on the river and available to all people at CONSOL.

And the purpose of that is to get the message out to all 8,500 employees. It's easy to say --- to give safety talks. It's easy to explain an accident. And you can put it on e-mail or send it through the mail. And what's unique about this is everybody's seeing the same thing.

We've taken the Rules to

Live By on the surface and made a video, presented it to the workforce. We used it for compliance training. It might show a situation underground. Do you see what I see? And take a look at what's wrong, and we show that. We show best practices. We actually run all ACE, all our Accident Cause Eliminations, on the network. I do videos. Our CEO does videos and other people. And I offered that with MSHA. This sends a consistent message throughout the entire company if you so choose to do so.

We also have employees that will reenact their accidents and talk about how the accident has affected them. And the impact of that is to see a co-worker, whether a supervisor or non-supervisor who is willing to take the time to make the video. They come back to work and talk about the accident and what they believe went wrong. And we believe that's very powerful.

We've taken some videos of employees that have worked 30, 40 years. What do you do when you find those people with a very good work record? It's hard to describe their success. They try to put it in words. But I offer that for anybody who wants to see our network. We find a lot of value within that system right now.

There's a lot of safety resources we have adopted. We have SWIs, training records. We have letters. We have policies. We have best practices. We are instituting putting computers underground that a supervisor can access training records of employees to make sure the employees are trained on SWIs, that they can use as a tool, because of the volume of Safe Work Instructions out there. We're in the process of doing that.

And one other thing on the safety management program. When we realized that we were overwhelmed the last few years with enforcement we felt

we had to do our safety first. In coal mines, we have nine safety professionals in the coal mines, and that went from five. We realized that we needed to have 24/7 coverage. We're in the process of building that.

And what do we do on shifts when the agency is not around? We do paperwork. Our goal is to start doing audits and try to improve and be proactive in regards to safety and compliance. And we feel that with all of the attention and exposure we have with our coal mines and with the regulations, that was necessary.

Absolute Zero. We have a person, a safety tech, that goes around and makes sure our lifelines are proper. We have five safety inspectors at the location and we realized the importance now of having a full-time respirable dust and noise person on in each coal mine.

If you look at our results from 2007 to 2010, for the

first nine months, we improved approximately 25 percent. That's an incident rate of about 3.00 to an average of 2.22. Total company improvement of 30 percent, and that's about 2.6. Total incident rate around 1.8.

I'd probably say since we've adapted and got more employee involvement that when we look at 8,500 employees, how many days can a company of that size go without reportable accidents? In 2008, we went seven days, consecutive days. In 2009, nine days. And earlier this year, we went 12 days. That may not sound big, but I'm telling you 12 days with 8,500 employees focused and going home safely without reportable injuries says a lot.

As you can see by the numbers, we're not where we want to be. We're not perfect, but we believe that it's our responsibility to achieve a perfect place when it comes to the safety of our employees.

Lastly, I'm here to ask the panel for help. I believe the issue is help. I've tried for the last few years. I'm starting to see it across the district. But I can tell you that there's an untapped resource out there for safety, and that's MSHA. And whether we want to realize it or not that resource brings a lot of experience and a lot of technical ability.

And today, the concentration, whether it's Congress driven or not, when it comes to safety, I think we all can share responsibilities. And that is that MSHA has to be more involved and I challenge MSHA and I challenge this panel that we look and say, hey, what am I doing for safety?

Communication, I believe is important in anything we do, but there are people out there that would say that we're here for compliance, not for safety. I don't think that's the

intent of the law. And what I'm asking you to do is --- you have the expertise, you have the ability. We need help and education for our people. And there's times we feel we're on our own, and it's just not safety-based discussions, but taking compliance and tying it to safety and providing a new explanation to our employees. When it comes to work habits, if MSHA, if it sees something in the coal mine or work habits, be proactive. See something, say something.

Risk assessments, I think as a team if we work with labor, if we work with our workforce, I think MSHA has to be part of the team and not separate themselves when it comes to that. Employee interaction, I believe as an industry we have responsibilities and obligations and the need for improvement. I can tell you what CONSOL Energy does, but I'm asking the agency for some help in this area. This concludes my presentation. And at

this time, I'll take any questions.

MR. BURNS:

Thank you, Lou. Anybody have any questions?

MR. DISTASIO:

Just a few. Is this case analysis for the same thing you've done in the last two years? It sounds like you've gotten a lot of improvement. To get that improvement, you've put in an awful lot of time for training and all that and so forth. So have you seen any improvement in the bottom line, or has it not been developed yet?

MR. BARLETTA:

That's not developed in regards to the bottom line. I have not looked under ---. That's something that as we look at medical and lost time, accident ratio, we can see some improvement on that level, reduction of lost time. But I can't quantify them. I don't have any real answer for you on that.

MR. DISTASIO:

The reason I was bringing it up is that the companies have said that they can't afford it and others have said that. It seems to be very much dependent upon the leadership of the company and which direction they want to go. If someone out there has some data to support it?

MR. BARLETTA:

I will go back and see if I can quantify that ---

MR. DISTASIO:

Thank you.

MR. BARLETTA:

--- and provide a written response to that.

MR. BURNS:

Any questions from the audience? Bruce?

MR. WATZMAN:

Bruce Watzman, National Mining. Lou, I'm curious. A couple terms during the presentation you used compliance and safety performance

together. And you know, do you see a correlation today in the environment we're in today where the compliance activity is improving safety performance at your operations? Or are the two disconnected from one another, I guess is the best way to put it?

MR. BARLETTA:

No. The last few months I've been trying to correlate that, Bruce, because we see that all over the board. And I don't know if it's somewhat of an inconsistency across the different districts, including ourselves, but what I see is I would say there's a correlation there.

We have a big mine that has four exceptions this year. Their violation rate is the highest it's ever been.

I wonder myself, and right now I'm not sure if there is a direct relationship between the two. That's something that we can take a

look at, so we can improve. I think a lot of it comes down to consistency and enforcement and how that all melds.

MR. BURNS:

Any other questions from the audience? Okay. Thank you very much.

MR. BARLETTA:

Thank you.

MR. BURNS:

The next speaker is Fernando Chavez, Safety Manager for CEMEX, South Florida Aggregates. I don’t know if he made it or not. We'll move on to someone who signed up, Joe Bourdage.

MR. BOURDAGE:

I don't have any slides, so I'm just going to talk. My name's Joe Bourdage, B-O-U-R-D-A-G-E, Director of Health and Safety for Carmeuse Lime and Stone. Carmeuse is family owned, fifth generation, just recently celebrated our 150 years. We have 2,000 employees in the U.S. and Canada.

We make lime, limestone and industrial sand products. And our corporate headquarters are here in Pittsburgh.

I just want to talk in general about my thoughts, my own personal thoughts on management systems. I thank you for the opportunity to talk today and commend MSHA for looking at management systems.

There are many to pick from. You mentioned some earlier. ISO 9,000, 14,000, 18,000. I believe they're all good. I think they all follow the general concept of plan, do, check, act and they all share common aspects.

And we've heard many examples of those aspects today; policy, commitment, training, hazard control. I believe the most important aspect is having those responsibilities.

And as a benchmark, I know in Ontario, these duties are actually explicitly written in the

legislation for employers who hire workers. That creates a great framework foundation for a company to establish what their goals and responsibilities are. And it becomes integrated to the industry as a whole.

And I want to talk about the behavior, human behavior. The human aspect, I think, is important in any management system. But I want to state that it should not be the system. It should be part of the system. I believe in the theory of management, system-based safety and not behavior-based safety.

And as I talk about behavior-based elements, I think it's important to make that distinction in that it's not simply semantics. So my cautions from my experience, 15 years as a health and safety professional, is that off the shelf behavior-based safety is based on behavioral psychology. It focuses on stimulus and response. It does not focus on why the

behavior exists. It does not focus on the system that allowed this behavior to exist and continue. It also focuses on the worker. It makes it very easy to blame the worker. And focus on the worker is he must be careful, must pay attention.

Again, we should look at the system as a whole. And I found in my experience that any company that actually does adopt behavior-based safety actually goes above and beyond the principles of behavior-based safety. And I think we actually saw examples of that today. When you begin coaching employees on the risk perception and the chances that they take and asking them why do they take those chances, when you begin engineering out controls, you are not doing behavior-based safety. You are then doing the systems-based safety. So let's call it what it is; systems-based safety management.

At Carmeuse, I will

share an example of aspects that we have taken to encourage worker involvement and improve worker involvement. And we took this program that MSHA developed, and we formalized it. And had workers assess the risks of the jobs they were doing. And the reason we did this is because we recognized that the perception of the risk between that worker and their supervisor and myself or anyone else can be very different. And when we asked an employee if he has ever worked unsafe, and only 60 percent answered that, that's because, in their opinion, they didn't work unsafe. However, it may have been unsafe in my opinion.

So we have taken that assessment and formalized it and the supervisors follow up with the employees when they've done the risk assessments, and they look for opportunities for improvement. And we have found --- I don't have a number for you, but numerous improvements of

the way they do the job.

One of the examples I heard today was the reason an employee does something unsafe is because it's the only way to do it. We found many examples of where the employees felt that was the case. Safe access is a common theme that comes up. However, with the management commitment, they were able to engineer out those hazards and find a safe way to do the job.

So going back to the fact of system management-based safety, I think the challenge will be how you regulate that. Again, going to my benchmark in Ontario, that regulation is performance based. And it's actually stated in the legislation that a company must have a health and safety program, but it does not stipulate what that program must look like. It does state some common elements that must be incorporated.

However, compliance with that element is obviously very

subjective. And my theory with the enforcement model of MSHA does not lend itself to subjective evaluations. However, an effective safety management system must be flexible, must be creative. The level of sophistication would depend on the site, the company. And as said earlier today, one size does not fit all, and thank you for that.

So to that end, I would encourage MSHA with whatever direction they decide to take, that education and training is the key on just what a management system is. Unless a person's been trained formally on one standard, ISO 9,000, 14,000, a management system is a difficult concept to understand.

And I will say that I don't have statistics in front of me, but in my experience sites that are the most proactive and have the most effective safety programs have the most evolved management systems. And that

concludes my comments. Any questions?

MR. BURNS:

Thank you very much, Joe. Does anybody on the panel have any questions? Anybody from the audience have any questions for Joe? Thank you very much. If Fernando Chavez comes back into the room, it's his turn to speak. If not, is there anybody else that wanted to make a presentation that hasn't signed up?

MR. DUCHARME:

Excuse me. Kevin?

MR. BURNS:

Yes.

MR. DUCHARME:

Can we just ask for that legal citation for that Ontario section?

MR. BURNS:

Sure. I don't know if he knows it. Do you have the citation for that Ontario statute?

MR. BOURDAGE:

It's called the

Occupational Health and Safety Act for Ontario.

MR. BURNS:

Thank you.

MR. DUCHARME:

Is there a year for that, Joe?

MR. BOURDAGE:

Off the top of my head I'm going to guess 1977, but I'm not sure.

MR. BURNS:

Okay. Is this specific to quarry, or is this a general ---?

MR. BOURDAGE:

No. Legislation there, the Act in general applies to all industries. And under the Act they have regulations that get more restrictive on certain --- similar to the MSHA regulations.

MR. DUCHARME:

Thank you very much. Well, since nobody else wishes to make a presentation, I do want to say thank

you. The Mine Safety and Health Administration appreciates your active participation in this meeting.

And I want to remind you that all comments must be received by midnight Eastern Standard Time December 17th, 2010. I can assure that we will take your comments and your concerns into consideration in developing the agency's proposed rule of safety and health management programs.

I want to encourage all of you to continue to participate throughout the rulemaking process. The public meeting on health and safety management programs is completed. And thank you very much.

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MEETING CONCLUDED AT 12:55 P.M.

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CERTIFICATE

I hereby certify, as the stenographic reporter, that the foregoing proceedings were taken stenographically by me, and thereafter reduced to typewriting by me or under my direction; and that this transcript is a true and accurate record to the best of my ability.