

# EVALUATING THE EFFECTIVENESS OF MSHA'S MINE SAFETY AND HEALTH PROGRAMS

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## HEARING

BEFORE THE  
COMMITTEE ON  
EDUCATION AND LABOR  
U.S. HOUSE OF REPRESENTATIVES  
ONE HUNDRED TENTH CONGRESS  
FIRST SESSION

HEARING HELD IN WASHINGTON, DC, MAY 16, 2007

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## **EVALUATING THE EFFECTIVENESS OF MSHA'S MINE SAFETY AND HEALTH PROGRAMS**

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**Wednesday, May 16, 2007  
U.S. House of Representatives  
Committee on Education and Labor  
Washington, DC**

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The committee met, pursuant to call, at 10:33 a.m., in Room 2175, Rayburn House Office Building, Hon. George Miller [chairman of the committee] presiding.

Present: Representatives Miller, Kildee, Payne, Woolsey, McCarthy, Kucinich, Wu, Bishop of New York, Sarbanes, Yarmuth, Hare, Clarke, McKeon, Wilson, Kline, Price of Georgia, Kuhl, Davis of Tennessee and Walberg.

Staff Present: Aaron Albright, Press Secretary; Tylease Alli, Hearing Clerk; Jordan Barab, Health/Safety Professional; Jody Calemine, Labor Policy Deputy Director; Lynn Dondis, Policy Advisor for Subcommittee on Workforce Protections; Michael Gaffin, Staff Assistant, Labor; Peter Galvin, Senior Labor Policy Advisor; Jeffrey Hancuff, Staff Assistant, Labor; Brian Kennedy, General Counsel; Thomas Kiley, Communications Director; Rachel Racusen, Deputy Communications Director; Michele Varnhagen, Labor Policy Director; Mark Zuckerman, Staff Director; Robert Borden, Minority General Counsel; Steve Forde, Minority Communications Director; Ed Gilroy, Minority Director of Workforce Policy; Rob Gregg, Minority Legislative Assistant; Richard Hoar, Minority Professional Staff Member; Victor Klatt, Minority Staff Director; Jim Paretti, Minority Workforce Policy Counsel; Molly McLaughlin Salmi, Minority Deputy Director of Workforce Policy; Linda Stevens, Minority Chief Clerk/Assistant to the General Counsel; and Loren Sweatt, Minority Professional Staff Member.

Chairman MILLER. The Committee on Education and Labor will come to order for the purpose of evaluating the effectiveness of MSHA's mine safety and health programs.

At the hearing on March 28, this committee heard some very strong criticisms of the U.S. Department of Labor and its Mine Safety and Health Administration. We heard from those directly impacted by MSHA's work that, despite its sweeping authority, the agency moves at a glacial pace and often simply fails outright to enact meaningful and effective safety standards.

Debbie Hamner spoke of her husband, Junior, who was killed in the Sago mine. She said: "If I knew then what I knew today, I would have begged my husband not to work at Sago \* \* \* Con-

gress mandated explosive-proof seals, and yet MSHA approved the use of omega blocks at Sago \* \* \* MSHA approved the ventilation system at Sago that did not push the air away from the seals. Therefore, when our miners tried to escape \* \* \* they could not.”

Scott Howard a miner told us that, in his 28 years experience in the mines, he hadn’t seen any evidence it was safer, despite the more robust laws passed by Congress. He said: “Outside [of the mine], safety is first. When you go underground, coal is all that matters.”

It is obvious from the hearings that MSHA must regain the trust of the people who rely on the agency every day, miners and their families. It appears that MSHA is not acting quickly enough to implement the Mine Improvement and New Emergency Response Act that Congress passed last year. In today’s hearing, we intend to examine why this is the case.

In many ways, it seems that MSHA has chosen to move at a snail’s pace when it could be acting far more aggressively. For example, MSHA has yet to require mine operators to install emergency rescue shelters in all underground mines. Just an hour ago, I toured one of these shelters right here on the grounds of the U.S. Capitol. The shelter can safely hold 35 miners for up to 96 hours with breathable air, potable water and food.

The shelter I toured was one of a half dozen such shelters which the State of West Virginia has approved as safe for underground coal mines. The National Institute for Occupational Safety and Health has advised us that they consider these shelters safe and have no plans to ask West Virginia to stop the deployment, to alter their requirement.

If these shelters can help the miners of West Virginia, then they can help the miners in Kentucky, Illinois and Alabama or any other mining State. These shelters are just an example of how the States have acted more swiftly than MSHA to improve the mine safety.

Congress established MSHA to protect the safety and health of miners. Congress gave the agency a lot of discretion to do that, and the courts have upheld that discretion time and again. Yet, under the current administration, we see we have plenty of examples where MSHA has not used its authority to aggressively protect miners.

It is clear that MSHA sometimes needs a push from Congress. Last year’s MINER Act was such a push. It did not address all of the lessons we learned and continue to learn from the tragedies at Sago, Aracoma Alma and Darby, but it was a push in the right direction.

In today’s hearing, we want to hear about the progress MSHA is making to implement that act of Congress, whether MSHA is being sufficiently pro-active in improving mine safety even beyond the MINER Act, and what tools MSHA may need to further carry out its mission to properly regulate and enforce the law. I look forward to these hearings and hearing that testimony.

At this time, I would like to recognize Congressman McKeon, the senior Republican on the committee.

[The prepared statement of Mr. Miller follows:]

**Prepared Statement of Hon. George Miller, Chairman, Committee on  
Education and Labor**

Good morning.

At a hearing on March 28, this Committee heard some very strong criticism of the U.S. Department of Labor and its Mine Safety and Health Administration. We heard from those directly impacted by MSHA's work that, despite its sweeping authority, the agency moves at a glacial pace—and often simply fails or outright refuses to enact meaningful and effective safety standards.

Debbie Hamner spoke of her husband Junior, who was killed at the Sago mine: “If I knew then what I know today, I would have begged my husband not to work at Sago. \* \* \* Congress mandated explosion-proof seals, yet MSHA approved the use of omega blocks at Sago \* \* \* MSHA approved a ventilation plan at Sago that did not push the air away from the seals. Therefore when our miners tried to escape \* \* \* they could not.”

Scott Howard, a miner, told us that in his 28-year experience in mines, he hasn't seen any evidence that he is safer despite the more robust laws passed by Congress. He said: “Outside [of the mine], safety is first. When you go underground, coal is all that matters.”

It is obvious from that hearing that MSHA must regain the trust of the people who rely on the agency every day—miners and their families. It appears that MSHA is not acting quickly enough to implement the Mine Improvement and New Emergency Response Act that Congress passed last year. In today's hearing, we intend to examine why this is the case.

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The shelter I toured is one of one a half dozen such shelters which the State of West Virginia has approved as safe for underground coal mines. The National Institute for Occupational Safety

and Health (NIOSH) has advised us they also consider these shelters safe and have no plans to ask West Virginia to stop deployment or alter their requirements.

If these shelters can help miners in West Virginia, then they can help miners in Kentucky, Illinois, Alabama, or any other mining state. These shelters are just one example of how states have acted more swiftly than has MSHA to improve mine safety.

Congress established MSHA to protect the safety and health of miners. Congress gave the agency a lot of discretion to do that, and the courts have upheld that discretion time and again.

Yet under the current Administration, we have seen plenty of examples where MSHA has not used its authority to aggressively protect miners.

It's clear that MSHA sometimes needs a push from Congress. Last year's MINER Act was one such push. It did not address all of the lessons we learned and continue to learn from the tragedies at Sago, Aracoma Alma, and Darby. But it was a push in the right direction.

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I look forward to hearing the testimony.

Thank you.

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Mr. MCKEON. Thank you, Mr. Chairman; and thank you for convening this hearing.

I welcome today's witnesses and, in particular, Chairman Rahall and Congresswoman Capito for testifying and also for joining us shortly for our discussion with the other witnesses we will have before us. I welcome you both back to the committee room where you testified last year, along with your West Virginia colleague, Mr. Mollohan, and five other House Members, to provide feedback on the Federal response to last year's mine tragedies, discussed mine

safety technology and outlined incentive initiatives to improve the safety of U.S. mines.

Notably, that hearing of our Workforce Protection Subcommittee was the only venue in Washington which all members of the West Virginia delegation provided official testimony, testimony that helped to trigger the most dramatic mine safety overhaul in decades.

Congresswoman Capito, in the days following the Sago mine tragedy, you helped provide valuable leadership to move the investigative and legislative processes ahead. In particular, I commend your work with my former committee colleagues, Mr. Norwood and Mr. Boehner, for securing a Department of Labor decision to reverse its policy of denying all requests under the Freedom of Information Act for notes taken by Mine Safety and Health Administration inspectors during the on-site mine inspections until a case has been officially closed.

This policy change provided valuable information to lawmakers, the news media and, most important of all, the families of mine workers. In fact, just a week ago, MSHA issued its final accident investigation report regarding the Sago disaster; and I would note that without the work of Congresswoman Capito none of the notes gathered by MSHA inspectors at that mine would have been available to the public until these past several days.

Mr. Stickler, I also thank you for agreeing to testify this morning. I am particularly eager to hear your testimony and answers to this panel's questions regarding MSHA's recently completed investigation.

In its report, your agency concludes that lightning running through a metal conduit in a sealed area of the mine served as the source of the blast, igniting methane gas which in turn blew out recently constructed omega block seals. I am hopeful we can have an honest and open-minded conversation about what led to these findings. Just as importantly, I am hopeful we can do so in a fair and straightforward manner. Part of improving practices both inside a mine and investigating incidents at a mine is learning from past mistakes, and I hope we will do just that.

Mr. Stickler, I also look forward to hearing from you about your agency's implementation of last year's MINER Act. As I understand it, MSHA has met each of its congressionally mandated deadlines to implement the MINER Act; and, similarly, labor and industry leaders have been working in good faith to bolster mine safety through available and ever-changing technology. Just as my colleagues do, I am hopeful that this law can and will be implemented just as quickly as possible.

Mr. Chairman, in addition to universal bipartisan support in the Senate, the MINER Act enjoyed strong support from the Mine Workers of America, the National Mining Association and a bipartisan group of House Members from key mining States. In the months ahead, just as we have demonstrated last year, I am convinced this committee will continue to track this issue closely and fairly with an eye toward all stakeholders.

With that, I again thank our witnesses and look forward to this morning's discussion.

[The prepared statement of Mr. McKeon follows:]



**Prepared Statement of Hon. Howard P. “Buck” McKeon, Senior Republican  
Member, Education and Labor Committee**

Mr. Chairman, thank you for convening this hearing. I welcome today’s witnesses, and in particular, I’d like to thank Congressman Rahall and Congresswoman Capito for testifying and also for joining us shortly for our discussion with the other witnesses we’ll have before us. I welcome you both back to our Committee room, where you testified last year—along with your West Virginia colleague, Mr. Mollohan—and five other House Members—to provide feedback on the federal response to last year’s mine tragedies, discuss mine safety technology, and outline initiatives to improve the safety of U.S. mines. Notably, that hearing of our Workforce Protections Subcommittee was the only venue in Washington at which all Members of the West Virginia delegation provided official testimony—testimony that helped to trigger the most dramatic mine safety overhaul in decades.

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Chairman MILLER. Thank you.

Our first panel will be made up of Congressman Nick Rahall, who has been a member of the United States House of Representatives, representing West Virginia’s Third Congressional District, since 1977. He is currently the chairman of the House Resources Committee. And Congresswoman Shelley Moore Capito, representing West Virginia’s Second Congressional District since 2001.

Welcome, both of you, to the committee. We look forward to your testimony; and we thank you for your leadership in the aftermath of these accidents and the leadership of your State, I think, in really showing the way to the rest of us and what can be done to improve the margins of safety for workers and for their families.

You will both be invited to sit and participate in the hearing under the unanimous consent agreement. I know you have busy schedules, but as long as you can remain with us, you are more than welcome to stay and to participate.

We will begin, Congressman Rahall, with you.

**STATEMENT OF THE HON. NICK RAHALL, A REPRESENTATIVE  
IN CONGRESS FROM THE STATE OF WEST VIRGINIA**

Mr. RAHALL. Thank you, Mr. Chairman. I certainly appreciate your leadership in having this hearing today as well as that of the ranking member, Mr. McKeon; and I want to thank you for allowing me to testify as well.

I think it should be noted that there are members of victims' families from the Sago mine with us today. We certainly commend Debbie Hamner and Sara Bailey for their courageous leadership. Every time there is a hearing or event here in our Nation's capital, they are here to ensure that the loss of their loved ones was not in vain; and I salute their courage and tenacity.

We are here in large part because of the sacrifices and losses of the coal miners in my district and across West Virginia and across our Nation. We are also here because of an unfortunate lack of oversight for too many years by the Congress, the people's branch, the miners' branch, if you will, of our Federal Government.

The 1969 and 1977 acts provided the Secretary of Labor with vast authorities to protect the health and safety of our miners, including those we will be talking about today. But somewhere along the way, probably as it lumbered along under the control of too many managers who were beholden to the industry, the agency lost sight of its priorities.

This committee, under your leadership, Chairman Miller, is helping to ensure that the Mine Safety and Health Administration remembers who its constituency really is; and I commend you, Mr. Chairman, and members of this committee for doing just that.

In recent weeks, we have seen the release of three weighty reports that resulted from MSHA's investigations into the disasters at Sago, Alma and Darby of last year. Each of these reports contains insight into how enforcement of the law proved inadequate and how an MSHA truly devoted to seeking better safety technology could have saved lives.

Mr. Chairman, I am proud to be able to say that my home State of West Virginia has been a real leader in pushing for advances in the coal fields. The State of West Virginia is taking steps that will save lives and prevent harm to the health of those men and women who toil in an inherently dangerous industry that is critically important to America's economic prosperity and our national security. It has moved ahead rapidly to improve more modern communications equipment in emergency shelters.

MSHA could benefit from an injection of the sense of urgency that has taken hold in my State. Unfortunately, MSHA has not committed itself to any timeline that would mandate the use of refuge chambers which we did visit this morning together; and it refuses to reconsider its rules even temporarily governing the use of belt air ventilation, which is the subject of legislation that I have introduced, H.R. 576, that is pending before this committee.

When it comes to introducing new technologies, coal miners will undoubtedly benefit from a deliberative, well-researched process. But it would be shameful if that process were used as an excuse for further delay and inaction.

I said well before its passage that the MINER Act was a good, solid start; and I commend this committee and I commend the administration for signing the bill into law. It set deadlines and improvements in emergency breathing and communications, lifelines, seals and rescue teams. But, as I said then and will say again today, it is only the beginning.

With the new funding that the Congress has provided to NIOSH to expedite improvements in safety technology—and I emphasize this point, Mr. Chairman—Federal research can produce emergency breathing and communications equipment and refuge chambers that go beyond anything that is being required in West Virginia today. But the new technologies approved in my State are an advanced generation that we all hope will spawn even greater advances in the years ahead.

We should all view mine safety as an ever-changing, always improving progression. So while my State is pressing operators to invest millions to deploy specified technologies, it is also asking for assurances from MSHA that those investments are not being made in vain.

We are anxious for MSHA to eventually catch up. We are as well hoping for cooperation so that when MSHA does catch up with its own regulations and technology approvals, good actors such as we have in West Virginia will not be penalized for acting sooner rather than later.

Mr. Chairman, our responsibility today is oversight. The Congress must continue to demand an MSHA that does its job and does it aggressively; and when the cameras are turned off and the media attention goes elsewhere, the Congress must continue to demand that MSHA do its job. Neither MSHA nor the State of West Virginia nor those of us in the Congress concerned with miners' health and safety can ever rest, consider the job done.

Because the job will never be done. One-third of coal mines still do not have at least two SCSRs, self-rescuers, for every miner underground; truly wireless communications and tracking is still not available; emergency response plans are still not fully approved by MSHA; evacuation drills and training remain inadequate; pre-shift examinations are too often incomplete; and there are still too few mine rescue teams.

What is MSHA doing to correct these inefficiencies and when will coal miners begin to see the difference underground? These are the questions that merit answers, and I am sure the committee will explore today.

I thank you again, Mr. Chairman, for affording me this courtesy to appear before you. I commend you and members of this committee for your dedication to coal miners' health and safety, and I look forward to finding the answers to questions and continuing to work together for the benefit of our miners and their families.

Chairman MILLER. Thank you.

[The statement of Mr. Rahall follows:]

**Prepared Statement of Hon. Nick J. Rahall II, a Representative in Congress  
From the State of West Virginia**

I thank you, Mr. Chairman, for your courtesy in allowing me to testify before the Committee today.

We are here—in large part—because of the sacrifices and losses of the coal miners in my district and across West Virginia.

We are also here because of an unfortunate lack of oversight for too many years by the Congress—the people’s branch, the miners’ branch—of our federal government.

The 1969 and 1977 Acts provided the Secretary of Labor with vast authorities to protect the health and safety of our miners—including those we will be talking about today.

But somewhere along the way, probably as it lumbered along under the control of too many managers who were beholden to the industry, the agency lost sight of its priorities.

This Committee is helping to ensure that the Mine Safety and Health Administration remembers who its constituency really is, and I commend you, Mr. Chairman, and the Members of this Committee for that.

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Each of these reports contains insight into how enforcement of the law proved inadequate and how an MSHA truly devoted to seeking better safety technology could have saved lives.

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MSHA could benefit from an injection of the sense of urgency that has taken hold in my state. Unfortunately, MSHA has not committed itself to any timeline that would mandate the use of refuge chambers.

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Mr. Chairman, our responsibility today is oversight. The Congress must continue to demand that MSHA do its job, and that it do it aggressively.

And when the cameras are turned off and the media attention goes elsewhere, the Congress must continue to demand that MSHA do its job.

One-third of coal mines still do not have at least two SCSRs for every miner underground.

Truly wireless communications and tracking is still not available.

Emergency response plans are still not fully approved by MSHA.

Evacuation drills and training remain inadequate.

Pre-shift examinations are too often incomplete.

There are still too few mine rescue teams.

What is MSHA doing to correct these deficiencies, and when will coal miners begin to see the differences underground?

These are the questions that merit answers. I thank you again, Mr. Chairman, for affording me this courtesy and I look forward to finding the answers to these questions and continuing to work together for the benefit of miners and their families.

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Chairman MILLER. Congresswoman Capito?

**STATEMENT OF THE HON. SHELLEY MOORE CAPITO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WEST VIRGINIA**

Mrs. CAPITO. Thank you, Chairman Miller, Ranking Member McKeon and members of the committee, for the opportunity to testify at the hearing on the effectiveness of MSHA's mine safety and health programs.

It has been 17 months since the devastating month of January, 2006, that saw 16 miners die in West Virginia, including 12 at the Sago mine in my district. During this time, we have worked together, the congressional delegation, the committee and members from both sides of the aisle, to pass critical mine safety legislation and provide needed oversight to MSHA and NIOSH as they carry out their important responsibilities.

It became clear immediately after Sago and Aracoma that many aspects of mine safety and emergency response were overlooked. The MINER Act addressed the obvious shortcomings in our response to accidents. I am pleased that MSHA has implemented emergency oxygen requirements pursuant to that Act that will ensure a 96-hour supply of emergency oxygen or its equivalent for all miners. Regulations for mine rescue teams should be completed this year.

It is important that we monitor the work of MSHA, NIOSH and the required interagency working group on communications technology. Nearly a year has passed since the MINER Act's passage, and we must continue to make progress and ensure that the deadline for implementing two-way communications devices is met, if not sooner, preferably sooner.

I am very pleased, as Congressman Rahall said, that our State of West Virginia has been a national leader in terms of beginning the process of getting rescue shelters to our miners. In March of this year, the State approved five types of shelters for use in the State's underground mines and gave mine operators until April 15 to submit shelter plans to the Office of Miners' Health, Safety and Training.

Progress has been slower on the national level in terms of evaluating and approving these shelters. I understand the concern of some regarding blast standards for a secondary blast explosion and with respect to the chambers, but I also share MSHA's belief expressed at hearings earlier this year—or last year—that evacuation must be the first option for miners in an emergency situation.

Nonetheless, NIOSH and MSHA must speed up their process and ensure that miners across the country will have access to these life-saving chambers as soon as possible. Again, it has been 17 months

since Sago demonstrated that evacuation is not always possible. West Virginia has taken steps towards ensuring our miners will have access to these shelters; and the rest of the Nation should, too.

Many of us pledged as we worked to pass the MINER Act we would return to address further regulations and legislation necessary to prevent future accidents following the completion of reports of Sago and Aracoma. This hearing is a step towards fulfilling that commitment, and thank you for this.

There is much we can learn from the accident reports. Several things I think we need to act on and swiftly address.

First, the seals used in the Sago mine were not constructed properly. When the omega block seals would not have withstood the force of the Sago explosion that MSHA estimated at 93 psi even if they were properly constructed, proper installations could be the difference between life and death in a future accident. It is important that mine operators, contractors and MSHA focus on the proper installation of these seals.

The MINER Act requires MSHA to update its regulations on sealing abandoned areas by the end of this year. I am pleased MSHA has acted to increase the 20 psi alternative for seals, but I hope the final emergency temporary standard will go further in addressing some of the issues we saw at Sago.

MSHA's Sago report found that energy from a lightning strike travelled along an ungrounded pump cable left in a sealed-off area. Current regulations would not require that pump cable to be removed; and, indeed, it is commonplace for items to be left behind the seals when an area is abandoned. Clearly, this issue must be re-evaluated by MSHA and, if necessary, by this committee to ensure that items that could turn into conductors are not allowed to remain in a sealed area.

The explosive range for methane is between 5 and 15 percent of the air. In a sealed area, methane will start below the explosive range, pass through the range and eventually become too highly concentrated to explode. This makes it crucial that companies and inspectors monitor methane levels in their abandoned areas, yet no regulation requires the monitoring of air in the sealed area. It is almost unbelievable that 1992 MSHA regulations required a sampling tube that would allow for the testing of air in the sealed-off areas but failed to actually require that testing be carried out.

We know today that MSHA's 1992 regulation on seals were wrong. This underscores the importance that MSHA get it right when it comes to the forthcoming regulation on seal strength and addressing the removal of items in sealed areas.

The Aracoma tragedy points out the need for an increase of inspectors; and we have worked on that and funded that—an increase we have already begun—in order to catch obvious violations.

I am anxiously awaiting the results of MSHA's internal investigation of its own actions in the lead-up to these accidents but in particular the one in Aracoma. MSHA inspectors had been at the mine just weeks before the accident and failed to note critical safety violations and see that they were addressed. We need to know why and take the necessary steps, whether it is updated training for inspectors or another solution, to ensure that all hazards, and

particularly those with the potential to cause a loss of life, are identified.

The MINER Act was a positive step in getting serious about the safety of our Nation's coal mines, as we said, when it passed, but it is not a stopping point. Congress must ensure that MSHA properly and expediently fulfills its obligations under the law and continues oversight to ensure that requirements are not diluted over time. It is important to note that most of the provisions of the MINER Act did not grant MSHA new authority. It instead required the agency to use its existing authority to address critical facets of mine safety and rescue and response. We should stand ready to legislate again to address issues that could prevent accidents and lead to safer coal mines if the agency needs additional authority or fails to act with necessary regulations.

On behalf of the many miners in West Virginia who I represent, I want to thank you. I want to thank this committee for your dedication to ensuring safer mines, and I look forward to working with you as we continue our efforts. I look forward to answering any questions you might have and joining you to ask questions to the MSHA and thank you for the opportunity.

[The statement of Mrs. Capito follows:]

**Prepared Statement of Hon. Shelley Moore Capito, a Representative in  
Congress From the State of West Virginia**

Chairman Miller, Ranking Member McKeon, and Members of the Committee, thank you for the opportunity to testify at this hearing on the effectiveness of MSHA's mine safety and health programs. It has been 17 months since the devastating month of January 2006 that saw 16 miners die in West Virginia—including 12 at the Sago mine in my district.

During this time we have worked together—West Virginia's congressional delegation, this committee, and other members from both sides of the aisle to pass critical mine safety legislation and provide needed oversight to MSHA and NIOSH as they carry out their important responsibilities. It became clear immediately after Sago and Aracoma that many aspects of mine safety and emergency response were overlooked.

The MINER Act addressed the obvious shortcomings in our response to accidents. I am pleased that MSHA has implemented emergency oxygen requirements pursuant to the act that will ensure a 96 hour supply of emergency oxygen or its equivalent for all miners. Regulations for mine rescue teams should be completed this year. It is important that we monitor the work of MSHA, NIOSH and the required interagency working group on communications technology. Nearly a year has passed since the MINER Act's passage and we must continue making progress and ensure that the deadline for implementing two-way communication devices in mines is met.

I am very pleased that my state of West Virginia has been a national leader in terms of beginning the process of getting rescue shelters to miners. In March of this year, the state approved 5 types of shelters for use in the states underground mines and gave mine operators until April 15 to submit shelter plans to the Office of Miners' Health, Safety, and Training. One of these approved shelters, the inflatable LifeShelter was demonstrated outside prior to today's hearing.

Progress has been slower on the national level in terms of evaluating and approving these shelters. I understand the concerns of some regarding blast standards for a secondary explosion with respect to the refuge chambers. I also share MSHA's belief—expressed at hearings last year during consideration of the MINER Act that evacuation must be the first option for miners in an emergency situation.

Nonetheless, NIOSH and MSHA must speed up their process and ensure that miners across the country will have access to these life saving chambers as soon as possible. Again, it has been 17 months since Sago demonstrated the evacuation is not always possible. West Virginia has taken steps towards ensuring that our miners will have access to shelters, and the rest of the nation should too.

Many of us pledged as we worked to pass the MINER ACT that we would return to address further regulations or legislation necessary to prevent future accidents following the completion of reports from the Sago and Aracoma accidents. This hear-

ing is a step towards fulfilling that commitment, and there is much we can learn from the accident reports.

Both MSHA and the West Virginia Office of Mine Safety and Training found that none of the safety violations at the Sago mine directly contributed to the explosion or its deadly result. However, clearly issues raised that MSHA and the mining community should learn from and act swiftly to address. First, the seals used in the Sago mine were not constructed properly. While the OMEGA block seals would not have withstood the force of the Sago explosion that MSHA estimates was greater than 93 psi, even if they were properly constructed, proper installation of seals could be the difference between life and death in a future accident. It is important that mine operators, contractors, and MSHA inspectors focus on the proper installation of seals.

The MINER Act requires MSHA to update its regulations on the sealing of abandoned areas by the end of this year. I am pleased that MSHA has acted to increase the 20 psi requirement for alternative seals, but I hope that the final Emergency Temporary Standard will go further in addressing some of the issues we discovered at Sago.

MSHA's Sago report found that energy from a lightning strike traveled along an ungrounded pump cable left in the sealed off area. Current regulations would not require that pump cable to be removed, and indeed it is commonplace for items to be left behind the seals when an area is abandoned to mining.

Clearly this issue must be reevaluated by MSHA and if necessary, by this committee to ensure that items that could turn into conductors are not allowed to remain in sealed areas.

The explosive range for methane is between 5 and 15 percent of the air. In a sealed area methane will start below the explosive range, pass through the range, and eventually become too highly concentrated for an explosion due to a lack of oxygen.

This makes it crucial that companies and inspectors monitor methane levels in abandoned areas so that they know if the concentration is becoming inert or if the mixture is within a danger zone. Yet no regulation requires the monitoring of air in the sealed area. It is almost unbelievable that 1992 MSHA regulations required a sampling tube that would allow for the testing of the air in sealed off areas, but failed to actually require that testing be carried out.

We know today that MSHA's 1992 regulations on seals were wrong. This underscores the importance that MSHA get it right when it comes to the forthcoming regulation on seal strength and address the removal of items left in the abandoned areas.

The Aracoma tragedy points out the need for an increase in inspectors at MSHA—an increase we have already begun—in order to catch obvious violations. At Aracoma, critical stoppings between the No. 7 Belt Air course and the intake air course for the 2 Section that could have prevented smoke from entering the escapeway were not in place, the mine's approved ventilation plan was not followed, and tragically the valve that provided water to the mine's fire suppression system was closed.

I am anxiously awaiting the results of MSHA's internal review of its own actions in the lead up to these accidents, but in particular at Aracoma.

MSHA inspectors had been in the mine just weeks before the accident and failed to note critical safety violations and see that they were corrected.

We need to know why, and take the necessary steps—whether it is updated training for inspectors or another solution to ensure that all hazards, and particularly those with the potential to cause loss of life are identified.

The MINER Act was a positive start in getting serious about the safety of our nation's coal mines. As we said when it passed, however, it is not a stopping point. Congress must ensure that MSHA properly and expediently fulfills its obligations under the law and continues oversight to ensure that requirements are not diluted over time. It is important to note that most provisions of the MINER Act did not grant MSHA new authority—it instead required the agency to use its existing authority to address critical facets of mine rescue and response. We should stand ready to legislate again to address issues that could prevent accidents and lead to safer coal mines if the agency needs additional authority or fails to act with necessary regulations.

On behalf of the many miners in West Virginia whom I represent, I want to thank this committee for your dedication to ensuring safer mines and I look forward to working with you as we continue our efforts to protect miners. I look forward to answering your questions and joining you to ask questions of MSHA witnesses.



Chairman MILLER. Thank you both very much for your testimony; and, again, if you have questions, we would invite you to participate and sit as part of the committee.

We will then begin with our second panel. The first member of the panel is Dan Bertoni, who is the Director of the Education, Workforce and Income Security Team at the Government Accountability Office.

Next will be Richard Stickler, who is the Assistant Secretary of Mine Safety and Health at the Department of Labor. Assistant Secretary Stickler was Director of the Pennsylvania Bureau of Deep Mine Safety from 1997 to 2003. He received his bachelor of science degree in general engineering from Fairmont State University in 1968 and certified as a mine safety professional by the International Society of Mine Safety Professionals.

Next, Jonathan Snare, who is the Acting Solicitor of Labor. Solicitor Snare served as Acting Assistant Secretary of the Occupational Safety and Health Administration. He received his BA from the University of Virginia and law degree from Washington Lee University.

Professor R. Larry Grayson has chaired the Mine Safety and Health Technology and Training Commission established by the mining industry in 2006 after the serious accidents of that year. Dr. Grayson is Chairman of the Department of Mining and Nuclear Engineering at the University of Missouri-Rolla and was previously in charge of mine safety work at the National Institute of Occupational Safety and Health and received his Ph.D. in engineering of mines at West Virginia University.

J. Davitt McAteer has served in the Clinton administration both as Assistant Secretary of Mine Safety and Health and as Acting Solicitor. He was appointed by the Governor of West Virginia to chair the panel that investigated the causes of the Sago and Aracoma Alma accidents, and Mr. McAteer is vice president for sponsored programs at the Wheeling-Jesuit University in West Virginia. He graduated from West Virginia University and College of Law.

Welcome to the committee. We look forward to your testimony. When you begin to testify, a green light will go on; and then, when you have a minute remaining, which will be about 4 minutes into your testimony, a yellow light will go on and then a red light. But we will certainly allow you to finish your thoughts and the purposes of your remark.

Congressman Rahall mentioned that we were joined by some family members here of the accidents. He mentioned Debbie Hamner and Sara Bailey who are here, but they have also been joined by Peggy Cohen, who is the daughter of Fred Ware who was killed in the accidents. We welcome them and again thank them for their commitment on this issue.

Mr. Bertoni, we are going to begin with you.

**STATEMENT OF DAN BERTONI, DIRECTOR, EDUCATION, WORKFORCE AND INCOME SECURITY TEAM, GOVERNMENT ACCOUNTABILITY OFFICE**

Mr. BERTONI. Thank you, Mr. Chairman, members of the committee. Good morning. I am pleased to be here to discuss worker safety issues in underground coal mining.

The tragic accidents that occurred early last year brought the Nation's attention to the daily perils facing mine workers. In response, the Congress and the Department of Labor's Mine Safety and Health Administration, or MSHA, took steps to prevent future fatalities. The Mine Improvement and New Emergency Response Act of 2006 required mine operators and MSHA to undertake a variety of reforms to enhance emergency response. MSHA also implemented several new safety and health standards. However, additional actions are needed to further enhance mine safety.

My testimony today is based on two GAO reports issued today and will focus on three key areas: challenges the underground coal mines face in preparing for mine emergencies; MSHA's role in miner training and other activities critical to mine safety and health; and how civil penalties are assessed when mine operators violate safety and health standards.

In summary, underground coal mine operators reported challenges meeting new training and mine rescue team requirements. In March, 2006, MSHA directed mine operators to conduct emergency evacuation drills every 90 days, including drills that simulate actual emergency conditions such as fire or explosions. However, as of February, 2007, we found that half the mines had not yet conducted any simulation drills, primarily due to lack of special training facilities and the cost of such training.

We also found that although MSHA had information on alternative tools and resources for conducting training under simulated conditions, such as smoke-filled mines, it was not being systematically shared with all mine operators.

Mine operators also anticipate some difficulties stemming from the MINER Act requirement that rescue teams train at least annually at the mines they serve. This change could pose a challenge for rescue teams that serve many or all of the particular State's mines. For example, depending on how the final regulations are implemented, one official told us its team could be required to conduct 120 annual training exercises compared, to the 12 it currently conducts.

In anticipation of the new requirements, some operators have begun making changes to their rescue teams, while others are still assessing the potential costs of training and equipping such teams.

Regarding MSHA, we identified opportunities for the agency to improve its oversight of miner training and to take additional steps to ensure that it maintains a skilled cadre of mine inspectors. MSHA approves mine operators' training plans and inspects their training records but does not have consistent standards for certifying instructors, current information on instructor location or skills or any continuing education requirements for approved instructors to ensure that they update their knowledge of emerging safety and technology issues. MSHA also does not adequately evaluate training sessions or assess how well miners are learning the skills being taught.

To better position itself to address future workforce needs, MSHA has taken steps to improve the mine inspector hiring process, including developing an upfront screening tool to assess the applicant's skills and expedite hiring. The agency also obtained au-

thority to hire inspectors under a broader range of pay scales, thus enhancing its ability to obtain and retain quality staff.

However, MSHA has not yet developed a comprehensive strategy to address impending retirements to ensure that it continues to meet its mission goal of enhancing mine safety. Over 40 percent of MSHA's inspectors will be eligible for retirement over the next 5 years, and between 32 and 47 percent will likely leave in their first year of eligibility. We have recommended that MSHA develop tactical and strategic plans with specific goals for mitigating the loss of seasoned and experienced inspectors.

Finally, in regard to penalties, we found that, while most proposed penalties are paid by mine operators, a small percentage of cases involving more serious and higher dollar amounts are appealed and often substantially reduced. Between 1996 and 2006, MSHA assessed about 500,000 penalties. About 32,000 penalties were contested. Nearly half of those were ultimately reduced by about 50 percent, regardless of the level of gravity and negligence originally noted by MSHA inspectors.

While MSHA uses a standard formula to calculate penalties, other entities involved in the appeals process use methods that are more subjective. Thus, in some appealed cases we reviewed, it was not always transparent as to how final penalty amounts were derived by ALJs.

MSHA most recently restructured its penalty process in a way that will most likely lead to higher penalties and, ultimately, more appeals. Thus, going forward, it is important that final penalty amount decisions are transparent and contain all necessary information. If not, it will be difficult to ensure that all entities are consistently applying relevant factors and that the impact of penalties and ensuring miner safety is not diminished.

Mr. Chairman, this concludes my statement. I am happy to answer any questions that you or other members of the committee may have. Thank you.

Chairman MILLER. Thank you.

[The statement of Mr. Bertoni follows:]

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United States Government Accountability Office

**GAO**

Testimony  
Before the Committee on Education and  
Labor, House of Representatives

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For Release on Delivery  
Expected at 10:30 a.m. EDT  
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**MINE SAFETY**

**MSHA's and Other Federal  
Agencies' Improved  
Oversight Could Enhance  
Safety for Coal Miners**

Statement of Daniel Bertoni, Director  
Education, Workforce, and Income Security



May 16, 2007

## MINE SAFETY

## MSHA's and Other Federal Agencies' Improved Oversight Could Enhance Safety for Coal Miners



Highlights of GAO-07-865T, a testimony before the Committee on Education and Labor, House of Representatives

### Why GAO Did This Study

The Mine Safety and Health Administration (MSHA), the National Institute for Occupational Safety and Health (NIOSH), the Federal Mine Safety and Health Review Commission, the Department of Labor's Office of the Solicitor, the states, and the mining industry share responsibility for ensuring mine safety.

In two reports released today, GAO examined the challenges underground coal mines face in preparing for emergencies, how well MSHA oversees mine operators' training efforts, how well MSHA and NIOSH coordinate to enhance the development and approval of mine safety technology, MSHA's coal mine inspector recruiting efforts, and how civil penalties are assessed.

### What GAO Recommends

GAO is making recommendations in the reports accompanying this testimony to strengthen the efforts of MSHA, Labor, NIOSH, and the Commission by improving mine operators' access to information and tools for training their workers, strengthening MSHA's oversight of training, improving the effectiveness of information sharing between MSHA and NIOSH, strengthening MSHA's human capital strategic planning efforts, and ensuring that there is transparency in penalty appeal determinations. Each agency generally agreed with the recommendations in the reports.

[www.gao.gov/cgi-bin/gettrt?GAO-07-865T](http://www.gao.gov/cgi-bin/gettrt?GAO-07-865T)

To view the full product, including the scope and methodology, click on the link above. For more information, contact Daniel Bertoni at (202) 512-7216 or [bertonid@gao.gov](mailto:bertonid@gao.gov).

### What GAO Found

Underground coal mine operators reported facing significant challenges in preparing for emergencies, including ensuring that miners receive realistic training and organizing mine rescue teams that satisfy new requirements. While mine operators recognize the importance of providing training in an environment that simulates an emergency, many of them reported challenges such as limited access to special training facilities and the cost of providing such training. In addition, mine operators reported that they anticipate challenges in implementing new mine rescue team requirements, such as conducting training annually at each mine the rescue team services.

MSHA approves mine operators' training plans and inspects their training records, but its oversight of miner training is hampered by several factors. For example, MSHA does not have current information on its instructors and does not ensure that they keep their knowledge and skills up to date. In addition, MSHA does not adequately monitor instructors or evaluate training sessions, and does not assess how well miners are learning the skills being taught.

MSHA and NIOSH have a common mission to improve the safety and health of coal miners, but they do not have a current memorandum of understanding to guide their coordination efforts. As a result, most of the coordination that occurs is initiated by individual staff members or by outside parties. Such informal coordination may not be sufficient given the pending retirements of many MSHA and NIOSH engineers and scientists and other challenges both agencies face.

In 2004, MSHA began a new process for hiring mine inspectors, which has led to a number of improvements, such as being able to identify applicants who possess the basic skills needed to be successful inspectors and decreasing the time it takes to hire new inspectors. However, MSHA's human capital plan does not include a strategic approach for addressing the large number of retirements expected in the next 5 years.

While most of the penalties proposed by MSHA are paid by mine operators without opposition, a small percentage of the cases involving more serious and higher dollar penalties are appealed, and those appealed are often reduced significantly. MSHA uses a standard formula to propose penalties, but the other entities involved in the appeals process use considerable discretion in deciding on the final penalty amount. Approximately 6 percent of the 506,707 penalties proposed by MSHA between 1996 and 2006 were appealed by mine operators. About half of the penalties for the appealed violations were reduced by an average of 49 percent, regardless of the level of gravity of the violation initially cited by MSHA or the degree of the mine operator's negligence initially cited.

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Mr. Chairman and Members of the Committee:

Thank you for inviting me here today to discuss worker safety in underground coal mines. As you are aware, the tragic accidents that occurred early last year brought the nation's attention to the perils workers face in underground coal mining. In response, the Congress and the Department of Labor's (Labor) Mine Safety and Health Administration (MSHA) took steps to try to prevent future fatalities. The Mine Improvement and New Emergency Response Act of 2006 (MINER Act) required mine operators and MSHA to undertake a variety of reforms, including enhancing mine rescue teams, developing up-to-date accident response plans, and instituting tougher penalties—including a criminal penalty—for mine operators who violate health and safety standards.<sup>1</sup> In addition, MSHA implemented new standards aimed at instituting immediate safety and health improvements, including requiring operators to provide safety training on evacuation routes and opportunities for miners to learn how to react in certain kinds of simulated emergency situations.<sup>2</sup> Other federal agencies share responsibilities for improving mine safety. These agencies include the Office of Mine Safety and Health of the Department of Health and Human Services' National Institute for Occupational Safety and Health (NIOSH), the Department of Labor's Office of the Solicitor, and the Federal Mine Safety and Health Review Commission.

In response to concerns about the safety of underground coal mines, my testimony today will focus on five key issues:

1. the challenges underground coal mines face in preparing for mine emergencies,
2. how well MSHA oversees mine operators' training efforts,
3. how well MSHA and NIOSH coordinate their efforts to enhance the development and approval of mine safety technology,
4. how MSHA has revised its recruiting and hiring of underground coal mine inspectors, and

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<sup>1</sup>Pub. L. 109-236.

<sup>2</sup>30 C.F.R. Parts 48, 50, and 75, Emergency Mine Evacuation; Final Rule, 71 Fed. Reg. 12,252 (March 9, 2006); 30 C.F.R. Parts 3, 48, 50, and 75, Emergency Mine Evacuation; Final Rule, 71 Fed. Reg. 71,430 (December 8, 2006).

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5. how civil penalties are assessed when underground coal mine operators violate safety and health standards.

My comments are based on the findings of two reports to be released today.<sup>3</sup> We conducted all of our work in accordance with generally accepted government auditing standards.

In summary,

- Underground coal mine operators reported facing significant challenges in preparing for emergencies, including ensuring that miners receive realistic training and organizing mine rescue teams that satisfy new requirements. While mine operators recognize the importance of providing training in an environment that simulates an emergency, many of them reported challenges such as having limited access to special training facilities and the cost of providing such training. In addition, mine operators reported that they anticipate challenges in implementing new mine rescue team requirements, such as conducting training at least annually at each mine the rescue team services.
- MSHA approves mine operators' training plans and inspects their training records, but its oversight of miner training is hampered by several factors. For example, MSHA does not have current information on its instructors and does not ensure that they keep their knowledge and skills up to date. In addition, MSHA does not adequately monitor instructors or evaluate training sessions, and it does not assess how well miners are learning the skills being taught.
- MSHA and NIOSH have a common mission to improve the safety and health of coal miners, but they do not have a current memorandum of understanding to guide their coordination efforts. As a result, most of the coordination that occurs is initiated by individual staff members or by outside parties. Such informal coordination may not be sufficient given the pending retirements of many MSHA and NIOSH engineers and scientists and other challenges both agencies face.

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<sup>3</sup>GAO, *Mine Safety: Better Oversight and Coordination by MSHA and Other Federal Agencies Could Improve Safety for Underground Coal Miners*, GAO-07-622 (Washington, D.C.: May 16, 2007); *MSHA's Revised Hiring Process Has Improved the Agency's Recruiting Efforts, but Its Human Capital Strategic Plan Does Not Adequately Project or Address Its Future Workforce Needs*, GAO-07-704R (Washington, D.C.: May 16, 2007).

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- In 2004, MSHA began a new process for hiring mine inspectors, which has led to a number of improvements, such as being able to identify applicants who possess the basic skills needed to be successful inspectors and decreasing the time it takes to hire new inspectors. However, MSHA's human capital plan does not include a strategic approach for addressing the large number of retirements expected in the next 5 years.
  - While most of the penalties proposed by MSHA are paid by mine operators without opposition, a small percentage of the cases involving more serious and higher-dollar penalties are appealed, and those appealed are often reduced substantially. MSHA uses a standard formula to propose penalties, but the other entities involved in the appeals process use considerable discretion in deciding on the final penalty amount. Approximately 6 percent of the 506,707 penalties proposed by MSHA between 1996 and 2006 were appealed by mine operators. About half of the penalties for the appealed violations were reduced regardless of the level of gravity of the violation initially cited by MSHA or the degree of the mine operator's negligence initially cited. Appealed penalties were reduced by an average of 49 percent.

In our reports released today, we are making a number of recommendations to improve mine operators' access to information and tools for training their workers, strengthen MSHA's oversight of training, improve the effectiveness of information sharing between MSHA and NIOSH, strengthen MSHA's workforce planning, and ensure transparency in penalty appeal determinations.

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## Background

MSHA's Coal Mine Safety and Health Administration is responsible for carrying out enforcement activities related to surface and underground coal mines. As of January 2007, MSHA employed approximately 550 underground coal inspectors in its 11 coal districts. MSHA's principal enforcement responsibility for underground coal mines is fulfilled by conducting a minimum of four comprehensive inspections of every underground coal mine each year.<sup>1</sup> When MSHA inspectors observe violations of federal health and safety standards, they are required to issue

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<sup>1</sup>Mines that are recognized as more dangerous, such as those containing high levels of methane gas, are inspected more frequently.



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a citation to the coal mine operator.<sup>5</sup> Even if an operator does not agree with the violation or the penalty amount, the operator must resolve the problems within the time frame set by the inspector.

In assessing penalties, the Mine Act requires both the Commission and MSHA to consider six statutory factors:

1. the mine operator's history of previous violations,
2. the appropriateness of the penalty to the size of the mine,
3. whether the mine operator was negligent,
4. the effect on the operator's ability to continue in business,
5. the gravity of the violation, and
6. the demonstrated good faith of the mine operator charged in quickly remedying the situation after being notified of a violation.

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## Underground Coal Mines Face Challenges in Preparing Mine Workers and Rescue Teams for Emergencies

Underground coal mine operators face significant challenges preparing for emergencies, including ensuring that miners receive realistic training and organizing mine rescue teams that satisfy new requirements. MSHA issued new requirements in March 2006<sup>6</sup> that direct mine operators to conduct mine emergency evacuation drills every 90 days, including drills that simulate actual emergency conditions; install directional lifelines to help miners find their way out of a dark mine; and instruct miners in the procedures for evacuating the mine in emergencies, such as those involving fires or explosions.<sup>7</sup> Based on our survey completed in February 2007, almost all mines had conducted evacuation drills and installed lifelines, but we estimate that half of the mines had not conducted drills in

<sup>5</sup>MSHA inspectors are authorized to issue either a citation or a withdrawal order when they observe a health and safety violation. All withdrawal orders compel the removal of miners from the affected work areas until the observed hazard is terminated. This, in essence, could halt production in a particular area of the mine.

<sup>6</sup>The new requirements were finalized in December 2006, with some modifications and clarifications.

<sup>7</sup>To ensure that four major scenarios—fire, explosion, gas, and water inundation—are covered each year, the final rule requires that a different scenario be used each quarter in conducting evacuation drills.

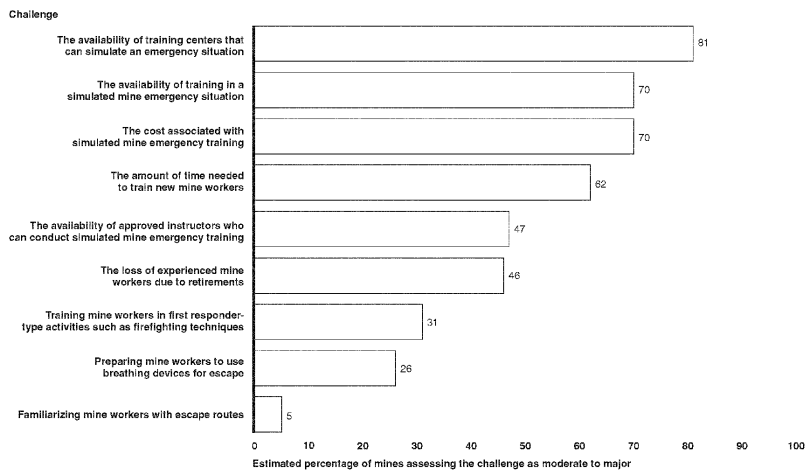
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environments that simulated actual emergency situations.<sup>7</sup> According to the survey, simulated mine emergency training presents the greatest challenge in preparing miners for and responding to mine emergencies. Specifically, the most common challenges were the availability of training centers that can simulate an emergency situation, the availability of training in a simulated mine emergency situation, and the cost associated with providing simulated mine emergency training (see fig. 1).

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<sup>7</sup>Percentage estimates are based on a sample and are subject to sampling error. See GAO-07-622 for more information on the survey methodology. We are 95 percent confident that the results we obtained are within plus or minus 8 percentage points of the true values of the in-scope population. Each sample element was subsequently weighted in the analysis to account for all members of the in-scope population, including those that were not selected.

**Figure 1: Mines' Assessment of Challenges in Preparing Workers for Mine Emergencies**



Source: GAO analysis of survey data.

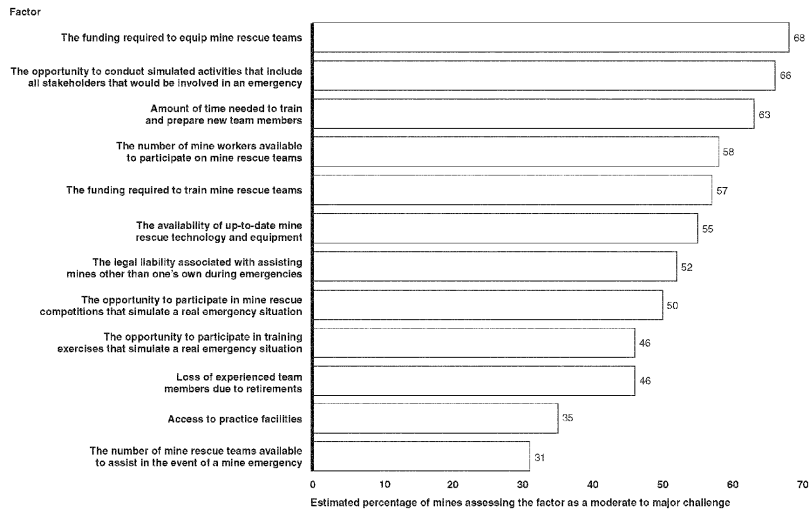
Although MSHA has materials that mine operators can use to provide hands-on training on specific topics, it does not provide all mine operators with information and tools for training under simulated emergency conditions. MSHA has a catalog of various training tools, including classroom exercises, that mine operators can obtain upon request. For example, to support the new standards issued in March that require miners to train with breathing devices, MSHA distributed a training packet to all underground coal mines and appropriate state grantees.<sup>9</sup> However, MSHA does not provide all mine operators with critical information on how to provide training in simulated emergency environments such as smoke-

<sup>9</sup>The packet contained a DVD on the protocol for how to transfer from one breathing device to another, training manuals on six types of breathing devices, an article on how to disinfect the devices, and other related information.

filled mines or information on resources that are available for providing such training. Some mine operators use a number of techniques to simulate emergency conditions, but other mine operators may be unaware of them.

Based on our survey, cost concerns and opportunities for conducting simulated training with all stakeholders are the greatest challenges in preparing rescue teams for mine emergencies (see fig. 2).

**Figure 2: Mines' Assessment of Rescue Team Challenges in Preparing for Mine Emergencies**



Mine operators also reported that they anticipated further challenges stemming from new requirements in the MINER Act. We estimate that half of underground coal mines anticipate changing the composition of at least one of their designated mine rescue teams as a result of the MINER Act.

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Specifically, mine operators pointed to the requirement that teams train at least annually at the mines they are responsible for covering. This change could present a particular challenge for mine rescue teams in several key coal mining states that serve many or all of the states' mines. According to respective state officials, all mines in Kentucky and many in Virginia and Pennsylvania rely on the state to provide or arrange for mine rescue services. In Kentucky, for example, mines receive rescue services from state teams composed of state mine inspectors whose primary duties are to inspect coal mines. According to a state official, a Kentucky team would be required to conduct 120 training exercises annually under the MINER Act, compared to the 12 exercises it currently conducts. Depending on the final regulations developed by MSHA to implement the requirements of the MINER Act, officials in Kentucky said they might stop offering mine rescue services because of the amount of time that will be needed to meet the training requirements.

Some mine operators have already started making changes to their mine rescue teams based on the MINER Act, while others are taking a more cautious approach, given the costs of training and equipping new rescue teams. For example, one company that operates multiple mines reported that it was creating new backup mine rescue teams to satisfy the new requirement that rescue teams be within 1 hour travel time from the mines they serve. In other cases, however, according to mine and industry officials, mines were waiting to see how MSHA implements the new mine rescue requirements before changing their team designations.<sup>39</sup> For example, the extent of the required training at each mine could affect how mine operators designate rescue teams.

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<sup>39</sup>MSHA has not yet determined how the mine rescue team requirements in the MINER Act will be implemented. MSHA officials said they plan to hold public hearings on the requirements of the act before publishing final rules, which are due in December 2007.

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**MSHA Reviews Mines' Training Plans and Inspects Training Records but Does Not Adequately Monitor Instructors or Training**

MSHA has the authority to oversee certain aspects of miner training to help ensure that miners work safely and are prepared for potential emergencies, but its oversight of training is hindered by several factors.

- Inconsistent instructor approval standards

To become an approved instructor, MSHA requires that an applicant prove his or her mining and teaching experience in one of three ways: by (1) submitting written qualifications, (2) attending new instructor training, or (3) teaching a class monitored by MSHA under provisional approval from an MSHA district manager. MSHA suggests factors that district managers may use in determining an applicant's skills, but it does not have firm criteria that new instructors must meet. In addition, the approval procedures are not standardized across MSHA's 11 coal districts, according to MSHA officials. For example, some districts grant provisional authority to new instructors only if they can be monitored by MSHA staff. Other districts grant provisional approval for individuals to teach specific courses but, according to MSHA officials, may not monitor these instructors' teaching skills. According to MSHA officials, staff resources limit districts' ability to monitor applicants' teaching skills.

- Lack of up-to-date information on approved instructors

MSHA maintains a database of approved instructors that includes contact information for each instructor, the courses they are approved to teach, and whether they have full or provisional authority to teach the courses. But according to MSHA officials, the database contains outdated contact information because some instructors move without notifying MSHA. Without accurate information on its instructors, MSHA cannot ensure that instructors receive training policy updates and cannot determine whether there are enough qualified instructors to meet mine operators' needs.

- No continuing education requirements for approved instructors

Once instructors are approved, according to an MSHA official, they are not required to demonstrate that they are staying current on emerging mining issues. As a result, MSHA cannot ensure that instructors are keeping their mining knowledge and skills up to date, including their knowledge of emerging safety and health issues and new training tools.

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- Limited monitoring and evaluation of training sessions

According to MSHA officials, the agency monitors few miner training sessions relative to the number conducted, and instructor evaluations occur on an ad hoc basis. According to mine operators and trainers, MSHA rarely oversees training, and it monitors sessions primarily for enforcement purposes rather than to enhance instructors' knowledge and abilities. In addition, many of the training sessions occur on the weekends, when MSHA staff do not normally work, limiting their ability to monitor training. MSHA does not collect or analyze training evaluations obtained from miners to help gauge whether learning objectives are taught effectively, and an estimate of 80 percent of mines do not seek feedback on training sessions from their workers. As a result, MSHA cannot determine how well miners are learning the skills taught by MSHA-approved trainers and recommend corrective measures as necessary.

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### MSHA and NIOSH Lack a Formal Agreement to Guide Mine Safety Coordination

MSHA and NIOSH have complementary roles in improving the safety and health of coal miners, but coordination between the two agencies is largely informal and inconsistent due to a lack of a formal agreement or policies to guide their efforts. MSHA is primarily involved in setting health and safety standards and enforcing them through mine inspections that can result in citations and penalties, whereas NIOSH's mining program is focused on research into the causes of and ways to prevent the safety and health hazards miners face.

MSHA and NIOSH currently lack a formal agreement, such as a memorandum of understanding or other policy to guide their coordination efforts, a practice we have identified as effective in prior work.<sup>11</sup> In 1978, NIOSH's predecessor and MSHA had a signed memorandum of understanding that specified how they would coordinate to ensure that technology resulting from mine safety research would be used to the

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<sup>11</sup>We have reported that agencies can strengthen their commitment to work collaboratively by articulating their agreements in formal documents, such as a memorandum of understanding, interagency guidance, or an interagency planning document, signed by senior officials in the respective agencies. See *GAO, Results-Oriented Government: Practices That Can Help Enhance and Sustain Collaboration among Federal Agencies*, GAO-06-15, (Washington, D.C.: October 21, 2005).

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fullest extent.<sup>12</sup> The memorandum embodied many of the key practices identified in prior GAO work that can help federal agencies enhance and sustain their collaborative efforts, such as defining roles and responsibilities and developing joint strategies. However, the memorandum is no longer used, and MSHA officials were unaware of any plan to update the document. As a result of not having a formal agreement or policies to guide their activities, coordination between MSHA and NIOSH is primarily driven by informal relationships between staff at both agencies. Officials from both agencies and labor union representatives told us that coordination has been primarily at the initiative of individuals at both agencies and, as such has not always been consistent across the agencies.

NIOSH and MSHA face a potentially large workforce turnover in coming years, and informal coordination based on working relationships between staff members may not continue when the individuals leave. As at many federal agencies, MSHA and NIOSH have a large proportion of employees, including many engineers and scientists, who are eligible to retire over the next several years. MSHA data show that more than 50 percent of its 140 engineers and scientists will be eligible for retirement within the next 10 years, with 31 percent eligible within 5 years. Similarly, about half of NIOSH's employees—most of whom are scientists and engineers—are eligible to retire in 5 years.

In addition, MSHA and NIOSH face other challenges that require them to work more closely together, particularly in developing and approving safety technologies under tight time frames. An influx of new and inexperienced miners brought on due to the increased demand for coal and the aging of the workforce, rising dangers as miners go deeper underground to mine coal, and recent mine disasters have heightened interest in promising new safety technology. The MINER Act addresses some of these issues and underscores NIOSH's and MSHA's roles in developing and approving safety technologies. For example, the act requires NIOSH to study the use of refuge chambers for miners and requires MSHA to review the results of NIOSH's work to determine what

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<sup>12</sup>This agreement was originally executed between MSHA's predecessor in the Department of Interior, the Mining Enforcement and Safety Administration (MESA) and NIOSH's predecessor, the Division of Mining Research – Health and Safety in the Bureau of Mines in 1976. The MOU was updated in 1978 after MESA was transferred to the Department of Labor and renamed MSHA.



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actions, such as making regulatory changes, are appropriate. Both agencies must take action within a relatively short period of time.<sup>13</sup>

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**MSHA Has Improved Its Hiring Process, but Its Human Capital Strategic Plan Does Not Adequately Project or Address Its Future Workforce Needs**

While MSHA has taken significant steps to improve its hiring process, the agency's human capital plan does not include a strategic approach for addressing the large number of retirements expected over the next 5 years. In 2004, MSHA began using the Federal Career Intern Program (FCIP) to hire new mine inspectors, which has resulted in a number of improvements to the hiring and recruitment process, such as hiring new inspectors more quickly. Since it began using the program, MSHA has hired 301 interns, 236 of whom are coal mine inspector trainees.<sup>14</sup> Through the FCIP, MSHA developed a process for assessing applicants' skills, conducting interviews, and providing applicants with immediate feedback on their aptitude during 1-day job fairs held in locations around the country. As of October 2004, all applicants for inspector positions must attend job fairs and pass a test on basic math and writing skills before interviewing with MSHA. MSHA reported that this screening process has helped the agency maximize its resources, since the exams identify applicants who do not have the basic skills needed to become a successful inspector at an early stage of the hiring process. For example, of the 1,256 applicants tested in 2005 and 2006, 49 percent failed either the math or written exam, or both. MSHA's previous hiring process considered experience over basic skills, and officials told us that this resulted in some new hires with significant mining experience but weak reading and writing skills. As a result, MSHA spent time during new mine inspector training teaching these basic skills.

MSHA officials reported that this new approach has reduced the amount of time it takes to hire a new mine inspector from up to 180 days to 45 days or less.<sup>15</sup> In addition, the Office of Personnel Management approved MSHA's request to hire mine inspectors through the FCIP under

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<sup>13</sup>NIOSH is required to report out on its work within 18 months after the enactment of the MINER Act. MSHA then has 180 days after receiving the report from NIOSH to determine what actions it intends to take.

<sup>14</sup>These data are as of February 2007. The noncoal interns were hired as inspector trainees for metal/nonmetal mining operations.

<sup>15</sup>According to an MSHA human resources official, this time frame begins when an applicant receives a job offer and includes time for the agency to review the results from a medical exam and drug test. It does not include any time that an applicant might be placed on a waiting list if the district does not have a job opening available.

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a broader range of pay scale levels, which allows the agency to hire individuals with different experiences.<sup>16</sup> For example, an applicant might have little experience in mining but possess relevant experience in construction and electrical engineering. This applicant would be hired as a mine inspector trainee at the lower end of the pay scale and be given additional training in areas specific to mine health and safety. Further, MSHA officials commented that the job fairs have helped the agency reduce the number of interagency transfers that occurred under its old hiring process, which was a significant problem. Since job fairs are held in the locations where applicants are being sought and applicants must attend the job fairs in person, they tend to live in those communities and are less likely to request a transfer to another location once they are hired.<sup>17</sup>

Appointments to the FCIP are generally for 2 years, at which point the intern may be offered a permanent position.<sup>18</sup> During the internship, new hires are required to participate in a formal training program, which consists of training provided by the Mine Academy and structured on-the-job training. However, district managers and Mine Academy officials agreed that, realistically, new inspectors can take up to 5 years to become fully competent and confident in their roles as underground coal mine inspectors.

While the improvements MSHA has made to its recruiting process are an important part of addressing impending retirements, the agency has not developed a long-term strategy for replacing mine inspectors. MSHA estimates that over 40 percent of its inspectors will be eligible for retirement by 2012 (see table 1), and agency officials told us that in the last 3 years, between 32 and 47 percent of the coal mine enforcement employees eligible to retire actually did so in the first year of eligibility.

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<sup>16</sup>MSHA can offer new mine inspectors positions under the government general schedule (GS) that range from GS-5 to GS-11. As of January 2007, the potential pay ranged from \$25,623 to \$61,068.

<sup>17</sup>For example, between October 2006 and April 2007, MSHA held job fairs in each of its 11 coal mine districts.

<sup>18</sup>Inspectors with relatively little experience (and hired at the lower end of the pay scale) participate in the FCIP longer—3 years instead of 2 years—to give the agency time to assess their performance and knowledge before a decision is made on whether to convert them to permanent employee status.

**Table 1: Number of Underground Coal Mine Inspectors and Those Eligible for Retirement by 2012**

	District office											Total
	1	2	3	4	5	6	7	8	9	10	11	
Number of underground coal mine inspectors	6	38	39	71	35	56	52	24	26	16	14	377
Number of underground coal mine inspectors eligible to retire within 5 years	3	23	15	36	12	16	13	10	13	8	5	154
Percentage eligible to retire within 5 years	50%	61%	38%	51%	34%	29%	25%	42%	50%	50%	36%	41%

Source: GAO analysis of MSHA data.

Note: Data are as of January 31, 2007.

District officials expressed concern over loss of highly experienced coal mine inspectors and the impact such retirements can have on achieving the goals of the agency. For example, one district official told us that recent retirements have left the district short-handed and expressed concern over the inspectors' ability to complete the required annual mine inspections on time.

While MSHA human resources officials told us about steps they are taking to mitigate the turnover, the agency has not developed a strategic plan that clearly links measurable outcomes to the mission and goals of the agency. In our review of the plan and discussions with MSHA officials, the agency has not yet demonstrated how it is planning for its future needs, what targets and goals are established to meet those needs, and how the goals will be monitored. For example, given the amount of time needed to train new inspectors, it is not clear how the agency will take into account the potential increases in future hiring and the time necessary to fully train replacements.

GAO has reported on effective strategies for workforce planning that require a more strategic approach to meeting the challenges of the future.<sup>19</sup> Among other elements, strategic planning serves as a tool to help agencies address challenges in a manner that is clearly linked to achieving their mission and goals. For example, by using data to make long-term

<sup>19</sup>GAO, *Human Capital: Federal Workforce Challenges in the 21st Century*, GAO-07-558T (Washington, D.C.: March 6, 2007); GAO, *Human Capital: Key Principles for Effective Strategic Workforce Planning*, GAO-04-59 (Washington, D.C.: Dec. 11, 2003).

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projections, an agency can design a transition program to ensure that experienced employees are available in critical areas of the agency and that the institutional knowledge would not be lost because of turnover. Further, the agency can revisit the projections on a regular basis and use the information to address broader agency goals for improvement.

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**Most Penalties Assessed by MSHA Are Paid without Opposition, but Many of Those Appealed Are Reduced Significantly**

Most of the penalties proposed by MSHA are paid by mine operators without opposition, but a small percentage of more serious and higher-dollar penalties are appealed, and many of those appealed are reduced significantly. In order to determine the amount of a proposed penalty, MSHA uses a standard formula that generally results in larger penalties being proposed for more serious violations. MSHA assigns point values to each of the six broad factors outlined in the Mine Act, and two of these factors—whether the operator was negligent and the gravity of the violation—carry the greatest weight in deciding the amount of the proposed penalty.<sup>20</sup> MSHA inspectors are responsible for making an initial determination regarding the magnitude of these two elements during their inspections.<sup>21</sup> After an inspector issues a citation and makes an initial finding regarding the gravity and negligence of the violation, MSHA determines the magnitude of the remaining four factors and tallies the points to determine the proposed penalty amount. Between 1996 and 2006, MSHA proposed 506,707 penalties for safety and health violations, and the average penalty was \$234 per violation. Table 2 details the range of

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<sup>20</sup>Under regulations effective as of April 23, 2007, MSHA's penalties are assessed in two different penalty categories: regular and special. Prior to the recent regulatory changes, MSHA issued a third type of penalty called the single penalty. The single penalty was a flat \$60 penalty for violations that are unlikely to cause injury or illness. This type of penalty accounted for approximately 60 percent of the penalties issued between 1996 and 2006. MSHA's new regulations eliminate the single penalty. A regular assessment is the agency's general penalty and ranges from \$112 to \$60,000. Special assessments are reserved for violations in which MSHA elects to waive the regular assessment, and set another penalty consistent with the six statutory factors. For example, special assessments may be used when an operator fails to correct certain violations or notify MSHA of certain kinds of accidents. A special assessment can be as high as \$220,000, but this is for the new flagrant violation established under the MINER Act; the maximum for most special assessments is also \$60,000. Eligibility guidelines and assessment formulas for special and regular assessments are outlined in MSHA regulations and agency policies.

<sup>21</sup>MSHA inspectors also determine whether mine operators have made good faith efforts to correct the violation, which results in a 10 percent reduction in the proposed penalty. Under regulations that were in effect through April 22, 2007, the good faith reduction was 30 percent.

average penalties, by degree of gravity and negligence, proposed by MSHA from 1996 through 2006.

**Table 2: Average Proposed Penalty by Gravity and Negligence Indicators, 1996 to 2006**

Elements of gravity and negligence	Percentage of citations issued	Average proposed penalty
<b>Gravity of violation<sup>a</sup></b>		
<i>Likelihood of accident</i>		
Accident occurred	0.2%	\$12,324
Highly likely to occur	0.9%	\$2,362
Reasonably likely to occur	38.6%	\$367
Unlikely to occur	55.5%	\$74
No likelihood	2.4%	\$168
<b>Total</b>	<b>97.6%<sup>d</sup></b>	
<i>Potential injury or illness</i>		
Fatal	3.5%	\$1,185
Permanent injury	7.4%	\$569
Lost days	62.4%	\$202
No lost work days	24.4%	\$77
<b>Total</b>	<b>97.7%<sup>d</sup></b>	
<i>Number of miners affected</i>		
0-1 miners	82%	<sup>c</sup>
2-5 miners	10.8%	<sup>c</sup>
6-9 miners	4.5%	<sup>b</sup>
10 or more miners	2.7%	<sup>c</sup>
<b>Total</b>	<b>100.0%</b>	
<i>Negligence by mine operator</i>		
Reckless	0.1%	\$8,458
High	3.5%	\$1,757
Moderate	84.3%	\$179
Low	9.4%	\$91
None	0.3%	\$454
<b>Total</b>	<b>97.6%<sup>d</sup></b>	

Source: GAO analysis of data MSHA penalty and violation data.

Note: These data represent the points accumulated under the former assessment process. MSHA expects its new regulations to result in higher proposed penalty amounts for each of these categories.

<sup>a</sup>Each subelement of gravity is an exclusive category.

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<sup>19</sup>Percentage does not add to 100 due to a small amount of missing data.

<sup>20</sup>We did not calculate the average proposed penalty for the number of miners, because most (75 percent) of the violations involved only one miner.

MSHA recently changed its regulations governing civil penalty assessments to update them and increase proposed penalty amounts, and to implement the new civil penalty requirement of the MINER Act. The new regulations will increase the points for most of the six statutory factors, and MSHA officials predicted that the new penalty structure will increase total proposed penalties by 234 percent. For example, these changes will increase the maximum points allotted for gravity from 30 to 88 points. MSHA officials asserted that these changes will likely lead to greater rates of compliance and subsequently a safer working environment for the nation's miners.

Between 1996 and 2006, approximately 6 percent (31,589) of the penalties proposed by MSHA for violations of underground coal mine safety and health standards were contested by mine operators, and about half of the contested penalties were reduced. The average amount of a contested penalty was \$1,107, compared to an average of \$176 for a noncontested penalty, and more than half of all contested penalties were for the most serious violations.<sup>22</sup> Almost half of all penalties contested by underground coal mine operators are reduced through the appeals process, even those involving the highest levels of gravity and negligence. From 1996 to 2006, 47 percent of all contested penalties (14,723 penalties) were decreased from the amount originally proposed by MSHA. On average, these penalties were reduced by about half of the amount initially proposed by MSHA using its standard formula.<sup>23</sup>

While all of the entities involved in the appeals process—the Labor's Solicitor's Office, MSHA's conference litigation representatives (CLR)<sup>24</sup>, and the Commission's administrative law judges (ALJ)—are required by

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<sup>22</sup>Sixty-three percent of contested penalties are considered "significant and substantial," or "S&S," violations. An inspector designates violations as S&S if they are deemed at least reasonably likely to cause an injury that results in lost work days. This designation can trigger more serious sanctions, such as closing a portion of a mine or closing an entire mine.

<sup>23</sup>For more detailed information about penalty reductions, see GAO 07 622.

<sup>24</sup>CLRs are MSHA enforcement staff and are located in every MSHA coal district. They have been provided with specialized legal training and are authorized by the agency to negotiate settlements for penalties that are no higher than \$350 and are limited in legal complexity.

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law to apply the six statutory factors specified in the Mine Act, they are not legally obligated to use any particular method to determine a final penalty amount when they determine that a reduction from MSHA's proposed penalty is appropriate. As a result, they have considerable discretion in deciding on the final penalty amount. Officials from all three of the entities involved in the appeals process told us that in determining the size of a final penalty, they apply the six statutory factors on a case-by-case basis and use their professional judgment. For example, officials from the Solicitor's Office and CLRs told us that, when appropriate, the Department of Labor generally views penalty settlements as being in the best interest of both the agency and the mine operators because settlements allow them to avoid costly litigation.<sup>25</sup> Attorneys from the Solicitor's Office also told us that they analyze the evidence presented by MSHA inspectors and mine operators and assess their chances of winning the case in deciding whether to settle a case or go to trial.

Prior decisions by the Commission require ALJ decisions to be sufficiently explained.<sup>26</sup> However, in some cases we reviewed, while the reasons supporting a reduction from MSHA's proposed penalty are clearly explained, the rationale for the final penalty amount is not always well documented. For example, in one case decided in October 2005, the ALJ reduced MSHA's proposed penalty from \$50,000 to \$10,000.<sup>27</sup> Although the judge concluded that the gravity of the violation was less than MSHA had originally found, thereby supporting a penalty reduction, he appeared to agree with MSHA's assessment regarding the other five statutory factors,

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<sup>25</sup>In addition to the general costs of litigation, in some cases, the Equal Access to Justice Act requires that the Department of Labor pay a mine operator's fees and expenses, including reasonable attorneys fees, if the ALJ finds that the agency's position was not substantially justified, such as when an MSHA proposed penalty is lowered significantly in formal proceedings. 5 U.S.C. § 504 and 29 C.F.R. Part 2704.

<sup>26</sup>In August 2006, the Commission reminded ALJs of the importance of adequately documenting penalty decisions. Specifically, the Commission wrote "When . . . it is determined that penalties are appropriate which substantially diverge from those originally proposed, it behooves the Commission and its judges to provide a sufficient explanation of the bases underlying the penalties assessed by the Commission. If a sufficient explanation for the divergence is not provided, the credibility of the administrative scheme providing for the increase or lowering of penalties after contest may be jeopardized by an appearance of arbitrariness." *In: Walter Resources, Inc.*, 28 FMSHRC 579, 606-07 (August 2006) (citing *Sellersburg Stone Co.*, 5 FMSHRC 287, 293 (March 1983)).

<sup>27</sup>*Wabash Mine Holding Co.*, 27 FMSHRC 672 (October 2005).

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including MSHA's finding that the operator's degree of negligence was high.<sup>28</sup>

In conclusion, the events of the last year heightened interest in protecting miners and preparing them for the perils in their workplace. While Congress, federal and state officials, mine operators, miners and their representatives have taken important steps to improve safety in mines, more can be done in several areas. First, without assistance for mine operators in providing training under simulated emergency conditions and adequate monitoring of instructors and the training miners receive, miners may not be able to safely and confidently escape a mine. Further, the high rates of retirement eligibility among MSHA and NIOSH scientists and engineers as well as the need to work together under tight time frames may render current informal coordination ineffective, thus hampering the agencies' efforts to speed the implementation of new safety technology in mines. Similarly, the expected high attrition among MSHA's inspector corps, coupled with the amount of time needed to train new inspectors to become proficient at their duties, calls for a more strategic approach. Absent a clear plan to address expected turnover, MSHA could jeopardize its success to date in reforming the inspector recruitment and hiring process.

Finally, given the trends over the past 10 years, the higher proposed penalties under MSHA's new penalty structure will likely lead more operators to appeal. As a result, it is important that decisions on contested penalties are transparent and contain the necessary information to understand how final penalty amounts are determined. Without such information, it will be difficult to monitor their decisions over time to ensure that all of the entities involved in the appeals process are appropriately and consistently applying the six statutory factors in altering penalty amounts and that the impact of penalties in protecting miners' safety through greater compliance by mine operators is not diminished.

In the reports, we made recommendations to the Secretaries of Labor and Health and Human Services, and the Chairman of the Federal Mine Safety and Health Review Commission. These recommendations are designed to strengthen the efforts of Labor, MSHA, NIOSH, and the Commission by

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<sup>28</sup>See also *Jim Walter Resources, Inc.*, 28 FMSHRC 1068 (December 2006) and *Jim Walter Resources, Inc.*, 28 FMSHRC 579 (August 2006).



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- improving mine operators' access to information and tools for training their workers,
  - strengthening MSHA's oversight of training,
  - improving the effectiveness of information sharing between MSHA and NIOSH,
  - strengthening MSHA's human capital strategic planning efforts, and
  - ensuring that there is transparency in final penalty amounts for appealed cases.

Each agency generally agreed with the recommendations after reviewing a draft of the reports.

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Mr. Chairman, this concludes my statement. I will be pleased to respond to any questions you or other members of the committee may have.

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**GAO Contact and  
Staff  
Acknowledgments**

For further information, please contact Daniel Bertoni at (202) 512-7215. Individuals making key contributions to this testimony include Revae Moran, Sara L. Schubano, and Rachael C. Valliere.

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Chairman MILLER. Mr. Stickler?

**STATEMENT OF RICHARD STICKLER, ASSISTANT SECRETARY  
OF MINE SAFETY AND HEALTH, DEPARTMENT OF LABOR**

Mr. STICKLER. Chairman Miller, Ranking Member McKeon and members of the committee, I am pleased to appear before you today to discuss the important actions of the Mine Safety and Health Administration in protecting the health and safety of the Nation's miners.

I have been part of the mining community for more than 40 years. My experience includes working in underground coal mines

as well as working in and around the mining community every day. I know firsthand that every fatality, serious injury is devastating to miners, their families and the communities in which they live. Let me be very clear that our number one priority is to protect the health and safety of America's miners.

MSHA began to implement new policies to protect miners even before Congress passed the MINER Act. For example, in March of 2006, MSHA issued emergency temporary standards addressing many of the safety provisions that were ultimately included in the MINER Act. We were guided by three basics of mine safety: strict enforcement of the law; effective safety training and practices for miners, supervisors and managers; and the implementation of new technologies that can help achieve a safer workplace.

On enforcement, we would use all the tools available to us to achieve our goals. We will be particularly aggressive with those mine operators who habitually violate MSHA's standards and who seem to view penalties as just another cost of doing business. On March 29 of this year, MSHA issued a \$1.5 million penalty, the largest ever assessed to a coal operator in this agency's history.

MSHA continues to move forward to both implement the MINER Act and to enforce provisions of the Mine Act. Over the past 14 months, MSHA has issued an emergency temporary standard to improve mine safety, an emergency mine evacuation rule, a program information bulletin raising the required strength of seals from 20 psi to 50 psi, a program information bulletin on breathable air, a program information letter on flagrant violations, a rule implementing increased part 100 civil penalties; and we are working to finalize an ETS that will strengthen seal requirements.

In addition, MSHA has trained 14 family liaisons and has another major rule in the regulatory process concerning mine rescue teams. This rule would improve the training, certification and the viability of mine rescue teams.

While MSHA faces significant challenges to both replace enforcement personnel who are retiring and expand their enforcement ranks, I believe the agency will meet its goal of hiring 170 new enforcement personnel by the end of this fiscal year.

Today, MSHA remains focused on our core mission, to improve mine health and safety of America's miners and work toward the day when every miner goes home safe and healthy to family and friends after every shift of every day. MSHA cannot do this alone. The entire mining community must also do their part to improve mine safety and health. Working together, we can achieve this important goal.

I thank you for allowing me to testify today, and I look forward to answering your questions.

Chairman MILLER. Thank you.

[The statement of Mr. Stickler follows:]

**Prepared Statement of Hon. Richard E. Stickler, Assistant Secretary of  
Labor, Mine Safety and Health Administration**

Chairman Miller, Ranking Member McKeon, and the Members of the Committee, I am pleased to appear before you today to discuss the actions the Mine Safety and Health Administration (MSHA) is taking to protect the health and safety of our nation's miners. I would also like to provide you a report on the significant progress

MSHA is making in implementing the Mine Improvement and New Emergency Response (MINER) Act of 2006, signed by the President on June 15, 2006.

I have been involved in the coal mining industry for more than 40 years. My experience includes working shifts in underground coal mines as well as working in and around the mine site and mining community every day. I know firsthand that every fatality, injury, and illness is devastating for miners, their families, and the communities they live in.

#### *Accident Investigations*

In March and April, MSHA released the results of its investigations of the Aracoma Alma No. 1 and Darby mining accidents of last year. MSHA released the results of the Sago investigation last week. The internal MSHA reports evaluating MSHA's activities surrounding the Aracoma, Darby, and Sago disasters will be released over the next month. In these reports, MSHA will review its policies and practices and develop action plans to address identified shortcomings.

#### *MSHA Actions to Improve Mine Safety*

Following the tragedy at Sago Mine, MSHA has taken swift action to provide new regulatory protections for miners at the same time that it has increased its enforcement efforts. For example, MSHA issued an emergency temporary standard on March 9, 2006, addressing many of the safety provisions that were ultimately included in the MINER Act, such as increasing the number of Self-Contained Self-Rescuers (SCSRs) in underground coal mines, additional safety training for underground coal miners, and immediate notification of mine accidents applicable to all mines.

In 2006, MSHA also stepped up its enforcement actions in both coal and metal and non-metal mines, issuing 77,129 citations and orders in coal mines, up nearly 12 percent from 69,124 in 2005. MSHA also increased the number of citations issued in metal and non-metal mines to 62,937, up nearly 7 percent from 59,101 the year earlier. Proposed assessments issued by MSHA in 2006 totaled \$35 million, up 40 percent from \$25 million in 2005.

When the MINER Act became law, even before the publication of the new civil penalty regulation, MSHA began enforcing new civil penalties for flagrant violations, unwarrantable failures, and failure to immediately notify MSHA of mine accidents. MSHA has already issued the first ever citations for flagrant violations. Six of these, totaling \$874,500, were assessed against R&D Coal Company for the October 23, 2006 death of one of its employees. A flagrant violation is defined in the MINER Act as "a reckless or repeated failure to make reasonable efforts to eliminate a known violation of a mandatory safety and health standard that substantially and proximately caused, or reasonably could have been expected to cause, death or serious bodily injury." MSHA will continue to use this important enforcement tool to bring about future compliance.

MSHA also initiates special emphasis inspection programs that focus special enforcement activities on specific aspects of mining. For example, this past February and March, MSHA initiated special emphasis inspection programs in Coal Districts 4 in Southern West Virginia and District 6 in Eastern Kentucky to examine roof controls plans and roof support methods in mines that use retreat mining methods. In District 4, MSHA issued 234 citations and orders during a two-week period.

District 6 conducted a special initiative which targeted all mines in the district that are conducting or will conduct retreat mining. The purpose was to observe retreat mining practices and to ensure that adequate safety precautions for retreat mining were included in each mine's roof control plan. Between March 5 and 22, 2007, MSHA inspectors inspected 33 mines and issued 8 citations related specifically to roof control issues. Of the 33 mines involved in the initiative, 21 were verified to have adequate safety precautions for retreat mining, and 12 were required to provide additional safety precautions.

In February, MSHA also conducted a nationwide targeted Special Health Emphasis enforcement program to ensure operator compliance with the applicable respirable dust standard at specific mines during normal production cycles, and that ventilation and dust control parameters were adequate and effective in protecting miners' health at all times. Over 1,130 dust samples were collected from February 20th to March 3rd, 2007 at 61 selected underground coal mines in all eleven coal districts. Thirty-two citations and one unwarrantable failure order for ventilation plan violations were issued during the health inspections, two citations were issued for excessive dust, and 44% of the enforcement actions were designated as Significant & Substantial (S&S). Further evaluation will be conducted to identify good and bad ventilation plans and practices.

*Implementing the MINER Act of 2006 and Initiating New Policies*

Last year, Congress passed and the President signed the MINER Act—the most significant mine safety legislation in nearly 30 years. The provisions of the MINER Act that have been implemented by MSHA include:

- The approval or partial approval of emergency response plans for the 466 currently active underground coal mines;
- Requiring more Self-Contained Self-Rescue (SCSR) devices for each miner in every underground coal mine;
- Requiring flame resistant life lines for evacuation in all underground coal mines;
- Mandating additional mine evacuation safety training and training on the use of SCSRs;
- Implementing a new maximum civil penalty of up to \$220,000 for flagrant violations, and new minimum penalties for “unwarrantable failure” and “immediate notification” violations.
- Requiring all mine operators to notify MSHA immediately after an accident;
- Installing redundant underground-to-surface communications systems;
- Requiring a supply of breathable air to miners who are trapped in underground coal mines;
- Training 14 MSHA officials to be Family Liaisons;
- Requiring post accident tracking of underground miners and;
- Requiring realistic “expectations” training for miners who use SCSRs.

Keeping miners safe and healthy is MSHA’s top priority. Implementation of the MINER Act is critical to achieving this goal, and I am proud of MSHA’s work in this regard. I want to review with the Committee in detail the objectives of the MINER Act that MSHA has already met.

*Emergency Mine Evacuation*

On December 8, 2006, the Department of Labor published its final rule on Emergency Mine Evacuation in the Federal Register. The final rule helps ensure that miners, mine operators, and MSHA will be able to respond quickly and effectively in the event of an emergency. The rule includes requirements for mine operators to provide increased capability for mine emergency response and evacuation; includes additional requirements for SCSRs and their storage; improved training and escape drills; lifelines, tethers, and multi-gas detectors; and accident notification. This final rule includes many provisions that MSHA initially included in the Emergency Temporary Standard issued March 9, 2006, and were later incorporated in the MINER Act. The provisions include:

- Increased numbers and storage of SCSRs;
- Improved mine emergency evacuation drills and training;
- Installation and maintenance of directional lifelines in underground coal mines, which must be fire resistant within three years; and
- Immediate accident notification for all mines.

Once again, MSHA went beyond the requirements of the MINER Act by requiring mine operators to provide multi-gas detectors to miners working alone and to each group of miners. While this provision was not part of the MINER Act, MSHA believes it is important to highlight the addition of this requirement in our final emergency mine evacuation standard because, in the event of a mine emergency, it will enable miners to know whether there are toxic gases in the mine atmosphere.

This rule was effective immediately on December 8, 2006, with the exception of certain training and equipment provisions. All provisions are now effective; SCSR training units for annual expectations training have now been developed. On March, 30 MSHA published a notice in the Federal Register notifying mine operators that the units were available. Mine operators must have had a purchase order for these training units by April 30 and must conduct training with them within 60 days of receipt of the units.

MSHA has also developed an SCSR database to enable the agency to locate SCSRs affected by future recalls or other approval actions, and to help our enforcement personnel inspect the SCSRs at the mines by cross checking reported inventories with units in use. In addition, NIOSH and MSHA will use this database to randomly select and collect SCSRs deployed at mines for testing in the Long Term Field Evaluation Program.

*Emergency Response Plans*

The MINER Act requires underground coal mine operators to develop and adopt written Emergency Response Plans (ERPs) specific to the mines they operate. In accordance with the MINER Act, MSHA required operators to submit plans by August 14, 2006. MSHA provided operators with guidance related to the requirements for

breathable air on February 8, 2007. This meant that ERPs could only be partially approved. Revised ERPs, indicating how breathable air will be provided, were required by March 12, 2007. In addition to breathable air, the ERPs must address post-accident communications and tracking, lifelines, training, and local coordination.

We are ensuring that the plans are reviewed in a timely manner, approved, and implemented for all underground coal mines as specified in the Act. As of May 8, 2007, there were 466 active underground coal mines. Of those, 261 have submitted ERPs that have been partially approved, and another 205 have been fully approved. MSHA is reviewing and discussing plan submissions with operators with the goal of providing full approval of all submitted plans in the near future.

#### *Post-Accident Breathable Air*

With respect to post-accident breathable air, MSHA issued a Program Information Bulletin (PIB) on February 8, 2007, to provide guidance to mine operators concerning acceptable quantities and delivery methods in underground coal mines. This PIB was placed on MSHA's Web site and was distributed widely to the coal mining community.

The PIB provides the following options for meeting the breathable air requirements of the MINER Act:

- Establish boreholes within 2,000 feet of the working section; or
- Provide forty-eight hours of breathable air located within 2,000 feet of the working section of the mine, with contingency arrangements to drill boreholes if miners are not rescued within 48 hours; or
- Provide ninety-six hours of breathable air located within 2,000 feet of the working section; or
- Provide other options that provide equivalent protection based on unique conditions at a mine.

Methods of providing breathable air (in barricaded or other areas that isolate miners from contaminated air) include:

- Drilling boreholes;
- Air line supplied by surface positive pressure blowers; or
- Compressed air cylinders, oxygen cylinders, or chemical oxygen generators; and
- Other means that provide 96 hours of breathable air.

In addition to the PIB, we have also posted related materials on MSHA's website, including a hazard awareness information sheet on use of compressed air and compressed oxygen; information sheets on methods of providing breathable air, including calculations; and questions and answers addressing specific breathable air issues.

#### *Post-Accident Communications and Post-Accident Tracking*

Section 2 of the MINER Act requires that each mine evacuation plan provide a redundant means of communications with the surface for persons underground. It also requires that the plan provide a means of tracking the pre-accident location of all underground miners. The MINER Act requires that mine operators adopt wireless communications and electronic tracking systems by June 2009.

To comply with the requirements of Section 2, as of May 2, 2007, MSHA has met with representatives of 49 communication and tracking system companies, and observed the testing or demonstration of 20 post-accident communications and tracking systems at various mine sites around the country. When these systems are presented to MSHA for approval, we will expedite the approval process to ensure that safe, durable and reliable systems get into the mines as quickly as possible. To date, MSHA has approved 19 systems, including four new devices. These new devices are:

- The Kenwood portable hand held radio;
- Marco RFID (radio frequency identification) Tracking Tag;
- Matrix Design Group RFID Tracking Tag; and
- NL Technologies Model Standalone WiFi Tracking Tag

In order to meet the long range communications and tracking requirements of the MINER Act, MSHA is reviewing all the available technology and working with the National Institute for Occupational Safety and Health (NIOSH) and manufacturers to help in the development of safe, reliable systems for underground coal mines. MSHA's responsibilities are to ensure these devices do not present an explosion or fire hazard in the mining environment, and also verify that they will function underground, while NIOSH is responsible for researching and developing these devices. MSHA has had contact with 137 parties about systems to track and/or communicate with miners while they are underground. However, as of today, there is no truly wireless tracking or communications system that meets the requirements of the MINER Act.

### *Mine Rescue Teams*

The MINER Act requires the Department of Labor to issue regulations with regard to mine rescue teams by December 2007. These regulations must address improved training, certification, availability, and composition requirements for underground coal mine rescue teams. MSHA is currently drafting a proposed rule to implement the MINER Act provisions for mine rescue teams.

### *Civil Penalties*

After passage of the MINER Act, MSHA promptly increased penalties for immediate accident notification and unwarrantable failure violations. On March 22, 2007, MSHA published a final rule to increase civil penalty amounts for mine safety and health violations; the rule became effective on April 23, 2007. Issuance of this rule fulfills another requirement of the MINER Act and demonstrates the commitment of MSHA to protect the safety and health of our nation's miners.

As prescribed by the Act, the final rule:

- Establishes a maximum penalty of \$220,000 for “flagrant” violations, as proposed in the President’s previous budgets.
- Sets minimum penalty amounts of \$2,000 and \$4,000 for “unwarrantable failure citations and orders.”
- Imposes a minimum penalty of \$5,000 (up to a maximum of \$60,000) for failure to timely notify MSHA of a death or an injury or entrapment with a reasonable potential to cause death.

Other major provisions of the final rule applicable to all mine operators and contractors are:

- Increases civil penalties overall—by an estimated 179 percent using 2005 violation data—targeting the most serious safety and health violations with escalating penalties.
- Adds a new provision to increase penalties—notwithstanding the severity—for operators who repeatedly violate MSHA standards.
- Replaces the \$60 single penalty with higher formula assessments for non-significant and substantial (non-S&S) violations.

### *Family Liaison Program*

The MSHA Family Liaison Policy has been put into place to provide for an MSHA liaison to be with families at the site of a mine accident where miners are unaccounted for or there are multiple fatalities. A Program Policy Letter has been issued and 14 designated family liaison personnel have completed their initial training sessions. The National Transportation Safety Board and the American Red Cross have helped train these individuals. Three MSHA family liaisons were present in Barton, Maryland, to be with the families of the miners during the recent accident at Tri-Star Mining Company.

### *Sealing of Abandoned Areas in Underground Coal Mines*

The MINER Act requires MSHA to issue mandatory health and safety standards relating to the sealing of abandoned areas in underground coal mines. The MINER Act requires the health and safety standards to “provide for an increase in the 20 psi standard currently set forth in section 75.335(a)(2) of title 30, Code of Federal Regulations.”

As an interim step, last year MSHA issued a temporary moratorium on new construction of alternative seals and then raised the psi standard for existing and new alternative seals by 150% from 20 to 50 psi. MSHA also issued guidance on the design and evaluation of new seals and the inspection of existing seals.

MSHA is currently drafting an emergency temporary standard which addresses improved seal strength, design, construction, repair and sampling of the atmosphere behind seals.

### *Technical Study Panel on Belt Air*

Section 11 of the MINER Act required MSHA to establish a Technical Study Panel on Belt Air. The purpose of this Panel is to “provide independent scientific and engineering review and recommendations with respect to the utilization of belt air and the composition and fire retardant properties of belt materials in underground coal mining.” Congress provided the Panel one year from the Panel’s appointment to issue its report, and the Secretary of Labor is given an additional 180 days to respond to the Panel’s report.

The charter governing the Panel was published in the Federal Register on December 22, 2006. The first two meetings of the Technical Study Panel have already taken place—the first on January 9-10, 2007 and the other on March 28-30 in Pittsburgh, Pennsylvania. The third meeting is being held now in Salt Lake City, Utah, and a fourth is scheduled for June 20-22 in Birmingham, Alabama. Members of the

Panel are prominent and experienced mine safety and health professionals. As mandated in the MINER Act, two of the Panel members were appointed by the Department of Health and Human Services, two by the Department of Labor, and two members were appointed by Congress.

#### *Refuge Alternatives*

NIOSH is conducting research and field tests on refuge alternatives. By the end of this year, NIOSH is scheduled to report the results of the research to the Department of Labor. By mid-2008, in accordance with the MINER Act, the Department of Labor will report to Congress on the actions MSHA will take in response to the NIOSH report. MSHA is aware of requirements by some states for refuge chambers, and MSHA is accepting state approved refuge chambers as a means of providing breathable air.

#### *Recruitment*

The Emergency Supplemental Appropriations Act of 2006 (P.L.109-234) provided an additional \$25.6 million for MSHA for coal enforcement, including the hiring of coal mine inspectors and other enforcement personnel. MSHA is pressing ahead with recruitment, training and deployment of the additional 170 coal mine enforcement personnel funded by the emergency supplemental appropriation. Through the first three quarters of MSHA's hiring plan, 126 new enforcement personnel staff has been hired. While MSHA faces significant challenges to both replace the enforcement personnel who will likely retire this year and expand our enforcement ranks, I am confident that the agency will meet its goal of hiring 170 net new personnel. The President's FY 2008 budget request includes \$16.6 million to maintain these enforcement staff.

MSHA continues to conduct recruitment drives in local communities around the country, and we have hired additional staff at our Mine Health and Safety Academy to ensure that we can properly and expeditiously train our new inspectors and get them out to the job sites where they will make a difference. I believe this training is the best, most effective program MSHA has ever had and will enable these new inspectors to meet today's challenges. In the end, I strongly believe the increased presence of MSHA enforcement staff at the job sites will have a positive impact on mine safety and health.

#### *Current Enforcement Activities*

MSHA will use all of the tools available to achieve our goal of safer and healthier mines, including tough enforcement, education and training, and technology. MSHA will be particularly aggressive with those mine operators who habitually violate MSHA standards and seem to view penalties as just another cost of doing business. In order to better identify these persistent repeat violators, MSHA is developing a database to provide for a more objective analysis of accident trends and enforcement results. MSHA will use the data developed from this database to target those operators who refuse to follow the laws and regulations governing mine safety and health.

One particular tool—pattern of violations—has been in MSHA's arsenal for over 30 years but the agency has never used it. The Mine Act authorizes MSHA to issue a withdrawal order under certain conditions disclosed by an inspection conducted within 90 days after a notice that the mine operator has a pattern of violations of mandatory standards that could have significantly and substantially contributed to mine hazards. MSHA has a regulation that provides for a letter warning mine operators that they have a potential pattern of violations before the statutory notice is issued. While MSHA has issued such letters, it has never proceeded to issue the statutory notice. MSHA has recently initiated the development of objective criteria to identify mines that may have a pattern of violations. Once this new criteria is in place, MSHA will issue pattern of violations notices and orders where warranted. This measure is tough, but I believe it is also necessary in instances where the safety of miners is routinely jeopardized.

MSHA will also continue to conduct focused inspections on known hazards, such as the program we recently completed on retreat mining. In addition to implementing the MINER Act, MSHA will continue to inspect each underground mine four times annually, and each surface mine twice a year, as required by statute.

#### *Conclusion*

MSHA continues to move forward to both implement the MINER Act and to enforce the provisions of the Mine Act. Over the past 14 months, MSHA has issued—

- An Emergency Temporary Standard to improve mine safety;
- Two major regulations to implement the MINER Act;
- A Program Information Bulletin on breathable air;
- A Program Information Letter on flagrant violations; and

- Another Program Information Bulletin on seals.

These actions have been taken to implement provisions of the MINER Act. In addition, two major rules to implement the MINER Act are in various stages of the regulatory process and should be in final form by the end of 2007 as mandated by Congress.

Today, every single person at MSHA remains focused on our core mission: to improve the safety and health of America's miners and to work toward the day when every miner goes home safe and healthy to family and friends, after every shift of every day. MSHA cannot do this alone. The entire mining community—mine operators and miners included—must also do their part to improve mine health and safety. Together MSHA, mine operators and miners can achieve this important goal.

Thank you for allowing me to testify today. I look forward to answering your questions and to working with this committee to continue to improve mine safety.

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Chairman MILLER. Mr. Snare?

**STATEMENT OF JONATHAN SNARE, ACTING SOLICITOR OF  
LABOR, DEPARTMENT OF LABOR**

Mr. SNARE. Chairman Miller, Ranking Member McKeon and members of the committee, I am pleased to appear before you today to discuss how the Office of the Solicitor supports and assists MSHA in its efforts to protect the health and safety of our Nation's miners.

The Office of the Solicitor, or SOL as we are known around the Department of Labor, has a long and distinguished record of providing high-quality legal services to the Department and its client agencies. SOL is relatively unique among legal offices in Federal agencies because it has independent litigating authority under a number of Federal statutes, including the Mine Act.

Enforcement is our first priority and accounts for the majority of SOL efforts in support of MSHA. Attorneys in our national and regional offices prosecute and defend MSHA enforcement actions and whistleblower protection cases before the independent Federal Mine Safety and Health Review Commission. We secure access to mines through injunctions when mine operators deny entry to MSHA inspectors, and we jointly refer criminal cases to the Department of Justice for investigation and criminal prosecution.

In recent years, mine operators have contested an average of 6 percent of the total number of violations issued. We expect that the contest rate on MSHA citations will increase because of the higher civil penalties now being assessed and as MSHA uses all of its enforcement tools as directed by Assistant Secretary Stickler, including the new tools authorized by the MINER Act.

Whistleblower cases under the Mine Act are also a high priority for SOL and MSHA. To ensure that whistleblower cases get the immediate attention they deserve, SOL and MSHA have established internal procedures that require a decision to file within 90 days of the complaint being filed with MSHA. Discharge cases are handled even faster. In appropriate cases, MSHA and SOL work together to take the action necessary to seek temporary reinstatement of a miner allegedly discharged for engaging in protected safety activity within a month from the date the miner files a complaint.

SOL also gives high priority to any case involving withdrawal orders issued by MSHA inspectors when they find that an imminent danger exists at a mine.



In addition to our priority enforcement cases, SOL is going after mine operators who refuse to pay their civil penalties.

SOL is working closely with MSHA to consider how best to employ the new enforcement tools to protect the safety of American miners, such as the MINER Act's authority to issue citations for flagrant violations of mandatory safety and health standards.

SOL works closely with MSHA when an inspector identifies a violation appropriate for a flagrant designation to make sure all of the legal elements are satisfied.

SOL is also supporting Assistant Secretary Stickler's decision to utilize the pattern of violations provision in the Mine Act to ensure that this policy will meet any potential legal challenges. Under this provision, MSHA can issue a withdrawal order requiring miners to exit the mine. Even though this provision has been in MSHA's arsenal for over 30 years, it has never been used.

SOL attorneys also provide legal support for mine accident investigations. In major accidents SOL will assign multiple attorneys to the investigation to ensure that the accident team has our full support and that eventual enforcement actions are backed up by solid evidence. For example, during the Sago investigation, the operator refused to allow the United Mine Workers of America representatives to participate in the underground accident investigation. SOL acted quickly on behalf of the UMWA to ensure that they can serve as a representative of the miners at Sago.

SOL also provided support for MSHA in their investigation of the Aracoma accident, which resulted in a criminal referral to the Department of Justice and the imposition of the highest civil penalty against a coal mine operator in history.

SOL attorneys also provide legal support to MSHA's rulemaking efforts. SOL works closely with MSHA to develop the emergency temporary standard and the subsequent final rule on emergency mine evacuations.

In addition to the rulemakings updating the civil penalty regulations and the rules on seals and mine rescue mandated by the MINER Act, SOL has supported MSHA providing legal guidance and advice on the review and approval of emergency response plans, developing policy on implementing the Family Liaison Program and chartering and providing legal support on the belt air technical study panel.

In assisting MSHA to achieve its regulatory objectives, SOL is keenly focused on making sure that these requirements withstand legal challenges. These efforts are particularly important because of the likelihood that these rules will be challenged in Federal court.

SOL continues to fully support MSHA and Assistant Secretary Stickler's clear message of strong enforcement. The Office of the Solicitor is also working with MSHA to ensure timely completion of the congressional mandates in the MINER Act. The attorneys in our office take their responsibility seriously and are proud to do their part in protecting America's miners.

I want to thank you again, Mr. Chairman and members of the committee, for the opportunity to testify; and I look forward to answering your questions.

Chairman MILLER. Thank you.

[The statement of Mr. Snare follows:]

**Prepared Statement of Jonathan L. Snare, Acting Solicitor, U.S.  
Department of Labor**

Chairman Miller, Ranking Member McKeon, and Members of the Committee, I am pleased to appear before you today to affirm the commitment of the Office of the Solicitor to support and assist the Mine Safety and Health Administration (MSHA) in its efforts to improve and protect the health and safety of our nation's miners. We believe that MSHA and the attorneys in the Solicitor's Office must work hand-in-hand to carry out MSHA's enforcement and regulatory responsibilities.

*Role of the Office of the Solicitor*

The Office of the Solicitor, or "SOL" as we are known in the Department, has a long and distinguished record of providing high quality legal services to the Department of Labor and its client agencies. SOL is relatively unique among legal offices in federal agencies other than the Department of Justice (DOJ) because it has independent litigating authority under a number of federal statutes, including the Mine Act of 1977. Attorneys in our headquarters division and regional offices handle MSHA's enforcement litigation before the independent Federal Mine Safety and Health Review Commission (Commission) Administrative Law Judges (ALJs).

Enforcement is our first priority and accounts for the majority of our efforts in support of the MSHA program. We prosecute and defend MSHA enforcement actions and whistleblower protection cases before the Commission, secure access to mines through injunctions when mine operators deny entry to MSHA's inspectors, and jointly refer criminal matters like the referral of the Aracoma violations to DOJ for investigation and possible criminal prosecution. SOL attorneys also assist MSHA by providing a broad range of legal guidance and advice on all aspects of our client's activities.

*Regular Enforcement Responsibilities*

Following the mining accidents last year and enactment of the MINER Act, SOL mobilized legal resources to assist MSHA in implementing the new legislation, while continuing to carry out regular enforcement responsibilities.

Litigating contested violations. In recent years, mine operators have contested an average of six percent of the total number of violations issued, which have ranged up to 135,000. All contested violations are handled by SOL attorneys or trained MSHA specialists. We expect that the historic contest rate of six percent will increase as a reaction to the increased civil penalties now being assessed and the full use of MSHA's enforcement tools as directed by Assistant Secretary Stickler.

Litigating whistleblower complaints. SOL and MSHA have continued to promptly address whistleblower cases—a high priority issue for DOL and MSHA. During Fiscal Year 2006, MSHA received 106 complaints. As of early May this year, MSHA has received 59 complaints. To ensure that whistleblower cases get the immediate attention they deserve, SOL and MSHA have established internal procedures that require a decision on whether or not to file the case with the Commission within 90 days of the complaint being filed with MSHA. Discharge cases are handled even faster. In appropriate cases, MSHA and SOL will work together to take the action necessary to seek temporary reinstatement of a miner allegedly discharged for engaging in protected safety activity within a month from the date the miner files a complaint.

Seeking injunctions to enforce withdrawal orders. We also give high priority to any case involving withdrawal orders issued by MSHA inspectors because they have found an imminent danger exists at the mine. While such cases are relatively rare, they can be complex (for example, cases involving expert testimony about mine ventilation plans). Although under the Mine Act, violations are corrected first before they are litigated, any enforcement action that stops production is vigorously contested before the judge. For the same reason, any case involving a failure to abate a violation, and thus issuance of a withdrawal order, also gets high priority and can result in an injunction action in District Court.

Going after delinquent mine operators. In addition to our priority enforcement cases, we are using innovative methods to go beyond the standard debt collection procedures in the Debt Collection Act to ensure that delinquent mine operators pay their civil penalties, including actions to enjoin operators from failing to pay civil penalties. Once the court issues an order, a recalcitrant operator can be held in contempt if he does not pay.

### *Support for Accident Investigations and Criminal Referrals*

When fatal accidents occur, SOL attorneys are immediately notified and are prepared to give on-the-scene legal support to MSHA investigators. In major accidents like Sago, Aracoma, and Darby, we assign multiple attorneys to the investigation to ensure that the accident team has our full support and that eventual enforcement actions are backed up by solid evidence.

For example, during the Sago investigation, after two anonymous miners designated the United Mine Workers of America (UMWA) as a representative of miners at Sago, the operator refused to allow the UMWA representatives to participate in the underground accident investigation. SOL took immediate action to obtain an injunction in District Court and successfully defended the injunction in the Court of Appeals. SOL's injunction case was filed on the same day the operator denied the UMWA their participation rights and the Sago investigation proceeded without interruption with participation by the UMWA.

The Aracoma investigation is an example of a complex investigation involving both a criminal referral and the highest civil penalty against a coal mine operator in history.

SOL also plays a critical role in assisting MSHA to refer potential criminal violations of the Mine Act to DOJ whenever they are found. Referrals to DOJ are done by a letter signed jointly by career MSHA and SOL officials.

### *New Enforcement Developments*

SOL works closely with MSHA to consider how best to employ new enforcement tools to protect the safety of American miners, such as the MINER Act's authority to issue citations for flagrant violations of mandatory safety and health standards.

SOL advised and assisted MSHA in the development of guidelines for determining when a violation should be designated as "flagrant" and assessed an appropriately high penalty. Citations for flagrant violations are particularly useful in instances where the mine operator has acted recklessly or habitually violated MSHA's mandatory standards and view penalties as the cost of doing business. SOL works closely with MSHA when an inspector identifies a violation appropriate for a flagrant designation to make sure that all the elements are satisfied. Flagrant violations can result in a penalty up to \$220,000. We fully expect these cases to be litigated and we will defend them at the Commission and on appeal where necessary.

Under the MINER Act, new minimum penalties have been implemented by MSHA regarding accident notification and unwarrantable failures. We believe that mine operators will begin to contest citations as a reaction to these new minimum penalties.

Assistant Secretary Stickler's decision to utilize the pattern of violations provision in the Mine Act will also require careful planning and preparation to ensure that we can meet any legal challenge. Under this provision, MSHA can issue a withdrawal order requiring miners to exit the mine. Even though this provision has been in MSHA's arsenal for over 30 years, it has never been used. As Assistant Secretary Stickler notes in his testimony, he intends to systematically review the enforcement and safety records at all mines and take appropriate action where a pattern of violations is established. Once the power of this tool has been exercised, we expect that mine operators will vigorously contest more citations to avoid the potential of withdrawal orders based upon a notice of a pattern of violations.

### *Development and Defense of New Rules*

SOL attorneys at headquarters provide legal support to MSHA's rulemaking efforts. The tragic events in early 2006, particularly the accidents at the Sago and Aracoma mines, led MSHA to conclude that a more integrated approach to mine emergency response and evacuation was necessary. This conclusion prompted the issuance of an Emergency Temporary Standard (ETS) to protect miners from the grave danger associated with mine emergencies and evacuations. In accordance with the Mine Act, the ETS was effective immediately upon publication in the Federal Register on March 9, 2006, and served as the proposed rule. This was the second ETS issued by this Administration out of only three in MSHA's nearly 30-year history. SOL worked closely with MSHA to develop the ETS and the subsequent final rule on Emergency Mine Evacuation. Our attorneys provided legal advice and counseling on all aspects of the rulemaking, including the "grave danger" finding, the regulatory text, and the preamble justification for the rule.

In addition to the larger, more intensive rulemakings including the update of the civil penalty regulations and the rules on seals and mine rescue mandated by the MINER Act, SOL has supported MSHA by providing legal guidance and advice on the review and approval of Emergency Response Plans, developing policy on implementing the Family Liaison Program, and chartering and providing legal support

to the technical study panel that is reviewing the use of belt air and the composition and fire retardant properties of belt materials.

In assisting MSHA in achieving its objectives through the development and implementation of new rules, SOL is keenly focused on making sure that the requirements withstand legal challenges. The efforts are particularly important because of the likelihood that these rules will be challenged, as were two of MSHA's recent initiatives.

The first challenge was filed by the National Mining Association (NMA) to MSHA's final rule on emergency mine evacuations.

The second challenge was filed also by the NMA to MSHA's February 2007 Program Information Bulletin (PIB). This PIB stems from the MINER Act's requirement that underground coal mine operators adopt emergency response plans providing for sufficient supplies of post-accident breathable air. On May 7, 2007, we filed a motion to dismiss this challenge.

Both challenges were filed in the D.C. Circuit Court of Appeals and SOL will work tirelessly to defend MSHA's action in both cases. We are also proud of our successful defense earlier this year of MSHA's rulemaking that established new standards for diesel particulate matter (DPM) exposure in underground metal and non-metal mines. The DPM legal victory resolved many questions raised by the industry regarding the validity of MSHA's risk assessment and the appropriate surrogate for measuring DPM. SOL continues to assist MSHA with legal advice concerning implementation of the final DPM rule and is consulted, as necessary, on enforcement issues.

#### *Conclusion*

SOL continues to fully support MSHA and Assistant Secretary Stickler's clear message of strong enforcement. The Office of the Solicitor is also working with MSHA to ensure timely completion of the Congressional mandates in the MINER Act. The attorneys in our office take their responsibilities seriously and are proud to do their part in protecting America's workers.

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Chairman MILLER. Mr. Grayson—Dr. Grayson.

#### **STATEMENT OF LARRY GRAYSON, CHAIRMAN, DEPARTMENT OF MINING AND NUCLEAR ENGINEERING, UNIVERSITY OF MISSOURI-ROLLA**

Mr. GRAYSON. Good morning, Mr. Chairman and distinguished members of the committee. My name is Larry Grayson. I am a Professor of Mining and Engineering at the University of Missouri-Rolla and also Director of the Mine Safety Center. I thank you for the opportunity to address the committee today concerning mine safety and the effectiveness of MSHA's mine safety programs.

My insights on these topics—

Chairman MILLER. Dr. Grayson, is your microphone on?

Thank you.

Mr. GRAYSON. My insights on these topics have been sharpened by last year's coal mine tragedies and through interaction with mine safety experts who served on the Independent Mine Safety Technology and Training Commission. The Commission report made recommendations on various technologies, strategies, procedures and training and recommended that risk-based design and management of major hazards should be done by every underground coal mine in the U.S. to prevent emergencies. We also noted that all mine personnel must be involved in establishing a culture of prevention.

MSHA has had a major role in improving miner safety. MSHA inspectors provide extra sets of eyes to spot problems, and well-trained inspectors are adept at finding more insidious-type problems. We have owe a great debt of gratitude to our mine inspectors, and our day-in-and-day-out efforts are critical.

MSHA's internal policies and practices change as key personnel change. Consistency of enforcement is sometimes problematic among districts, mines and even inspectors. The current attrition of experienced inspectors will only exacerbate the situation unless close attention is paid and proactive action is taken to minimize the effects.

A lack of attention to details by MSHA is highlighted by the Jim Walters Resources No. 5 Mine disaster in 2001 when 13 miners died. The mine received 41 percent of all citations from January, 1999, until the explosions occurred on September 23; and they were on ventilation, accumulation of combustible materials and rock dusting and, finally, roof control. A significant percentage of them were S&S. Five withdrawal orders were issued on ventilation and eight on combustible materials and rock dusting. Three ignitions occurred between August 30 and September 19, while only one occurred in 2000. Each of these critical areas was related to the explosions, and there was significant evidence the greater MSHA scrutiny was justified.

This case study emphasizes the value of risk analysis and implementation of actions to mitigate or eliminate a sequence of events from causing a disaster. No coal mine fire and explosions fatalities occurred from 1993 through 1999. However, seven explosions occurred in sealed areas during that time. The causes were deciphered but next steps were not taken to deal with the conditions under which seals were compromised and to examine how to prevent damage from such explosions.

We paid the price for the lack of scrutiny in 2006. Sound risk analyses of these situations would have detected and addressed the vulnerabilities, and a plan aimed at prevention could have been started in 1996 following three or four of these events. It is MSHA's responsibility to initiate such scrutiny and any follow-up action.

Many mines do not perform at an acceptable level of safety. It is appropriate to target high-risk mines deserving heightened scrutiny and concomitant enforcement without sacrificing adequate inspections of all mines. However, such targeting must be objective, risk-analysis based and designed to address major hazards in high-risk mines quickly.

Investigations of incidents with four or more fatalities should not be managed by MSHA. An independent investigative board should conduct those investigations.

MSHA should accelerate the acceptance of technology and equipment approved according to high international standards for permissibility and intrinsic safety. The liability issues should be removed quickly to facilitate this.

Moving new technology into mines is not generally an easy task. We must ensure that the technology will work and not fail in times of critical need. Miners must be assured that they will be protected as advertised and will never again be in situations that expose false expectations about technology. The key is to identify needs early and pursue new technology proactively.

In my written comments I have shared details on a research project that illustrates the problem of moving too quickly to demonstrate a new technology for monitoring coal mine dust exposures.

It has taken over 6 years since I left NIOSH to reach success for the technology, but soon we will be able to rely on the accuracy, the robustness and utility of the personal dust monitor to protect miners from dust diseases.

I admire our coal miners deeply, and I affirm that we must provide them a workplace that will protect their lives and livelihoods. Our Nation needs courageous men and women willing to meet the challenges of coal mining. Let us remove the life-threatening vulnerabilities that have been identified, look proactively for those yet unidentified and build a risk-analysis-based culture of prevention that will address the major threats.

I will try to answer any questions you may have.

Chairman MILLER. Thank you.

[The statement of Larry Grayson follows:]

**Prepared Statement of R. Larry Grayson, Union Pacific/Rocky Mountain Energy Professor of Mining and Director, Western U.S. Mining Safety & Health Training and Translation Center**

Good morning Mr. Chairman and other distinguished members of the Committee. My name is Larry Grayson. I am the Union Pacific/Rocky Mountain Energy Professor of Mining at the University of Missouri-Rolla and Director of the Western U.S. Mining Safety & Health Training and Translation Center. Having been a coal miner myself for nine years, I very much appreciate the opportunity to address the Committee today concerning mine health and safety issues and the effectiveness of MSHA's mine safety and health programs.

Based on my experience in underground coal mining, as a professor who focuses on mine health and safety issues, and as a former Associate Director of mine health and safety research in NIOSH, I am here hopefully to help you evaluate the effectiveness of MSHA's mine safety and health programs. My insights on this topic have been sharpened dramatically in the last year since the mine tragedies at the Sago, Aracoma/Alma, and Darby mines compromised a dramatic legacy of improvements in mine safety. These insights were particularly honed through my interaction with mine safety and emergency response experts who served on the independent Mine Safety Technology & Training Commission (hereafter referred to as the Commission), which was boldly established by the National Mining Association.

During the course of the study, it became clear to the Commission that the mine safety record regarding underground coal mine fatalities resulting from fires and explosions dramatically changed from the period 1993-1999, when no such fatalities occurred, to the period 2000-2006, when the awful toll increased to 37. This latter number comprises 40% of such fatalities over the past 23 years, and returned the incident rate to over 6 per year, nearly the same rate during the period 1984-1992. No single factor can account for the dramatic rise, but rather myriad parameters led to it.

The Commission's initial focus was on making recommendations to increase the chances of miners to survive mine emergencies. Accordingly, in the report<sup>1</sup> recommendations were made relative to communications technology, emergency response and mine rescue procedures, training for preparedness, and escape and protection strategies; however, the Commission noted the need for a fundamental change in the way mines address their major hazards. In this respect the Commission recommended that risk-based design and management of major hazards are necessary processes for underground coal mines to effectively prevent mine emergency situations. History and experience clearly indicate, in numerous situations and conditions encountered, that often minimum compliance with regulations is not sufficient to deal with major hazards such as fires and explosions. The Commission noted further that the level of risk from such hazards is mine specific, and interventions to effectively mitigate or eliminate the threats of such major hazards must be determined by a thorough risk analysis leading to a management plan implementing the interventions. This process should be done by every underground coal mine in the U.S., because of the significant threats, and management must involve all workers in preventing accidents and injuries. Establishing a culture of prevention is necessary for us to achieve the goal of zero fatalities.

<sup>1</sup>The Commission report can be found at: <http://www.coalminingsafety.org>

I will now focus on MSHA and give my assessment of the agency's effectiveness in improving mine safety and health in the U.S. First without doubt the agency has played a major role over the past 37 years in improving the safety of miners. Statistics bear this out. MSHA inspectors provide 'extra sets of eyes' to help spot problems in a mine, and I have personally regarded their efforts as very helpful. Some underground coal mines can be very expansive spatially, comprised of extensive infrastructure spread throughout miles and miles of tunnels, both of which can deteriorate over time. Good examinations by mine examiners can help spot developing problems, especially the more visible ones, but many other problems develop much more insidiously, and well trained inspectors are adept at finding such insidious problems earlier. We owe a great debt of gratitude to our mine inspectorate, and their day-in and day-out efforts are critical.

The focus of MSHA's internal policies and practices does change over time, particularly as key personnel change. Consistency of enforcement, including the assignment of the S&S designation, is sometimes problematic among districts, mines, and inspectors. The current attrition and loss of experienced inspectors will only exacerbate this situation, unless close attention is given and proactive action is taken to minimize the effects. The scrutiny of mine inspectors is critical to ensure the overall safety of mine operations, just as is the scrutiny of mine examiners at their mines. Lack of attention to details can spell disaster, as we have seen from last year's tragedies.

An example of this lack of attention to detail by mine managers is manifested by the situation that developed at Jim Walter Resources Mine No. 5 in 2001, when 13 miners died. An analysis of violations and reportable accidents for that mine shows that a number of leading indicators of potential disaster did exist. Specifically, the mine had only one reportable ignition in 2000. The first ignition at the mine in 2001 occurred on May 17th, and then a second occurred on August 30. This was not particularly noteworthy in an experienced miners' mind. However, two additional ignitions occurred in September, just prior to the explosions on September 23rd. The latter two ignitions in quick succession following the one on August 30th should have rung a clarion call for immediate scrutiny of potential for danger.

To carry the example farther regarding lack of appropriate attention to details by MSHA, the Jim Walter Resources No. 5 Mine received 1,489 citations from January 1999 until the explosions occurred in 2001. Of these, citations for ventilation (329), accumulation of combustible materials and rock dusting (288), and roof control (112) accounted for 49% of the total. The percent of them that were designated as S&S were 14.6%, 19.8%, and 64.3%, respectively. Over the same period, five withdrawal orders were issued concerning ventilation, eight relative to combustible materials and rock dusting, and one regarding roof control. Importantly, each of these critical areas was related to the explosions that occurred on September 23rd and the spatial extent of destruction.

There was significant evidence, in my opinion, that greater scrutiny of the safety performance at the Jim Walter Resources No. 5 Mine was justified. The sequence of events involving unsafe conditions and unsafe acts could have been interrupted, thereby preventing the fatalities. Unsafe conditions included the bad roof area, the occluded methane, the local explosion, disrupted ventilation, and accumulation of methane from the face areas toward the mouth of the section. Unsafe acts included leaving the charger near the bad-roof area, allowing the miners to stay in the mine after the first explosion, not removing the power from the haulage block system, and allowing the miners to return to the area of the first explosion. A simple action to move the charger away from a high-risk, bad-roof area could have interrupted the sequence of events and prevented the explosions. This case study shows the distinct value of analyzing high-risk situations and then taking action to mitigate or eliminate a potential sequence of activities from reaching fruition.

I also believe that there were many warnings of potential disaster involving sealed, abandoned areas of mines. As I noted earlier, there were no fatalities because of fires and explosions from 1993 through 1999, and we all thought that the trend would continue. However, during this period there were seven incidents of explosions in sealed, abandoned areas in mines. We were fortunate that the incidents did not result in fatalities, but simply ignoring what was happening was, in retrospect, not wise. I know work was done to decipher the causes of these explosions, and we understood the reasons, but we didn't go the next step to deal with the conditions under which seals were compromised and to prevent damage from such explosions. Very tragically, we paid the price for the lack of scrutiny in 2006. I am convinced that a systematic approach to risk analysis of these situations would have detected the vulnerabilities, and a game plan toward prevention could have been started in 1996 after three or four of these events occurred. In my opinion, it is the responsibility of MSHA to initiate such scrutiny and follow-up action.

Many mines do not perform at an acceptable level of safety. It is appropriate, in my thinking, to target high-risk mines deserving heightened scrutiny and concomitant enforcement without sacrificing adequate inspection of all mines. However, such targeting must be objective and based on a sound risk-analysis process, fair to all types of operations, and designed to address major hazards quickly. I believe MSHA is headed in this direction, and I urge the agency to do it soundly and fairly. The U.S. mining industry should be the global leader in mine safety and health.

As we have become painfully aware from the tragedies in 2006, it is critical that a technology scan be done periodically to continuously seek improvement of the level of protection of miners to a higher level, thereby increasing their odds of survival dramatically in an emergency. It is imperative that this be done proactively, and it is recommended that an independent group of safety experts, including some from non-mining disciplines, should comprise a technology committee charged to do this. The agency to which the committee reports does not matter, as long as the committee functions independently.

Investigations of incidents with four or more fatalities should not be managed by MSHA, in my opinion. There will be an innate conflict of interest in some cases, and in other cases MSHA needs the separation from unpopular conclusions in order to preserve the perception of objectivity. It is in the agency's best interest to have an investigative board established, so that investigation can be done independent of the agency's influence.

The time has arrived for MSHA to accelerate the approval and certification of technology and equipment approved according to high international standards for permissibility and intrinsic safety. The agency knows which standards meet or exceed their own standards, and liability issues should be removed quickly to facilitate this.

As this point I am obligated to note that moving identified technology toward implementation in mines is not generally an easy task. We cannot allow the adoption of new technology without ensuring that it will work in the underground coal mine environment and not fail in times of critical need. Miners must be assured that they will be protected 'as advertised' and will never again be in situations that reveal false expectations about technology. The key is to identify needs early and pursue new technology proactively. From my own experience, I can share a technology research project that will illustrate the problem of trying to move too quickly to implement a new technology.

When I first joined NIOSH in 1997, an ongoing multi-year project was the development of a machine-mounted, continuous, respirable dust monitor (MMCRDM). The targeted technology for eventual implementation was the tapered-element oscillating microbalance (TEOM). The technology was used in other industries to monitor dust or particulate matter accurately, and it was selected as the best technology for innovative application in measuring respirable coal mine dust levels continuously. After about 5 years of research, the developer of the MMCRDM was able to demonstrate its accuracy in a housing that was appropriate for application in an underground coal mine. The next step was to test the new technology for accuracy against the dust sampling device commonly used for compliance purposes by MSHA and mine operators. Eventually and reasonably quickly, the accuracy was confirmed. The next step was to test the ability of the new technology to withstand the rigors of the underground mining environment. Lab testing was the first step in doing this, according to a partnership-based research protocol, where the machine would be subjected to vibration and water droplet levels expected in coal mines. In this stage, any problems detected would result in modification of the machine to improve its robustness. Following success in this stage, in-mine testing of a prototype or a few prototypes would be done next, to validate the robustness in the mine environment. Unfortunately the machine was moved too quickly to the in-mine testing stage, bypassing the planned lab testing and early field testing, and multiple units failed miserably upon implementation for demonstration purposes. The technology now forms the basis for the personal dust monitor (PDM), which is near final approval following successful field research. It has taken over six years to reach this stage after I left NIOSH, but we will be able to rely on the accuracy, robustness, and utility of the PDM to protect miners from dust diseases of the lungs.

I would be remiss if I did not speak on MSHA's behalf concerning the impediments the agency faces in moving technology, procedures, policies, and rulemaking along more quickly. The U.S. government was established originally with an intricate system of checks and balances placed on its activities, involving each branch of government. In rulemaking, the process requires input from stakeholders. The stakeholders also have access to legal challenges when strong disagreements on direction occur. This intricate, balanced system ensures that prudent laws, regulations, and decisions are achieved in the end, while involving those most impacted



by the proposed measures. Implementation of many provisions of the MINER Act must also undergo this process of public input and interaction with MSHA to move the laws into rules. Although it is very frustrating that the desired protections are not yet in place, and danger from fires and explosions still exist for underground coal miners, MSHA has been following the required process for most provisions. Why certain provisions of the MINER Act were not pursued in the past or not done more quickly is problematic, for example, concerning development of seal construction criteria in light of past explosions in abandoned areas and evaluation of the protections afforded by rescue chambers.

Finally, I admire our coal miners more than I can say, and I affirm that we must provide them a workplace, in often threatening conditions, that will protect their lives and livelihoods while also assuring a retirement free from disability. Our nation has a growing dependence on a tremendous natural resource, which will provide stability in our continued economic development, and we need courageous young men and women to step up to meet the challenges of coal mining. Let us remove the life-threatening vulnerabilities that have been identified in 2006, look proactively for those yet unidentified, and build a risk analysis-based culture of prevention that will not leave any stone unturned to address the major threats.

I appreciate the opportunity to address you, and I will try to answer any questions you may have.

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Chairman MILLER. Mr. McAteer.

**STATEMENT OF J. DAVITT McATEER, VICE PRESIDENT FOR  
SPONSORED PROGRAMS, WHEELING-JESUIT UNIVERSITY**

Mr. McATEER. Chairman Miller, Ranking Member McKeon and members of the committee, my name is Davitt McAteer; and I thank you for this opportunity to present my views about MSHA.

From 1994 to 2000, I served as the agency's Assistant Secretary and also served for a time as the Acting Solicitor of Labor. I have been involved in mine safety and health issues since 1968, following the tragic Farmington, West Virginia, mine disaster.

Following the disaster at Sago and Aracoma Alma, Governor Joe Manchin of West Virginia asked me to lead an investigative panel into the causes of those disasters. In July and November of last year I produced reports into those disasters, and I submitted a copy of those reports for the record today.

Following the disasters of 2006, the families of the Sago, Aracoma Alma and Kentucky Darby victims, this committee and the American public asked the question, why hasn't the Federal Government acted to bring about changes in health and safety protections afforded miners? And why aren't new communications systems, seals, rescue chambers and improved SCSRs been placed in the mines?

While the answer is complex, the bottom line is this, miners still lack a wireless, durable phone system; 14,000 alternative seals have not been strengthened; and rescue chambers have still not been installed.

Those looking beyond the 2006 tragedies are also mystified that MSHA's regulations to protect miners from black lung is nearly 30 years old, its asbestos standard is 20 times less protected than OSHA's, and its rules on mine rescue teams are seriously outdated. The list of unfulfilled promises to miners goes on and on.

During the past 6 years, this administration has terminated multiple regulatory undertakings, including important rules on SCSR's mine rescue teams and black lung prevention.

There is no doubt that the administration's regulatory philosophy plays an important role in whether regulations are issued and the

type of regulations pursued, but that is not the only factor it plays. If congressional oversight focuses exclusively on politics, it will miss a tremendous opportunity to address a serious problem that exists beyond the resident of the White House.

Before being appointed to MSHA in 1994, I was one of the agency's harshest critics. When I started the job, I had high expectations in the form of new protective standards; and during my tenure we finalized a dozen significant regulations. Some of these had been initiated by my predecessor and others were commenced and completed during my term.

Despite my determination to issue rules and the commitment of MSHA's talented engineers and scientists, I am only modestly satisfied with our regulatory accomplishments. In my case, the faults did not fall with the agency's lack of commitment to miner safety or unwillingness to regulate.

MSHA is a small agency within a large Federal bureaucracy. Its mission is only one of many within the Department of Labor, and it does not operate in a vacuum. Promulgating workplace safety standards is a process fraught with obstacles. It was a problem when I was at MSHA, and it will be a problem for the next administration.

Some of the roadblocks were of the administration's own making and some were created by my fellow lawyers exploiting the regulatory system. When a rule is controversial, and most are, it will take 4 to 6 years to complete. In the worst of cases, the procedural maneuverings obstruct the process; and those rules are never completed. This unfinished business of protecting miners is the result of a broken rule making system.

Interest groups who have a stake in avoiding or postponing new workplace safety rules have the financial resources to bog the system down. There are numerous examples of this in MSHA's history. But one of the most troubling to me is the mining industry's efforts to obstruct MSHA's plan to correct the manner in which miners' exposure to coal dust is measured.

One of my highest priorities was attempting to transform MSHA's regulations to eliminate black lung disease once and for all. Our efforts were comprehensive, and one small part included dismantling the dust monitoring scheme put into place by the U.S. Bureau of Mines in 1971. Under this outdated policy, miners exposed to coal dust are calculated based upon an average of multiple samples. You may have two or three dusty jobs in a coal mine, and the agency is required to average those miners' exposure with samples collected from less dusty jobs. More times than not, the average will be less than the enforceable limit, meaning the mine operator does not receive an MSHA citation, and the inspector cannot compel the mine operator to correct the problem.

Beginning in 1991, we attempted to change this policy, but an unfavorable decision by the MSHA Review Commission forced us to engage in a formal rulemaking. We sought to officially revoke the sampling average policy and replace it with the safeguard of a single-shift dust sample. After a 4-year rulemaking process with multiple public hearings, we issued a joint rulemaking with NIOSH. The mining industry challenged our rule, arguing that we failed to conduct the proper rulemaking. Their challenge was upheld by the

Court of Appeals. We were forced to begin another rulemaking to revoke this harmful policy. Regrettably, the rule was not finished before I left; and, today, the 1971 averaging scheme remains in effect.

I described in my written testimony three hazardous situations faced by miners in which practical solutions exist today. Those are the presence or absence of proximity detectors, hardened cabs on bulldozers, and backup cameras on large haulage trucks. These are circumstances that kill miners day in and day out over the years. We have solutions, and because of the nature of the regulatory system, we can't get those solutions to be put in place.

I submit that the current regulatory system is broken, and we need to find a new approach to protecting miners' health and safety. I would suggest the four items for your consideration:

First, we need a full public analysis of accident, injuries, illnesses and near misses, if you would, a national report to Congress on health and safety related to best practice. That is, what has been done right within an industry, as well as deficiencies in protecting miners.

These best practices could then become a norm to help establish the "duty of care" against which an individual company could be judged. Even absent a specific regulation, mine operators would be on notice that protections exist and are available; and they have a duty to act whether or not a specific regulation is in place.

Second, the establishment of a duty of care responsibility for each mine operator. The duty of care would require a thorough process of hazard identification, risk assessment and risk control and would be coupled with the regulatory system, not replacement for the regulatory system. This model has been successfully adopted in several countries, including Australia and Canada.

Third, incorporating mine safety and health into the production of mining equipment, production equipment. This is akin to requiring for the installation of safety equipment on automobiles as part of the automobile manufacturers' responsibility and not the responsibility of the automobile driver.

For example, longwall mining machines cost in excess of \$50 million and are unparalleled in their ability to mine millions of tons of coal. Yet few, if any, safety and health features are designed into this equipment.

Chairman MILLER. Mr. McAteer, I am going to ask you if you can wrap it up.

Mr. MCATEER. I am sorry. I will wrap it up.

Fourth is permitting a quasi regulatory requirement agreed upon by all parties as part of the duty of care; and, finally, for Congress to follow the model established in the landmark 1969 Coal Act to instruct the industry directly on what is expected of them.

With these changes I believe we could improve the protections for miners and also avoid the Sago, Aracoma and Kentucky Darby type accidents. Thank you, sir.

[The statement of Mr. McAteer follows:]

**Prepared Statement of J. Davitt McAteer, Vice President of Wheeling Jesuit University**

Good Morning. My name is Davitt McAteer and I wish to thank you for this opportunity to appear before you today. I am the Vice President of Wheeling Jesuit

University where I am responsible for research efforts at the National Technology Transfer Center (NTTC) and Center for Educational Technologies (CET).

In addition, during the past year and one-half, I conducted investigations into the Sago and Aracoma/Alma No. 1 Mine disasters in West Virginia at the request of West Virginia Governor, Joe Manchin, III, and in July and November of 2006, issued reports on those disasters, a copy of each I submit for the record.

From 1994 to 2000, I served as Assistant Secretary of the United States Department of Labor for the Mine Safety and Health Administration (MSHA) and also served as Acting Solicitor for the United States Department of Labor from February, 1996 to December, 1997.

I have been involved in mine safety and health issues since 1968 when, following the Farmington Mine disaster in November of 1968, I conducted a study and produced a report and book entitled Coal Mine Safety and Health—A Case Study of West Virginia.

I come here today to attempt to address questions concerning efforts to improve health and safety in United States for mine workers, but also to propose possible solutions to long standing problems facing the Mine Health and Safety Administration and other regulatory agencies.

Following the disasters of early 2006—the families of the Sago, Aracoma/Alma and Kentucky, Darby victims, this committee and the American public asked the question of “Why hasn’t the Federal Government acted to bring about changes in the health and safety protections afforded miners, specifically why aren’t new Communication Systems, Seals, Rescue Chambers and improved SCSRs been placed in the mines?”

While the answer is complex, the bottom line is that miners still lack wireless and/or protected phone systems, the 14,000 alternative seals have not been strengthened, rescue chambers are not yet installed in United States mines, increased numbers of improved SCSRs are not yet available to miners and the mine rescue system, although improved, is not equipped as it should be for the 21st Century. We should, however, note that much has been accomplished in terms of improved training of miners on SCSRs, testing of new communication systems, approval by West Virginia of rescue chambers, monitoring of existing seals, a moratorium on alternative seal construction, and a proposal to strengthen the seals which MSHA’s forthcoming Emergency Temporary Standard will address.

Still, those looking beyond the recent tragedies are mystified that MSHA’s regulations to protect miners from black lung and silicosis are nearly 30 years old, its exposure limit for asbestos is 20 times less protective than OSHA’s standard, and its rules on mine rescue teams are seriously outdated. The list of unfulfilled promises to miners goes on and on.

There are reasons to suggest that in the past, MSHA officials have been unwilling to issue much needed rules, or did not assemble the necessary resources to get the job done in a timely way. Without a doubt, during the past six years the Administration has terminated and cancelled multiple regulatory undertakings (See Attachment 11), however, since Sago, Aracoma/Alma, and Kentucky Darby as well as since the passage of the Miner Act and as a result of this Congress’s oversight, the agency has stepped up its efforts to promulgate regulations, especially those related to disaster relief.

There is no doubt that an Administration’s regulatory philosophy plays an important role in whether regulations are issued and in the type of regulations pursued. But, that is not the only factor in play; if congressional oversight focuses exclusively on politics, it will miss a tremendous opportunity to address a serious problem that extends beyond the resident of the White House.

As the Assistant Secretary for Mine Safety and Health from 1994 until the end of 2000, I devoted significant agency resources into the development of new MSHA rules to protect miners. I came to the agency with a history of being one of its toughest critics, and I had high expectations in the form of new protective health and safety standards.

From the time I was confirmed by the U.S. Senate (February 1994) until January 19, 2001, there were a dozen or so final rules issued by MSHA.<sup>2</sup> My predecessor initiated some of these projects (e.g., Hazard Communication; Safety Standards for Explosives at Metal/Non-Metal Mines; First—Aid at Metal/Non-Metal Mines) and we completed them while I was Assistant Secretary. Others were new rules commenced and finalized during my tenure (e.g. Preventing Hearing Loss/Noise Standard; Safety Standards for Underground Coal Mine Ventilation; Training for Stone, Sand and Gravel Miners/Part 46). A team of talented MSHA engineers, industrial hygienists and analysts, would be pulled together to work on each new rule, and typically this assignment was in addition to their regular duties in an MSHA field office. These skilled and determined individuals worked diligently to develop sound,

evidence-based and cost-effective regulations designed to prevent miners from suffering injuries, illnesses and death. Despite my determination to issue protective rules and the devotion of MSHA's staff, I am only modestly satisfied with the number of regulatory improvements made during my tenure. In our case, the fault does not lie with the Agency's lack of commitment to miners' health and safety, or an unwillingness to regulate.

MSHA is a small agency within a large federal bureaucracy. MSHA's mission is only one of many within the Department of Labor, and the highest priorities of MSHA's Assistant Secretary may just be one of many for the Secretary of Labor. MSHA is not an independent agency, and it does not operate in a vacuum. But let us put this regulatory promulgation problem into context—this is not just a problem for this Administration. It was a problem when I was Acting Solicitor and Assistant Secretary for MSHA and it will be a problem for next Administrations to come.

During my tenure, we found similar obstacles and road blocks, some of which were the Administration's own making, some created by the Federal Courts and some created by my fellow lawyers exploiting the regulatory system and Federal Courts.

In the best of circumstances, promulgating a new health or safety standard takes 2-3 years to complete. However, when the rule was substantial and/or controversial, it can take 4, 6, 8 or more years from start to finish. In the worst of cases, the procedural maneuvering completely obstructs the process, and those rules are never completed. This "unfinished business" of protecting workers' health and safety is the result of a broken rulemaking system. Equally troubling was this Administration's decision mentioned above to drop about a dozen regulatory projects that were in the queue, including important rules on SCSRs, mine rescue teams, and black lung prevention.

As currently structured, MSHA's system (like OSHA's) is unable to address, in a timely manner, long-standing hazards faced by workers let alone new emerging risks. The public policy considerations embodied in the Federal Administrative Procedure Act, Presidential Executive Order 12866, the Paperwork Reduction Act of 1995, the Information Quality Act of 2001, and their amendments and implementation documents<sup>3</sup> as well as other requirements have suffocated the public health and precautionary values embodied in the statutes governing, among others, MSHA<sup>4</sup> and OSHA<sup>5</sup>. The harsh reality is that those interest groups, which have a stake in avoiding or postponing new workplace rules, have the financial resources and political clout to impede and/or bog down the current rulemaking system. There are numerous examples of this in MSHA's history, but one of the most troubling to me is the mining industry's efforts to obstruct MSHA's efforts to correct a deadly flaw in the manner in which miners' exposure to coal mine dust is measured.

When I was Assistant Secretary, one of my highest priorities was transforming MSHA's regulations on coal mine dust to eliminate black lung disease once and for all for U.S. coal miners. Our efforts were wide-ranging and comprehensive and some required changes in long-standing regulations. One of the keys to the effort was dismantling a dust monitoring scheme put in place by the U.S. Bureau of Mines (BOM) in 1971, which mandated that miners' exposure to coal mine dust would be calculated as the average of multiple samples. In order for an MSHA inspector to issue a citation for excessive coal mine dust, the average of the samples has to exceed the exposure limit, plus an error factor.

As is well known, the average of multiple data points does not accurately reflect the value of any one of the individual data points. Likewise, when you have two or three dusty jobs in a coal mine (e.g., roof bolters, continuous miner operator) and you average these workers' dust exposure samples with samples collected from less-dusty jobs, more times than not, the average will be less than the permissible exposure limit. The result: the mine operator does not receive an MSHA citation, and MSHA cannot compel the mine operator to correct the respirable dust problem, leaving miners, in particular a subgroup of miners, exposed to elevated levels of deadly coal dust.

Beginning in 1991, MSHA attempted to change its enforcement policy to eliminate the averaging of dust samples. After an unfavorable decision by the Federal Mine Safety and Health Review Commission, MSHA and NIOSH jointly engaged in a notice-and-comment rulemaking to revoke officially the BOM's 1971 "sample averaging" policy, and provide miners the health protection afforded by a single-shift dust sample.<sup>6,7</sup> In addition, an Advisory Committee of industry, labor, public health scientists and academics was constituted in November 1995 and issued its report and recommendations in November 1996. After a lengthy public comment period, which was reopened several times, and multiple public hearings, a rule revoking the "averaging" policy was published in early February 1998,<sup>8</sup> after a 4-year public process. The mining industry challenged the rule,<sup>9</sup> arguing on procedural grounds

that MSHA failed to conduct a proper rulemaking. In September 1998 the U.S. Court of Appeals for the 11th Circuit ruled in favor of the mining industry, and we were forced to begin the rulemaking process again. To this day, the rule remains as it was since 1971, in effect exposing a known set of miners to dust levels which we know will result in black lung disease.

As part of this comprehensive effort, we pursued with NIOSH, the development and testing of a continuous dust monitoring system. That effort allowed the introduction in several coal mines the initial, first-generation machine-mounted continuous dust monitor, which proved the concept that real-time continuous dust sampling was possible. These in-mine tests led to the development of the second and now third generations of continuous dust monitors, which are person-wearable units. Tragically, this equipment has not yet been mandated or implemented into U.S. coal mines. While black lung disease has been virtually eliminated in Australia, a recent NIOSH analysis points to the ongoing incidence of new cases of coal workers pneumoconiosis among U.S. miners.<sup>10</sup> We have the knowledge of how to eliminate it. We have the means to eliminate it. What is lacking is the will at both the governmental and industry levels. It is a shame on the mining industry and on the United States' mining community that we have not eliminated black lung disease.

MSHA, like its sister-agency OSHA, finds itself hidebound by a multi-layered system which slows the process, and thus, the implementation of much-needed worker protections. Agency staff and senior officials in MSHA, and indeed miners and mine operators themselves, know of longstanding hazards faced today by mine workers that are causing injuries, illnesses and death for which remedies exist. In fact many of the hazards encountered by miners today, are not new, some are the same hazards faced by their fathers and even grandfathers. More troubling, is that for many, if not all of these dangers, a remedy exists to reduce or eliminate miners' risk of harm, but is not being put in place.

The mechanical and procedural requirements relating to dates of publication, public comments, record opening, request for additional time for public comment, etc. add months to the process. This is not to suggest that each of the notice and public hearing requirements are lacking in merit or not worthwhile; the facts are that the system has become overloaded. The search for alternative ways to eliminate these risks and dangers must be expanded.

Two alternatives contained in the Mine Act "negotiated regulations" and "advisory committees" have generally failed. Negotiated regulations have proven to be, almost without exception, an ineffective path to successful rulemaking in large part because they can be stopped at any step of the process by any involved party. Objections sometimes come after years of effort, meaning one interest group, either industry or labor, can torpedo the whole effort.

The Act also contains an "advisory" committee option which because of the two tiered requirements, first requiring equal membership of labor and industry, plus a requirement that a majority of committee members be unrelated economically to the mining industry, has proved not only difficult to fulfill but has resulted in a near impossibility to create a committee which can successfully report out an agreed upon set of recommendations. Even when a committee can agree on recommendations, MSHA must still then proceed with the normal rulemaking process.

But let us turn to examples of known safety and health risks which we can virtually all agree are causing death, injury and illness for miners. These are problems for which solutions or answers exist, but which, because of the cumbersome regulatory process or interest group opposition slows the promulgation of regulatory remedies. We rarely create a new way to kill miners, and in the following three examples, solutions have existed for years but the Federal government has been unable to promulgate protective new rules:

1. Proximity detectors can automatically turn off remote-controlled mining equipment when it gets too close to miners. The problem of putting mining equipment operators under unstable roof was solved by allowing them to operate the equipment remotely. Currently a number of equipment operators are killed every year when they are crushed by moving equipment underground. Yet despite the fact that devices exist which prevent these deaths, they are not in wide spread use in mines and no regulations have been promulgated requiring their use.

2. Hardened cabs on bulldozers that are used on surge piles can save lives. When a bulldozer falls into a void on a surge pile, the bulldozer and the miner operating the dozer are covered over with the coal or ore. It can take hours to remove the equipment and operator from the surge pile, but if the windows on the dozer don't break and the miner has enough oxygen inside the cab, he can survive. Every year, there are documented lives saved using this technology, but it is not required by

regulation. A number of companies have installed this equipment but a significant portion of the industry has not retrofitted their cab windshields to strengthen them.

3. Back-up cameras on trucks and haulage vehicles at large surface mines can save lives of miners who otherwise are at risk of being crushed when the big trucks back up over miners or smaller trucks. These large haulage trucks cost a fortune, but inexpensive camera systems which are currently available, are not required by MSHA. In the late 90s, I initiated a voluntary program to encourage operators to install them, and sadly that program has languished in the last several years.

Because of the recent mining tragedies, disaster-related regulations have been placed front and center and correctly so. However, this emphasis insures that the hazards described in the three examples above will not be addressed and more miners will needlessly perish from well-recognized hazards. I propose the following shift in regulatory philosophy with respect to mine safety and health problems and solutions.

The critical point is that the regulatory process is broken and cannot be relied on to quickly address real needs for improvements and fast moving changes in the modern workplace. Congress and the regulatory agencies themselves, under the current regulatory framework, cannot efficiently legislate or request solutions to every one of these workplace hazards—issue by issue. We need to find a new approach to protecting miners' health and safety. Below I have outlined four steps to achieve this new approach.

First, we need a full public analysis of accident, injuries, illnesses, and near misses, and possible solutions. If you will, a National Report to Congress on Health & Safety, and Best Practices. The Report will annually assess how MSHA, as well as other agencies, are doing in achieving their core mission of saving lives and preventing injuries and illnesses, such as in the case of MSHA and OSHA, or improving environmental quality, in the case of the EPA. This Report would also describe Best Practices in a particular industry, that is, what is being done right, as well as deficiencies.

These best practices then would become the norm to help establish the "Duty of Care" against which an individual company's efforts would be judged. Even absent a specific regulatory requirement, mine operators would be "on notice" that protections exist and are available, and they have a duty to act, whether or not a specific regulation is in place.

The federal agencies themselves are in the best position to assemble and analyze the data and should be held accountable for what they do with it. It may be that some things are appropriate for a general regulation and this Report would be invaluable in setting priorities. Congressional oversight and public scrutiny is the key. Thus, some issues can be addressed through existing mechanisms like our powerful private insurance system and traditional methods of corporate accountability. And the power of Congress and the press should not be overlooked as another means to effect change, but a yardstick is necessary to measure performance and the annual Report would give us a yardstick based on factual data and the analysis of trends.

Secondly, the current regulatory scheme should be blended with the establishment of a Duty of Care responsibility on the part of each operator. Broadly stated, the duty of care requires a risk management approach on the part of each mine manager, including a thorough process of hazard identification, risk assessment and risk control.

This duty of care approach should be coupled with regulations, not a replacement of the regulatory scheme. This model has been successfully adopted in several countries including Australia and Canada.

At my request and as part of the Sago mine disaster investigation, a memorandum entitled "Thinking Out-Side-The Box: The Proposed Blended Duty of Care and Safety Case Model for Regulation in the Coal mining Industry of Australia" was prepared by Suzanne M. Weise, Esquire and Professor Patrick C. McGinley (West Virginia University College of Law), which I submit for the record (See Attachment 2).

This Memorandum describes the generally applicable "duty of care" standard of Australian law and a proposal to amend to the existing coal mine safety regulatory regime a "safety case" approach found to be successful when applied occupational health and safety regulation of other industries in Australia. Relevant to the post-Sago search for ways to improve mine safety is the active involvement of mine managers in developing mine-site specific approaches to reduction of health and safety hazards.

The Memorandum concludes that in light of the criticism of post-Sago regulatory and administrative proposals addressing perceived shortcomings of the existing statutory and regulatory regime, critics and regulatory change proponents should welcome the opportunity to review and critique out-side-the-box approaches. The duty

of care/safety case regime has been successfully utilized in Australia to address workplace health and safety issues relating to hazardous waste and off-shore petroleum industries. Australian authorities are examining the safety case approach to determine its potential applicability to that nation's coal mines. The safety case approach is one way that site-specific considerations may be given appropriate attention as critics of post-Sago remedial proposals demand. At the very least, those critics and other interested parties should begin to explore new approaches to protect the health and safety of the nation's miners.

As the Memorandum indicates, a duty of care model might have limited application in the United States, especially given the differences in production and number of mines in operation (i.e., Australia with 100,000,000 tons of coal produced annually v. the United States, with 1.2 billion tons produced) but some model which mandates operators to actually engage in the identification of risks and the elimination of them, as part of their ongoing mining responsibilities. These risk assessment requirements would be in addition to the safety and health regulations required of industry by federal and state agencies. The establishment of legal responsibility for the failure to comply with the "duty of care" might help resolve the "thorny regulatory issues which tend to be frozen by ossified conventional analysis."<sup>11</sup>

The outcome at Sago might have been significantly different if the operator viewed it as his responsibility for managing what was going on behind the seals, rather than the "seal it and forget it" approach which ICG management followed.

Moreover a third solution is to shift responsibility for incorporating safety and health remedies into the production cycle, that is, away from the regulatory agencies and onto the mine machinery manufacturers. This is akin to requirements for the installation of safety equipment on automobiles is part of the automobile manufacturers' responsibility, and not the responsibility of the automobile driver.

For example, longwall mining machines cost in excess of \$50 million and are unparalleled in their ability to mine millions of tons of coal. Yet, few if any, safety and health features are designed into this equipment. There are no locations to store self-rescuers (SCSRs) but instead, miners continue to have to strap these bulky boxes onto their belts. Likewise, and perhaps most disastrously, this longwall equipment is not engineered or designed to capture the tons of coal dust created as an integral part of this high speed powerful cutting machine. Instead, miners who are stationed along the 100+ yards of the longwall machine are inhaling coal dust, after the fact efforts to control the dust with water sprays and shields are only partially effective at best. Moreover, there is significant lost energy as the coal dust is blown into the mined out workings. A vacuum system which captures the coal dust could both capture that energy (the coal dust), and dramatically reduce miner's risk of developing black lung and of a coal-mine dust explosion.

Similarly proximity detectors are not being built into mining equipment purchased today by mine operators. Video cameras providing side and rear viewing for haulage truck drivers sitting 25 feet off the ground, are not standard on all equipment, nor are harden cabs with air supply systems. Despite being technologically available, these common sense protections are not designed into new pieces of equipment sold to the mining industry.

The development of health and safety equipment used by the mining industry has been historically on a separate design and marketing track from coal production equipment. Over the decades, the approach has been to add protections and safeguards to the miners—and often as stop gaps to the hazards, such as respirators, hearing protectors, and SCSRs, etc.—rather than to eliminate the problem and make the protection part of the production equipment. This disjointed approach, which segregates development of the production equipment from the installation of safety and health equipment, must change.

Fourth, innovative ways to regulate must be explored. Simplified quasi requirements agreed upon by all the parties could be made part of the duty of care model and failure to comply would open the operator to litigation if he/she failed to adopt the industry adopted preventative methods and norms.

Moreover, Congress could follow the model adopted in the landmark 1969 Coal Act, and instruct the industry directly on what is expected for miners' safety and health in the law, rather than directing MSHA to regulate. In a regulatory system that is broken and incapable of rapidly and effectively addressing the many hazards still faced by U.S. miners, direct Congressional intervention such as was done in 1969 in adopting dust standards at 2.0 mg<sub>3</sub>, may be justified, and would not be unprecedented.

Finally, industry is not prohibited from adopting voluntary standards and joining in voluntary education and training efforts. Two models which we undertook in-



cluded: a Comprehension Dust and Noise Training and Sampling Program for stone, sand and gravel operations, and the national campaign to eliminate silicosis.

Under existing Metal/Non-Metal Mine regulations, operators are required to monitor levels of air contaminants and noise, as frequently as necessary, to ensure that their engineering controls are working properly. At these kinds of miners, many mine operators do not routinely conduct this monitoring, but instead rely on , MSHA inspectors, who make inspections twice a year, to monitoring the dust and noise at their workplaces. In essence, some operators rely on MSHA to be their industrial hygienist, although MSHA is only on-site twice per year.

Under an agreement signed with the National Stone, Sand and Gravel Association, MSHA provided used dust- and noise-monitoring equipment to mine operators, and provided multi-day training to miners or supervisors so that these small operations would conduct their own exposures samples for these two health hazards. By learning to monitoring the mine environment as part of their routine production cycle, these miners and operators could assess for themselves whether their engineering controls were working properly.

The second example was MSHA's national campaign to eliminate silicosis. It involved the identification of a problem (i.e., excess exposure to respirable crystalline silica) especially in Metal/Non Metal mines; education—providing information on the need for having and maintaining effective dust controls; and enforcement targeted to the training, controls and most importantly, levels of exposure. This comprehensive model involved both industry and labor and was successful, at least during my tenure, on highlighting the risks from silicosis.

The changes proposed here would, if adopted in part, address the risks identified at the Sago, Aracoma/Alma, and Kentucky Darby mines and would hopefully protect miners from the types of disastrous consequences which occurred in 2006. But they would also address the long term problems which have hampered the agency from addressing ongoing existing problems.

Finally, these changes could help reestablish the United States as the safest mining industry in the world.

#### ENDNOTES

<sup>1</sup> Attached Chart prepared under the direction of Suzanne M. Weise and Professor Patrick C. McGinley (West Virginia University College of Law).

<sup>2</sup> Self-contained self-rescuer approval process, joint rule by MSHA and NIOSH, (60 Federal Register 30398, June 8, 1995); First-Aid at MNM Mines, (61 Federal Register 50432, September 26, 1996); Explosives at MNM Mines, (61 Federal Register 36790, July 12, 1996);

Safety standards for diesel equipment in coal mines, (61 Federal Register 55412, October 25, 1996); Tuition fee waiver at MSHA's Academy in Beckley, WV, (62 Federal Register 60984, November 13, 1997); Civil penalties (63 Federal Register 20032, April 22, 1998); Training requirements for experienced miners, 63 Federal Register 53750, October 6, 1998); Changes to operator's daily inspection reports at surface coal mines, (63 Federal Register 58612, October 30, 1998); Training for sand, gravel and stone miners (Part 46), (64 Federal Register 53080, September 30, 1999); Coal mine ventilation, (64 Federal Register 45165, August 19, 1999); Protecting miners from hearing loss, noise standard, (64 Federal Register 49548, September 13, 1999); Hazard communication (interim final rule), (65 Federal Register 59048, October 3, 2000); Diesel particulate matter protection for coal miners, (66 Federal Register 5526, January 19, 2001); Diesel particulate matter protection for metal and nonmetal miners, (66 Federal Register 5706, January 19, 2001)

<sup>3</sup> E.g. Presidential Review of Agency Rulemaking by OIRA (September 2001); OMB Circular A-4, New Guidelines for the Conduct of Regulatory Analysis (March 2004); OMB's Benefit-Cost Methods and Lifesaving Rule (May 2003); Information Quality Bulletin for Peer Review (December 2004); OMB Bulletin for Good Guidance Practices (January 2007)

<sup>4</sup> Federal Mine Safety and Health Act of 1977

<sup>5</sup> Occupational Safety and Health Act of 1970.

<sup>6</sup> MSHA noted that single-shift air samples are part of standard industrial hygiene practice and the air monitoring approach used for all other workplace air contaminants sample by MSHA and OSHA. This anomaly of "averaging samples" only exists at U.S. coal mines.

<sup>7</sup> The proposed rule was published on February 18, 1994 (59 Federal Register 8357).

<sup>8</sup> The final rule was published on February 3, 1998 (63 Federal Register 5687)

<sup>9</sup> That is, the National Mining Association and the Alabama Coal Association.

<sup>10</sup> Centers for Disease Control and Prevention. Advanced Cases of Coal Workers' Pneumoconiosis—Two Counties, Virginia, 2006, 55(33): 909-913, (August 25, 2006).

<sup>11</sup> "Thinking Out-Side-The Box: The Proposed Blended Duty of Care and Safety Case Model for Regulation in the Coal Mining Industry of Australia." Memorandum prepared at the request of J. Davitt McAteer, Special Advisor to West Virginia Governor, Joe Manchin, III, for the Sago Mine disaster investigation by Suzanne M. Weise, Esquire and Professor Patrick C. McGinley (West Virginia University College of Law).

Chairman MILLER. Thank you very much. Thank you very much for your testimony.

We have a vote on. I think what I will do is I will go ahead and start my questioning, my 5 minutes; and then when we come back on our side we will recognize Mr. Kildee, Mr. Hare, Mr. Rahall, and then go down the dais here. But there are two votes.

I just warn the members, I think that the Leadership's in the process—three votes? The Leadership's in the process of tightening up the clock on the first vote. So the idea that you can leave here when there is zero on the clock, I think you will find yourself in some jeopardy at the other end. We will see whether that works or not.

Thank you very much, all of you, for your testimony.

Mr. Stickler, if I might begin with you, earlier today we toured a demonstration of the rescue chambers, in-place rescue chambers that are now approved for deployment in West Virginia. I think 100 of them have been ordered in West Virginia. My understanding is there are five or six of the models that have also been approved, and I think also NIOSH has removed any objection to their deployment. Is that correct?

Mr. MCATEER. NIOSH has provided a letter to the State of West Virginia suggesting that they don't see—they are not saying in finality, but they don't see any potential conflict between their approval process and the approval in West Virginia.

Chairman MILLER. Mr. Stickler, can you tell us where you are in the approval process for this?

You know, I wrote you a letter back in March, I guess it was, asking for an emergency rule on this, and that was declined. Can you tell us where you are now?

Mr. STICKLER. As you know, the MINER Act establishes NIOSH to do research on refuge chambers and to issue a report by the end of this year. MSHA has not simply been waiting on NIOSH. We have been working with them. We have several working groups, representatives from MSHA and NIOSH working together, looking at significant issues regarding the testing of the refuge chambers, the development of a protocol for doing the test; and I have been told that NIOSH will likely recommend that MSHA do a physical test of the refuge chambers before we would provide any approvals.

I believe that MSHA needs the time that's provided in the MINER Act to address the specific criteria that these refuge chambers should meet and to establish a protocol for testing and a facility to conduct that testing. And when we receive the report from NIOSH at the end of this year, then at that time we will move forward.

Chairman MILLER. You anticipate that would be when?

Mr. STICKLER. I would anticipate that NIOSH will complete their study, issue their report by the end of this year, as mandated in the MINER Act; and then there is 180 days in the MINER Act for MSHA to make a decision on what would—

Chairman MILLER. That's the middle of next year.

Mr. STICKLER. That's right.

Chairman MILLER. And what would be completed by the middle of next year?

Mr. STICKLER. Well, as I said, NIOSH would complete their study by the end of this year. That would be presented to Congress and the Secretary of Health and Human Services and Secretary of the Department of Labor. MSHA then would have 180 days to study the information that's available and to make a decision on what action they would take.

Chairman MILLER. And you would make those decisions. And what would the timetable be after that?

Mr. STICKLER. Well, I can't project the timetable. You are talking after the 180 days?

Chairman MILLER. Yes.

Mr. STICKLER. I can't project that at this time.

Chairman MILLER. Well, what would the ordinary course of events be—how long would that take you after the 180 days?

Mr. STICKLER. Well, during the 180 days, not saying that it would have to take 180 days for MSHA to make a decision, but based on what course of action MSHA would decide to take, that would determine the amount of time that would be required after that.

Chairman MILLER. For what purpose?

Mr. STICKLER. Well, for whatever MSHA decides to do. You know, there are various options. You could have a regular rule. That's a possibility. Normally, we found that to do a rule takes at least a year. You know, that's something that we will—

Chairman MILLER. So we are talking two-and-a-half years?

Mr. STICKLER. That's a possibility, yes.

Chairman MILLER. So the situation will be what in West Virginia? These are going to be illegal?

Mr. STICKLER. Well, in the interim—

Chairman MILLER. Mines—

Mr. STICKLER. I think you are aware that MSHA has issued a policy on breathable air which requires mine operators to provide 96 hours of breathable—

Chairman MILLER. My understanding is—I don't know if there is a picture of the shelter that we toured, but—there it is—that the shelter complies with that. That's the West Virginia standard, too, apparently.

Mr. STICKLER. MSHA is accepting the refuge chambers that West Virginia is using, and other mine operators across the country are looking at to provide the 96 hours breathable air.

Chairman MILLER. But you are not going to have a standard for two-and-a-half years.

Mr. STICKLER. For a refuge chamber. I can't tell you what MSHA's going to do after they receive the report from NIOSH other than we will study all the information available and look at the facts and decide and make a decision during the 180 days that Congress has provided for MSHA to make that decision.

Chairman MILLER. So that's a good thing we didn't say 4 or 5 years, I guess. I don't get your sense of urgency. I am lost somewhere.

Let me ask you, you mentioned in your testimony on the seals that you are in the process of a rule on the seals. Again, could you tell us where you are with that?

Mr. STICKLER. Well, we submitted that to OMB on May the 8th; and I have a verbal confirmation that OMB has cleared that emergency temporary standard today. I would anticipate within a few days that will be published in the Federal Register.

Chairman MILLER. That will be implemented how? There is apparently a significant inventory of seals that may be improperly constructed or insufficient under what we have learned. What's the process of going through that inventory and making a determination about the replacement of each?

Mr. STICKLER. Well, back last year, MSHA issued a policy requiring MSHA inspectors to inspect all the underground seals. There are approximately 14,000 seals in underground coal mines. MSHA has completed that inspection. We have issued quite a few violations requiring seals to be repaired or replaced. At that time, we also required the operators to do a survey of the atmosphere behind the seals and to take appropriate remedial action based on the results of those surveys.

Chairman MILLER. So will this rule speed up that process by which remedial action has to be taken?

Mr. STICKLER. This rule will go beyond the process that was in the policy in—regarding establishing new seal strength standards for seals that will be built in the future, requiring regular monitoring of the atmosphere behind seals, and remedial action if the atmosphere would be at or near the explosive range.

Chairman MILLER. So—this is layman's terms—the work list will be based upon the previous inspections made. I mean, I assume we will go back—under this rule, go back and correct all of those seals.

Mr. STICKLER. The corrections to the previous—the previous inspections that MSHA has done, those corrections have been made.

Chairman MILLER. They have all been made?

Mr. STICKLER. Made as far as repairs and replacement of seals that we identified were not built according to standard or because of deterioration of the underground mining conditions.

Chairman MILLER. So they are all in compliance with the new rule?

Mr. STICKLER. Are the existing seals in compliance with the emergency temporary standard?

Chairman MILLER. Yes.

Mr. STICKLER. No, the emergency temporary standard will go beyond—

Chairman MILLER. That is my point.

Mr. STICKLER. That is why we are putting out an emergency temporary standard.

Chairman MILLER. So the existing seals are going to be compared against the emergency standard, right?

Mr. STICKLER. The existing seals, we will require monitoring of the atmosphere. And if the atmosphere behind the seals is at or near the explosive range, then remedial action will have to be taken. That could be replace the seal with a higher strength seal that would be explosion proof, withdraw the miners from the underground workings, or other options that an operator—

Chairman MILLER. The operators will provide them monitoring under guidance of MSHA?

Mr. STICKLER. The operators will be responsible for doing the monitoring, and MSHA will monitor on their quarterly examinations of the underground mines.

Chairman MILLER. Thank you. We will recess for the purpose of going for this vote.

[Recess.]

Mr. KILDEE [presiding]. I can recall one particular hearing when we had a coal mine owner, at least the president of the company, testifying and, of course, giving the best face possible of his company's operations; and he told Carl Perkins, Chairman Perkins, that our first concern is the safety of our workers. And he, of course, put the best face on the safety of the workers. He put it on a little strong; and Carl finally banged the gavel and said, "Sir, when I was 5 years old, my daddy put me in the back of the buckboard, took me over to the next holler for the funeral of my cousin, who was killed in one of your mines. So don't you preach to me about mine safety. I know about mine safety or the lack thereof."

I always remember that. I learned the law from Carl Perkins, but I also learned the morality of putting human beings first, and that can be done.

If there be a mine owner who is so poor they cannot carry out the safety of the workers, they shouldn't be in business. I mean, really, when you put people down in those mines, you better have the wherewithal to do what's legally right and what's also morally right.

That is my preaching for the day.

Mr. Stickler—I spent 6 years in the Catholic seminary, so I do preach a bit once in a while.

Mr. Stickler, your report on the Sago accident, it is not the first to point out that, in an explosion, the walls which maintained the flow of air down to where the miners are working and back out again can fail in an explosion. I understand that there are what I will call stoppings. If this happens, it not only destroys the ability of the miners to get air, to breathe, but also slows down the rescue operations, because the rescuers need to replace these walls as they move forward so they too can be in safety. What is MSHA doing to address this well-recognized explosion hazard?

Mr. STICKLER. Well, that is primarily the thrust of the emergency temporary standard that we are currently working on, is to address the seal strength so that future seals will provide adequate protection for the miners and to also require that sealed areas be monitored and remedial action taken when it is indicated it is needed.

Mr. KILDEE. We are actually talking about the walls of the mines, aren't we? There are two things that tend to make sure there is adequate egress and adequate safety, the coal columns you leave up and then the walls. What do you do to make sure that those walls are adequate? What kind of inspections do you give for that?

Mr. STICKLER. Are you referring to the seals? Is that what you are—

Mr. KILDEE. No.

Mr. STICKLER. There is walls. I am not sure what you mean. The coal walls, the ribs or—

Mr. KILDEE. The stoppings.

Mr. STICKLER. Stoppings.

Mr. KILDEE. Yes.

Mr. STICKLER. Relation stoppings, relation controls. Those are required to separate the intake escapeway, fresh air escapeway, any belt haulage entries, track haulage entries; and the return air courses is where the ventilation stoppings are used to control the air flow and make sure the air flows where it's intended to be.

Mr. KILDEE. Are those inspected regularly to make sure that they meet at least the basic standards and specifications?

Mr. STICKLER. That is part of the quarterly inspections that our underground coal miners inspectors do, plus the daily inspections on the pre-shift examinations that the mine operator is required to do.

In addition, for those areas that aren't inspected during the pre-shift examinations every shift, they are also required to conduct weekly examinations.

Mr. KILDEE. You would consider that a high priority?

Mr. STICKLER. It is a high priority to do the safety inspections correctly, yes.

Mr. KILDEE. And when you train—when inspectors are trained, they are trained in both technology and priorities. Is that considered one of the high priorities in their training?

Mr. STICKLER. Yes. MSHA's inspectors are very well trained.

Mr. KILDEE. Mr. Bertoni, I know you are familiar with the new regulations MSHA issued to adjust the way it calculates proposed penalty assessments. MSHA has indicated that a key reason for rewriting these regulations is to insure that the more serious violations will receive higher penalties. Yet, as I understand your statement, if a mine operator asks a hearing officer of the independent Mine Safety and Health Review Commission to review a proposed assessment, the hearing officer isn't bound to give any particular weight to how serious the violation may be. You think something needs to be done about this, and could you elaborate on that?

Mr. BERTONI. I guess the—our main point, I guess initially, is that we acknowledge the increase in the penalty amounts that MSHA has, you know, put in place. We believe the point system for, say, gravity increased from 33 to 88, which will result in at least an initial higher penalty. And as that penalty or that case progresses through the appeals process, the individual who is doing the adjudicating at the appeals level must consider the six factors that need to be considered in terms of calculating the penalty amount.

I guess our concern was we know that they are using the six statutory factors, but it is unclear how each of those factors are being weighted and how the end result penalty, the final penalty amount is being arrived at. That was just an area every time when we looked at these cases we came away, at least some of them, with some question as to how they weighed these particular amounts. And that was—it was not clear how these penalties were ultimately—

Mr. KILDEE. So there is a lack of clarity in that area then?

Mr. BERTONI. In our review, we found there was a lack of clarity, at least in some cases, in some fairly large cases.

Mr. KILDEE. Thank you very much.

Mr. McKeon?

Mr. MCKEON. Thank you, Mr. Chairman.

Dr. Grayson, there has been a lot of discussion about refuge chambers that are used in the underground coal environment. Have these units been tested underground? Have they experienced human testing? What, in your opinion, should be the appropriate study protocol to test these chambers? And, finally, do you have any concerns about the use of these chambers?

Mr. GRAYSON. Actually, I did participate in the approval process for one—

Mr. MCKEON. Is your mike on?

Mr. GRAYSON. Yes, but I am probably not speaking loud enough. Sorry.

I did participate as the professional engineer on one of those rescue chambers. What we had done is we looked at the criteria that are required by the State of West Virginia and then did various types of analyses to make sure that all of those things that were specified were met according to the analysis.

One particular rescue chamber was placed into an explosive mixture and tested to make sure it could at least handle 25 psi overpressure. And, actually, it was around 30. That is the only one to my knowledge that was actually tested in an explosive environment.

Again, it was an engineering type of analysis, including on the temperature rise and heat transfer and stuff of this nature. That is of concern about the miners who may be in there. There was a convergence of the analyses to show that the temperature would be maintained below 95 degrees in three different analyses converged among the five different chambers that were analyzed.

So that gives some credence to the validity, if you will, of the calculations. But no man test has been done, just to make absolutely sure that if the miners are in there, indeed, the temperature will be maintained and then the oxygen-CO<sub>2</sub> balance would be maintained.

Mr. MCATEER. Mr. McKeon, if I might speak to that question, please.

Mr. MCKEON. Sure.

Mr. MCATEER. The State of West Virginia analysis of these devices relied in part on the U.S. Army's tests that were done with some of these same kind of or similar devices, as well as some NASA tests, and relied—and borrowed that—those tests. They did not undertake human testing, but in fact relied upon the tests that were done by those other two agencies.

Mr. MCKEON. Okay. Dr. Grayson, your testimony discusses the development of the machine-mounted, continuous, respirable dust monitor. Because the research, in layman's terms, essentially skipped a step, the dust monitor didn't perform in the underground coal environment. Can you discuss why that step was bypassed and what cautionary tale that tells us today about not skipping steps in the scientific process?

Mr. GRAYSON. Yes, I can elaborate on that.

Research for new technology that has been applied elsewhere but not actually tested in a mine environment does require some pretty

good steps and protocol to make sure that once the—in this particular case, once the accuracy is attained, both by the manufacturer and then in the test chamber, then before we actually place these into the mine environment, where there is quite a bit of vibration and water droplets and things of this nature, we really do need to be sure that it is going to have a chance to survive that mine environment.

So the protocol had called for some laboratory testing and then later on some in-mine testing with one or two prototypes to be sure that the robustness would be achieved. And then if we did see any problems, either in the laboratory or in the mine, then we could go back and modify the design so they could better withstand the vibration and water droplets and other challenges that might show up from the mine environment.

What happened was that as soon as the prototypes—I think there were 10 of them altogether that were created. As soon as they were created, we did get some pressure to go ahead and move them into the mine environment and sort of do a demonstration, if you will. And at the same time we were doing the demonstration, we were kind of checking the robustness and see how well they would do. Unfortunately, all of the five monitors—I believe it was five of them; it might have been six—anyway, all of them were non-functional by the end of a month. One of them failed on the first shift and primarily because of water droplets.

So even though we were able to get them in the mine, it then quickly became more of a development project rather than a research project because we violated the research protocol. And then at that point in time we had a parallel path, where we were doing the personal dust monitor and we had a partnership that was set up on both of these and had put together the protocols for the research on both of those. And the other one on the personal dust monitor, the protocol was followed to fruition. And now we are, you know, very, very soon—we have done all the field testing as well, and they are robust, they are accurate, and we will soon have those implemented.

But the other particular technology then became pretty much something that industry, meaning the manufacturers, would have to work on with MSHA in order to get the robustness that was required in the mine environment, in our opinion.

Mr. MCKEON. Have those been pulled out then?

Mr. GRAYSON. The machine-mounted dust monitors?

Mr. MCKEON. The ones that—no.

Mr. GRAYSON. The personal dust monitors?

Mr. MCKEON. The ones you put in that failed.

Mr. GRAYSON. Yeah, they had to be pulled out.

Mr. MCKEON. They are all gone?

Mr. GRAYSON. Yes.

Mr. MCATEER. Mr. McKeon, if I could speak to that issue. I was the assistant secretary during the time these tests were being conducted. I was the one who urged that these devices be put underground and was driven, in fact, by my knowledge of a number of miners who have suffered from black lung disease. And the urgency that that gives you when you have—when you face the problem of seeing and continuing to see that we have in this country



new cases of black lung disease, when other countries have eliminated the disease entirely.

I am struck by two points that Dr. Grayson makes. The latter point that soon these devices will be underground. "Soon" was now 10 years ago when they first said that soon they were going to have them. We still don't have those devices.

Secondly, we didn't take all 10 devices underground. We took a sampling. It was four devices that we took underground, and we wanted to see them tested. The protocol was not violated from the standpoint of all the devices were not taken underground, but we said that NIOSH's approach in this matter lacked the urgency necessary to address this problem. I would do it again tomorrow. It did not slow the process down in any way, shape or form. It did not slow the development down. That development still isn't there yet today.

Thank you.

Mr. KILDEE. The gentleman's time has expired.

Mr. Rahall?

Mr. RAHALL. Thank you, Mr. Chairman.

Thank each of the panelists for their expert testimony today and, most importantly, your commitment to coal miner safety.

In response, Davitt, in response to your last comment, I recall that very well, and certainly commend you not only for those efforts but your efforts in West Virginia to insure that no more disasters occur in our State.

You know, there are so many issues, all of which have been touched upon already by the GAO, the fines, rescue teams, the loss of inspectors, the process that we go through for a safety inspection, questions galore in each one of those areas. Suffice it to say, in numerous areas we have had to be defensive in the Congress over the last 6 years to prevent any degradation or raising of dust level standards, for example, in our mines.

That was a roll call vote we had on the floor of the House many years ago. We had to scream and yell when certain regulations were rescinded that allowed belt entry air, for example, to be used as a ventilation vehicle.

But that is not the purpose of my questions or the purpose of today's hearing, so far, anyway. I would like to follow up on Chairman George Miller's questioning, very good questioning.

We in West Virginia are making tremendous advances. We are pushing ahead. We are not waiting for any deadline to be at our doorstep tomorrow morning or any regulation that tells us we have to do something. We are doing it because we are concerned about coal miners' health and safety. Governor Manchin has taken the leadership, and Davitt McAteer is following through.

But what I want to ask you, Mr. Stickler, is, because West Virginia is taking such fast action, it appears it is causing problems for us as far as long-term Federal compliance. We have heard of our commitments to these refuge chambers. We have heard of our movement in other areas. We are moving ahead rapidly. It is requiring operators, many of whom are undertaking it very legitimately and commendably. They are investing millions of dollars in these new technologies. But they have a fear.

And there are others who are not doing such investments because they are using the excuse, what if MSHA 2 years from now or on down the road comes up with something different and we get told we are bad boys then and get fined? There is that uncertainty, legitimate uncertainty, that operators are facing. They are afraid that you will come out with regulations making whatever technologies they invest in today obsolete down the road. That legitimate fear, as anybody would be afraid.

The State is trying to get MSHA to allow operators some kind of cushion so that the West Virginia technologies that we are moving ahead on of our own volition and concern for miners' safety, we are looking for some type of cushion so that these technologies to be considered compliant for today's time and then newer technologies are approved by you in the future. Are you in any way attempting to insure our operators that they won't get fined or they won't be considered obsolete and all the investments they are making today being thrown out the window?

Is there some type of commitment or some type of assurance, some type of process, partnering, if you will, whatever you want to call it, being put in place to insure operators that they won't be, 2 years down the road, told everything you have done is wrong?

Mr. STICKLER. Well, we have worked together. Representatives from MSHA have participated as far as some of the work that West Virginia did in the area of technology, the refuge chambers.

We have recently met with representatives of West Virginia to hear some of their concerns. But, at the end of the day, MSHA's responsibility comes from the direction of Congress; and Congress has specified, for example, two-way wireless communication from the surface to underground miners that may be trapped. And I don't think that we should or could move away from the definition that Congress has provided and the time frame that Congress set to have this technology in place.

Mr. RAHALL. So it seems you are telling me that you need more legislative direction from Congress then, when I would say what we have had on the books is sufficient. It is only what is on the books that ought to be implemented.

Mr. STICKLER. What I am saying is we are intending to follow the direction that Congress provided in regard to requirements for technology.

Mr. RAHALL. You want us to mandate these refuge chambers?

Mr. STICKLER. I am not going to—I can only tell you that I am committed to implementing and following the process that Congress has put in place.

Mr. KILDEE. Mr. Kline.

Mr. KLINE. Thank you, Mr. Chairman.

I thank the witnesses for their testimony, for being here today, and for your commitment I think across the board to improve miner safety.

I say to my colleagues, Mr. Rahall and Ms. Capito, if she were here, that I am not the least bit surprised that West Virginia is proving to be more agile, more nimble, more responsive than Federal bureaucracy. But that would apply in many cases on many subjects. It is an expectation. Federal bureaucracies move slowly.

And I want to explore that just a little bit. I am not excusing it, because I share the frustration that everybody else has.

I want to go back to the subject which we have talked and talked and talked about, and that is these shelters. I, too, went and visited the one that is over here on the Capitol grounds, and it is pretty neat. It looks like a really good idea to me. In fact, that is what I said to the folks over there.

But it was also explained to me while I was there that changes are already being made to this chamber. It is being reoriented, it is being strengthened, thicker steel, more blast protection, and so forth.

So it seems to me we are sort of caught right now in do we want something now—and I would think if I were a miner I would want something now—or do we want something better later? And that is the trap that we fall into in so many ways. It is like body armor for troops. Do we go with the best that we have? Do we wait another 4 or 5 years and get something better, another 4 or 5 years after that? You would rather have something than nothing.

So the question—I am just following up on Mr. Rahall—what is it we can do to allow the employment, deployment of these shelters and still provide some protection, if you will, for those companies that are willing to put them in?

I don't know that we can, frankly, because I know I can imagine the outcry should it prove that one of these shelters where miners have sought refuge in is inadequate, has failed. There would be an outcry, unquestionably lawsuits up and down the street.

But I am just sort of throwing it out for any of you. Is there a way that you can suggest which we can do something in statute or something we can do that would allow mines to employ what the best technology is that they have at hand today? Recognizing that there is going to be something better later. Because, whatever it is, it is going to be obsolete. There is just no question about it.

Is it going object obsolete next year or 5 years from now or 15 or 20 years from now? What is it we can do to allow the employment of this technology? From anybody?

Mr. Stickler, you are sort of on the spot here with the—

Mr. STICKLER. Well, we currently allow operators to use the refuge chambers that are on the market today as a way to comply with the 96 hours of breathable air that MSHA is requiring.

Mr. KLINE. By the way, where did we get the 96 hours? Where did that come from?

Mr. STICKLER. Well, that was a policy that MSHA set. We did research on the disasters that have occurred in the past to determine how long it took rescue teams to locate the miners. We also looked at situations such as, when you have a fire or explosion, particularly, how long does it take for the mine atmosphere to stabilize enough that you can get accurate measurements to safely send rescue teams into the mine? And we thought that the 96 hours would provide that.

Mr. KLINE. Okay. Mr. Rahall, if you would like, I will be happy to yield back to you. I am not sure we got to your—to the answer to your question. I don't know if you want to pursue that any further. I am trying to look for a way to make this work.

Mr. RAHALL. Let me commend MSHA on the 96 hours. That is beyond the West Virginia 48 hours, and I appreciate it. Let me give the rest of the panel a chance to answer the same question.

Mr. KLINE. All right.

Mr. MCATEER. Mr. Chairman, if I might, this has been a subject that we have been concerned about for some years. We get a piece of safety equipment, we put it in the mines, and then there is no progression because the industry is small in terms of numbers. There is not a marketplace-driven kind of renewal process. And it has been a concern for a number of us in the industry.

Two parts to—the answer to my question is in two parts to you, though. One, we need to act on what we have now, recognizing that it is not perfect. It is not a perfect world. But we need to get chambers underground now.

Then we need to continue to kind of research and to kind of develop—this same kind of ongoing kind of development needs to be done, both at—the National Research Council study, recent study of NIOSH's actions suggest that they need to do some kind—there needs to be some mechanism to try and get us to get newer devices on an ongoing kind of basis. There isn't such—there is not such a program that exists today.

Mr. KLINE. Okay. I see, Mr. Chairman, my time has expired; and maybe Mr. Grayson wants to chime in as well, which is certainly fine with me. But it seems to me, with your indulgence, it looks like we are still in that trap. If Mine Safety—MSHA was to come forward and mandate this and it turns out they are not adequately tested and they fail, it would be a catastrophe.

I yield back.

Mr. KILDEE. Thank you.

We have two votes. Ms. Woolsey, you want to take your 5 minutes now?

Ms. WOOLSEY. I would. Thank you, Mr. Chairman.

Mr. KILDEE. The gentlelady from California, Ms. Woolsey.

Ms. WOOLSEY. I want to briefly comment on the testimony. If I were one of the families in the audience and I was listening to Mr. Stickler, I would be out of my mind in frustration over the lack of urgency of your answers. Come on. This has been years. We have had deaths.

Best technology versus future technology. Obsolescence, it is going to happen. But a good-faith effort has to be made to ensure that industry, mining industry, any industry, is doing the best they can at that particular time, not risking doing nothing in order to get the best later. That is always going to be moving away in front of us. And I would assume that every industry has budgets for upgrading for efficiency and safety and making things better. So the mining industry is an industry. Let us help them figure out how to stay current and keep the workers as safe as possible.

Prevention is one tool. Certainly inspection is a great step. Accident reports and reviews of what happened during an accident is another step. Near misses, if they are reported—I hope they are in this industry—that is something that might have happened that didn't cause a huge problem but could have, we need to learn from that.

And also learning from the workers. We had a mine hearing last month and heard testimony from these wonderful women that are here and the families and the widows of the miners and from miners themselves; and we learned that these miners and their families are reluctant to come forward to report health and safety violations in mines because of their fear of punishment, of being blacklisted.

Yesterday, my subcommittee, Workforce Protection Subcommittee, had a hearing on private whistleblowers; and we had Jeffrey Wigand, who blew the whistle on big tobacco, and John Simon, who has a complaint about trucking violations. They told their stories. They were really very brave.

And I hope you agree with me that one important element of mine safety is to make it possible for the miners who are there day in, day out to come forward to report health and safety violations without fear of retribution. So I would like to open it up and ask you each how you think we can make that process more open, safer, and actually learn from it as our miners come forward and tell us where they see safety problems. All right, Mr. Grayson?

Mr. GRAYSON. If I may, I did want to follow up on the rescue chamber idea, too. I think all we need to do is think what would happen if a similar explosion occurred today and they decided, the miners decided in their own minds that they cannot get out? We would be where we were.

Ms. WOOLSEY. Well, I don't want to go off on that other question—

Mr. GRAYSON. I am going to go on to that, too.

Ms. WOOLSEY. Okay.

Mr. GRAYSON. I am going to go on that point next. I just wanted get that one in.

Because, right now, they would have to build up a barricade again, and it would not be that great.

Ms. WOOLSEY. Okay. Answer my question on how to make this so they are not blacklisted.

Mr. GRAYSON. Well, in the commission report we did note that there is a minimum level of safety performance that all operators should follow; and we have specified in there—

Ms. WOOLSEY. When they are not and the worker complains about it, how does that work?

Mr. GRAYSON. If they do not, they should not be in the business. We also agreed to that as a commission.

So, with that said, we need to be much more progressive in the way that we, number one, perform; and if they can't perform to that level they should be out of the business. And number two, target them. Then, using the safety statistics, violations included—

Ms. WOOLSEY. Okay. You are not answering my question, Mr. Grayson. Mr. McAteer will.

Mr. MCATEER. The need for protection is profound. The Mine Act has the most far-reaching protection available to any worker in the country. The difficulty is that the workers have not had a—and don't have a way to get that—exercise that right; and the agency has not been strong enough in endorsing or in, A, educating and, B, in following up with those kinds of complaints.

The agency has a role, and the individual miner has a role. The difficulty we have is that they are in remote areas, and it is very hard for you to get miners to come forward with claims and to protect them when they do.

Mr. KILDEE. We have three votes pending on the floor, and we apologize, but we shall return. I hope you can remain. This is a process around here. I have been in it for 30 years. It doesn't work perfectly. But if you could remain, I know Mr. Miller wants to come back and the other members.

You voted already? Come take the chair.

Mr. PAYNE [presiding]. Thank you very much.

I, too, am disturbed at the lack of urgency. It seems like ever since I have been a little boy I have been hearing about mine tragedies.

I remember the first labor leader I ever heard of was John L. Lewis. I mean, he was a person that was bigger than life. And I lived in an urban center that didn't know anything about mining. But it was problems then, there seems to be problems today, and we still seem to have a lack of urgency that we need.

I wonder also about the communications. I understand that in the MINER Act they were talking about some kind of communications, wireless two-way communications. Could someone tell me what type of communications there are currently available when miners are trapped? Is there any way they can communicate with people outside and any more effective way that could be done?

Maybe, Mr. Stickler, you might be able to bring me up to date on that.

Mr. STICKLER. The Mine Act regulations require—

Mr. PAYNE. I can't hear you, sir.

Mr. STICKLER. The Mine Act and the regulation requires two-way communications from the underground workings to the surface.

Recently, we have required mine operators to install a redundant system; and that is accomplished by installing the communication lines in separate air courses. So if there would be a roof fall or a fire in one air course, a communication line would be protected in the second air course. But these systems, most of them require a hard wire, or all the ones underground today require a hard wire system to communicate from underground to the surface.

To our knowledge, there are no purely wireless systems that you can communicate from the surface underground without having underground hard wires or antennas.

Mr. PAYNE. Mr. McAteer, could you tell us what West Virginia is doing?

Mr. MCATEER. The present system in West Virginia, as well as in the country, is that we are using the cable wire system that has been in place for 40 years. We haven't made the change.

Since Sago, there have been examinations of devices; and a number of those show promise. First is the leaky feeder system, which is, in effect, a sending a signal down that leaks, in effect, and can be picked up then by phones that are wirelessly connected to that leaking system.

Second is dropping nodes and—putting a node system down so that every so often you put in a node system. That shows promise.

A third system, which is from your State of New Jersey, is the Kutta system, which is a system that goes on a blended system that goes on any—I am sorry, steel or metal object and can in effect use a leaky feeder or use the frame of a conveyor belt or any one of those others. That shows tremendous promise as well.

Those three systems are being tested. They are being proto-tested in some mines and have been tested in West Virginia, and we expect to see some of those put in place this summer. Those are hopeful systems that will get us to a system that will provide us with some better communication. It will not be entirely wireless. There is some wire connected to it in some way. But those systems are the ones that are being looked at.

Mr. PAYNE. Let me thank you very much. Since the time is running late, I am going to have to adjourn soon.

There is—I understand, Mr. Holt, in your district there is a system being tested. Do you want to respond to that?

Mr. HOLT. Yes, Mr. Chairman, if I may.

I come to this not just as a scientist who is interested in the technology that comes out of Fort Monmouth in New Jersey but as someone who was raised in West Virginia. I grew up there. My father, who many years ago as a U.S. Senator was known, as people from that area tell me, as one of the best friends the miner ever had.

I am particularly interested in this communications because when you hear the stories about lost opportunities in mine accidents, in many cases it traces to poor communication. I am so pleased that last Congress we appropriated \$10 million in emergency supplemental money for NIOSH; and there is now several million dollars going, as you mentioned, to the Kutta system and to various other wireless communication systems and interruptible and restorable communications systems. So I thank the chairman.

Let me just finish by saying all of the discussion today about whether there is sufficient authority to implement the MINER Act rapidly are just excuses. We have got to implement that immediately on a fast pace.

Thank you, Mr. Chairman.

Mr. PAYNE. And I couldn't concur more.

Let me commend the gentleman from West Virginia, Mr. Rahall, for the interest and concern that he has had; and I am sure that has had a lot to do with the speed in which West Virginia is moving. In this instance, the States are certainly moving much more quickly than we are at the Federal level, but this is too important to have a bureaucracy turning down.

People's lives are at stake. We are talking about increasing fossil fuels. The mining industry is not going to get any smaller in the next immediate future. We need to act more swiftly.

With that, the hearing will stand recessed until the votes are concluded, about 10, 15 minutes.

[Recess.]

Chairman MILLER. Thank you, everybody, for your patience with these. We had a number of unexpected votes on the floor.

I would like now to recognize Congresswoman Shelley Moore Capito.

Mrs. CAPITO. Thank you, Mr. Chairman.

I want to thank you all for your patience in our votes and recesses and all that. I know it is frustrating, but that is the way we live here.

I had a couple questions. First of all, the one I am interested and mystified by or one of the issues is the communications issue. I know that there have been 137 communications and tracking proposals, 51 applications, 19 approved systems, 15 remodifications and only 4 new systems. And I read in some of our briefing papers that we remember Chairman Norwood when he said, if we could talk to somebody on the moon, why can't we talk to somebody underground in a coal mine?

We want to help with these technologies and assist with the creation of these technologies. Where are we on this? I certainly hope we won't take the—I think it is 3 years allotted for this to seek completion of this. Can you—anybody—or, Mr. Stickler, could you start on the status of the wireless technology?

Mr. STICKLER. We are looking at that. We have several systems that we have.

Mrs. CAPITO. Hit your mic, please.

Mr. STICKLER. Is the mic on now?

MSHA has been involved in evaluation of two-way communications. We have witnessed a demonstration, and we have tested approximately 19 different systems. All of the systems that we have tested to date, have been presented to us and that we are aware of depend on a hard-wire communications system, where there have not been any systems that have 100 percent two-way wireless that we are aware of. But we are optimistic, we are hopeful that the activity that is ongoing, and several companies are working on them, and our hope is that they will develop a two-way wireless system that we can communicate from the surface to an underground miner.

We are trying to identify what is the next best option, and I think in some part it is going to be a combination of components from some of the best systems that are available and interlaying those systems on top of each other and building redundancy.

Mrs. CAPITO. Does anybody else have a comment on that?

Mr. MCATEER. Congresswoman Capito, there are three conceptual processes that have led to a number of companies to build systems. One is where you take a telephone line and you feed off of that onto a wireless connection.

A second is you put up a series of nodes, not unlike the satellites you now use. You place those in the ground and you then bank off that.

And the third is a hybrid system that we have talked about a little earlier—perhaps you weren't here today—that a consulting group out of New Jersey has developed a medium frequency system that uses any, basically, metal structure in the mine and can communicate through that.

None of these systems that we have today, as Mr. Stickler has indicated, is entirely wireless; and I don't think we will get to an entirely wireless system in the next couple of years. I think that that is a goal, but I think that, as a practical matter, we can get to a wireless—a system that is sufficiently wireless that we—given the types of explosions that we have, that will make us be able to—



that has redundancies, that has an ability to shift, as you do with your own cell phone, to shift from one carrier to another, if one goes down. That kind of system will then be available to the miners in the near future.

And the old maxim of the enemy is the perfect of the good, we need to put the good in and continue to search for the perfect.

Mrs. CAPITO. I think one of the things at Sago which was extremely tragic to all of us was the fact that they were there. Had they had the ability to communicate, they might be sitting here today; and I know we all agree that that is a tremendous tragedy.

I would also like to associate myself with the question that my colleague from West Virginia asked on the development of the portable chambers for air that West Virginia has developed and put a stamp of approval onto. I think it is extremely disheartening to think that our companies are following through on their agreement, companies are buying them and installing them, and for them to come in and raise a question for the viability I think presents a real conundrum for a lot of our West Virginia mining companies.

So I would just like to say that I share his concern on that. I don't really have a formal question on that.

I have two other little questions. The GAO report mentioned that NIOSH and MSHA don't have as good a coordinating relationship and need to build a memorandum of understanding. Certainly in terms of speed, of getting good results, this is something that we should move forward on; and I would like to ask Mr. Bertoni and Mr. Stickler, any kind of views on that?

Mr. BERTONI. Our position is that they form a coordinating mechanism like an MOU, is the way it should be proceeding.

I think in talking about a couple of these I should say high-stakes technology issues today, the rescue chambers and some other things that we talked about, I think there is opportunity here for them to work together, to be in early, not to wait for the outside parameters of what the MSHA calls them to do to reach some final decisions for analysis, but, in many cases, do some interim analyses, work together on an interim basis to meet some milestones, talk along the way so that they are in a better position sooner rather than later to make a determination on, say, rescue chambers.

But, in general, yes, we believe that formal coordination MOU will go a long way towards ensuring that they coordinate at least going out into the future years, which is going to be substantial retirements and turnover in both these agencies over the next several years.

Right now, coordination is okay. It works in many respects. But it is built on long-standing professional relationships that have built up over the years in units in MSHA, in NIOSH; and if those folks were to leave and retire, a more formal agreement with an MOU that specifies who will do what, what are the areas of authority, where are the areas where they overlap, what are the demarcations, they are going to be in a better position to come up with the best products and the best safety standards going forward.

Mrs. CAPITO. Okay, if I could just ask one more question, Mr. Chairman; and this is one I spoke with the Sago families about just briefly.

I said, if you could be up here and ask one question, what would you ask? And this is going to come as no surprise, I don't think, to anybody on the panel. But their biggest frustration, and I think it is a frustration shared by a lot of us here, is why does everything move so slowly? Why are decisions not made more quickly? Why are regulations that are put into place not enforced more rapidly or with more teeth?

I suppose, in my opinion, there is probably not a real rational explanation for that. I mean, we can all say, well, that is the way government works, and the wheels of government turn slowly. But for us in West Virginia who are all mining families, even if we don't have somebody who mines every day, a slow response is an inefficient response; and in our view, at some points, it is a hurtful response.

So I would give Mr. Stickler—obviously, MSHA is where we are looking at this—what would you say to the families? Why do things move so slowly?

Mr. STICKLER. If I could have just a moment, please, to go back to your previous question as far as the cooperation and working relationship between MSHA and NIOSH.

I know that we have a very cooperative working relationship and a teamwork between MSHA employees and NIOSH employees. Many of our employees participate in work groups with NIOSH, working together on trying to solve some of the same problems and address the same issues.

I have known Dr. Coburn for years. He is a personal friend. I think we have a very good relationship. I have met with NIOSH several times. He has been down to MSHA. I have been to the Pittsburgh research centers for various meetings. We are working on a memorandum that—an MOU that would memorialize the good relationship that we currently have to preserve that for the future.

As far as moving quicker on items, I would have to say that a big part of the focus is on quality instead of quantity. We want to make sure that we get it right; and the process also includes involvement, participation, comments from outside groups.

When we are in the deliberative process, we travel across the country. We have meetings at key locations, located in mining areas that have input from miners and labor and industry; and we respond to all of the comments and concerns that we get.

That is part of why the process does get extended and takes a considerable amount of time, is it is an open process, it is transparent, it provides participation for all the stakeholders; and, at the end of the day, it ensures quality to make sure that we get it right.

Mrs. CAPITO. I thank you very much.

Thank you, Mr. Chairman.

Chairman MILLER. Thank you.

Mr. Hare?

Mr. HARE. Thank you, Mr. Chairman; and thank you all for waiting while we had our votes. I just wanted to talk, if I could, for a moment.

In my congressional district, I have eight mines in the southern part of my district, west central Illinois. I would like to ask a cou-

ple questions about limiting fire on the conveyor belts and address them to Mr. Stickler.

As we know, after the Aracoma Alma accident, the conveyor belts can catch fire. Years ago, the National Institute For Occupational Safety and Health recommended that the belts themselves be made more flame resistant. In fact, the current standard—in picking up on what my colleagues said in terms of moving slow—the current standard is 52 years old.

Before your arrival, the Bush administration stopped that rule-making that would have updated the standard. Now we have a task force that is studying this thing yet again. My question is, why can't that rulemaking be restarted now and a standard issue immediately? I don't understand what the delay has been. And this is, again, a standard, as I say, that is 52 years old.

Mr. STICKLER. With regard to the Aracoma accident, the fact that the belt that was used in it was fire resistant, what caused that accident and the loss of life was not the belts being fire resistant.

The key thing—we cited 25 contributory violations in the law that contributed to that accident and the death of the miners. The one that was most key is the fact that the ventilation controls, the stoppings that separated the belt conveyor from the fresh air escapeway, two of those stoppings had been removed. So when the fire was in the belt entry, the smoke products and combustion went into the fresh air escapeway. Had those two stoppings been in place and if everything else had been the same at that mine, the other 24 contributory violations still existed, and the miners would have been able to evacuate because there is no smoke in their intake escapeway.

Mr. HARE. I understand that. I guess what my question is—we have a standard that is 52 years old and now your agency has a task force that is going to study this problem again; and my question to you again is why are we still waiting? Why can't the rule-making be restarted now and the standard issued immediately for this, irregardless of if this is a danger point and this can cause explosions or can cause people to die or to become injured in a mine? Why do we have a standard 52 years old that we are not updating and reinstituting a new standard on?

Mr. STICKLER. Well, Congress provided for the technical study panel to study the use of belt air interface and also the fire-resistant properties of conveyor belts. This panel was—the charter was published in the Federal Register in December. They have already—they had their first meeting in January, their second meeting in March. They are meeting today in Salt Lake City, Utah. Their next meeting is in Alabama. They are doing extensive research to determine what would be the proper standards for fire-resistant conveyor belts.

Now for us to move forward instead of waiting for their report, we would have to do the same research to gather the same data to make the same evaluation. At this stage, I think is important that we allow the technical study panel that Congress provided for, let them do their job. When we get that information, then we will proceed accordingly.

Mr. HARE. Do you know approximately when that will be?

Mr. STICKLER. Their report is due to be finalized by the end of this year.

Mr. HARE. I would hope that it wouldn't take any longer than that. Because I think, clearly, after waiting 52 years for a new standard, I don't think we can wait much longer.

Just another question regarding belt air. Thanks to the leadership of Congressman Rahall, we know the practice of belt air can increase the dangers of miners to conveyor belt fire. Before your arrival, the administration made it easier for mine operators to use the approach. Do you have the authority right now to act to limit this practice?

Mr. STICKLER. We have the authority. But, again, I think the technical study panel that Congress provided for, that is the second thing they are looking at besides the fire-resistant property, is the use of belt air interface; and they will finish their report at the end of this year.

I trust that their recommendations will address this issue properly; and my recommendation is, if we allow that process to proceed—and this is a panel that is comprised of six very skilled health and safety professionals. Two members were appointed by the Department of Labor, two by the Department of Health and Human Services and two by Congress. Many of these individuals are professors of mining engineering at our primary engineering schools across the country, and I trust that the work that they are doing will provide us the information we need to determine the proper and most protective standards for the use of belt air and also fire-resistant belts.

Mr. HARE. Well, my time has expired, but let me just suggest to you, Mr. Stickler, that I wouldn't wait too long for this panel to get back. We have a lot of people in the mines. This is a dangerous situation for people. I don't want to have another hearing on why we have lost more people in the mines while we are waiting for a commission to get back by the end of the year. I would think if you have the power to do it, my recommendation—my strong recommendation—would be to exercise your authority and proceed with it.

I would yield back.

Mr. STICKLER. Well, if I could, sir, I will just comment.

The authority I would have would be through the process of implementing a new rule; and, as you know, that takes considerable time. The panel will conclude their study by the end of this year, and we will proceed accordingly.

Chairman MILLER. Thank you.

Mr. Davis.

Mr. DAVIS OF TENNESSEE. I would like to thank the chairman and ranking member for holding this hearing today. I appreciate the seriousness and scope of this hearing.

My question is primarily for Mr. Stickler, but anyone can respond.

This week, I received a letter from an outstanding company from my district that has spent thousands of dollars in preparing a safety plan and enforcing that plan. The company which performs only surface mining has asked me for guidance. They have given me

some examples that are problematic. Please allow me to read a few lines from their letter.

Quote, one mission inspector has tried to issue a citation to a very large operator because the chairs provided for employees had only four legs instead of five and the inspector alleges that four-legged chairs tip over easily. The same inspector walks through the operator location and pulls the trash from every trash container and leaves the trash on the floor. He has stated on numerous occasions that he has looked for items that spontaneously combust such as tubes of grease. I will admit the oily rags, that will spontaneously combust, but I have never seen or heard of a tube of grease doing this, and if such a hazard did exist I am curious as to why the standard packaging for grease is made of cardboard. End quote.

Mr. Stickler, is there a manual or set of standards that outline the steps required for miner safety? Or is it left up to individual inspectors to determine if four-legged chairs or finding trash in trash cans are the threat to health and safety of miners? Are we spending more time on filling out reports and finding "gotcha" moments than we are in actually carrying out the mission of MSHA, which is to protect the miners?

Mr. STICKLER. Yes, sir. We do have the inspection handbook for our inspectors. It is very detailed.

To go back to the specific case that you mentioned, we don't have standards for how many legs are on chairs. I would be happy to follow up if you would provide me enough detail that I could follow up on that.

But I would also like to say that we have hundreds of men and women that work for MSHA that work very hard every day to see that the right thing is done for safety. Many of these individuals go into coal mines that aren't as high as this table and crawl on their hands and knees in mud and water and hazardous conditions, that are dedicated to work very hard every day to protect the health and safety of miners. And the image that you projected there, I can't conceive that that is something that exists within our organization.

Mr. DAVIS OF TENNESSEE. I certainly appreciate you taking a look at this, and I will have my staff provide you with the letter that I quoted.

I certainly appreciate the inspectors going out and doing their jobs. I hope we just don't put so much pressure through the media and through Congress on inspectors to the point that they try to find things just to be able to build a report. That doesn't do mine safety any good.

What we need to do is to make sure that we have that set of standards, follow those standards. That way, both the employer and the inspector knows exactly what they are looking for.

I appreciate your willingness to work on this for me. Thank you.

Thank you.

Chairman MILLER. Thank you, Mr. Davis.

Mr. Stickler, if I might, I just have one quick question and we will wrap this up. You have all been very patient with your time.

In your testimony, I think you said about half of the emergency response plans have been fully approved. I assume that means half

haven't been. What is the status of those that have not yet been approved and what is the timetable for that?

Mr. STICKLER. Well, the vast majority of plans have been partially approved. And we say "partially approved" because the ones that have not been fully approved, it is primarily because of not providing for the 96 hours of breathable air. As you know, we put out guidance for that in February of this year. I think the last number I saw was roughly 55 percent of the plans—emergency response plans now have been approved, including the 96 hours of breathable air. So operators are starting to respond to the requirement for breathable air.

There is one other issue that is a little bit of a problem, maybe a handful of operators in regard to the size of the zones for the pre-accident monitoring and tracking of miners.

As you recall, the MINER Act provides for pre-accident tracking so that we know where miners would be located if there is an explosion or fire. And most operators are doing that through the process of communications where they are tracking—where you go from one area of the mine to the other, that is recorded.

There is an issue with just a handful of operators on the size of those zones, and that process between the district managers and the operators is such that we notify them that it is unacceptable and give them time then to modify their plan. But particularly in the last month or so since we have come out with the guidance on breathable air, there has been very rapid progress in increasing the percentage of plans that are fully approved.

Chairman MILLER. So you would expect that they would be in compliance within 30 days, 60 days, 90 days?

Mr. STICKLER. I am reluctant to give you a time period.

Also, I would point out that the MINER Act also provides a mechanism, once we have worked with the operators through informing them that what they have submitted is not acceptable, given them a chance to resubmit, once we have gone through that back and forth, and the next step is to issue a violation, that then will go to the Federal Mine Health and Safety Review Commission, and a judge then will determine whether or not the operator's plan was sufficient or whether MSHA—

Chairman MILLER. You don't expect to go through that process for 45 percent of the plans do you?

Mr. STICKLER. Absolutely not. I would just take a handful.

Chairman MILLER. I understand if somebody wants to challenge it, but 55 percent of them have complied, as you have pointed out. So I am just trying to determine what is going on with the other half here. You know, it is kind of a basic benchmark in terms of the MINER Act.

Mr. STICKLER. Right. What is going on with the other half is the review process is continuing. This is handled by the district managers. We have 11 districts across the country, and they have specialists that review these plans, identify the deficiencies, write deficiency letters back to the operator, and that is a back-and-forth process.

Chairman MILLER. Do we have a list of those who have not complied? Is there a list of those who have not fully been approved?

Mr. STICKLER. I don't have that list with me. I am sure—that is one of the things we are doing, is we are tracking regularly all the components of the MINER Act. Every requirement of the MINER Act is being tracked by each district. That is being reported in to the headquarters here in Arlington.

We are monitoring the number of compliance for all the specific items, whether it be a multi-gas detector that we put in the emergency temporary standard and the final mine evacuation rule that was finalized in December. But there is about 15 items that we are tracking on a regular basis. We have a monthly report that shows us the status of each one of those specific requirements of the MINER Act.

Chairman MILLER. So, theoretically, a printout is available of their progress or their lack of progress?

Mr. STICKLER. Yeah, we could provide that.

Chairman MILLER. That would be helpful.

Congressman Kucinich, did you have a question?

Mr. KUCINICH. Yes. To Mr. Stickler, the question arises, with respect to enforcement, have you ever shut down a mine for violations of health and safety?

Mr. STICKLER. Well, MSHA's law requires that the area affected by a violation, if it is an imminent danger, it would be shut down immediately. If it is a situation where an operator has been issued a citation and they have failed to abate that citation or violation, that affected area can be shut down immediately. It depends on the nature of the violation. There are some—

Mr. KUCINICH. I understand that is the law. But my question was, have you ever shut down a mine for a safety or a health violation?

Mr. STICKLER. Well, I am sure MSHA has. When you have a violation that would affect the entire mine, such as methane accumulation or improper ventilation, that withdrawal order that MSHA issues would affect the entire mine.

Mr. KUCINICH. Have there been mines shut down recently for health or safety violations?

Mr. STICKLER. I am sure there have been mines shut down.

Mr. KUCINICH. Anyone else on the panel that knows the answer to that?

Mr. MCATEER. Mr. Kucinich, the process—there are about a thousand mines a year, on average, that have a shutdown order on part or all of that mine to be shut down by the agency; and that is year in year out. That is in addition to if there is an imminent danger. So that does happen. But I can't say the last year when it has.

Mr. KUCINICH. Yeah, Mr. Chairman, I think it would be interesting for this committee to know how serious the administration has been on enforcement, how far they go to ensure compliance by raising the issue. Thank you.

Chairman MILLER. Thank you, Mr. Kucinich.

If you could help us get that information, Mr. Stickler, that would be helpful.

[The information follows:]

## U.S. Department of Labor

Mine Safety and Health Administration  
1100 Wilson Boulevard  
Arlington, Virginia 22209-3939



AUG 27 2007

The Honorable George Miller  
Chairman  
Committee on Education and Labor  
U.S. House of Representatives  
Washington, D.C. 20515

Dear Chairman Miller:

This letter is in response to questions asked at a hearing (*Evaluating the Effectiveness of MSHA's Mine Safety and Health Programs*) held on May 16, 2007. I appreciate having the opportunity to respond to these requests.

At the hearing, you asked that a printout of the progress towards implementing the MINER Act be provided to you. Below is a spreadsheet that provides this information<sup>1</sup>.

Of the active producing underground mines, how many of the ERPs have been partially approved?	1
Of the active producing underground mines, how many of the ERPs have been fully approved?	460
Number of active producing underground mines	461
Redundant Communication Implemented	512
Pre-Accident Tracking Implemented	518
SCSR Training Completed	497
ERP Escape and Fire Drill Training Completed	520
Lifelines Installed	513
3-gas detectors provided	474

Rep. Dennis Kucinich asked how many coal mines MSHA closed due to a safety or health violation. We compiled data for orders issued under sections 107(a), 104(b), 104(d)(1), and 104(d)(2) of the Mine Act. Withdrawal orders issued under those sections resulted in miners being withdrawn from the affected areas of coal mines 9,614

<sup>1</sup> The number of mines that have implemented provisions of the MINER Act is higher than the overall number of active mines for a variety of reasons: Some mines have closed; a mine owner may be preparing to open a mine and is bringing the mine into compliance prior to opening; or, a mine may be temporarily closed due to fluctuations in the price of coal or due to maintenance in the mine.

You can now file your MSHA forms online at [www.MSHA.gov](http://www.MSHA.gov). It's easy, it's fast, and it saves you money!



times from January 1, 2001 to present. These withdrawal orders were issued at 1,314 coal mines. Enclosed please find a full explanation of the aforementioned withdrawal orders.

I appreciate having the opportunity to provide this information. Please let me know if you need any additional information on the progress MSHA is making to implement the MINER Act.

Sincerely,



Richard E. Stickler  
Assistant Secretary for  
Mine Safety and Health

Enclosure

Enclosure

Section 107(a) of the Mine Act authorizes an MSHA inspector to issue a withdrawal order when he finds that an imminent danger exists. The order requires withdrawal of all miners in the affected area. Only those miners who are necessary to correct the hazardous condition are permitted to enter the affected area. "Imminent danger" is defined as a condition or practice which could reasonably be expected to cause death or serious physical harm before such condition or practice can be abated.

Section 104(b) authorizes MSHA to withdraw miners when an inspector finds that a previously issued violation has not been totally abated within the period of time originally set for abatement, and that the abatement time should not be further extended. Only those miners necessary to correct the condition are permitted to enter the area affected.

Section 104(d)(1) orders are issued by an MSHA inspector within a certain time period when there is a violation of a mandatory safety or health standard which was caused by the operator's unwarrantable failure to comply. A violation is caused by an unwarrantable failure if it is determined that the mine operator has engaged in aggravated conduct constituting more than ordinary negligence. Only those miners necessary to correct the condition are permitted to enter the affected area.

Section 104(d)(2) orders follow the issuance of a (d)(1) order when there is a violation (found during a subsequent inspection) of a mandatory safety or health standard which was caused by the operator's unwarrantable failure to comply. Only those miners necessary to correct the condition cited are permitted to enter the affected area.

Chairman MILLER. Again, let me thank you again for your co-operation this morning with the committee. I think clearly you can hear the frustration from members of the committee about the urgency of this matter. I think none of us want to be on watch when again another group of miners are injured or lose their lives in these accidents.

It was the intent I think of the authors of the MINER Act that this would increase the margins of safety, and I think that is why there is so much concern about the rate of implementation around this Act. I think when the authors wrote these emergency response plans, I assume that they believed that the plans would be in effect in the near future. And, you know, this process of negotiation in the regions, when this will come to completion, they will have an

approved plan, appears it can take a very long time in different regions. I am very worried about that time frame, and I think that the other Members of Congress are, too, if that continues to drain on. There ought to be a point at which it cannot go beyond.

But, again, this committee plans to stay engaged in this until we get it right; and I hope that we can continue to call on you for your expertise. But I think it is clear that the Members of Congress and certainly those from the most heavily impacted areas are looking for a different tone, a different timetable, a different sense of urgency than we have seen in the past. Because many of us believe that that led to the loss of life and to the actions that took place, and we don't want a repeat of that.

Thank you again very much, and my apologies for all of the interruptions.

The committee will stand adjourned.

[The prepared statement of Mr. Altmire follows:]

**Prepared Statement of Hon. Jason Altmire, a Representative in Congress  
From the State of Pennsylvania**

Thank you, Mr. Chairman, for holding this hearing on how effective the Mine Safety and Health Administrations safety and health programs are.

I would like to extend a warm welcome to all of the witnesses. I appreciate the time you took to be here today and look forward to your testimony.

The tragedies at the Sago Mine in West Virginia and the Quecreek Mine in Pennsylvania shed light on the need for additional safety measures to be implemented in mines throughout this country. To its credit, the 109th Congress moved quickly in passing the MINER Act to ensure that many of the necessary safety measures were codified in law.

I am interested in hearing how effective MSHA has been in implementing provisions from the MINER Act, and whether or not these provisions have done enough to ensure the safety of our miners.

Thank you again, Mr. Chairman, for holding this hearing. I yield back the balance of my time.

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[Supplemental materials submitted by Mr. McAteer follow:]

[Attachment 1: List of rules withdrawn by MSHA follow:]

TITLE OF RULE/ REG. ID NUMBER	AGENCY JUSTIFICATION/ DATE ADDED/ RELEVANT CITE (IF AVAILABLE)	AGENCY JUSTIFICATION FOR WITHDRAWAL/ DATE WITHDRAWN/ RELEVANT CITE	LEGAL AUTH. FOR PROPOSED RULE/ CODE MOD.
<b>Metal/Nonmetal Impoundments</b>  1219-AA83	- the need to address the "proper design, construction and other safety issues" regarding "water, sediment and slurry impoundments for metal and nonmetal mining and milling operations."	"MSHA is withdrawing this entry from the agenda in light of resource constraints and changing safety and health regulatory priorities."	<b>30 USC 811</b>  30 CFR 56 30 CFR 57
	10/00	9/24/01	
		66 FR 61866	
<b>Surface Haulage</b>  1219-AA93	- the need to set "safety requirements for restraint systems, lighting, and blind areas" for large-haulage vehicles, over-the road trucks, front-end loaders, and similar equipment" for "both coal and metal and nonmetal surface mines and surface areas of underground mines."	"MSHA is withdrawing this entry from the agenda in light of resource constraints and changing safety and health regulatory priorities."	<b>30 USC 811</b>  30 CFR 56 30 CFR 57
	10/00	9/24/01	
		66 FR 61866	
<b>Electrical Grounding Standards for Metal and Nonmetal Mines</b>	- the need to consider "rulemaking to specify the proper equipment grounding" because MSHA records show that "accidents occur from inadequate grounding."	"MSHA is withdrawing this entry from the agenda in light of resource constraints and changing safety and health regulatory priorities."	<b>30 USC 811</b>  30 CFR 56 30 CFR 57

1

1219-AB01	11/96	9/24/01	
		66 FR 61866	
<b>Training and Retraining of Miners</b>  1219-AB02	"Our current regulations require all mine operators to have proved plans for training of their miners. We reviewed these requirements as part of our regulatory Flexibility Review to determine if changes were appropriate. We are considering developing a proposed rule to reflect a more flexible approach. In response to public comments we are considering increasing the number of hours of annual refresher training for supervisors from 8 hours to 12 hours. The training needs of supervisors are broader in scope than those of miners. We believe that better trained, more knowledgeable supervisors will contribute to their safety and that of miners under their supervision."	"MSHA is withdrawing this entry from the agenda in light of resource constraints and changing safety and health regulatory priorities."	<b>30 USC 811</b> <b>30 USC 825</b>  30 CFR 48
	10/00	9/24/01	
		66 FR 61866	
<b>Respirable Crystalline Silica Standard</b>  1219-AB12	- the need to develop new limits for respirable coal dust when crystalline coal dust is present based upon recommendations by the Secretary of Labor's Committee on the Elimination of Pneumoconiosis Among Coal Mine Workers that "will most effectively reduce worker overexposure to silica."	"MSHA is withdrawing this entry from the agenda in light of resource constraints and changing safety and health regulatory priorities."	<b>30 USC 811</b> <b>30 USC 813</b>  30 CFR 70.101 <i>et seq.</i> 30 CFR 90.101 <i>et seq.</i> 30 CFR 71.101 <i>et seq.</i> 30 CFR 72.101 <i>et seq.</i>
	4/98	9/24/01	
		66 FR 61866	

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<b>Safety Standard Revisions for Underground Anthracite Mines</b>  1219-AA96	"Our current regulations for coal mines do not adequately address anthracite coal mining because of the significant differences in conditions and hazards in these mines. Mining methods in anthracite mines include minimal use of mechanized equipment and a slow rate of advance into the coal seam. IN addition, anthracite coal is found in pitched, undulating seams. Mine operators currently must petition us for a modification of the existing regulations for certain situations. The proposed rule would address specific conditions of the anthracite mining industry and eliminate the need for a modification of existing safety requirements."	"MSHA is withdrawing this entry from the agenda in light of resource constraints and changing safety and health regulatory priorities."	<b>30 USC 811</b> <b>30 USC 825</b>  30 CFR 48 30 CFR 57 30 CFR 75
	11/95	9/24/01	
		66 FR 61866	
<b>Safety Standards for Self-Contained Self-Rescue Devices</b>  1219-AB19	"Self-contained self-rescuers (SCSR) are closed circuit breathing devices that provide a source of oxygen and greatly increase a miner's chance of surviving a mine emergency involving an irrespirable atmosphere. The mining industry has had recent experiences with SCSRs which did not function properly or were not donned properly, rendering them ineffective. We are considering a rule to address the service life of the devices, the appropriate inspection of SCSRs, and the adequacy of training. In addition, we may propose to apply SCSR standards to metal and nonmetal mines."	"MSHA is withdrawing this entry from the agenda in light of resource constraints and changing safety and health regulatory priorities."	<b>30 USC 811</b> <b>30 USC 825</b>  30 CFR 48 30 CFR 57 30 CFR 75
	7/7/99	9/24/01	
	ANPRM 64 FR 36632	66 FR 61868	
<b>Verification of Surface Coal Miner Dust Control Plans</b>	"The Secretary of Labor's Advisory Committee on the Elimination of Pneumoconiosis Among Coal Workers made several recommendations that impact surface coal mine workers. These surface coal mine issues will be addressed by the agency in a separate rulemaking which is currently underway. The scope of that rulemaking will include many issues that are addressed in the proposed underground	"MSHA is withdrawing this entry from the agenda in light of resource constraints and changing safety and health regulatory	30 CFR 71

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1219-AB21	rule (1219-AB14)Verification of Underground Coal Mine Operators' Dust Control Plans and Compliance Sampling for Respirable Dust. These issues include requirements for dust control plans, verification of dust control plans prior to approval, on shift examination of dust control measures, and the elimination of operator sampling for compliance purposes."	priorities."	
	10/00	9/24/01	
	66 FR 25717	66 FR 61868	
<b>Surge and Storage Piles</b>  1219-AB22	"MSHA has documented a number of fatalities and injuries involving miners operating vehicles and equipment on surface coal surge piles. The current standard only prohibits persons from walking or standing on or around surge or storage piles where a hazard may exist. We are considering rulemaking to expand the existing standard to address vehicles and equipment."	"MSHA is withdrawing this entry from the agenda in light of resource constraints and changing safety and health regulatory priorities."	<b>30 USC 811</b>  <b>30CFR77.209</b>
	10/00	9/24/01	
	66 FR 25713	66 FR 61863?	
<b>Escapeways and Refugees</b>  1219-AB27	"This standard would revise and clarify an existing standard that requires underground metal and nonmetal mines to have at least two separate exits to the surface. Because of the physical limits in underground mines, fire, massive ground fall, methane ignition, inundation, for example, could result in multiple entrapment deaths. A second escapeway increases the likelihood that miners will not be trapped underground during an emergency if one escape route is cut off."	"MSHA is withdrawing this entry from the agenda in light of resource constraints and changing safety and health regulatory priorities."	<b>5 USC 811</b>  30 CFR 57.11
	10/00	9/24/01	

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	65 FR 25710	66 FR 61868	
<b>Continuous Monitoring of Respirable Coal Mine Dust in Underground Coal Mines</b>  <b>1219-AB27 *</b>	<p>“Based on available technology, MSHA’s current regulations to control underground coal miners’ exposure to respirable coal mine dust employ periodic inspector and operator sampling for overexposures. MSHA recognizes that continuous respirable dust monitors, under development, would allow mine operators and miners to be aware of the actual dust conditions at all times, thereby enabling immediate action to avert overexposures. The ability to monitor dust exposures continuously during each workshift, predict end-of-work-shift cumulative exposures, and to display the actual end-of-work-shift exposures would be far more effective in controlling exposures to respirable coal mine dust than the current system. Continuous monitors when used effectively could greatly reduce coal miners’ occupational lifetime exposures to respirable coal mine dust and the associated risks for developing occupational lung disease. For operators who would use continuous monitoring, we would solicit comments on proposed modifications to the current dust control regulations. Moreover, for operators who would not use continuous monitors, we would identify how the current periodic dust monitoring sampling program could be improved, to increase protection of miners from occupational exposure to respirable coal mine dust.”</p>	<p>“MSHA is withdrawing this entry from the agenda in light of resource constraints and changing safety and health regulatory priorities.”</p>	<b>30 USC 811</b> <b>30USC813(h)</b>  30 CFR 70 30 CFR 72 30 CFR 75 30 CFR 90
	4/01	9/24/01	
	66 FR 25717	66 FR 61869	
<b>MSHA focused Inspections</b>  <b>1219-AB30</b>	<p>“Compliance history and safety and health performances are factors that provide an objective means for focusing MSHA resources. MSHA seeks comment on how best to maximize the effectiveness of resources and to further develop inspection procedures based upon experience. MSHA will evaluate current guidelines and practices for conducting inspections and determine how to best balance the complimentary objectives of protecting miners while focusing inspection resources on the greatest safety and health needs within each mine.”</p>	<p>“MSHA has withdrawn this item and will address this issue through non-regulatory means.”</p>	<b>30 USC 957</b>  30 CFR 4
	Fall 2002	Fall 2003	

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	UA vol. 67, no. 236		
<b>Air Quality, Chemical Substances, and Respiratory Standards</b>  <b>1219-AA48</b>	<p>“Our current regulations for exposure to hazardous airborne contaminants are over 25 years old. They do not fully protect today’s miners, who are potentially exposed to an array of toxic chemicals, and other hazards. Examples of these include lead, cyanide, arsenic benzene, asbestos, and other well-documented hazards. We will propose provisions of the air quality rule in phases based on our assessment of priority needs.”</p>	<p>“MSHA plans to withdraw this item.”</p>	<b>30 USC 811</b> <b>30 USC 813</b>  30 CFR 56 30 CFR 57 30 CFR 58 30 CFR 70 30 CFR 71 30 CFR 72 30 CFR 75 30 CFR 90
	July 1983	Fall 2002	
	UA vol. 67, no. 236	67 FR 60611	
<b>Occupational Exposure to Coal Mine Dust</b>  <b>1219-AB08</b>	<p>“Respirable coal mine dust levels in this country are significantly lower than they were over two decades ago. Despite this progress, there continues to be concern about the respirable coal mine dust sampling program and its effectiveness in presenting an accurate picture of exposure levels in mines. Coal workers exposed after the implementation of the current PEL continue to develop pneumoconiosis. In response to this concern, MSHA undertook an extensive review of the Agency’s respirable coal mine dust program. The MSHA Coal Mine Respirable Dust Task Group, which issued its report in June 1992, found that vulnerabilities exist which could impact miner health protection and made recommendations for improving the monitoring program. The Advisory Committee also addressed this issue and made recommendations. The Agency has carefully reviewed the NIOSH Criteria Document Occupational Exposure to Respirable Coal Mine Dust and the recommendations of the Advisory Committee on Elimination of Pneumoconiosis among Coal Mine Workers. MSHA finds that there remains unacceptable risk to miners’ health at the current exposure limit for dust in coal mines. Therefore, the Agency is in the preliminary rulemaking process for seeking information to lower this risk.”</p>	<p>“MSHA is currently developing regulatory alternatives to issues relating to respirable coal mine dust. Therefore, we are withdrawing this item at this time.”</p>	30 CFR 70.1 30 CFR 71.1 30 CFR 90.1 30 CFR 72.1

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	<b>Oct. 1998</b>	<b>Sept. 2002</b>	
	UA vol. 63, no. 216		
<b>Mine Rescue Teams</b> <b>1219-AB20</b>	“We are assessing our current regulations to identify areas where we might increase flexibility and encourage underground mine operators to provide mine rescue and recovery capability at their mines. We hope to increase the number of mine rescue teams available to assist miners in life threatening emergencies.”	“MSHA is withdrawing this item and plans to evaluate non-regulatory alternatives.”	<b>30 USC 811</b> <b>30 USC 825(e)</b> <b>30 USC 957</b>
	<b>Oct. 1999</b>	<b>July 2002</b>	30 CFR 49
	UA vol. 64, no. 224	67 FR 46431	
<b>Requirement for Approval of Flame-Resistant Conveyor Belts</b> <b>1219-AA92</b>	“Our current regulations require conveyor belts used in underground coal mines to be flame-resistant. The rule, as proposed, would set new procedures and requirements for testing and approval of these belts to evaluate their resistance to fire ignition and propagation. The proposal would also require purchase of the improved belts after one year.”	“MSHA has withdrawn this item.”	<b>30 USC 811</b> <b>30 USC 957</b>
	<b>Dec. 1992</b>	<b>July 2002</b>	30 CFR 14 30 CFR 18 30 CFR 75
	UA vol. 67, no. 236 57 FR 61524	67 FR 46431	
<b>Confined Spaces</b> <b>1219-AA54</b>	“Storage bins, hoppers, tanks, stockpiles, and other confined spaces at mining operations create hazards to miners. These hazards include entrapment by shifting piles of loose materials, falling into materials, and being struck by overhanging materials. Additionally, miners are exposed to toxic and physical hazards in these confined spaces. We will explore both regulatory and non-regulatory ways to eliminate or reduce these hazards.”	“MSHA is withdrawing this entry from the agenda in light of resource constraints and changing safety and health regulatory priorities.”	<b>30 USC 811</b> 30 CFR 56 30 CFR 57 30 CFR 70 30 CFR 71 30 CFR 75
	<b>Dec. 1991</b>	<b>Dec 2001</b>	30 CFR 77
	UA vol. 66, no. 323 56 FR 67364		

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History (1 each for 17 Rules)

TITLE OF RULE/ REG. ID NUMBER	DATE	ACTION	CITE	PRIORITY
<b>Air Quality, Chemical Substances, and Respiratory Standards</b>  <b>1219-AA48</b>	07/06/83	Notice of Availability	<b>48 FR 31171</b>	Other Significant
	11/19/85	ANPRM	<b>50 FR 47702</b>	
	08/29/89	NPRM	<b>54 FR 35760</b>	
	10/19/89	NPRM	<b>54 FR 43026</b>	
	08/30/91	NPRM Comment Period End	<b>56 FR 43026</b>	
	02/18/94	Final Rule: Abrasive Blasting and Drill Dust Control	<b>59 FR 8318</b>	
	09/26/02	Withdrawal Notice	<b>67 FR 60611</b>	
<b>MSHA focused Inspections</b>  <b>1219-AB30</b>	06/00/03	ANPRM		Substantive, Nonsignificant
<b>Occupational Exposure to Coal Mine Dust</b>  <b>1219-AB08</b>	11/26/96	Availability of Recommendations		Other Significant
	01/24/97	Agency Response to Advisory Committee Recommendations		
	05/05/97	Policy Document – Phase 1 Press Release – Effective 6/15/97		
	12/31/97 08/17/98	Policy Document – Phase 2 Withdrawn – Split Into Three Regs. – 1219-AB08, 1219-AB09, 1219-AB14		

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	06/00/98	NPRM		
<b>Mine Rescue Teams</b>  <b>1219-AB20</b>	To Be Determined	ANPRM		Substantive, Nonsignificant
<b>Requirement for Approval of Flame-Resistant Conveyor Belts</b>  <b>1219-AA92</b>	12/24/92	NPRM	<b>57 FR 61524</b>	Substantive, Nonsignificant
	02/11/93	Extension of Comment Period	<b>58 FR 8028</b>	
	03/31/95	Reopen Record and Notice of Public Hearing	<b>60 FR 16589</b>	
	06/05/95	Record Closed	<b>60 FR 16558</b>	
	10/31/95	Record Reopened	<b>60 FR 55353</b>	
	12/20/95	Extension of Comment Period	<b>60 FR 65509</b>	
	12/28/99	Record Reopened	<b>64 FR 72617</b>	
	07/15/02	Withdrawal Notice	<b>67 FR 46431</b>	
<b>Confined Spaces</b>  <b>1219-AA54</b>	12/30/91	ANPRM	<b>56 FR 67364</b>	Substantive, Nonsignificant
	05/01/92	ANPRM Comment Period End	<b>57 FR 8102</b>	
	08/16/01	Withdrawn		
<b>Metal/Nonmetal Impoundments</b>  <b>1219-AA83</b>	09/24/01	Withdrawn	<b>66 FR 61866</b>	Other Significant
<b>Surface Haulage</b>  <b>1219-AA93</b>	07/30/98	ANPRM	<b>63 FR 40800</b>	Other Significant
	09/24/01	Withdrawn	<b>66 FR 61866</b>	
<b>Electrical Grounding Standards for Metal and</b>	09/24/01	Withdrawn	<b>66 FR 61866</b>	Other Significant

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<b>Nonmetal Mines</b>				
<b>1219-AB01</b>				
<b>Training and Retraining of Miners</b> <b>1219-AB02</b>	10/01/96 10/01/98 09/24/01	Begin Review End Review Withdrawn	<b>66 FR 61866</b>	Substantive, Nonsignificant
<b>Respirable Crystalline Silica Standard</b> <b>1219-AB12</b>	09/24/01	Withdrawn	<b>66 FR 61866</b>	Other Significant
<b>Safety Standard Revisions for Underground Anthracite Mines</b> <b>1219-AA96</b>	11/95 09/24/01	ANPRM Withdrawn	<b>64 FR 36632</b> <b>66 FR 61866</b>	Other Significant
<b>Safety Standards for Self-Contained Self-Rescue Devices</b> <b>1219-AB19</b>	07/07/99 09/01 09/24/01	ANPRM NPRM Withdrawn; Regulatory Flexibility Analysis Required: Undetermined	<b>64 FR 36632</b>	Other significant
<b>Verification of Surface Coal Miner Dust Control Plans</b> <b>1219-AB21</b>	08/16/01	Withdrawn; Regulatory Flexibility Analysis Required: Undetermined	<b>64 FR 36632</b>	Other Significant
				Substantive,

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<b>Surge and Storage Piles</b> <b>1219-AB22</b>	09/01 09/24/01	NPRM Withdrawn; Regulatory Flexibility Analysis Required: Undetermined	none given <b>64 FR 36632</b>	Nonsignificant
<b>Escapeways and Refugees</b> <b>1219-AB27</b>	01/00/02? 09/24/01	ANPRM Withdrawn; Regulatory Flexibility Analysis Required: Undetermined	none given <b>64 FR 36632</b>	Other significant
<b>Continuous Monitoring of Respirable Coal Mine Dust in Underground Coal Mines</b> <b>1219-AB27</b>	09/24/01	Withdrawn	<b>64 FR 36632</b>	Other Significant

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[Attachment 2: Memorandum for the file follows:]

July 2006.

To: Sago Mine Investigation File  
 From: Suzanne Weise & Patrick McGinley  
 CC: Davitt McAteer  
 RE: *Thinking Out-Side-The Box: The Proposed Blended Duty of Care and Safety Case Model for Regulation in the Coal Mining Industry of Australia*

## I. INTRODUCTION

New regulatory and administrative measures have been proposed to address perceived shortcomings of the existing statutory and regulatory mine safety regime subsequent to the Sago Mine explosion. Some coal industry officials, regulators and other interested parties have been critical of these proposals on the ground that broad, generally applicable regulatory mandates, fail to take into account mine-specific circumstances and features. Such criticism asserts that regulatory mandates that fail to adequately address mine-specific issues are likely to involve excessive cost in relation to increase in miner safety and that they are likely to prove inefficient and or ineffective.

This assertion that mine site-specific issues should be an integral part of any response to the regulatory inadequacies identified in the wake of the Sago investigation is not necessarily in conflict with the regulatory proposals it criticizes. On the contrary, “outside-the-box” analysis might lead to new approaches blending the general regulatory mandate approach of recent proposals with critics’ demand for attention to site-specific mine characteristics. Below, this memorandum identifies an example of “outside-the-box” thinking which might provide the impetus for resolving concerns of critics of new mine safety regulatory proposals. The memo does not argue for the adoption of the blended duty of care/safety case regulatory model proposed for the coal industry in Australia. Rather, the approach of the Australian proposal provides an example of how creative outside-the-box thinking may help to resolve thorny regulatory issues which tend to be frozen by ossified conventional analysis.

This Memorandum describes the generally applicable “duty of care” standard of Australian law and a proposal to append to the existing coal mine safety regulatory regime a “safety case” approach found to be successful when applied occupational health and safety regulation of other industries in Australia.<sup>1</sup> Relevant to the Post-Sago search for ways to improve mine safety is the active involvement of mine managers in developing mine site-specific approaches to reduction of health and safety hazards.

The following discussion describe in summary form a 2005 report and attendant working paper made to and for the West Australian government; the charge of Hopkins and Wilkinson, the reports’ authors, was to provide advice on best practice safety regulation for the mining industry in that State.<sup>2,3</sup>

## II. DUTY OF CARE IN AUSTRALIA

Australia is a national federation of six States and two Territories. Under the Australian system of government, States and Territories have responsibility for enacting and enforcing laws relating to workplace health and safety.<sup>4</sup>

Each State and Territory has a principal Occupational Health and Safety (OHS) Act which sets out requirements for ensuring workplace health and safety. These requirements spell out the duties of different groups of people who play a role in workplace health and safety. These requirements are known collectively as the “Duty of Care.”<sup>5</sup> Duty of care legislation “is often described as outcome-based, performance based, or goal setting legislation because of its focus on outcomes.”<sup>6</sup> This duty of care standard has roots in the common law tort of negligence recognized in Anglo-American jurisprudence. In Australia’s occupational health and safety law the duty of care is a component of statutory regime protecting workers.<sup>7</sup>

Duty of care requires employers, employees and any others who may have an influence on hazards in a workplace to do everything ‘reasonably practicable’ to protect the health and safety of workers.<sup>8</sup> Prior to the adoption of the duty of care approach, safety obligations were imposed only up to the level of the mine manager and no duty was imposed on mine owners.<sup>9</sup>

The term ‘reasonably practicable’ under duty of care means that the requirements of the law vary with the degree of risk attendant a particular activity or work environment which must be weighed against the time, trouble and cost of taking measures to control the risk.<sup>10</sup> It allows the duty holder to choose the most efficient

means for controlling a particular risk from the range of feasible options preferably in accordance with the 'hierarchy of control'.<sup>11</sup>

The range of options falling within the scope of 'reasonably practicable' allows employers to meet their duty of care at the lowest cost and require advances in technology and knowledge to be incorporated when efficient to do so.<sup>12</sup> The duty holder must show that it was not reasonably practicable to do more than what was done or that it has have taken 'reasonable precautions and exercised due diligence.'<sup>13</sup>

Specific rights and duties flowing from the duty of care include:

- provision and maintenance of a safe plant and systems of work;
- safe systems of work in connection with a plant;
- a safe working environment and adequate welfare facilities;
- provision of information and instruction on workplace hazards and supervision of employees in safe work;
- monitoring the health of employees and related records keeping;
- employment of qualified persons to provide health and safety advice; and
- monitoring conditions at the workplace.

These rights and duties are representative of employer's specific duties in all Australian States and Territories.

When workplace duty of care legislation was first adopted, there was some concern that "prescription" would be abandoned and there would be a move toward industry self-regulation.<sup>14</sup> However, experience has shown that the duty of care approach to occupational health and safety in Australia works in conjunction with statutory prescription rather than as a replacement.<sup>15</sup> The "broadly stated" duty of care approach is "now widely understood" as requiring a risk management approach including a process of hazard identification, risk assessment and risk control.<sup>16</sup>

As noted above, Australia's application of duty of care doctrine to occupational health and safety regulation involves companies in risk assessments regarding specific hazards and allows employers to make site-specific decisions as to measures needed to control identified risks. Discussed below in Section III is a proposal to incorporate much broader opportunities for coal operators to meld a mine safety regulatory regime to local conditions and considerations. In the Sago Mine context, such an approach or a derivation thereof might allow proponents and critics of new regulatory mandates to find common ground, especially as to the issue of consideration of mine-specific issues.

### III. PROPOSAL TO USE "SAFETY CASES" FOR REGULATION OF AUSTRALIA'S MINING INDUSTRY

Hopkins and Wilkinson provide an example of how "thinking outside-the-box" might resolve difficult and contentious issues relating to coal mine health and safety in their working paper, Safety Case Regulation for the Mining Industry, prepared for the Australian National Research Centre for Occupational Health and Safety Regulation.<sup>17</sup> As discussed below, Hopkins and Wilkinson's paper draws from the Australian experience with successful "safety case" regimes applied to major hazardous waste facilities in the State of Victoria and the National Offshore Petroleum Safety Authority (NOPSA).<sup>18</sup> Most relevant to Post-Sago efforts to improve mine safety in West Virginia and other coal producing jurisdictions is the safety case emphasis on careful site specific analysis of safety and health hazards. The suggestion that regulation and site specific health and safety issues are inimical is clearly debunked by the safety case approach.

Before discussing their proposal to blend the existing mine safety regime including its' broad duty of care requirements, they begin their discussion with the proposition that safety management systems need to focus on the most serious hazards while not neglecting other health and safety risks.<sup>19</sup> They opine that major accidents are usually preceded by indications of trouble and that safety plans must therefore identify these indications and specify appropriate action to be taken when they occur.<sup>20</sup> They explain:

[P]lans must identify trigger levels, or events, and action response plans, actions to be taken in response to trigger events. For each hazard, there are normally several trigger levels of increasing seriousness, with corresponding action plans, ranging up to withdrawal of all personnel from the mine. Mines have therefore developed schedules of triggers and corresponding actions and these have become known as TARPs (Trigger Action Response Plans).<sup>21</sup>

According to Hopkins and Wilkinson, "TARPs are the heart and soul of \* \* \* principal hazard management plans."<sup>22</sup>

The working paper notes that "in other industries the need to focus on the most serious hazards and the apparent failure of previous, (mainly prescriptive), regu-

latory systems \* \* \* led to the development of safety case regimes.”<sup>23</sup> These regimes require operators to:

- provide a detailed description of the hazardous facility
- identify all potential major hazards and major accident events
- carry out a systematic assessment of the nature of such events and their consequences
- put in place control systems to safeguard against such events
- monitor the controls to ensure that they are working
- embed this control system in a comprehensive safety management system.<sup>24</sup>

Hopkins & Wilkinson explain how safety cases differ from duty of care responsibilities:

Arguably, all this is already required by the general duty of care. But the crucial additional feature of a safety case regime is that it is a licensing regime. Operators are required to make a case to the regulator indicating how they intend to comply with these requirements (hence the term “safety case”). Regulators must ultimately accept or reject the safety case.<sup>25</sup>

They observe that the evaluation of safety cases may be quite time consuming and that complex safety cases require considerable expertise because of the amount of detail in complex safety cases.<sup>26</sup> Further, Hopkins and Wilkinson point out that “once accepted by the regulator, all the detail in the case is enforceable.”<sup>27</sup> Safety case regimes, they emphasize, “are \* \* \* not a retreat from prescription; it is simply that what is prescribed is set out in the safety case rather than in legislation or regulations.”<sup>28</sup> The amount of detail in a safety case is proportionate to the complexity of the operations at the site and smaller mines are likely to require a much more simplified safety case than large mines.<sup>29</sup>

A safety case regime can be resource intensive especially where mines require complex safety cases. The authors emphasize that a safety regime must be well resourced or it would likely offer no advantages over and above non-safety case regimes.<sup>30</sup> They also address the risk assessment component of safety cases and respond to criticism that such assessment is problematic.<sup>31</sup> Hopkins and Wilkinson concede that some criticism of how risk assessment is applied may be accurate but not criticism of the safety case concept itself.<sup>32</sup>

For complex facilities with complicated processes, they argue, there is no alternative to the use of systematic hazard and risk assessment methodologies. Moreover, they minimize the complexity of safety cases observing that:

\* \* \* for many risks, especially for general occupational health and safety risks, appropriate precautions are well known. For example the law generally requires certain dangerous machines to have suitable guarding, power takeoff shafts on tractors to be covered, ladders on construction sites to be secured, heavy vehicles to have efficient brakes and so on. In other words, the risk assessment part of the process of managing health and safety has already been done, and the standards are well known and documented. \* \* \* [I]n these circumstances, it is neither necessary nor desirable to carry out a risk assessment from scratch. The assessment process is generally a narrower one of checking that the standard precautions are appropriate in this particular case.<sup>33</sup>

Hopkins and Wilkinson also examine activities of inspector carries in a safety case regime and the implications these have for staffing.<sup>34</sup> They identify the most important duty is to judge if the company has the leadership, staff, systems and procedures to safely operate the facility.<sup>35</sup> “Where there are deficiencies,” the authors observe, “the regulator must have the capability to recognize these and develop appropriate strategies to persuade senior staff to make appropriate changes.”<sup>36</sup> As far as enforcement in the safety case setting, resort is rarely made to legal options but Hopkins and Wilkinson confirm that regulators are expected to take formal enforcement action when appropriate.<sup>37</sup>

Hopkins and Wilkinson recognize the difference between safety case situations and the traditional role of safety inspectors to check for compliance with specific requirements in the legislation and regulations. They confirm that this type of compliance monitoring continues to have a place in a safety case regime has its place, “especially if the information obtained is used to build a picture of how the organization health and safety systems are operating.”<sup>38</sup> They caution that inspectors must be cautious to “avoid concentrating on minutiae and missing the bigger picture.”<sup>39</sup>

The working paper also emphasizes that regulatory staff must have personal credibility with senior company staff to have their views taken seriously, so the regulatory staff must possess knowledge and first hand experience of the industry to be regulated.<sup>40</sup>

Following these observations, the working paper proposes specific principles of best practices regulation of which the safety case is an integral part.

#### **IV. A BEST PRACTICES SAFETY CASE REGIME PROPOSAL FOR THE AUSTRALIAN COAL INDUSTRY**

Hopkins and Wilkinson recommend consideration of the 33 principles<sup>41</sup> in developing a safety case regime for the mining industry. These principles are briefly summarized below; the full statement of principles appearing in the working paper is attached as Appendix.

(1) Safety case regimes should be introduced in the mining industry, not as a replacement of duty of care but as an addition to it by requiring operators to demonstrate how they intend to fulfill their duty of care.<sup>42</sup>

(2) Safety case requirements should apply to all mines, regardless of size, with the understanding that the smaller and less complex the mine, the simpler the safety case.<sup>43</sup>

(3) Safety cases should emphasize the idea of triggers to action and incorporate trigger action response plans where appropriate.<sup>44</sup>

(4) Safety cases in the mining industry should address all risks including those to occupation health.<sup>45</sup>

(5) Safety cases should include a detailed consideration of fatigue management.<sup>46</sup>

(6) Mining safety cases should not normally be required to carry out quantitative risk analysis.<sup>47</sup>

(7) The workforce and their representatives should have the right to be consulted in the development of a safety case and to raise concerns about a safety case after it has been accepted.<sup>48</sup>

(8) The safety case regime should specify guidelines for employee participation.<sup>49</sup>

(9) Safety cases should include provision for adequate training for workforce and management.<sup>50</sup>

(10) The development of safety case regimes within particular jurisdictions should be coordinated and aligned where possible.<sup>51</sup>

(11) OHS should be amalgamated into a single Act, with industry specific regulations and codes of practice where necessary.<sup>52</sup>

(12) Prosecution can be of companies and individuals. The repertoire of enforcement options available to inspectorates should be as broad as possible, and the workforce, in particular health and safety representatives, should have the right to request the regulator to initiate an investigation with a view to enforcement action, including prosecution.<sup>53</sup>

(13) Inspectors must carry out both announced and unannounced inspections.<sup>54</sup>

(14) Separate statutory authorities should be established to manage safe case regimes in the mining industry.<sup>55</sup>

(15) Regulatory staff must be paid competitive salaries in order to recruit and retain staff of the requisite quality.<sup>56</sup>

(16) There should be a single point of contact for a site within the inspectorate (i.e., one person should have overall responsibility for the site and visits it regularly).<sup>57</sup>

(17) The competency and accountability of all staff required for the Authority should be defined.<sup>58</sup>

(18) Recruitment of staff to an Authority will need to be by open advertisement.<sup>59</sup>

(19) A comprehensive training program will need to be developed and implemented as part of developing an enhanced inspectorate, including training in the techniques of root cause analysis (designed to identify the systemic causes of accidents) and evidence gathering as a prelude to prosecution.<sup>60</sup>

(20) Inspectors should be trained both in systemic accident analysis and in evidence gathering, particularly concerning neglect by senior company officers.<sup>61</sup>

(21) Inspectorates should publish reports on all significant accidents, using the Australian Transport Safety Bureau reports as a model.<sup>62</sup>

(22) The size and cost of a safety Authority should not be determined by any historical method but should be worked out from first principles. The assumptions upon which size is determined should be transparent.<sup>63</sup>

(23) Government should be aware that any proposed Authority would cost substantially more than the present regulator and should seriously consider the possibility of external funding options such as imposing an industry levy.<sup>64</sup>

(24) One-off start up costs should be paid by the government.<sup>65</sup>

(25) If the decision is to fund an Authority in part or in whole from industry sources, the funding arrangement should not be set up on a fee for service basis.<sup>66</sup>

(26) A proposed Authority should have an expertise based advisory board which should include representatives of industry, the workforce, unions and government.<sup>67</sup>

(27) The Authority should report to parliament, through a Minister to be decided by government.<sup>68</sup>

(28) The Authority's ways of working, systems, procedures and activities should be as transparent as possible.<sup>69</sup>

The authors, in concluding that the safety case system should be the basis for the regulation of health and safety in the Australian mining industry, recognize that "best practice regulation requires the ability to effectively monitor and audit companies safety cases as well as the provision of high quality advice, encouragement and stimulation to the industry to improve its own performance as well as effective enforcement and prosecution of the (revised) law, where appropriate."<sup>70</sup>

## V. CONCLUSION

As noted in the introduction to this memorandum does not argue for the adoption of the blended duty of care/safety case regulatory model proposed for the coal industry in Australia. Rather, the approach of the Australian proposal provides an example of how creative outside-the-box thinking may help to resolve thorny regulatory issues which tend to be frozen by ossified conventional analysis.

In light of the criticism of Post-Sago regulatory and administrative proposals addressing perceived shortcomings of the existing statutory and regulatory mine safety regime critics and regulatory change proponents should welcome the opportunity to review and critique out-side-the-box approaches identified by those outside the current MSHA regulatory framework. The Australian duty of care/safety case regime has been successfully utilized in Australia to address workplace health and safety issues relating to hazardous waste and off-shore petroleum industries. Australian authorities are examining the safety case approach to determine its potential applicability to that nation's coal mines. The safety case approach is one way that site-specific considerations may be given appropriate attention as critics of Post-Sago remedial proposals demand. At the very least, those critics and other interested parties should begin to explore new approaches to protect the health and safety of the nation's coal miners.

## ENDNOTES

<sup>1</sup>Hopkins & Wilkinson, "Working Paper 37: Safety Case Regulation for the Mining Industry," (July 2005). (Hereafter "Hopkins & Wilkinson").

<sup>2</sup>Id. at 3. The advice was provided in the first place to a Mine Safety Improvement Group and formed the basis of its report to government, delivered in April 2005. The full report is available at: <http://www.ministers.wa.gov.au/carpenter/docs/features/interim%20report%20stage%201%20w%20text.pdf>

The Hopkins and Wilkinson working paper discussed herein "aims to extricate the advice outlined in that report from the particular Western Australian context and present it in a way that is of potential relevance to other Australian jurisdictions. The aim, then, is to present a model for best practice safety regulation in the mining industry generally." Id. The report and working paper do not parallel traditional discussions of regulatory models that focus on regulatory requirements to be imposed on a regulated industry. Rather, Hopkins and Wilkinson go further—considering both regulatory requirements and with the structure of the regulator.

<sup>3</sup>Id. Wilkinson and Hopkins explain their report and work paper devote considerable attention to regulatory structure because of its importance for any government seeking to set up a best practice regulatory regime.

<sup>4</sup>The following is a link to the State and Territory OHS authorities: <http://www.nohsc.gov.au/OtherRelatedSites/australianites/>

<sup>5</sup>The "duty of care" standard of the common law tort of negligence (in American Jurisdictions often referred to as the "reasonable person" standard) underpins the development of occupational health and safety regulation in Australia as well as in the United Kingdom.

<sup>6</sup>Id. at 3-4, note 3, citing, N Gunningham, "The Development Model for best practice regulation in the mining industry of a New Regulatory Model for Occupational Health and Safety in the New South Wales Coal Industry", October 1999. Paper available at <http://www.minerals.nsw.gov.au/legislation?p=1696#Coal> at 47.

<sup>7</sup>See generally, <http://www.ascc.gov.au/OHSLegalObligations/DutyofCare/dutycare.htm>

<sup>8</sup>"Any others" includes contractors and those who design, manufacture, import, supply or install plant, equipment or materials used in the workplace.

<sup>9</sup>Hopkins & Wilkinson, supra note 1 at 3.

<sup>10</sup>The words "reasonably practicable" have been the subject of much judicial consideration. Three general propositions are to be discerned from the decided cases:

- the phrase "reasonably practicable" means something narrower than "physically possible" or "feasible";
- what is "reasonably practicable" is to be judged on the basis of what was known at the relevant time;
- to determine what is "reasonably practicable" it is necessary to balance the likelihood of the risk occurring against the cost, time and trouble necessary to avert that risk.

<sup>11</sup>Slivak v. Lurgi, 205 CLR 304, 322 [2001] HCA 6 (citing cases in footnotes 36 through 39).

The 'hierarchy of control' refers to the range of feasible options for managing the risk to health and safety. The hierarchy normally ranges over the following controls: elimination of the hazard; its substitution with a less harmful version; its redesign; engineering controls; isolation of the hazard from people at the workplace; safe work practices; redesigning work systems; and

the use of personal protective equipment by people at the workplace. <http://www.nohsc.gov.au/OHSLegalObligations/DutyofCare/dutycare.htm>.

<sup>12</sup><http://www.nohsc.gov.au/OHSLegalObligations/DutyofCare/dutycare.htm>

<sup>13</sup>Id.

<sup>14</sup>Hopkins & Wilkinson at 4. Black's Law Dictionary (8th ed. 2004), defines "prescription" as "[t]he act of establishing authoritative rules." The term "prescription" used in the Australian Occupational Health Safety context refers to what Americans call "regulatory mandates."

<sup>15</sup>Id. at 4.

<sup>16</sup>Id.

<sup>17</sup>The National Research Centre for Occupational Health and Safety Regulation is a research within the regulatory institutions network, in the Research School of Social Sciences, at the Australian National University. The Center is funded by the National Occupational Health and Safety Commission ("NOHSC"). <http://ohs.anu.edu.au>

<sup>18</sup>Hopkins & Wilkinson supra, note 1 at 7. The Victorian regime covers about 50 major hazard sites in that state. The legislation draws on the national standard for the regulation of major hazards, but is informed by major hazard regimes in Europe and goes beyond the national standard in various respects. The Victorian regulator is relatively well-resourced. It has scrutinized and commented on safety cases in great detail. Like the Victorian regime, the offshore petroleum safety case regime, largely administered by NOPSA, has detailed regulations and an extensive set of guidelines about how these regulatory requirements can be met. Moreover, NOPSA states in its Strategic Plan that safety cases will be checked to ensure that they are consistent with "good oil field practice."

<sup>19</sup>They base their discussion on the Queensland Coal Mining Safety and Health Act of 1999, which defines a principal hazard as one with the potential to cause multiple fatalities and requires mine operators to develop individual principle hazard management plans for each such hazard.

<sup>20</sup>Hopkins & Wilkinson supra, note 1, at 5.

<sup>21</sup>Id.

<sup>22</sup>Id.

<sup>23</sup>Id. at 5-6.

<sup>24</sup>Id. at 6.

<sup>25</sup>Id.

<sup>26</sup>Id.

<sup>27</sup>Id.

<sup>28</sup>Id.

<sup>29</sup>Id.

<sup>30</sup>The authors find evidence for this observation in the British rail system's safety case regime. The U.K government's administration of the rail safety case regime sought to minimize the role of the inspectors' approval of safety cases and catastrophic train accidents followed. They assert that this result is "a graphic example of what can happen if such a regime is introduced without the other requisite features of good safety case regimes, namely a regulator with the capacity to professionally challenge safety cases, a workforce which is sufficiently empowered to play an active part in the process and finally, a belief at the working level in both the regulated and regulator that the safety case is a beneficial approach."

<sup>31</sup>Id. Such criticism includes the accusation that complex risk assessment methodologies (particularly where quantification is involved) can be difficult to understand and therefore unreliable and that the results of quantitative risk assessments can be "massaged" to reduce risk to an acceptable level.

<sup>32</sup>Id.

<sup>33</sup>Id. at 30.

<sup>34</sup>Id. at 8-9.

<sup>35</sup>Id. at 8.

<sup>36</sup>Id.

<sup>37</sup>Id. The authors stress that "best practice auditing by inspectors is not just passive compliance monitoring; it involves challenge. \* \* \* Best practice inspectors are engaged not only in compliance monitoring; they are also investigators. We are talking here of proactive investigation, not just reactive investigation which follows an accident or so called 'near miss.'"

<sup>38</sup>Id.

<sup>39</sup>Id.

<sup>40</sup>Id.

<sup>41</sup>Id. at 9-24. Although there are 33 principles set forth in the paper, only those that are relevant to our inquiry here are included in the text.

<sup>42</sup>Id. at 10.

<sup>43</sup>Id.

<sup>44</sup>Id.

<sup>45</sup>Id. at 11.

<sup>46</sup>Id. at 11-12.

<sup>47</sup>Id. at 11-12. Safety case regimes in process industries in Australia often make use of quantitative risk assessment, but the authors did not think this may not be appropriate in mineral extraction operations but did not elaborate as to why.

<sup>48</sup>Id. at 12. The authors suggest that employees should have the right to raise problems about a safety case which become apparent after it has been accepted and to call inspectors to examine issues which arise if necessary.

<sup>49</sup>Id.

<sup>50</sup>Id. at 12-13. The authors suggest that tier-training will be necessary, with the level of training determined by job requirements. Workers will also need intensive training in risk-management principles and the safety case should include a provision for such training. Finally, training will also be required for managers.

<sup>51</sup> Id. at 13.

<sup>52</sup> Id. at 13-14. The authors note that the UK has adopted a single safety Act covering all UK industry.

<sup>53</sup> Id. at 14. The authors recognize that “the importance of personal liability is that it directly affects the motivations of decision makers who are responsible for creating the risks, in a way that holding companies responsible fails to do.” Hopkins & Wilkinson, *supra*, note 1 at 14. The authors also recognize that some jurisdictions provide third parties with a right to prosecute when the regulatory agency does not. This appears to be similar to our citizen suit provisions under SMCRA.

<sup>54</sup> Id. at 14-15.

<sup>55</sup> Id. at 15-16.

<sup>56</sup> Id. at 16.

<sup>57</sup> Id. at 16-18.

<sup>58</sup> Id. at 18.

<sup>59</sup> Id. at 18.

<sup>60</sup> Id. at 18-19.

<sup>61</sup> Id. at 19.

<sup>62</sup> Id. at 19. See, <http://www.atsb.gov.au/publications/investigation—reports/investigation—reports.aspx>.

<sup>63</sup> Id. at 20-21.

<sup>64</sup> Id. at 21.

<sup>65</sup> Id. at 22.

<sup>66</sup> Id. at 21-22.

<sup>67</sup> Id. at 22.

<sup>68</sup> Id. at 22-23.

<sup>69</sup> Id. at 23.

<sup>70</sup> Id. at 24.

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[Internet address to the Aracoma Alma Mine Report follows:]

*<http://www.wju.edu/aracoma/AracomaAlmaMineReport—November2006.pdf>*

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[Internet address to the Sago Mine Disaster Report follows:]

*<http://www.wju.edu/sago/SagoMineDisasterReport—July2006.pdf>*

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[Whereupon, at 1:24 p.m., the committee was adjourned.]

