S. HRG. 110–464

IMPROVING MINE SAFETY: ONE YEAR AFTER SAGO AND ALMA

HEARING

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

UNITED STATES SENATE

ONE HUNDRED TENTH CONGRESS

FIRST SESSION

SPECIAL HEARING

FEBRUARY 28, 2007—WASHINGTON, DC

Printed for the use of the Committee on Appropriations

Available via the World Wide Web: http://www.gpoaccess.gov/congress/index.html

U.S. GOVERNMENT PRINTING OFFICE

43–819 PDF WASHINGTON : 2008

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2250 Mail: Stop SSOP, Washington, DC 20402–0001

COMMITTEE ON APPROPRIATIONS

ROBERT C. BYRD, West Virginia, *Chairman*

DANIEL K. INOUYE, Hawaii
PATRICK J. LEAHY, Vermont
TOM HARKIN, Iowa
BARBARA A. MIKULSKI, Maryland
HERB KOHL, Wisconsin
PATTY MURRAY, Washington
BYRON L. DORGAN, North Dakota
DIANNE FEINSTEIN, California
RICHARD J. DURBIN, Illinois
TIM JOHNSON, South Dakota
MARY L. LANDRIEU, Louisiana
JACK REED, Rhode Island
FRANK R. LAUTENBERG, New Jersey
BEN NELSON, Nebraska

THAD COCHRAN, Mississippi
TED STEVENS, Alaska
ARLEN SPECTER, Pennsylvania
PETE V. DOMENICI, New Mexico
CHRISTOPHER S. BOND, Missouri
MITCH McCONNELL, Kentucky
RICHARD C. SHELBY, Alabama
JUDD GREGG, New Hampshire
ROBERT F. BENNETT, Utah
LARRY CRAIG, Idaho
KAY BAILEY HUTCHISON, Texas
SAM BROWNBACK, Kansas
WAYNE ALLARD, Colorado
LAMAR ALEXANDER, Tennessee

CHARLES KIEFFER, *Staff Director*
BRUCE EVANS, *Minority Staff Director*

SUBCOMMITTEE ON DEPARTMENTS OF LABOR, HEALTH AND HUMAN SERVICES, AND EDUCATION, AND RELATED AGENCIES

TOM HARKIN, Iowa, *Chairman*

DANIEL K. INOUYE, Hawaii
HERB KOHL, Wisconsin
PATTY MURRAY, Washington
MARY L. LANDRIEU, Louisiana
RICHARD J. DURBIN, Illinois
JACK REED, Rhode Island
FRANK R. LAUTENBERG, New Jersey
ROBERT C. BYRD, West Virginia, (ex officio)

ARLEN SPECTER, Pennsylvania
THAD COCHRAN, Mississippi
JUDD GREGG, New Hampshire
LARRY CRAIG, Idaho
KAY BAILEY HUTCHISON, Texas
TED STEVENS, Alaska
RICHARD C. SHELBY, Alabama

Professional Staff
ELLEN MURRAY
ERIK FATEMI
MARK LAISCH
ADRIENNE HALLETT
LISA BERNHARDT
BETTILOU TAYLOR *(Minority)*
SUDIP SHRIKANT PARIKH *(Minority)*

Administrative Support
TERI CURTIN
JEFF KRATZ *(Minority)*

CONTENTS

	Page
Opening statement of Senator Tom Harkin	1
Statement of Senator Robert C. Byrd	3
Opening statement of Senator Arlen Specter	5
Statement of Senator Patty Murray	7
Statement of Hon. Richard E. Stickler, Assistant Secretary, Mine Safety and Health Administration, Department of Labor	8
Prepared statement	10
Statement of Dr. John Howard, Director, National Institute for Occupational Safety and Health, Department of Health and Human Services	14
Prepared statement	15
Statement of Cecil Roberts, international president, United Mine Workers of America, Washington, DC	39
Prepared statement	40
Statement of Bruce Watzman, vice-president, National Mining Association	45
Prepared statement	47
Statement of J. Davitt McAteer, esquire, vice president of sponsored programs, Wheeling Jesuit University, Shephardstown, West Virginia	50
Prepared statement	52
Statement of Chris R. Hamilton, senior vice president, West Virginia Coal Association, Charleston, West Virginia	55
Prepared statement	57
Questions submitted by Senator Tom Harkin	70
Question submitted by Senator Robert C. Byrd	80

IMPROVING MINE SAFETY: ONE YEAR AFTER SAGO AND ALMA

WEDNESDAY, FEBRUARY 28, 2007

U.S. SENATE,
SUBCOMMITTEE ON LABOR, HEALTH AND HUMAN SERVICES, AND EDUCATION, AND RELATED AGENCIES,
COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 2:15 p.m., in room SD–124, Dirksen Senate Office Building, Hon. Tom Harkin (chairman) presiding.

Present: Senators Harkin, Murray, Byrd, Specter, and Shelby.

OPENING STATEMENT OF SENATOR TOM HARKIN

Senator HARKIN. Good afternoon. The Appropriations Subcommittee on Labor, Health and Human Services, and Education, and Related Agencies will now come to order for this hearing on mine safety.

I'm happy to convene this hearing in response to a request from Senator Byrd, the chairman of the full Appropriations Committee.

At the outset, I want to say that Senator Byrd has no peer, when it comes to improving the health and the safety of our Nation's miners. In response to his leadership, our subcommittee included $302 million in the fiscal year 2007 Joint Funding Resolution for the Mine Safety and Health Administration, MSHA. This amount is $24.5 million more than MSHA would have gotten without his efforts, and $14 million more than the President's budget request.

Last year, Senator Byrd pushed for supplemental appropriations of $25.6 million for MSHA and $10 million for the National Institute for Occupational Safety and Health (NIOSH)—funding required to hire more coal inspectors and push the development of technologies that can improve the working conditions of miners.

In addition, Senator Byrd led the Congress in passing the MINER Act, the most significant piece of mine safety legislation passed in the last 30 years.

Earlier this month, Senator Byrd made an outstanding speech about coal mining on the Senate Floor, in which he quoted the great labor leader, John L. Lewis. I wondered at the time if the President pro tem of the Senate knew—I'm sure he does, because he's very knowledgeable about these things—but not a lot of people know that John L. Lewis was born and raised, and began to mine coal in the State of Iowa. Not too many people—I've won more beers at bars with miners on that little tidbit of information than anything you can imagine. We have the John L. Lewis museum, in Lucas, Iowa—it's a wonderful museum. About all of the early days

of coal mining in this country. At that time, Iowa was one of the leading coal-producing States in the country. A lot of the Welsh tie-ins, the Slovenes, my mother was an immigrant, her family came over to mine coal, that kind of thing.

My father started mining coal in Iowa sometime around 1910. Now, of course, I wasn't born until after he'd finished—he worked in the mines about 23 years. Then the Depression hit. He tried a little bit of farming, and lost his farm in the Depression. Then he came back, actually, and worked a little bit, when the mine came back right at the beginning of World War II.

But I can remember, as a little kid, my father and some of his buddies, his friends that all worked in the coal mines, sitting around, talking about it, and what it was like. As a little kid, listening to this, I can still remember how scary it was—about going down in this rickety, old elevator, how they would pump air, manually, pump air down into the mine. I still, well I had until recently, his old carbide lantern, you know, the old carbide lanterns they would wear. How they would go out, and they'd go down in the mine before the sun came up, and they would come up after the sun went down. My dad, and those guys, sometimes would go for weeks without ever seeing the sunshine. They lost a lot of people, working in those coal mines.

Well, anyway, just an aside, I didn't mean to get into all that. But anyway, that just made an impression on me, growing up. I've just always had a feeling about miners in this country, and the kind of work they do, and the kind of lives they lead. If it weren't for the miners of this country, we wouldn't have the kind of society—the powered generation. The coal that was used to heat our homes—to make our great factories, our steel mills that produced all the things we used World War II, our electric lighting, all came from coal.

So, it's safe to say, that on the backs of our miners, we built America. So I'm proud to have come from that line miners.

Well, it's been more than 1 year since the tragedies at the Sago and Alma Mines. Despite all of the heightened focus on safety after those events, another 33 mining families lost a loved one during the remainder of 2006. Even after Sago and Alma, we did no better protecting miners. Well, this has got to change.

As a son of a coal miner, my heart goes out to these families, as does my commitment to follow the lead of Senator Byrd, and try to find a way to prevent another needless loss of life.

When my father started mining coal in Iowa around 1910, there was one fatality—at least this is what my research says—1 fatality for every 257 miners. In 2006, that rate was 1 death for every 2,537 miners, so that's a pretty significant improvement over 100 years.

So, we think about how far we've come, but think about how far we do need to go yet, with technology that can help us. There's no reason why we can't communicate safely and effectively with miners underground, after an accident. Know where they are through tracking technology.

I'm disappointed that MSHA's approved only three additional communication and tracking systems since last year. Why is there not a greater sense of urgency about getting this technology tested

and approved, and why the delay? Why haven't coal companies installed better communications systems that are currently available? The National Mining Association's report last year recommended that mines take this step, until new technologies are available.

Well, as I've outlined, Congress has taken significant steps, thanks to Senator Byrd, to give the administration the resources and tools it needs. Well, the administration must respond by delivering the kind of results that mining families across the country expect and deserve.

Before I call on Senator Byrd, I'd like to recognize my fellow Senator here, Senator Specter, for his vital role. As we continue—as he has so many times said—the seamless passing of this gavel, which has happened several times in the last 20 years, between Senator Specter and me.

It was under his chairmanship, last year, that this important supplemental appropriations was enacted, that I just spoke about. I can say this from both personal experience, and being a good friend of Senator Specter's, that he is a true friend to miners in Pennsylvania, and the United States. His legislation was crucial in forging the bipartisan MINER Act, which we passed last June. So, I'm flanked by two great supporters of our miners in this Country, and I'm proud to be associated with both of them.

With that, I would turn to the chairman of our committee, and my great friend—a friend to all miners—Senator Byrd, from the State of West Virginia.

STATEMENT OF SENATOR ROBERT C. BYRD

Senator BYRD. I defer to the Senator from Pennsylvania.

Senator SPECTER. No, no, I defer to you, Senator Byrd. We're going to play Gaston and Alphonse, but I'll follow you, Senator Byrd.

Senator BYRD. Thank you for schedule this hearing in response to my request. Last year, Senator Specter did the same for me in the days immediately after the Sago tragedy. I compliment, and thank, both of you for your courtesies, and for the work that you do on this subcommittee, and for our Nation's coal miners.

I welcome our witnesses—Richard Stickler from MSHA, Dr. John Howard from NIOSH, Davitt McAteer from Wheeling Jesuit University, Chris Hamilton from the West Virginia Coal Association, Bruce Watzman from the National Coal Mining Association, and the one and only—the one and only—Cecil Roberts, from the United Mine Workers of America. Thank you for sharing your expertise—your knowledge—this afternoon.

I grew up in the coal fields of Southern West Virginia. My dad was a coal miner. He belonged to the United Mine Workers, Local 5771. I married a coal miner's daughter, she's an angel in heaven today. My brother-in-law died of silicosis, black lung, and his father was killed in a slate fall, Walker Minton. When I speak about coal miners and their safety underground, I am speaking about my family. I am speaking from the heart.

Forty-seven coal miners perished last year. Half of them, in West Virginia. Our Nation mourned when 12 miners perished at the Sago Mine in Upshur County, West Virginia. It watched in dis-

belief, as two more miners perished. They succumbed to an underground fire in the Alma Mine in Logan County. Logan County, West Virginia.

Congressional hearings revealed that the Mine Safety and Health Administration, MSHA, had been lax in communications equipment. Emergency preparedness and mine rescue had been allowed to fall by the wayside. The Federal Mine Safety budget had been eroded. Egregious and habitual violators were getting away with slaps on the wrist.

It is a tragedy whenever miners perish in the coal fields. It is unforgivable when those deaths could have been prevented, like those at Sago and Alma, last year.

The Coal and Mine Acts are specific about the Department of Labor responsibility for achieving the highest degree of health and safety protection for the Nation's coal miners, for the miner. How frustrating it is to listen to the Department drone on about so-called "compliance assistance initiatives" when miners are dying in the coal fields? How infuriating it is to watch MSHA issue regulations that actually weaken statutory protections.

The agency and Department charged with protecting our Nation's coal miners exacerbated the dangers in the coal fields in the years, the long years, before Sago and Alma. Good work and the good intentions of so many dedicated public servants at the Department of Labor and MSHA were undermined by their own political leadership.

Last year, the Congress had to pass the MINER Act, in order to force the Department of Labor to do its job. In addition, with the support of Senators Harkin, and Specter—Senators Harkin and Specter have secured $36 million for MSHA to hire additional safety inspectors, and for NIOSH to expedite the hiring and the development—the hiring of men, and the development of the emergency safety equipment.

The President has requested additional funds for the Department of Labor to continue the hiring of safety inspectors in the fiscal year 2008. However, the President's budget does not include additional funds for NIOSH. The President's budget does not—N-O-T—include additional funds for the development of the essential emergency breathing, communications equipment. The President's budget does not include additional funds to further test, and to strengthen seals. The President's budget does not include additional funds to develop refuge chambers. The President's budget does not include additional funds to improve mine rescue training. These omissions are glaring, they're inexcusable, and they must be remedied.

Two deaths in Southern West Virginia this year, serve as a somber reminder that the crisis in the coal fields is not over. We must seek opportunities to get ahead of the dangers. We must ask the question, the question—the question, repeatedly, if necessary. What additional resources are needed to protect our Nation's miners?

I look forward to hearing the answers to that question from our witnesses.

Thank you, Mr. Chairman.

Senator HARKIN. Thank you, Mr. Chairman.

Senator Specter.

OPENING STATEMENT OF SENATOR ARLEN SPECTER

Senator SPECTER. Thank you, Mr. Chairman. It is an honor to appear on this panel with the distinguished senior Senator of the U.S. Senate, Senator Byrd, as well as my colleague, Senator Harkin, the chairman, and Senator Murray.

There's nothing like being chairman of the Appropriations Committee. Senator Byrd commented about the $36 million he added in the past to, for additional inspectors, we just passed a continuing resolution to add an additional $24.5 million. Senator Byrd was elected for his 9th term last year. I'm only one spot away from being the senior Republican on the committee, and as the gavels shift back and forth, as my distinguished colleague Senator Harkin said, we have had shifts of the gavel, and it's seamless, and I look forward, one day, to being chairman of the Appropriations Committee.

Senator BYRD. I look forward to being at your elbow.

Senator SPECTER. Senator Byrd makes a reference to being at my elbow as the ranking Democrat—we would make a tremendous team. Anybody teamed up with Robert Byrd would make a tremendous team. But if, as and when I become chairman, the coal miners—will have an advocate—I won't say equal to—but a very strong advocate.

When I chaired the subcommittee last year, again, at Senator Byrd's request, we had a hearing on January 23, after the Sago Mine incident. We had a accident at the Quecreek Mine, Somerset County, Pennsylvania. I convened a field hearing on October 21, 2002, and we have pressed very hard to get adequate funding.

But, I'm distressed to note that there was a report by the House Committee on Education and Labor, just released yesterday, which came to the conclusion that the U.S. Mine Safety and Health Administration, "is moving too slowly," to make needed safety improvements for the Nation's coal miners. That has to be corrected, that has to be acted upon.

When Senator Byrd went through a long list of items which were inadequately funded, I can tell you that he and Senator Harkin, Senator Murray and others as well as myself, will make every effort to restore them, and with the chairman of the Appropriations Committee on board, I think we will restore them.

Just a comment or two about the Assistant Secretary for Labor and Mine Safety and Health. We did not have the confirmation process concluded last year for Mr. Richard Stickler, but he received a recess appointment, and I want to put in the record a letter which I wrote to Mr. Stickler, dated November 1, 2006. Especially the handwritten message I wrote at the bottom, "I urge you to become a forceful advocate for adequate mine safety funding." I want to put in the record Mr. Stickler's response to me, dated December 6, and I think in the vernacular, Mr. Stickler, you're on the spot. You have to perform. We'll be watching you very closely.

May the record show that Mr. Stickler's nodding in the affirmative.

[The information follows:]

ARLEN SPECTER
PENNSYLVANIA

COMMITTEES:
JUDICIARY
APPROPRIATIONS
VETERANS' AFFAIRS

United States Senate
WASHINGTON, DC 20510-3802
specter.senate.gov

November 1, 2006

The Honorable Richard Stickler
Assistant Secretary of Labor for Mine Safety and Health
Mine Safety and Health Administration
U.S. Department of Labor
1100 Wilson Boulevard, 21st Floor
Arlington, VA 22209-3939

Dear Mr. Stickler:

I noted with keen interest your recess appointment by the President on October 19, 2006. While I would have preferred a vote in the U.S. Senate on your confirmation, you are now serving in a very key capacity. As you begin this role, I want to take the opportunity to revisit some of the issues we discussed during your confirmation process.

Mining is a dangerous business. Last year, the safest year on record, there were 22 fatalities in underground coal mines, in 20 separate accidents with 4 men killed in my home state of Pennsylvania; 3 in West Virginia; 8 in Kentucky and 7 in other states. During 2006, 35 miners have died due to inadequate protections in underground coal mines.

The Federal Coal Mine Health and Safety Act of 1969 was last amended in 1977 by the Federal Mine Safety and Health Amendment Acts of 1977. For almost 30 years, the law had not been updated. Federal mine safety laws needed to be updated to reflect newer technologies to benefit miners' health and safety. That is why I introduced S. 2308, the Mine Safety and Health Act of 2006, in the Senate on February 16, 2006. Additionally, I cosponsored Senator Enzi's legislation, the Mine Improvement and New Emergency Response Act of 2006, that passed in the Senate on May 24, 2006 and was signed into law by the President on June 15, 2006.

Despite my efforts as Chairman of the Labor, HHS, and Education Appropriations Subcommittee, the budget for mine safety and health has not kept up with the needs of the times. This has forced the agency to reduce staffing by 183 positions over the past ten years. In Fiscal Year 2006 (FY06), the final appropriation was $2.8 million below the budget request and $1.4 million below the FY05 appropriation due to the 1% across-the-board reduction that was required to stay below the budget resolution ceiling. As Chairman of the LHHS Appropriations Subcommittee, I look forward to working with you to protect all of our nation's miners.

Sincerely,

Arlen Specter

I urge you to become a forceful advocate for adequate mine safety funding.

AS:js

PRINTED ON RECYCLED PAPER

U.S. Department of Labor

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

DEC 0 5 2006

ARLEN SPECTER
DEC 1 8 2006
UNITED STATES SENATE

The Honorable Arlen Specter
United States Senate
Washington, DC 20510

Dear Senator Specter:

Thank you for your letter dated November 1, 2006. As we discussed during our brief meeting last spring, I am committed to making mining in the United States as safe as it can possibly be and to being a strong advocate for our nation's miners, which includes advocating for resources necessary to carry out MSHA's mission. One of my top priorities as the new Assistant Secretary for the Mine Safety and Health Administration (MSHA) is to fully and effectively implement the bipartisan MINER Act, which is the most significant piece of mine safety legislation since the Federal Mine Safety and Health Act was enacted in 1977. We have already taken several significant steps, such as the Notice of Proposed Rulemaking to increase penalties and the issuance of instructions to MSHA districts regarding flagrant violations. We are working to constitute the Technical Study Panel on belt air and are awaiting a designated member from the Senate and House minority.

As the former head of the Pennsylvania Bureau of Deep Mine Safety, I am well aware of your strong interest in mine safety, and I look forward to working with you and others in Congress to achieve our mutual goals.

Sincerely,

Richard E. Stickler

Richard E. Stickler
Assistant Secretary for
Mine Safety and Health

You can now file your MSHA forms online at www.MSHA.gov. It's easy, it's fast, and it saves you money!

Senator SPECTER. Thank you, Mr. Chairman.
Senator HARKIN. Thank you, Senator Specter.
Senator Murray.

STATEMENT OF SENATOR PATTY MURRAY

Senator MURRAY. Thank you very much, Mr. Chairman, for calling this hearing. It's an honor to be here with this panel today, who I know speak from their heart when it comes to this issue. I have another hearing I have to go to, but I did want to come today and speak, just quickly, about the importance of properly implementing and enforcing the MINER Act. Because, like all of us here,

I was very shocked and saddened by the tragic events last year at Sago and Alma. Listening to the widows and the family members of the miners talk about the loss of their loved ones, really compelled me to work with all of you to do the best job we could do.

I especially want to thank Senator Byrd for his work last year, along with Senators Kennedy, Rockefeller, and Enzi, in quickly putting together legislation that is the most sweeping changes in mine legislation in a generation, and getting that through the Congress and to the President's desk for a signature. The act requires long-overdue improvements in miner communications, it increased the supply and access to oxygen for our miners, and it better tracks their whereabouts in the mine. But, I think all of us know that without vigorous enforcement, the MINER Act—like any act—though well-intentioned will not really have its value.

So, I look forward, today, to hearing about the progress with MSHA, and NIOSH on what they've done to implement the MINER's Act, key safety provisions, and hope that we hear some really strong words about their commitment to make sure that that is implemented properly.

I chair the Subcommittee on Employment and Workplace Safety within the HELP Committee, and I intend to work very closely with Chairman Kennedy—along with all of our colleagues here—on additional oversight hearings on this matter. I want to really hear about whether we're doing accident preparedness and response plans, and whether they've been reviewed, and what the findings are.

But, Mr. Chairman, I do have another hearing to go to, I did want to come by today because this is a critical issue, and I hope that we can soon report to the widows and the children of the 72 men who died last year in mine-related accidents, that we're doing everything we possibly can—and as quickly as we can—to prevent tragedies like that happening again in the future.

So, thank you very much, Mr. Chairman, and I will submit my questions for the record.

Senator HARKIN. Thank you very much, Senator Murray.

Well, we have two panels, our first panel, Mr. Richard Stickler, we'll recognize first, then Dr. Howard.

Mr. Richard Stickler, appointed to serve as Assistant Secretary of Labor for Mine Safety and Health on October 19, 2006. He was Director of the Pennsylvania Bureau of Deep Mine Safety from 1997–2003, he's a native of West Virginia. Received his B.A. from Fairmont State University, and certified as a mine safety professional by the International Society of Mine Safety Professionals.

Then after that, we'll to Dr. John Howard, from NIOSH. With that—and again, all of you, your statements will be made a part of the record in there entirety, I'd ask that, if you could just take 5 minutes and summarize for us, we'd appreciate that so we have time for questions.

Mr. Secretary, welcome to the committee, and please proceed.

STATEMENT OF HON. RICHARD E. STICKLER, ASSISTANT SECRETARY, MINE SAFETY AND HEALTH ADMINISTRATION, DEPARTMENT OF LABOR

Mr. STICKLER. Thank you. Is this on?

Senator HARKIN. Yes, sir.

Mr. STICKLER. Chairman Harkin, Chairman Byrd, Senator Specter, and members of this subcommittee. I'm pleased to appear before you today to discuss the important work of the Mine Safety and Health Administration, MSHA, in protecting the health and safety of our Nation's miners. We appreciate the support this committee has given MSHA.

The President's budget request for fiscal year 2008 underscores our commitment to advancing mine safety and health.

Last year, Congress passed the MINER Act, the most significant mine safety legislation in nearly 30 years. Allow me to briefly list some of our actions, to date, to implement this act.

MSHA's final rule in emergency mine evacuation was published in the Federal Register on December 8, last year. It addressed many provisions that were mandated in the MINER Act to enhance miner safety, including required catches of self-contained self-rescuers, improved training for miners, installation of lifelines and escape routes, provisions for multi-gas detectors, and the prompt accident notification.

All emergency response plans have been submitted to MSHA by the deadline of August 14, 2006. We are ensuring that these are reviewed, approved, and implemented in a timely manner.

One key component of the emergency response plan, is the availability of post-accident breathable air. MSHA issued a program information bulletin February 8 of this year that specifies three acceptable options for meeting this requirement.

Post-accident communications and tracking are required by the MINER Act to be in place by mid-June 2009. We have had contact with more than 125 parties about systems to track and/or communicate with miners while they're underground. To date, we have observed the testing or demonstration of 16 systems at various mine sites around the country.

The MINER Act mandates improved training, certification, availability, and composition requirements for underground coal rescue teams. We're on track for publication of this proposed rule in the Spring, with the final rule to be published by the MINER Act's deadline of December of this year.

We have also taken action to increase civil penalties. MSHA has sent a draft final rule increasing penalties to the Office of Management and Budget, and we expect it will be approved shortly.

To implement section VII of the MINER Act, MSHA has designated 14 family liaison personnel. Those liaisons have had their initial training. The National Transportation Safety Board and the American Red Cross has helped us train these individuals.

The MINER Act requires that standards be finalized by December 15 of this year, for sealing of abandoned areas of underground coal mines, with seals that provide for an increase in the 20 pounds per square inch standard.

Last year MSHA raised the standards for alternative seals from 20 psi to 50 psi. This is an interim step until we finalize the final standard.

MSHA and NIOSH are studying seal design, and MSHA is developing a proposed rule that we expect to publish in the Federal Register this spring.

We're pressing ahead with our recruitment, training, and deployment of 170 additional coal mine enforcement personnel, mandated by Congress, and provided for in our fiscal year 2008 budget. Ninety have already been hired, and we're on target to meet our hiring goal by September of this year.

We will use all of the tools available to us to achieve our goals, including tough enforcement, education and training, and technology. We will particularly be aggressive with those mine operators who habitually violate MSHA's standards, and who seem to view penalties as just another cost of doing business.

PREPARED STATEMENT

Much progress has been made to improve mine safety and health, but yet there is still a lot of work to be done. Today, MSHA remains focused on our core mission—to improve 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, every shift of every day.

Thank you for allowing me to testify, I look forward to taking your questions.

[The statement follows:]

PREPARED STATEMENT OF HON. RICHARD E. STICKLER

Chairman Harkin, Chairman Byrd, Senator Specter, members of the subcommittee: I am pleased to appear before you today to discuss the important work of the Mine Safety and Health Administration (MSHA) in protecting the health and safety of our Nation's miners, and to tell you of our progress in implementing the Mine Improvement and New Emergency Response (MINER) Act of 2006.

2006 was the worst year for coal mine fatalities in over a decade. I know firsthand that every fatality is devastating for miners, their families, and the communities they live in. Let me be very clear that my number one priority is to protect the health and safety of America's miners. Both President Bush and Secretary Chao support my efforts to achieve these goals.

Everything we do at MSHA is in service of the goal of zero fatalities in the Nation's mines.

MSHA FISCAL YEAR 2008 BUDGET REQUEST

The President's 2008 Budget requests $313 million and 2,306 full-time equivalent employees for MSHA—a 4 percent increase over the 2007 appropriation. The Budget underscores the administration's commitment to strong enforcement of safety and health in our Nation's over 14,000 mines. The Budget includes $16.6 million to retain 170 additional coal enforcement personnel that were initially funded in a fiscal year 2006 emergency supplemental appropriation in the wake of the Sago, Alma, and Darby mine accidents. It also supports the vigorous implementation of new safety standards and regulations authorized in the MINER Act, which the President signed into law on June 15, 2006.

Implementing the MINER Act of 2006 and Initiating New Policies

Last year, Congress passed the MINER Act—the most significant mine safety legislation in nearly 30 years. Implementing the provisions in the MINER Act is MSHA's top priority.

I would like to take this opportunity to review the progress that MSHA has made in implementing this landmark legislation.

EMERGENCY MINE EVACUATION

The Department published a final rule on Emergency Mine Evacuation in the Federal Register on December 8, 2006. This regulation implements many provisions that were mandated in the MINER Act to enhance miner safety, including:

—Increased availability and storage of breathing devices, Self-Contained Self-Rescuers (SCSRs);

—Improved emergency evacuation drills and training;

—Installation and maintenance of lifelines in underground coal mines;
—Immediate accident notification for all mines.
—Installation of fire-resistant, directional lifelines; and
—Requirement to provide multigas detectors to individual miners working alone and to each group of miners.

This rule was effective immediately, on December 8, 2006, with the exception of some training and equipment provisions that must necessarily wait for training units to be developed and made available and for the equipment to be manufactured and shipped to some of the mine operators.

With regard to the caches of SCSRs operators are required to store throughout the mines, MSHA has requested manufacturers of these units to give priority consideration to fulfilling orders to mining operations starting with those that do not have two SCSRs per miner.

I have also written letters to underground mine operators asking them to ensure that they have at least two SCSRs per miner at their mine. If they do not, I have asked them to contact the manufacturer of their SCSRs to request priority order consideration. In addition, I have asked operators to let their local MSHA District Manager know if they need priority order consideration so that MSHA can monitor the requests and assist wherever possible.

We are following a risk-based implementation plan to ensure sufficient quantities of SCSRs for every underground mine operation in this country, and we will continue to closely monitor the situation.

EMERGENCY RESPONSE PLANS

Section 2 of the MINER Act requires underground coal mine operators to adopt an emergency response plan covering the evacuation of all individuals endangered by an emergency, and to provide for the maintenance of individuals trapped underground. The first priority in any mine accident is to evacuate everyone from the mine, if possible. In addition, the emergency response plan must address post-accident communications and tracking, post-accident breathable air, lifelines, training, and local coordination.

MSHA issued Program Policy Letters providing guidance to mine operators to help them develop their emergency response plans. All plans were submitted to MSHA by the deadline of August 14, 2006. 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.

POST-ACCIDENT BREATHABLE AIR

With respect to post-accident breathable air, MSHA first issued a request for information (RFI) in August 2006, to solicit ideas about how to address the issue of post-accident breathable air (required by the MINER Act). The Emergency Response Plans (ERPs) must provide for "emergency supplies of breathable air for individuals trapped underground sufficient to maintain such individuals for a sustained period of time."

We evaluated the comments and determined the best approach for implementing this requirement is through the dissemination of a Program Information Bulletin (PIB) on Breathable Air. This PIB was placed on MSHA's website and distributed widely to the coal mining community on February 8, 2007.

The major provisions of this PIB include:

Provides the following options for Operators to meet the requirements for Breathable Air:
—Establish boreholes within 2,000 feet of the working section; or
—Provide 48 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 96 hours of breathable air located within 2,000 feet of the working section; or
—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.

We are also posting related compliance assistance materials on MSHA's website, including the Program Information Bulletin (PIB), a hazard awareness information

sheet on use of compressed air and compressed oxygen; and information sheets on methods of providing breathable air, including calculations.

POST-ACCIDENT COMMUNICATIONS AND POST-ACCIDENT TRACKING

In section 2, the MINER Act requires post-accident communication and tracking systems to be in place by mid-June of 2009. MSHA is reviewing all the available technology and working with NIOSH and manufacturers to help in the development of safe, reliable systems for underground coal mines. We have had contact with more than 125 parties about systems to track and/or communicate with miners while they are underground.

To date, we have observed the testing or demonstration of 16 post-accident communications and tracking systems at various mine sites around the country. Once these systems are presented to MSHA for approval, we will expedite the approval process to ensure that workable, durable and reliable systems get into the mines as quickly as possible.

MINE RESCUE TEAMS

The MINER Act mandates improved training, certification, availability, and composition requirements for underground coal mine rescue teams. We currently are drafting a proposed rule to implement the MINER Act provisions for mine rescue teams, and are on track for publication in the spring. The final rule will be published by the Act's deadline of December 2007.

CIVIL PENALTIES

MSHA has implemented provisions contained in the MINER Act mandating increased penalties for flagrant violations, unwarrantable failure violations, and immediate notification violations in accordance with the MINER Act. The penalty amounts currently being assessed include:

—Failure to promptly notify MSHA of accidents—$5,000 to $60,000;
—Unwarrantable failure violations—minimum $2,000 for the first citation and $4,000 for subsequent orders; and
—Flagrant violations—up to $220,000.

Last October, I issued a Procedure Instruction Letter (PIL) to all MSHA inspectors establishing uniform, Agency-wide procedures for enforcement personnel to properly evaluate flagrant violations as defined in the MINER Act.

MSHA included the MINER Act penalty provisions and increased civil penalties for other violations in our civil penalty proposed rule, published September 8, 2006. We held public hearings to collect input from miners, the mining industry, and other interested parties.

After reviewing the hearing input and written comments from all interested parties, we drafted a final rule and submitted it to the Office of Management and Budget for their review in accordance with required regulatory procedures. We anticipate publication of the final rule on civil penalties in the Federal Register soon.

FAMILY LIAISON PROGRAM

MSHA's Family Liaison Policy has been put into place to provide for an MSHA liaison with families at the site of a mine disaster. A Program Policy Letter has been issued and 14 designated family liaison personnel have had their initial training sessions. The National Transportation Safety Board and the American Red Cross have helped train these individuals.

SEALING OF ABANDONED AREAS IN UNDERGROUND COAL MINES

The MINER Act requires that standards be finalized by December 15, 2007, for the sealing of abandoned areas in underground coal mines with seals that provide for an increase in the 20 pounds per square inch (psi) standard for alternative seal construction.

Last year, MSHA raised the standard for alternative seals from 20 psi to 50 psi. This is an interim step until we establish a final standard.

MSHA and NIOSH are studying the issue, and MSHA is drafting a proposed rule that we expect to publish in the Federal Register this spring.

TECHNICAL STUDY PANEL ON BELT AIR

Section 11 of the MINER Act requires the establishment of a Technical Study Panel on Belt Air. The charter governing the panel was published in the Federal Register on December 22, 2006. The first meeting of the Technical Study Panel on

the utilization of belt air and the fire retardant properties of belt materials in underground coal mining took place January 9–10, 2007.

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.

The panel will convene their next meeting in March in Pittsburgh.

The panel will prepare and submit a report by the end of this year to the Secretary of Labor regarding the utilization of belt air and the fire retardant properties of belt materials in underground coal mines. This report will provide independent scientific and engineering recommendations.

REFUGE ALTERNATIVES

The National Institute for Occupational Safety and Health (NIOSH) will conduct 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, the Department of Labor will report to Congress on the actions MSHA will take in response to the NIOSH report.

RECRUITMENT

The Emergency Supplemental Appropriations Act of 2006 (Public Law 109–234) provided an additional $26 million for MSHA to strengthen its coal enforcement program, 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. To date, 90 of the 170 staff have already been hired. We are on target to meet our hiring deadline of September 2007, for the additional 80 coal mine enforcement personnel.

We continue 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 strongly believe the increased presence of MSHA enforcement staff at the job sites will have a positive impact on mine safety and health.

REINFORCING THE BASICS OF MINE SAFETY AND HEALTH

We will use all of the tools available to us to achieve our goals, including tough enforcement, education and training, and technology. We will be particularly aggressive with those mine operators who habitually violate MSHA standards and who also seem to view penalties as just another cost of doing business. We are developing a database on accidents so that we can more objectively analyze trends and results. This will help MSHA target resources and attend to areas where progress has not been satisfactory.

We face the challenge of inculcating a culture of safety in an industry that has played a key role in America's economic growth since the first industrial revolution. Much progress has been made since passage of the seminal Mine Safety and Health Act of 1977. 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.

Thank you for allowing me to testify today. I look forward to answering your questions.

Senator HARKIN. Thank you very much, Mr. Stickler.

Senator HARKIN. Now, we turn to Dr. John Howard, Director of the National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services in Washington.

Dr. Howard received his Doctor of Medicine from Loyola University in Chicago, his Doctor of Law from the University of California, Los Angeles, his Master's of Law from the George Washington University, here in Washington.

He is Board-certified in internal medicine and occupational medicine, admitted to practice medicine and law in the State of California and the District of Columbia.

Then, do I understand, you're accompanied by Dr. Kohler, who is Director of the NIOSH Office of Mine Safety and Health—is that correct?

Dr. HOWARD. Yes, Mr. Chairman.

Senator HARKIN. Well, Dr. Howard, please proceed.

STATEMENT OF DR. JOHN HOWARD, DIRECTOR, NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH, DEPARTMENT OF HEALTH AND HUMAN SERVICES

Dr. HOWARD. Thank you very much. We're very pleased to be here today, with our statutory partner, MSHA, to give you an update on the NIOSH activities at Mining Safety and Health at our Pittsburg, Pennsylvania, our Spokane, Washington, and our underground Lake Lynn laboratories, which straddle Pennsylvania and West Virginia. Especially, activities made possible by the MINER Act, and the $10 million emergency supplemental appropriation in 2006.

Following enactment of the MINER Act, NIOSH developed an implementation plan consisting of a technical, and a contract acquisition phase. In the technical phase, we tested system prototypes in operating coal mines, and evaluated claims from vendors about technologies that were represented as, "solutions," for the mining industry. NIOSH met with representatives from industry and labor, from Federal and State agencies, and even as far as Australia.

Now, we're in the contract acquisition phase where the statement of Work for each technology area has been developed, and contract solicitations have been advertised for the development of new technologies.

Today, I wanted to give you a brief update a brief update on several of the aspects of our Disaster Prevention Research Program, which have been made possible, and are greatly aided by the MINER Act, and the supplementation.

First, NIOSH and MSHA have been working to share information on mine seals. Recently, NIOSH released a draft report entitled, "Explosion Pressure, Design Criteria for New Seals in U.S. Coal Mines." Once finalized, this NIOSH report will provide an engineering science basis for designing mine seals in underground coal mines.

Second, the Kutta System, which is a subterranean, wireless electronic communication system for the military. NIOSH is providing funds to DOD to modify their existing contract to develop a digitally networked communication system for underground miners to communicate with each other, and with the surface, which is capable of maintaining mine-wide operational integrity after a fire or explosion.

Third, the leaky feeder communications systems, which are currently used in underground mines, and during normal mine operations, they function well. But they are based on a cable backbone that is run throughout the mine that can be damaged in fire or explosion. Our goal is to develop a survivable wireless leaky feeder communications system, that again, is capable of maintaining mine-wide operational integrity, after a fire or explosion. Such a system will be evaluated at the Leverage Mine, near Fairmont, West Virginia.

Fourth, a wireless mesh system, which is a multi-hop network technology that could potentially increase the probability of any radio being able to communicate with another radio in the mine, by providing multiple communication paths in the mine. This system will be evaluated at the Imperial Mine in West Virginia.

Fifth, mine location tracking systems would be particularly useful in locating miners in post-disaster situations, provided that the system survived a fire or explosion. We are now evaluating various tracking systems, and one will be selected for development.

Sixth, NIOSH and MSHA have a working group to share information and coordinate activities on refuge chambers. NIOSH has contracted with the National technology Transfer Center at Wheeling Jesuit University to conduct two pilot studies on refuge chambers. Additionally, we are developing a third contract to determine design, installation and location parameters for refuge chambers. Combined with our own research and testing, these contract results will be used to prepare a report to Congress on refuge alternatives, and to provide practical guidance on the use of refuge chambers in underground coal mines.

Seventh, NIOSH and MSHA are working, together with a technical study panel, appointed jointly by the Congress and the Secretaries of Labor and Health and Human Services, to develop recommendation on the utilization of belt air, and the composition and flammability of belt materials.

PREPARED STATEMENT

In closing, NIOSH continues to work diligently to protect America's mine workers. The MINER Act, and the emergency supplemental appropriation of 2006, will enable NIOSH together with MSHA, to better protect miners.

Thank you, Mr. Chairman.

[The statement follows:]

PREPARED STATEMENT OF DR. JOHN HOWARD

INTRODUCTION

Good morning Mr. Chairman and other distinguished members of the Committee. My name is John Howard, and I am the Director of the National Institute for Occupational Safety and Health (NIOSH), which is part of the Centers for Disease Control and Prevention (CDC), within the Department of Health and Human Services. I am accompanied by Dr. Jeffery Kohler, Director of the Office of Mine Safety and Health within NIOSH. We are pleased to be here today with our sister agency the Mine Safety and Health Administration (MSHA) to give you an update on activities that have been initiated under the MINER Act of 2006.

The United States is fortunate to have an abundance of mineral resources to power the economy, and the highly skilled men and women who work in the mining industry everyday are our most precious resource. The mine disasters in 2006 and the double roof fall fatalities in a West Virginia coal mine last month serve as painful reminders of the dangers inherent to this industry, and our shared responsibilities to ensure the safety and health of our mineworkers.

The Office of Mine Safety and Health Research within NIOSH works to eliminate occupational illnesses, injuries, and fatalities through its research and prevention activities. Mining researchers at our Pittsburgh, Spokane, and Lake Lynn Laboratories have a long and successful history of working in partnership with labor, industry, and State and Federal agencies to develop and implement interventions that eliminate or control mining safety hazards, or reduce exposure to harmful physical or chemical agents. The work of NIOSH scientists and engineers can be found throughout American mines. This is evidenced by safer design practices, equipment innovations that improve safety or health, technology to improve mine rescue, and

improved training programs for miners. Over the years, significant safety and health gains have been achieved through the collective efforts of labor, industry, and government. Yet, more remains to be done, and additional effort will be required just to maintain the historical gains, as changing mining conditions present new safety and health challenges. Our program of mining safety and health research is driven by a strategic plan with specific performance goals. Our plan, developed with extensive customer and stakeholder input, identifies critical gaps in mining safety and health knowledge and practices and establishes research priorities for filling in those gaps.

While it is still too soon to find visible evidence of major changes resulting from research in underground coal mines since the Sago Mine disaster, changes are underway, and may represent the most significant improvement in mine safety technology and mine safety practices in three decades. New communications and tracking technologies, Self Contained Self Rescuers (SCSRs), and refuge chambers are being developed. New and more effective training programs, emergency procedures, and mine safety practices are being designed using innovative management systems and risk analysis studies. Any one of these alone would improve mine safety, but in combination the effect is expected to be great. The funds from the emergency supplemental appropriation are facilitating more safety technology gains in 2 years than have occurred in the last few decades. The legislative mandates have created an unprecedented environment of partnership among labor, industry, and government. The safety landscape will be different and vastly improved within 3 years of enactment of the MINER Act, and important improvements are expected to continue for several years afterwards.

Improving disaster prevention and response continues to be a high priority for NIOSH, and we have several projects to develop technologies and practices to prevent mine explosions, fires, and inundations that existed before the MINER Act was adopted and some new ones triggered by the tragic events of last year. A few weeks ago we released a draft report entitled, Explosion Pressure Design Criteria for New Seals in U.S. Coal Mines. Once finalized, this NIOSH report will provide an engineering-science basis for designing mine seals and will assist NIOSH and MSHA in developing new standards for seals in underground coal mines, in this country and around the world.

NIOSH received the Research & Development 100 Award of 2006, recognizing the coal dust explosibility meter, as one of the top technological innovations of the year. Rock dust is applied to coal mine surfaces to prevent coal dust explosions. If sufficient dust is applied, an inert mixture between the two dusts is achieved. The percentage of inert material in the mixture is specified by current regulation. However, a determination of this percentage by an MSHA inspector or mine operator requires taking a sample and sending it to a distant lab for analysis. This can take several days. The coal dust explosibility meter developed and field tested by NIOSH researchers will allow an immediate or real-time determination by mine operators, or an MSHA inspector, of whether an inert ratio has been achieved. A pre-production model is currently undergoing approval testing at MSHA, and commercial production of this life-saving, new technology will begin as soon as it is approved for use in underground coal mines.

NEW INNOVATIONS—MINER ACT OF 2006 AND SUPPLEMENTAL APPROPRIATION

Moving critical safety technologies, for example oxygen supply, emergency communications, and miner tracking devices, from the laboratory into the mine is a high priority for NIOSH, as is adapting technologies from other military or civilian applications to the mining industry's needs. In addition to the scientific challenges, there are economic ones as well—since mines represent a relatively small market for sales, the government role in research and development becomes even more important in bringing a promising technology to mine operators.

The Conference Report on H.R. 4939 (109–494) Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery provided a $10 million Emergency Supplemental Appropriation (ESA), that will have a very positive effect in increasing the availability of critical oxygen supply, communication and tracking technologies. The goal is to facilitate the adaptation and movement of these technologies from other industries or from prototype stage to commercialization and into the mines, as rapidly as possible, and this is well underway.

First, a high level "road map" for success was designed, taking into consideration, the availability of technologies, commercial availability of equipment, as well as the technical and logistical difficulties in meeting the schedule and performance expectations of the MINER Act. It was determined that the plan should include improve-

ments to legacy systems as well as the introduction of new technologies. An accurate assessment of the existing technology base was deemed an essential prerequisite to success. The initial challenge for NIOSH was to invest sufficient time in the initial analysis to ensure that the contract efforts are in the areas most likely to yield results, and move new technologies into the mines as expeditiously as possible.

Our effort to award the right mix of contracts quickly consisted of two phases: the technical preparation phase and the contract acquisition phase. The technical phase consisted of significant engineering-science work to develop the scope of work for the contracts, testing of system prototypes in operating coal mines and at NIOSH's Lake Lynn Experimental Mine, and evaluation of claims from vendors on technologies that were represented as "solutions" for the mining industry. Stakeholder meetings including the NIOSH Emergency Communications Partnership were held periodically as well. NIOSH also met with Australian labor, industry, and government officials to review findings and the proposed approach, as well as other alternatives. Within three months after the engineering services agreement (ESA) was approved, a consensus was reached among all groups that the available funds were: targeting a balanced set of technologies that address the mining community's needs in the critical gap areas; selecting technology subsets that have a higher probability of success in the short term; and meeting the goal of the emergency supplemental appropriation.

Depending on the amount of work involved, it has taken between 2 and 5 months to complete the preliminary technical work for each contract. Essentially, this technical preparation phase has helped to ensure that the most promising and critical technologies are being supported under the ESA.

We are now in the acquisition phase, where the statements of work for each technology area have been developed and contract solicitations have been advertised for the purchase of services that will lead to development and demonstration of new technologies to meet the intent of the MINER Act. The Emergency Supplemental Appropriation is subject to the rules and regulations for full and open competition as prescribed by the Federal Acquisition Regulation (FAR) Part 15. Therefore, full and open competition is being pursued.

NIOSH and MSHA have a working group to share information and coordinate activities on refuge chambers. NIOSH has contracted with the National Technology Transfer Center at Wheeling Jesuit University to conduct two pilot studies on refuge chambers, and another contract to determine design, installation, and location parameters is in the acquisition phase. The findings of these contracts combined with our research and testing will be used to prepare the report to Congress on refuge alternatives, and to provide practical guidance to industry and labor on the use of refuge chambers in underground coal mines.

The following table displays the various communication and tracking technology solicitation areas NIOSH is actively pursuing, and the respective anticipated award and completion dates.

TABLE 1.—COMMUNICATION AND TRACKING PROCUREMENTS

Solicitation	Technical phase completion date	Anticipated award date	Projected Completion Date
Adaptation of the U.S. Army "Kutta" System	August 2006	Awarded January 2007—work in process.	April 2008
Survivable Leaky Feeder	August 2006	April 2007	August 2008
Hardened Mesh/Node System	September 2006	May 2007	September 2008
Communications Practices	November 2006	May 2007	March 2008
Tracking System	December 2006	June 2007	December 2008

The projected completion dates are based on historical estimates and projections from appropriate organizations, and are directly dependent on the anticipated award dates being met. It should be noted that a number of factors may affect award dates and therefore project completion, such as the number of bidders, the extent of technical clarification or budget clarification meetings necessary, the complexity of the negotiated changes, and the time allotted to prepare best and final offers.

The following provides a brief description of select technologies to be funded.

Adaptation of the U.S. Army "Kutta" System

The U.S. Army Research, Development and Engineering Command, Communications Electronics Research, Development and Engineering Center (CERDEC) cur-

rently has a contract with Kutta Consulting to design and develop a subterranean wireless electronic communications (SWEC) system for the military. There is high potential for applying this Department of Defense (DOD) technology to meet the mine communication and tracking requirements. In this procurement action, we are providing funds to the DOD to modify their existing contract with Kutta Consulting, to extend current design and development efforts to a communications system for underground mines. In taking this approach, we hope to build on the proven successes resulting from the application of state-of-art information and communications-electronics technologies to increase the safety level for the military, to achieve similar enhancements for U.S. mines.

Under this contract, Kutta Consulting will develop a digitally networked communications system for underground miners to communicate with each other and with the surface. The approach is to develop a communication system that has a dual-mode of operation. It is envisioned that this system will be capable of maintaining mine-wide operational integrity after an emergency situation such as a mine fire or explosion.

Survivable Leaky Feeder System

Leaky feeder communication systems are currently used in underground mines. During normal mine operations they function very well. However, they are based on a cable backbone that is run throughout the mine that can be damaged in the event of a fire, roof fall or explosion. If the cable is damaged, the system may no longer be operational.

For this procurement action, we want the selected contractor to design, develop, and demonstrate a survivable wireless leaky feeder communications distribution system that is capable of maintaining mine wide operational integrity after an emergency situation such as a mine fire or explosion. The proposed system will be compatible with the leaky feeder systems and mobile radios that are commonly used in mines today.

Hardened Mesh/Node System

Wireless mesh network technology is a multi-hop system in which devices are capable of supporting each other during transmission of voice and data information. They are used for commercial and public safety applications today. Some of the attributes that they display could be beneficial for use in underground mines. These include: (1) increased probability of any radio being able to communicate with another radio, by providing multiple paths for communications within the mesh network, and (2) peer-to-peer communications network in which every node is a routing relay. The mesh network is capable of supporting communications between members of a group within the mesh network without the support of external networks.

While the introduction of wireless mesh technology in mines does hold potential, there are a variety of challenges that the underground mining environment introduces to realizing the full potential of a wireless mesh network, including: survivability of system components during catastrophic events, range limitations. For this procurement action, we want the selected contractor to design, adapt, construct, install, and evaluate wireless mesh "peer-to-peer" communication networks in an underground coal mine that address these challenges.

Mine Location Tracking System

NIOSH has also prepared a request for the procurement of services to evaluate and develop mine location tracking systems. These systems would be particularly useful in locating miners in a post accident situation and respond directly to the requirements of the MINER Act.

Our internal research and discussions with vendors have determined that there are several possibilities for providing for the tracking of miners. Therefore, our request for services has been constructed so that there can be several phase one awards during which the accuracy and feasibility of the technology can be assessed. Of the competing phase one awardees, one will be selected for phase two funding for the demonstration and development of their technology.

As a separate initiative, NIOSH and MSHA plan to test a fully functional military mesh communications and location tracking system in an underground mine. While the form factor (back pack size) is totally unsuitable for a miner, it should demonstrate the maximum performance and accuracy achievable through one approach to mine tracking—the node based radio approach. This is an important input in consideration of future spending of funds in this area.

Lastly, NIOSH and MSHA are working closely together with a technical study panel on belt air appointed by the Congress and the Secretaries of Labor and Health and Human Services to develop recommendations on the utilization of belt air and the composition and flammability of belt materials.

CONCLUSION

In closing, NIOSH continues to work diligently to protect the safety and health of mineworkers. The MINER Act and supplemental funding for mining research will enable us to make significant improvements in the areas of communication and tracking. We appreciate the opportunity to present our work to you and thank you for your continued support. We are pleased to answer any questions.

Senator HARKIN. Dr. Howard, thank you very much.

I would like to open this round of questions by turning to our distinguished chairman, Chairman Byrd.

Senator BYRD. Thank you, Mr. Chairman.

Mr. Stickler, the State of West Virginia is preparing to implement several mine safety improvements. Coal operators will submit plans for the use of emergency shelters by April of this year, and submit separate plans for the use of wireless communications and tracking systems by July 31 of this year.

If West Virginia is moving ahead with these safety improvements in communications, and emergency shelters, then why can they not be done just as quickly at the Federal level?

Mr. STICKLER. Well, as you know, the MINER Act established procedures for the evaluation of shelters, and assigned that responsibility to NIOSH, and NIOSH will be issuing a report by the end of this year. That process is ongoing, and certainly MSHA will look forward to receiving that information, and use that guidance to do the best we can to promote health and safety.

Senator BYRD. When will MSHA make emergency shelters available to miners?

Mr. STICKLER. This is dependent upon the study that NIOSH is doing, and after that study's done, and a report is published, then MSHA would consider that information for rulemaking to make shelters available to miners.

Senator BYRD. When do you think that will be? How long will that take?

Mr. STICKLER. Well, NIOSH's report, I understand, is due the end of this year. Then normally it takes about a year to do rulemaking after that.

Senator BYRD. When will MSHA re-examine its rule about the use of belt air ventilation?

Mr. STICKLER. Well, as you know, Congress established the technical study panel, comprised of two members appointed by Congress, two members appointed by each the Secretary of the Department of Labor, and the Secretary of the Department of Health and Human Services.

Senator BYRD. Are they all in place?

Mr. STICKLER. They're in place, they had their first meeting on January 9 or 10, they're scheduled for their second meeting in March in Pittsburgh, and they will complete their report by the end of this year.

Senator BYRD. You've had the authority to address these issues since the 1969 Coal Act. Why does MSHA choose not to use that authority? Why do you need another 18 months to study the issues?

Mr. STICKLER. Well, sir, I think since Congress established the mechanism for NIOSH to conduct that study, and I think it's appropriate to follow that process.

Senator BYRD. When MSHA releases its rule to increase seal standards this spring, how closely will those changes track the recommendations by NIOSH, which suggested a three-tier—T-I-E-R—system and a standard up to 640 psi?

Mr. STICKLER. I have been working very closely with NIOSH on, on this. I've met with them, I've also assigned a team of engineers and safety specialists to address exactly what you said—a tier system that would identify the seal stress that would be required in various scenarios in an underground coal mine.

Senator BYRD. How closely will those changes track the recommendations by NIOSH?

Mr. STICKLER. I think they will track very closely. NIOSH did a study, traveled around the world—really, this is the first time that any type of study like this has been done, and provided new information that, I think, is going to have a significant impact on mine safety—not only in this country, but in other countries. MSHA will certainly track NIOSH's recommendations very closely.

Senator BYRD. Mr. Stickler, MSHA recently changed its training requirements for coal safety inspectors. In the materials submitted to my office, I noted from those materials that MSHA has eliminated from its curriculum 92 hours of safety training, including 6 hours related to repeat violations, 6 hours related to roof control, 13 hours related to ventilation, 6 hours related to accident investigations, and 6 hours related to 103(g) orders, which is the provision in the Coal Mine Acts giving a union representative the right to obtain, immediately, an inspection of a mine if an imminent danger exists. How can this subcommittee be sure that the coal safety inspectors that MSHA is hiring are receiving sufficient training in these critical areas?

Mr. STICKLER. My understanding is that, while some curriculum's subject matter was reduced, for other subjects, increases in the amount of training hours, and the net gain was 56 hours.

Part of the reason that the classroom training hours were reduced, is that some of this training has been transferred to the field at the District Offices to be done, some of it can be done via computer systems. But I had the same concerns and the same questions that you asked. It came to my attention, I met with the Director of the program that oversees the Beckley Academy and the training of our mine inspectors, and he assured me that a couple of years ago they did a survey to identify what knowledge and skills and information an individual needs to have to be a mine inspector. So, they went back, and they changed the curriculum, to tailor it, to make sure that they addressed those areas that gave the trainee, the inspector trainee, the skills and knowledge that they needed to do the job, and he has assured me that we are doing a better job training our inspectors today than any time in the past.

Senator BYRD. How do you feel about that? Are you, are you, are you assured by that?

Mr. STICKLER. Well, this individual has many years of mining experience, worked underground with the miners, been in charge of safety, of training for MSHA for several years, and I have a great amount of confidence in his judgment.

Senator BYRD. Do you feel that there's anything that's, really, that really needs to be done? Anything that's not up to your expectations?

Mr. STICKLER. In the area of training, I think we have a world-class training program of our inspectors. They spend, basically, 6 months in the classroom, and 6 months on the job, and they rotate back and forth, spend a couple of weeks in the classroom, 2 or 3 weeks out in the field, and back and forth. I think we're doing an outstanding job.

I've spent quite a bit of time, since I've been with this job, traveling out to the districts and meeting with our mine inspectors, and talking with them, and getting ideas and comments from them, and I have not had one yet indicate to me that he was concerned about the amount—or she was concerned—about the amount of training they're receiving.

Senator BYRD. Thank you, Mr. Chairman.

Senator HARKIN. Thank you, Mr. Chairman.

Senator Specter.

Senator SPECTER. Thank you, Mr. Chairman.

Mr. Stickler, the report released by the House Education and Labor Committee has evaluated a number of the objectives that we had. It has found that the requirements have not been completed. For example, conveyer belts were supposed to be installed which could readily ignite underground fires. They have not been replaced with less flammable belts, although those less flammable belts are available. Are you familiar with that deficiency?

Mr. STICKLER. I'm not familiar with that deficiency, Senator, because, in fact, there is no deficiency there.

The Congress set up the technical study panel to study the fire-resistant properties of underground conveyer belts. That's the Panel I mentioned earlier, they are studying two things—belt air, and the fire resistant properties of underground conveyer belt material.

That study panel will conclude their work at the end of this year, and based upon their recommendation, then, MSHA will determine what would be appropriate, based on the study and information we receive.

Senator SPECTER. Isn't it correct, as the House committee has found—that there are flammable belts now in operation?

Mr. STICKLER. Yes, sir. There——

Senator SPECTER. Aren't there belts which are safer, less flammable?

Mr. STICKLER. The belts that are in service today are required to be fire-resistant. They are tested by MSHA to determine whether or not they are fire-resistant.

Senator SPECTER. Well, then let's deal with my question, which is a question posed by the House committee report, that there are less flammable belts available now—isn't that true?

Mr. STICKLER. I would, yes, I believe you could protract less flammable belts.

Senator SPECTER. Well, if that is true, why aren't the less flammable belts installed now?

Mr. STICKLER. The law hasn't required a less flammable belt, the law has required a fire-resistant belt, and the specifications that

belt material must pass in the test in order to be approved as fire-resistant.

Senator SPECTER. Well, if the law requires a fire-resistant belt, and you could put a safer belt on, why not do that?

Mr. STICKLER. That may very well be the recommendation of this study panel, that they are available——

Senator SPECTER. Well, wait a minute—wait a minute—why wait for a recommendation from a study panel, if you know that there is equipment which will be safer?

Mr. STICKLER. Because Congress set up the study panel to do an impartial, scientific evaluation of what is available, and whether or not it's practical to improve the fire-resistance of our underground conveyer belts.

Senator SPECTER. But, you have authority now to put into operation the safest equipment which is currently available, don't you?

Mr. STICKLER. That would take a rule to change the fire-resistant specifications for a conveyer belt, will take a rule, and it will take longer—it would take longer to do that rule, than it would to wait until the technical study panel does their work.

Senator SPECTER. Well, Mr. Stickler, first I hear about a rule change, then I hear about a study. In the context where you know you could get safer belts now, it seems to me that it ought to be done. Are you telling me that you don't have the authority to do it?

Mr. STICKLER. Under the current law and rules, I do not have the authority to require any belts, other than what is specified in the Federal regulation.

Senator SPECTER. Well, we will pursue that, Mr. Stickler. I don't think you're correct. I think you have the authority to do that now, and you're telling us about rule changes and about studies. These more flammable belts could cause an accident at any time.

The House committee reported that there are electronic detection devices available, which can detect fires before they get out of control, and detect explosive gases before it is too late. But, those devices are not being implemented, why not?

Mr. STICKLER. Well, they're implemented in some cases. Some mine operators install these voluntarily, and also mine operators that use belt air at the face, are required by Federal regulation to install carbon monoxide detectors as part of their protection system on that belt conveyor.

Senator SPECTER. Well, don't you have the authority to require that those electronic detection devices will be installed?

Mr. STICKLER. Not without a new rule. The current rule does not require them at all mines.

Senator SPECTER. Are you trying to get a new rule, so we could have safer electronic detection devices?

Mr. STICKLER. I think that would certainly be a rule that I would like to pursue.

Senator SPECTER. Well, why don't you pursue it?

Mr. STICKLER. Well, sir, I've been on the job 4 months. I inherited a regulatory agenda that I've been working very hard on, and the priorities on that agenda are those things that Congress mandated last June, and MSHA has been working very hard to do that rulemaking, and will continue to do so the rest of this year.

Senator SPECTER. Well, the red light is on.

Senator HARKIN. Go ahead.

Senator SPECTER. Senator Harkin says I should go ahead, so I shall. I've got a long list here.

There are required air packs, in order to assist on evacuation. The House committee found that those required air packs are not being installed, is that true?

Mr. STICKLER. They're being installed at the rate of, probably about 10,000 a month. There are three manufacturers for these air packs, and as you know, the MINER Act, and also the final rule that MSHA published on December 8 requires a significant number of additional air packs at the underground mines, and the manufacturers have not been able to keep up.

There are two manufacturers that have about 98 percent of the market, and they have approximately a 10 month backlog on order. I have worked with the manufacturers, and I sent a letter out to the mine operators, asking that we give priority to those mines that need these units the most. Starting with any mine that doesn't have two units per miner, and once we get those in place, then we'll go to three, and so on, until we get full implementation.

About 20 percent of the mines are in full compliance, that have not only two per miner in the working section, but one on the mantrip, and caches of SCSR's steward in the escape way, traveling out of the mine.

Senator SPECTER. According to the committee report, Mr. Stickler, MSHA has delayed in providing guidance, so that mine operators are not yet providing breathable air supplies underground, as required by law. Is that true?

Mr. STICKLER. I provided that guidance on February 8. As far as breathable air, the requirements and methods of providing breathable air.

Senator SPECTER. So, the House committee is wrong when they say that your Department has delayed, and the mine operators don't know what to do on that issue.

Mr. STICKLER. Well, perhaps they wrote that before February 8, but February 8 was when I issued the guidance.

Senator SPECTER. The report came out yesterday.

The MINER Act sought to ensure that all coal mines have rescue teams available who can react swiftly in emergencies. According to the committee report, that hasn't been accomplished. Are they wrong again?

Mr. STICKLER. The current regulation on mine rescue teams is that they have to be within 2 hours of the mine site. The MINER Act requires that MSHA promulgate rules that would require the rescue teams to be within 1 hour. MSHA has started to work on that rule, and we will be publishing a proposed rule shortly, and we will have a final rule before the end of this year.

Senator SPECTER. The MINER Act sought to ensure that MSHA would keep families and the public fully and accurately informed about accidents. According to the committee report, family members continue to complain that MSHA is not fulfilling that requirement. Are they wrong again?

Mr. STICKLER. I have instructed our investigation team leaders to make sure that we maintain constant contact with the family

members and meet with them, and provide information with them. If there's anyone that feels that we're not fulfilling that, I would certainly correct it, if they make me aware of it.

Senator SPECTER. Well, there are more, we'll supply them for the record.

[The information follows:]

SUMMARY OF STAFF REPORT OF THE HOUSE EDUCATION AND LABOR COMMITTEE

EMERGENCY EVACUATION PROBLEMS STILL REMAIN

The MINER Act sought to ensure that miners have the equipment and training needed to get out of the mine quickly during an emergency. According to the Committee staff, the required air packs necessary for escape are not all in place, and their reliability is uncertain. Miners are not yet receiving real-world training in evacuation. Adequate communication and tracking equipment for emergencies are still not in place, and will not likely be anytime soon.

UNDERGROUND REFUGES ARE STILL NOT BEING INSTALLED

The MINER Act sought to ensure that miners have a safe place to await rescue should they be unable to safely evacuate in an emergency. According to the Committee staff, due to delays by MSHA in providing guidance, mine operators are not yet providing breathable air supplies underground. Moreover, MSHA has not yet required mine operators to provide hardened shelters underground.

QUALIFIED RESCUE TEAMS ARE STILL NOT AVAILABLE AT ALL MINES

The MINER Act sought to ensure that all coal mines have rescue teams available who can react swiftly in emergencies. According to Committee staff, this has not been accomplished.

DISASTER COMMUNICATION WITH MINER FAMILIES AND THE PUBLIC NEEDS ATTENTION

The MINER Act sought to ensure that MSHA keep families and the public fully and accurately informed about accidents. But today, family members continue to complain that MSHA is not keeping them informed about accident investigations affecting their loved ones.

KEY HAZARDS REVEALED BY THE 2006 TRAGEDIES REMAIN UNADDRESSED

According to Committee staff, conveyor belts that can readily ignite underground mine fires have not been replaced with less flammable belts, although flame retardant belts are available. Electronic detection devices that can detect fires before they get out of control, and explosive gases before it is too late, are not universally required.

TOUGHER PENALTIES NEED TO BE REGULARLY ASSESSED

The MINER Act sought to ensure that incentives for compliance with MSHA requirements at mines were increased. According to Committee staff, MSHA has yet to issue a "pattern of violations" citation to a mine operator, has not finalized regulations to ensure that assessments are properly assessed, and has not addressed concerns that initial penalties assessed by inspectors are watered down during review.

CONCLUSION: ACCORDING TO THE COMMITTEE STAFF, THE PROMISE OF THE MINER ACT HAS NOT BEEN FULLY REALIZED

The promise of the MINER Act of 2006 has not been fully realized. MSHA is moving too slowly. Meanwhile, miners' lives remain at risk. The mining industry need not wait for MSHA to act, but many mine operators are doing just that. MSHA and the mining industry need to do better, and then move on swiftly to eliminate many other critical safety and health risks to miners.

Senator SPECTER. It's a little discouraging, Mr. Stickler, to find a House committee specifying all of these deficiencies, and to have your replies that they're either wrong on the facts, or that you need some additional rule, or that some manufacturer can't comply, and

it all amounts to delay. Any one of these many factors could cause another mine disaster with many deaths.

I would ask you to review their report, and give this subcommittee responses to what they have had to say.

Mr. STICKLER. I'll do that.

Senator SPECTER. Thank you.

[The information follows:]

MSHA COMMENTS ON THE HOUSE COMMITTEE ON EDUCATION AND LABOR INTERIM STAFF REPORT—IMPLEMENTATION OF THE MINER ACT

EXECUTIVE SUMMARY

On February 27, 2007, the Chairman of the House Education and Labor Committee, Rep. George Miller, issued an Interim Staff Report entitled, Implementation of the MINER Act Is Proceeding Too Slowly. As the title of the report indicates, Chairman Miller believes that the Mine Safety and Health Administration (MSHA) is not moving quickly enough to implement the Mine Improvement and New Emergency Response (MINER) Act of 2006, which was signed by President Bush on June 15, 2006. MSHA's response to the report was requested by Senator Arlen Specter during an oversight hearing conducted by the Senate Appropriations Subcommittee on Labor, Health and Human Services, and Education on February 28, 2007.

The report concedes that MSHA is making progress towards implementing the key provisions of the MINER Act. The principal criticism appears to be that MSHA is not implementing the Act before the deadlines set for the agency by Congress. The key point made by the report is:

"Following a careful examination of available information, we conclude that while the Mine Safety and Health Administration is making some progress, it is moving too slowly in addressing the critical risks targeted by the MINER Act."

MSHA, however, believes that, by including these deadlines in the legislation, Congress made clear its intent to focus MSHA's attention on MINER Act implementation. Congress also recognized, by setting certain deadlines ahead of others, that certain MINER Act provisions are complex and require substantial analysis and public input prior to implementation. These provisions would necessitate more time.

MSHA does not agree that the agency is falling short on implementing the MINER Act. There has been significant progress toward implementing this important statute. A summary of the provisions already implemented to protect miners include:

—Requiring all coal mines to submit to MSHA their emergency response plans;
—Requiring more SCSRs devices for each miner in every underground coal mine. MSHA has addressed a backlog in SCSR orders created by new MINER Act requirements;
—Requiring fire resistant evacuation life lines in all underground coal mines within three years as specified in the MINER Act;
—Mandating additional safety training and training on the use of SCSRs at underground coal mines. Devices from all three SCSR manufacturers are now commercially available for miners to fulfill their expectations training requirements;
—Establishing new maximum penalties for flagrant violations and new minimum penalties for failure to notify and unwarrantable failure violations and orders;
—Requiring all mine operators to contact MSHA within 15 minutes of an accident;
—Requiring redundant underground to surface communications systems in underground coal mines;
—Issuing guidance to mine operators regarding emergency supplies of breathable air;
—Training 14 MSHA officials to serve as Family Liaisons; and
—Although it was not required under the MINER Act, MSHA required the use of multi-gas detectors for underground coal miners.

In addition to these accomplishments, MSHA continues to implement the remaining provisions of the MINER Act, including:

POST-ACCIDENT COMMUNICATIONS AND POST-ACCIDENT TRACKING

Between January 2006 and March 30, 2007, MSHA has received 39 applications for approval of communications and tracking systems. Of these 39, 24 applications

are being evaluated for approval, 12 are modifications of previously approved systems, and 3 are approvals for new systems. These new systems are:

—The Kenwood portable hand held radio;

—Marco RFID (radio frequency identification) Tracking Tag; and

—Matrix Design Group RFID Tracking Tag.

While none of these devices are entirely wireless, they do provide options that are available now for communicating in mines. Congress, in the MINER Act, requires that by June 2009, mine operators must adopt wireless communications and electronic tracking systems. MSHA is reviewing 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. Between January 2006 and March 26, 2007, MSHA has received a total of 132 communications and tracking proposals.

MINE RESCUE TEAMS

The MINER Act requires the Department of Labor to issue regulations with regard to mine rescue teams. 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 with anticipated publication in summer 2007. MSHA anticipates that a final rule, as mandated by Congress in the MINER Act, will be promulgated by December 15, 2007.

CIVIL PENALTIES

MSHA immediately implemented the MINER Act provisions mandating a new maximum penalty of up to $220,000 for flagrant violations, and new minimum penalties for "unwarrantable failure" and "failure to notify" violations. Last October, MSHA issued a Procedure Instruction Letter (PIL) to all MSHA inspectors establishing uniform, Agency-wide procedures for enforcement personnel to recognize and issue flagrant violations as defined in the MINER Act. MSHA's Coal Mine Safety and Health Division is considering 13 flagrant violation citations and orders—a first in the Agency's history. In addition to the MINER Act changes, MSHA published a proposed civil penalty regulation in September 2006 and a final civil penalty rule, providing higher penalty assessments, on March 22, 2007.

SEALING OF ABANDONED AREAS IN UNDERGROUND COAL MINES

Beginning on June 1, 2006, prior to passage of the MINER Act, MSHA took several actions to increase protection for miners. The agency required: a temporary moratorium on the construction of new alternative seals; operators to assess the atmosphere behind sealed areas of existing alternative seals; operators to take remedial action if the atmosphere behind the seal had the potential for an explosion; strength and construction requirements for new alternative seals; inspection and maintenance of existing alternative seals, including corrective action when necessary; and MSHA approval of new alternative seals. MSHA is currently reviewing all the available scientific information and industry practices to determine the best means of implementing the seal requirements of the MINER Act. Working with the National Institute for Occupational Safety and Health (NIOSH), MSHA is developing a proposed rule on mine seals and will publish the proposal in the Federal Register in summer 2007. A final rule, as mandated by Congress in the MINER Act, will be promulgated by December 15, 2007.

TECHNICAL STUDY PANEL ON BELT AIR

Section 11 of the MINER Act established 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 required the Department of Labor to respond to the Panel's report within 180 days of receiving it.

The charter governing the Panel was published in the Federal Register on December 22, 2006. The first meeting of the Technical Study Panel took place January 9–10, 2007. 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. The Panel will convene its second meeting to be held March 28–30 in Pittsburgh, Pennsylvania.

REFUGE ALTERNATIVES

The MINER Act requires NIOSH to provide a report to the Department of Labor by December 2007 concerning various refuge alternatives for underground coal mines. The MINER Act further requires that 180 days after receipt of the NIOSH report, the Department of Labor will report to Congress on the actions MSHA will take in response to the report. Additionally, MSHA is currently working with state agencies, refuge chamber manufacturers and NIOSH, in examining the technical considerations for implementing refuge chambers safely. MSHA has hosted several informational meetings and demonstrations in which refuge chamber manufacturers, NIOSH, industry personnel, and state agencies participated.

MSHA CONTINUES TO PROTECT MINERS

MSHA is meeting the requirements of both the MINER Act and the Federal Mine Safety and Health Act. Every day, MSHA personnel are inspecting mines, issuing citations, reviewing safety and health plans, working on regulatory initiatives, and improving both inspector and miner training.

It is important to keep in mind that as MSHA implements the MINER Act, the agency is also working to meet its many other statutory obligations under the 1977 Mine Act. As you know, MSHA is required to inspect each surface mine at least two times a year and each underground mine at least four times a year. During the inspections of 2006, MSHA issued 77,129 citations and orders in coal mines, up from 69,124 in 2005 and 62,937 in metal and non-metal mines, up from 59,101 in 2005. Proposed assessments in 2006 totaled $35 million, up from $25 million in 2005.

MSHA performs other important duties and activities, including:

—Investigating mine accidents, complaints of discrimination filed by miners, hazardous condition complaints, knowing or willful violations committed by agents of mine operators, and petitions for modification of mandatory safety standards;
—Developing improved mandatory safety and health standards;
—Proposing assessments and collecting civil penalties for violations of mine safety and health standards and the Mine Act;
—Reviewing and approving mine operators' ventilation and dust control, roof control and other mine plans, and education and training programs;
—Maintaining the National Mine Health and Safety Academy to train inspectors, technical support personnel, and mining industry personnel;
—Approving certain mining products for use in underground coal and gassy metal and nonmetal mines to ensure they do not cause a fire or explosion;
—Providing technical assistance to mine operators;
—Providing assistance to mine operators in improving their education and training programs;
—Cooperating with states in the development of mine safety and health programs;
—Making grants to states in which mining takes place; and
—Overseeing rescue and recovery operations at mines nationwide.

Additional comments on the House Education and Labor majority staff report are attached.

MSHA RESPONSES TO EDUCATION AND LABOR COMMITTEE STAFF REPORT ON MINER ACT IMPLEMENTATION

THE EMERGENCY EVACUATION RULE

The report makes several erroneous statements about the emergency evacuation plans mandated by section 2 of the MINER Act.

Charge. "The Rules and When They Take Effect, Vary Mine by Mine." The report claims that the emergency evacuation plan required by the MINER Act is not being enforced with consistent criteria, thus the MINER Act protections "are not being implemented." Furthermore, the report charges that "implementation of the rules set out in the MINER Act is occurring only gradually in many mines," because of the time being given to operators to comply with these provisions.

Answer. As with other required underground mine plans such as roof control and ventilation plans, the Emergency Response Plans (ERPs) are required for each mine and must be tailored to the individual mine. A "one size fits all" implementation standard is neither practical nor in the best interests of mine safety and health, given the unique and various conditions that exist in each underground coal mine. MSHA district managers always have the latitude to request additional information to render an informed decision on the approval or disapproval of the plans, and to issue citations for violations of a plan as called for in the act.

The ERP plans must address specific items required by the MINER Act through various options or alternatives. These variations are based on mine operator submissions, which take into account mine specifics and unique features such as mine size, overall mine design and layout, mining environments and other physical considerations, and mining methods. As various portions of the ERPs are approved by MSHA, mine operators are expected to fully comply with the approved components of the plan.

In some instances, mine operators are given a reasonable period of time to implement certain portions of their approved ERPs, which is normally based on market availability and delivery schedules of materials and equipment.

More details are provided about these instances in ensuing sections of this response.

Charge. The report charges that miners are missing SCSRs and that the problem is "in part due to MSHA policies."

Answer. MSHA does not dispute that miners are missing SCSRs. This deficiency is because of a large backlog of SCSR orders from SCSR manufacturers as result of the large increases in the numbers of SCSRs required by the MINER Act. Due to this backlog, operators are considered to have made a good faith effort in obtaining the SCSRs either by taking physical delivery of the SCSRs or providing a purchase order with a delivery date. The current shortage of SCSR units is approximately 90,000. MSHA is working diligently with the mining community to reduce this backlog and comply with the requirements of the MINER Act concerning SCSRs.

Charge. "So although the third manufacturer of SCSRs (Draeger) has a surplus of thousands of these lifesaving devices, miners remain without them." The report states ". . . but of course compliance with this request is not required."

Answer. Recognizing the overwhelming preference of coal mine operators and of miners for units from the other two manufacturers (CSE and Ocenco), MSHA has asked mine operators and these two SCSR suppliers to cooperate and give priority in supplying SCSRs to those mines that do not have at least two SCSRs per miner, or to those with the worst shortages. MSHA is working closely with SCSR manufacturers and there is no evidence that manufacturers are not cooperating.

If MSHA required operators who currently use CSE and Ocenco's in their mines to purchase the Draeger units as called for in the staff report, miners could face another set of serious safety issues. Mixing different types of SCSRs that use different technology or donning procedures could result in confusion and delay in donning and activating the device during an emergency situation. Therefore, MSHA and the United Mine Workers of America believe that it is not in the best interest of safety to mix SCSR types at a mine.

Charge. The report further states that "SCSRs have a history of failure" and mentions 250 units "manufactured in recent years being pulled" by MSHA in January 2007.

Answer. MSHA has, in fact, recalled MSA Lifesaver 60 SCSRs. MSA issued a recall in 2002 on these devices due to potential problems with the chlorate candle starters. This recall was extended to a wider range of manufacturing dates in 2006. MSA has received cooperation from mine operators to remove these devices from their inventories. These SCSRs are no longer being manufactured, and operators will have to replace these models with other types of SCSRs. Since CSE and Ocenco are the predominant SCSR manufacturers in the United States, this MSA recall had a de minimis effect on the backlog.

The Emergency Mine Evacuation final rule requires that mine operators report their SCSR inventories to MSHA. This national inventory will constitute the first time an accurate count of SCSRs will be made, including manufacturer, type of model SCSR, serial numbers, and dates of manufacture. This inventory will serve as the basis for the random sampling of SCSRs. MSHA developed a computer-based reporting system which mine operators will be able to access from the MSHA website, as well as a form for reporting SCSR inventories.

Charge. "MSHA has declined to conduct random sampling of the SCSR units stocked by mine operators, nor is it required to by the MINER Act."

Answer. In the past, a true random sampling procedure for testing SCSRs was impossible for MSHA to implement without inventory information. However, it is not a true statement that SCSRs are not checked for reliability. For the past 26 years, MSHA has cooperated with NIOSH by assisting with the Long Term Field Testing (LTFT) of SCSRs. NIOSH has selected the numbers and types of SCSRs to be collected, and MSHA has assisted with mine contacts and collection. The selection of SCSRs was based on estimated market share by manufacturer. NIOSH performs the testing and writes the reports. NIOSH has recently published a program concept paper on its web site proposing a draft redesign of the mine respirator eval-

uation program and is seeking public comment on the proposal. This concept paper includes the methodology for selecting the random sample using the new MSHA SCSR inventory database mentioned above.

Charge. The House Committee staff report also states that the large purchases of SCSRs—required to comply with the MINER Act—could harm the development of new technology to provide breathable air in underground mines. Specifically, the report says ". . . since mine operators are currently purchasing many units of existing design to meet the requirements of the MINER Act, and these units have an official shelf life of many years, it is likely to take a new mandate to move new designs into place quickly."

Answer. The pursuit of new technology continues, as evidenced by MSHA's coordination with NIOSH to develop dockable and hybrid SCSRs. MSHA personnel also participated in the SCSR workshops, sponsored by both NIOSH and MSHA in 2005 and 2006, where concepts for both of these new types of SCSRs were developed. MSHA also has been involved in the evaluation of SCSR proposals through the NIOSH Request for Proposal (RFP) process.

While some SCSR models have a "service life" of 10 years, and others have service lives of 15 years, operators are able to introduce new technology at any time. In addition, MSHA has worked with one mine operator and Draeger to utilize SCBAs (self-contained breathing apparatus) similar to those used by firefighters, with quick-fill connections and quick-fill stations to meet the requirements of the MINER Act. The SCBAs will be used in conjunction with SCSRs that will be carried on miners' belts and on man-trips. This will provide another choice for operators who currently have plans to utilize only SCSRs.

In addition, NIOSH introduced proposed changes to their approval regulations for SCSRs in 2006 as specified in 42 CFR Part 84, which would expedite the introduction and adoption of new technology into the mining industry. Under this proposal, breathing and metabolic simulators would be used instead of man tests and the test criteria would be changed. In addition, NIOSH has proposed that SCSR manufacturers would need to meet the new criteria within 6 years from enactment of the new regulations.

Charge. "Miners are still not Receiving Adequate Evacuation Training," and expectations training in particular, because ". . . requirements that mine operators provide such training will take effect only after MSHA certifies that the training units which can provide a simulated experience of using an SCSR are readily available."

Answer. All manufacturers have developed training devices that simulate both the heat and breathing resistance a miner may experience using an SCSR. These devices are required by the December 8, 2006, final rule. These training devices are now available and MSHA is publishing a Federal Register notice to announce their availability. Operators will have 30 days from publication of the notice to purchase the units and 60 days from receipt of the units to provide training.

Charge. "However, mine operators are not required to allow miners to actually turn on the SCSR and breathe with it. While this saves the cost of obtaining additional SCSRs, it also means this quarterly training does not provide miners with the sensation of what it is like to actually use an SCSR."

Answer. Advanced training in SCSR use during simulated mine evacuations is being implemented. MSHA's final rule on Emergency Mine Evacuation required increased self-rescuer training, including instruction and demonstration in the use, care, and maintenance of the self-rescue devices used at the mine. The final rule specifically requires that miners must insert the mouthpiece as part of the quarterly training. As part of the ERP requirements, mine operators must include SCSR hands-on training in donning and transferring from one SCSR to another for each type of SCSR carried or stored in the mine. Each mine operator's ERP must also provide for one of the quarterly drills to take place in artificial smoke or in an environment simulating smoke, and MSHA inspectors are checking for mine operator compliance with these ERP provisions.

Charge. The report states that miners still lack good emergency communications systems. Specifically, the report states that "MSHA could require these systems (communications systems described in the report) prior to 2009; it has chosen not to do so. Moreover, it (MSHA) has elected not to require one-way communication devices either." This section of the report concludes "While waiting for a more perfect technology saves mine operators money, it places miners' lives at risk."

Answer. MSHA disagrees with the charge that MSHA is failing to implement these provisions because it "saves mine operators money." MSHA is actively implementing the provisions of the MINER Act, based on the requirements of the Act as passed by both Houses of Congress.

The MINER Act requires underground communication systems to be implemented in two stages. Stage 1 is the provision in the ERPs for post-accident communications by means of redundant communication systems with the surface. Stage 2 is the provision in the ERP for post-accident communication between underground and surface personnel via a wireless two-way medium by June 15, 2009. Also, between January of 2006 and March 26, 2007, MSHA approved 3 new tracking and communication systems and 12 approvals for modification to previously approved systems via the Revised Approval Modification Program (RAMP). While these are not wireless systems, they will provide more communications options. MSHA's foremost concern is the safety of miners. With this as a priority, MSHA is implementing the requirements of the MINER Act as specified.

Charge. The report incorrectly states that "many manufacturers already produce two-way wireless systems, and many such systems have been installed in mines around the world."

Answer. MSHA representatives have traveled to Australia and Germany in the last year, and NIOSH representatives have visited additional countries to research and evaluate the availability and functionality of two-way wireless systems. MSHA is unaware of any fully wireless two-way communication system used in an underground mine anywhere in the world.

The Personal Emergency Device (PED), which received a great deal of media and Congressional attention as a wireless solution, is a one-way paging system that would only be useful after a fire or explosion only if the required loop antenna were installed on the surface. Most U.S. mines install the loop antenna underground because they do not own surface rights or the topography is not amenable to surface installation. An underground loop antenna would be susceptible to damage in a fire or explosion. Surface antenna, depending on geology and depth from the surface, does not always provide dependable one-way communication.

Charge. The report correctly states that MSHA must examine two-way communication systems to ensure they are intrinsically safe and further states that "this approval process can often take 1–2 years, although MSHA has promised to give such wireless communication systems top priority."

Answer. Products used in underground mining have to meet requirements that are not needed for above ground use. The possible presence of methane and combustible dust along with tough environmental conditions impose unique demands on communications equipment. This equipment must also be able to withstand an explosion in order to be effective after an accident. Therefore, MSHA works with manufacturers to ensure their products can meet the unique safety and reliability requirements demanded by underground mining. Although the MSHA approval process can sometimes take 1–2 years, the turnaround time can typically be significantly less if the applicant provides a complete application package initially, and provides timely responses to MSHA requests for corrections or test samples. The process timeline can be further shortened if the product under evaluation does not require significant re-design to achieve compliance or if no test failures are experienced. MSHA has made a concerted effort to expedite all applications for approval of these devices.

Charge. "Underground Miners Still Cannot be Quickly Located." As in the previous section of the report, the charge is "The situation here is similar to that for two-way wireless communication devices—there are already approved systems that mine operators could adopt." The report further states that "workable electronic tracking systems for miners have been around since the 1980s, are not very expensive . . . ."

Answer. To our knowledge, the first electronic tracking device was approved by MSHA in 2003 and the only available MSHA-approved tracking technology is radio frequency identification (RFID) tags. To use an RFID system, the miner wears a "tag" that can be identified by various "readers" located in strategic locations around the mine and the system is only as accurate as the spacing of the readers. For example, if the readers are located 4,000 feet apart, you can have up to 4,000 feet of area where the miner's location would not be known. While the "tag" is MSHA-approved, the "readers" are not MSHA-approved and therefore, are not safe for use in an explosive atmosphere; so miners located in these areas could not be tracked. Also, RFID is a wire-based system so functionality may be lost in a fire or explosion.

The MINER Act establishes that no later than 3 years after the date of enactment, mine operator plans shall ". . . provide for an electronic tracking system permitting surface personnel to determine the location of any persons trapped underground or set forth within the plan the reasons such provisions cannot be adopted." MSHA continues to review and field-test a number of emergency communications and tracking systems that represent the most promising technologies for application in underground mines. As of February 14, 2007, MSHA had observed testing or

demonstration of 19 communications and/or tracking systems at various mine sites. MSHA technical personnel have met with representatives from 48 communication and tracking system companies. To date, we have had discussions with various vendors regarding 133 different proposals for development of mine communications and tracking systems. We continue to work with the NIOSH Emergency Communication and Testing Partnership to arrange for demonstrations of additional systems. We are also assisting NIOSH in the review of proposals received in response to the Requests for Proposals (RFPs).

UNDERGROUND REFUGES

Charge. "MSHA approval of underground shelters is not required; there are no intrinsic safety issues."

Answer. The first priority in any mine accident is to evacuate everyone from the mine, to the greatest extent possible. The focus of the MINER Act is to ensure that miners are adequately trained and supplied so that they can safely exit a mine in case of an emergency.

With regard to underground refuge chambers, MSHA approval for permissibility in mines may be required depending on whether the shelters use electricity; there may be safety issues when electrical systems are used in the refuge shelters. These need to be carefully reviewed to ensure that new safety hazards are not created for miners after these chambers are installed.

Further, the MINER Act requires that NIOSH conduct research on refuge alternatives and provide its report to MSHA by December 2007 (the MINER Act does not require NIOSH to provide technical specifications to MSHA). Then, the Department of Labor has 180 days to respond to the Congress about the report. MSHA began collecting technical information about refuge chambers shortly after the Sago mine tragedy and continues to do so. In October 2006, MSHA held a Mine Rescue Technologies Expo in conjunction with the annual training conference at the National Mine Academy in Beckley, West Virginia. The Expo served to exchange information on international technologies for refuge chambers and other safety advancements in the mining industry. MSHA has reviewed prototypes of inflatable stoppings or other quickly deployable barricade units that can be used to create a safe haven by isolating the trapped miners from the potentially toxic mine atmosphere. The study of these devices is ongoing as new products are developed and submitted for review.

Charge. The report charges that MSHA did not implement the 'breathable air' provisions of the MINER Act in a timely manner.

Answer. On February 8, 2007, MSHA published the Program Information Bulletin, PIB–07–03, as a practical approach that provides options for implementing the requirement for breathable air. Mine operators are required to include a provision for "breathable air" in their emergency response plans. The MINER Act required MSHA to study the "breathable air" issue and develop the appropriate response. Prior to issuing the PIB, MSHA sought public input by issuing a Request for Information (RFI) from experts and the mining community.

Charge. Referring to the breathable air guidance provided by MSHA, the report says "On February 8, 2007, following a letter from Chairman Miller to Secretary of Labor Elaine Chao expressing concern about this and several implementation delays, MSHA issued a Program Information Bulletin to its district managers and mine operators providing some guidance on these points."

Answer. MSHA solicited public comment and worked diligently to provide options for meeting this requirement.

Charge. The staff report criticizes the breathable air PIB for not providing specific guidance for other safety related issues such as protecting oxygen tanks from roof falls, fire hazards, and storage concerns, the report says "The PIB provides no specific guidance on this point, although there appear to be some regulations from 1971 that remain applicable."

Answer. The report does not acknowledge the PIB attachments, which provide storage, handling, and use information for compressed air and oxygen cylinders, including sketches with suggested storage racks.

Charge. The report characterizes the ERP submission and approval process as follows: "Mine operators have a month to submit plans, but additional delays can be expected as District Managers and operators ask for clarification on a variety of alternatives, and individual plans are likely to include long implementation timelines for whatever approach is ultimately agreed upon."

Answer. Congress included an expedited dispute resolution process for ERPs in the MINER Act. This expedited process was meant to resolve disputes quickly over plan content or a district manager's disapproval of a plan. If the districts manager

disapproves a plan and issues a citation to the operator, the citation must be immediately referred to an administrative law judge (ALJ) of the Federal Mine Safety and Health Review Commission (FMSHRC). MSHA and the operator must submit all relevant material to the ALJ within 15 days of the date of the referral. The ALJ of the Federal Mine Safety and Health Review Commission must render a decision with respect to the plan dispute within 15 days of the submission of material to the judge.

QUALIFIED RESCUE TEAMS

Charge. "Qualified Rescue Teams are Still not Available at All Underground Mines."—The House staff report goes on to say "Many rescue teams are highly qualified but may not have all the equipment and operational support they need to do their jobs; until MSHA completes these regulations and implements them, miner protection will not be secure."

Answer. The latest data indicated that there are currently 161 coal mine rescue teams and 152 metal and nonmetal rescue teams. These teams consist of company funded teams, state government funded teams, contract teams, and teams made up of state employees. These teams are all qualified, well equipped, and readily available for underground mine rescue. The nation's miners are well served by these mine rescue teams.

MSHA is working to finish its proposed rule on mine rescue teams with expected publication this summer. These new regulations are scheduled for completion by December 15 2007, as required by the MINER Act.

DISASTER COMMUNICATION

Charge. "According to some of the Sago families, however, as of early this year they were still are not being kept well informed about the status of the investigation of this tragedy, and MSHA has not been responsive to their requests for information. . ."

Answer. Despite the implication of the staff report, the Agency has completed several additional actions to fully implement Section 7 of the MINER Act, including:

—A Program Policy Letter was issued on December 22, 2006, to describe implementation of Section 7 of the MINER Act with regard to both the Primary Communicator and the Family Liaison.

—On the same day, the Assistant Secretaries of the Office of Public Affairs and the Mine Safety and Health Administration signed a protocol firmly establishing Departmental support of a Primary Communicator in accident cases where multiple miners are trapped, unaccounted for, or where multiple fatalities have occurred.

—Procedural instructions were issued to require the appropriate application of personnel and resources to meet the obligation for Family Liaison and Primary Communicator. These materials are available on the MSHA website and have been released to the mining community and the general public.

—In January 2007, MSHA trained 14 employees to act as family liaisons at future mine accidents where multiple miners are trapped, unaccounted for, or where multiple fatalities have occurred. These individuals were selected based on their credentials as technical mining experts, as well as their ability to perform in stressful situations and in effective communications. Training was provided by experts from the National Transportation Safety Board and the Red Cross—organizations having vast experience with grief management and communications with families, media, and the public. The 14 employees are fully capable of filling the role of family liaison. To assure the rapid availability of family liaisons, additional employees will be trained in the future.

In both the Aracoma and Darby mine accidents, the lead accident investigators have worked directly with family members to keep them informed of progress in the investigations. Also, the lead investigators attempted to respond to all questions and requests as quickly as possible. We are unaware of any outstanding complaints by the families of the Aracoma and Darby accident victims.

At Sago, a family liaison was assigned after the rescue and recovery operations were completed. Both the assigned liaison and the lead accident investigator have made every effort to respond to the questions and requests of the Sago families in a timely manner. The MSHA Sago mine accident investigation team, accompanied by the Associate Solicitor for Mine Safety and Health, held several meetings with family members which were intended to keep them fully apprised on the progress of the investigation. Senior MSHA personnel will also meet with the families again when the accident investigation report is final and released to the public.

MINE SEALS

Charge. The report declares that "practically all underground coal miners are in imminent danger" based on a draft report from NIOSH on mine seals.

Answer. The buildup of methane and the possibly improper installation of mine seals present a serious hazard.

The sealing regulations that were promulgated in 1992 allowed for alternative seals provided they withstand a static horizontal pressure of 20 pounds per square inch (psi) and their method of installation and the material used are approved in the ventilation plan. Tests were conducted in the NIOSH Lake Lynn experimental mine that indicated an alternative seal could withstand the 20 psi test.

However, after the mine accidents at Sago and Darby mines in 2006, MSHA took action to reduce the risk associated with alternative seal construction and increased the psi standard by 150 percent, from 20 to 50 psi. Beginning on June 1, 2006, prior to passage of the MINER Act, MSHA took several actions to increase protection for miners. The agency required: a temporary moratorium on the construction of new alternative seals; operators to assess the atmosphere behind sealed areas of existing alternative seals; operators to take remedial action if the atmosphere behind the seal had the potential for an explosion; strength and construction requirements for new alternative seals; inspection and maintenance of existing alternative seals, including corrective action when necessary; and MSHA approval of new alternative seals. MSHA is considering whether other interim measures would be appropriate at this time.

MSHA is constantly evaluating mine seals in a critical and systematic fashion. This includes an evaluation of the integrity of the seals as well as removing a portion of the coating on block seals to determine if the mine operator had constructed the seals in accordance with the ventilation plan requirements. The results of these efforts can be seen in the enforcement activities of MSHA. From January 1, 2006, to March 6, 2007, a total of 558 seal violations were issued nationwide. MSHA has examined all existing seals and taken corrective action where necessary.

Section 10 of the MINER Act requires that the Department of Labor finalize mandatory health and safety standards relating to the sealing of abandoned areas in underground coal mines and provide for an increase in the 20 psi standard, no later than December 15, 2007. MSHA anticipates the publication of a proposed rule on seals by summer 2007.

On February 9, 2007, NIOSH issued a draft report on seals entitled "Explosion Pressure Design Criteria for New Seals in U.S. Mines" and asked for public comments to be considered and evaluated before NIOSH produces a final report. MSHA will consider the research that NIOSH has completed and will continue to work with NIOSH as MSHA drafts its proposed rule.

CONVEYOR BELTS AND BELT AIR

Charge. The report does not make specific charges against MSHA with regard to belt air. Instead, the report states that there are proposals to suspend the belt air rule or outlaw the use of belt air to ventilate a mine. One bill would ban belt air (i.e. to return the approach to what it was before the Bush administration rule).

Answer. The MINER Act provides that MSHA convene a technical study panel with members appointed by the Congress and the Departments of Labor and Health and Human Services. The Panel was duly established by the Department of Labor 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 mines.

MSHA convened the first meeting of the panel in January, 2007 and the next meeting is scheduled for March 28, 29 and 30. Within one year after the members' appointment, the Panel will submit a report to the Secretary and the Congressional Committees concerning the use of belt air and the composition and fire retardant properties of belt materials in underground coal mines. No later than 180 days after receiving the report, the Secretary of Labor will respond to the Congressional Committees by describing what actions, if any, will be taken based on the report, and the reasons for those actions.

The Federal Coal Mine Health and Safety Act of 1969 and the Federal Mine Safety and Health Act of 1977 that superseded it, provided that entries used as intake and return air courses be separated from belt haulage entries, and that air coursed through belt entries be prohibited from ventilating active working places. However, technology improved over time and some mines submitted petitions for modification under section 101(c) of the Mine Act to allow the use of belt air at the working faces provided that certain conditions were met, including the use of atmospheric moni-

toring systems in entries to monitor conditions and detect combustion at the early stages of a fire.

There were 204 petitions for modifications that were granted to allow the use of belt air as an additional intake air course between 1979 and 2003. As of February 7, 2007, 45 coal mines use belt air to ventilate working faces.

On April 2, 2004, MSHA issued its final "Belt Air Rule," which eliminated the need for operators to file for petitions for modification. The protections under the final rule, however, are at least equal to those contained in the belt air petitions for modifications that were granted and offer the same or an increased level of protection to miners. In addition, all conveyor belts used in underground coal mines are subject to the flammability testing as stipulated in 30 CFR Part 18.65, which establishes the flame resistance testing and acceptance requirements for conveyor belt materials. MSHA flame resistance testing is conducted at MSHA's Approval and Certification Center in Triadelphia, WV.

DETECTING METHANE GAS AND FIRES

Claim. The report discusses the necessity for "electronic detection devices that can avoid explosions and serious fires by detecting for methane, carbon monoxide and smoke . . ." and further states that "until action is taken, miners' lives remain at risk."

Answer. MSHA took action to increase the numbers of multi-gas detectors in underground coal mines in the Mine Emergency Evacuation Rule, issued on December 8, 2006. In this rule, MSHA requires that the mine operator provide an MSHA-approved, handheld, multi-gas detector, which can measure methane, oxygen and carbon monoxide, to each group of miners and to each miner working alone, that at least one miner in each group be a qualified person and that each miner working alone be trained to use the detectors to take gas readings and to interpret the readings. Provisions are included in the Emergency Mine Evacuation final rule that the detector must be maintained and calibrated as specified by MSHA regulations.

PENALTY ASSESSMENT

Charge. The report makes several charges regarding penalties. The first is that "MSHA has never actually issued a 'pattern of violations' citation."

Answer. 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.

Charge. "MSHA does not have authority to close down entire mines; only sections thereof."

Answer. MSHA has authority to shut down an entire mine if the hazard being cited affects the entire mine. MSHA inspectors determine the extent of the area in the mine affected by an imminent danger or closure order and will close that area of the mine, or the entire mine, depending on the conditions they observe. For example, if there is a major ventilation problem at the mine causing high levels of methane to be detected, the entire mine is considered the affected area. An MSHA inspector would immediately close down the entire mine until the condition is abated.

MSHA district managers retain the right to approve or disapprove ventilation, roof control, or emergency response plans at each underground coal mine. This authority can also be used to close a mine because, without an approved plan, a mine operator is not allowed to legally operate the mine. It is the mine operator's responsibility to develop and follow a plan which incorporates safe and healthful plan provisions.

Charge. MSHA's approval authority regarding mine plans "simply leads to negotiation over implementation."

Answer. The MINE Act provides the operator is entitled to adopt a plan and the Secretary to grant approval. The process often requires discussion and some refinements to the operator's proposed plan. MSHA disagrees with the assertion that implies that inadequate plans are approved. Compliance with MSHA's health and safety requirements are not negotiable. Mine operators must submit a plan for approval or they cannot operate the mine. MSHA will not approve a plan that is inadequate.

MSHA proposes assessments which a mine operator may pay in full or contest before the Federal Mine Safety and Health Review Commission (Commission). The Commission has the authority to assess penalties. When MSHA proposes assessments it takes into account the six statutory criteria which also guide the Commission. These criteria are: (1) the operator's history of previous violations; (2) the appropriateness of such penalty to the size of the business of the operator charged; (3) whether the 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 person charged in attempting to achieve rapid compliance after notification of a violation.

MSHA's new civil penalty final rule was published in the Federal Register on March 22, 2007. The final rule will result in an across-the-board increase in penalties; the amounts will increase more significantly for operators with histories of repeat violations of the same standard and operators whose violations involve high degrees of negligence or gravity. The final rule eliminates the single penalty assessment provision of $60 for non-significant and substantial violations in favor of a regular assessment. It also includes minimum penalties of $2,000 and $4,000, depending on whether there is a withdrawal order for unwarrantable failure violations. In addition, flagrant violations—those involving "a reckless or repeated failure to make reasonable efforts to eliminate a known violation of a mandatory health or safety standard that substantially and proximately caused, or reasonably could have been expected to cause, death or serious bodily injury"—may receive a maximum penalty of $220,000. Finally, a mine operator who fails to timely notify MSHA of a death, or injury or entrapment with a reasonable potential to cause death, may face penalties between $5,000 and $60,000.

MSHA MISSION SUPPORT

Claim. The report states that it is "too early to assess whether MSHA is properly training new inspectors."

Answer. *Training enforcement personnel*.—MSHA has revised the training requirements for new coal mine inspectors. In the past, entry-level training was stretched out as much as 2 years. By hiring additional instructors at the Mine Academy, revising the training schedule, condensing time between class modules, and streamlining the delivery of the training curriculum, inspectors can now graduate in approximately 1 year with the same or better skills. Some of the training is now done on line or in the new inspector's home district and some training classes have been combined to improve the efficiency and effectiveness of the training program. Listed below are classes within the trainee curriculum.

Orientation/Introduction to MSHA; Diversity; Effective Writing; Intro to Laptops; Law Regulation and Policy; Notetaking/Citations and Order Writing; Root Cause Analysis; Inspection Procedures; Inspectors Portable Application for Laptops (IPAL); Workplace Examinations; Longwall; Mine Maps/Gas Detecting Devices; Simulated Inspection; Electrical Permissibility; Diesel Permissibility; Combustible Materials and Rockdusting; Professionalism; Safety Talks I; Part 48 Training Requirements; Part 50 Reporting Requirements & Auditing; Conference Presentation Preparation PP; Conference Presentation; Introduction to Special Investigations; Noise/Respirable Dust; Interviewing Techniques; Mine Act 107(a)/103(g); Fire Protection; Ventilation; Accident Investigation; Ground Control; Part 45 Contractors; and Mine Act 104(g)/Part 48.

The Interim Staff Report states that "it is important that these inspectors not be permitted to go out on their own until they have completed adequate training, as they could miss life-threatening hazards." MSHA concurs with this assessment. Currently, the trainee is not permitted to receive his/her authorized representative (AR) card until criteria have been fulfilled, including successful completion of Academy training modules and satisfactory evaluations of the trainee from the Academy Instructor, trainee's supervisor to District and Coal Headquarters management. In addition, the trainee must have completed on-the-job training and demonstrated, during supervisory- and inspectors-accompanied inspections, the ability to independently conduct periodic on-site health and safety inspections at coal mines.

Hiring Enforcement Personnel.—With the special supplemental funding from Congress, MSHA is in the process of hiring an additional 170 new coal enforcement personnel. The hiring will occur over 5 quarters beginning in July 2006 and ending on September 30, 2007. The chart below shows the number of enforcement personnel hired, broken down by district, per quarter. To date, MSHA has filled their commitments through the first three quarters of the hiring plan.

Date and district	Hired
July 2006–September 2006:	
District 3, Bridgeport, WV	3
District 3, Morgantown, WV	2
District 4, Mt. Hope, WV	6
District 4, Mt. Carbon, WV	1
District 4, Logan, WV	1
District 4, Madison, WV	1
District 4, Princeton, WV	1
District 7, Barbourville, KY	4
District 7, Hazard, KY	1
District 9, Gillette, WY	1
Total	21
October 2006–December 2006:	
District 2, Clearfield, PA	2
District 3, Morgantown, WV	1
District 3, St. Clairsville, OH	1
District 4, Madison, WV	1
District 4, Logan, WV	1
District 5, Norton, VA	2
District 5, Vansant, VA	2
District 6, Whitesburg, KY	2
District 6, Martin, KY	2
District 6, Hindman, KY	1
District 8, Vincennes, IN	1
District 9, Craig, CO	3
District 10, Madisonville, KY	1
District 10, Morganfield, KY	1
Total	21
January 2007—March 31, 2007:	
District 2, Clearfield, PA	2
District 2, Indiana, PA	1
District 2, Johnstown, PA	1
District 2, Ruff Creek, PA	4
District 3, St. Clairsville, OH	4
District 4, Madison, WV	1
District 4, Pineville, WV	1
District 5, Norton, VA	2
District 5, Vansant, VA	2
District 6, Martin, KY	1
District 7, Barbourville, KY	1
District 7, Harlan, KY	3
District 7, Hazard, KY	2
District 8, Hillsboro, IL	1
District 9, Delta, CO	1
District 9, Gillette, WY	1
District 9, Price, UT	1
District 10, Beaver Dam, KY	1
District 10, Madisonville, KY	1
District 11, Bessemer, AL	1
Total	32

In addition, MSHA's goal is to backfill retiring enforcement personnel. Our goal is to not only hire 170 supplemental hires by September 30, 2007, but to replace enforcement personnel lost to attrition such as retirements, at a one-to-one rate. As of March 19, 2007, an additional 51 enforcement personnel have been hired thereby offsetting the vast majority of losses realized through attrition. At the end of fiscal year 2007, MSHA is projecting to have 757 enforcement personnel on board. This staffing would mark the highest level of coal enforcement personnel since 1994.

CONCLUSION

MSHA disagrees with the conclusion of the staff report that the agency [is] "failing to self-initiate important safety improvements." It further states that MSHA "needs to do better, and quickly move on to address the many other critical safety and health risks to miners that require prompt attention before new disasters occur."

MSHA is moving aggressively to implement important new safety improvements in the MINER Act. Since passage of the MINER Act, MSHA has taken the following regulatory and special emphasis enforcement actions:

—Published final rule on Emergency Mine Evacuation implementing many mandated provisions; final rule requires additional SCSRs, improved SCSR and drill training, directional lifelines, and multi-gas detectors for underground coal mines, and prompt accident notification for all mines;
—Issued final rule on civil penalties, including penalty provisions in the MINER Act; final rule published March 22, 2007;
—Issued guidance to help operators develop emergency response plans;
—Issued guidance to operators on post-accident breathable air;
—MSHA is considering 13 flagrant violation citations and orders, a first in the Agency's history.
—Issued policies on family liaison and primary communicator positions—trained MSHA officials to be family liaisons;
—Issued guidance to mine operators and MSHA personnel on alternative seals: increased the strength requirement; improved inspection and monitoring requirements; and improved approval requirements;
—Inspected all seals, requiring corrective action where necessary;
—Evaluated testing and/or demonstration of post-accident communications and tracking systems;
—Established the Technical Study Panel on the Utilization of Belt Air; held the first meeting;
—Drafting proposed rules on mine rescue teams and sealing of abandoned areas in underground coal mines;
—Initiated a special emphasis program in two districts to help identify and reduce risks to miners who are engaged in retreat mining;
—Initiated a special emphasis program to reduce health risks to miners exposed to coal dust;
—Developing a new protocol to be rolled-out soon for addressing mines that exhibit a "pattern of violations;"
—Approved two proximity protection systems, providing improved protection to miners who work underground near dangerous equipment; and
—Hired 125 new coal enforcement personnel as a result of Supplemental Appropriations and plans to hire a net of 170 coal enforcement personnel by September 30, 2007.

MSHA believes that this list of accomplishments demonstrates solid commitment to improving safety in our Nation's mines.

Senator HARKIN. I just have one question for Dr. Howard. What I'm concerned about, is how we maintain an interest in new technology, when there hasn't been a recent disaster—thank God—and when we've had this massive new legislation passed. To get new innovations, and especially when you're not talking about something that is going to be widely used, where maybe an innovator might make a lot of money, because they sell millions of these units, there's just not that big of a demand out there for the kind of innovation, perhaps, that we're talking about.

I'm intrigued by groups like the X-Prize Foundation that offer prize money for innovation. Every year, NASA offers up to $500,000 in the Centennial Prize Program to the first company or individual to solve a technology problem.

The Defense Advance Research Project Agency—DARPA, as we all know—offers up $2 million in the Grand Challenge program to whatever company shows that their technology will solve a problem that DARPA has come up with. Should we do something like that? How about annual prize in mine safety innovation? Hold out a $1

million or $2 million out there, something like that. Have you have ever considered that?

Dr. HOWARD. I think it's a great idea. Would we have the resources to accomplish that, we'd be happy to do that. I think it's a very innovative idea.

Senator HARKIN. Well, maybe we ought to think about getting the resources out there. Because, it just seems to me, this is like that kind of a situation. Where you want to encourage innovation, but there's not a huge market out there for it. But, it's a problem that needs to be solved.

Well, we'll discuss it further with you on that. That's all I have, and with that, we—did you have anything else to add, Mr. Stickler, or Dr. Howard, or Dr. Kohler, any last things before we dismiss you? Time is running out, we should get our next panel.

Senator BYRD. May I ask a question here?

Senator HARKIN. Oh, I'm sorry, yes.

Senator BYRD. Dr. Howard and Mr. Stickler—last summer, the weekly mortality and morbidity report by the CDC noted clusters of rapidly progressive pneumoconiosis, black lung, among miners in Southwestern Virginia, and Eastern Kentucky.

The article noted several possible reasons for the continuing occurrence of advanced cases of black lung. That the current Federal respirable dust limit is too high, and it needs to be lowered, or that the severity of black lung may be increasing because of the toxicity of the coal being mined. I suggest a third possible reason, namely that MSHA may not be enforcing the current dust laws as effectively as they should be. How do you explain the appearance of such aggressive cases of black lung?

Dr. HOWARD. Senator, we are actively investigating the outbreak of coal workers' pneumoconiosis in relatively young miners in certain counties along the Kentucky, Virginia, West Virginia border. Like us, we're looking at those kinds of possibilities. But we, today, cannot tell you exactly what the cause is.

We have briefed United Mine Workers, we have briefed the industry, we have briefed MSHA, and I think we—hopefully—can all work together to give you those answers, so that we know—beyond reasonable doubt—what the issues are. We need to solve this problem.

Senator BYRD. I hope you will continue to actively pursue that. Would you respond, too, Mr. Stickler?

Mr. STICKLER. I met with Dr. Howard and the folks at NIOSH on this, and discussed the issues and some of the concerns about hot-spot areas, in other words, areas where there seems to be a higher prevalence of black lung disease, particularly among young miners.

We talked about some of the things that we can do, and one idea that we're going forward on is identifying the mines that these individuals are showing first-stage black lung, or pneumoconiosis, identifying the mines that they work at now, and in the past. MSHA plans to focus our enforcement to increase the enforcement at those operations, and also increase the amount of education and training to get people to understand the risk that they're taking, when they're exposed to coal dust.

Senator BYRD. I compliment you, and I hope you'll continue.

Mr. STICKLER. Thank you.

Senator HARKIN. Thank you, Mr. Chairman.

Well, I thank this panel, you're dismissed, we'll call up our second panel.

Mr. Cecil Roberts, Mr. Bruce Watzman, Mr. Davitt McAteer, and Mr. Chris Hamilton.

We'll start with this panel in the order that I have them listed here, we'll start first with Mr. Cecil Roberts, International President of the United Mine Workers of America.

President Roberts is a sixth-generation coal miner, both of his grandfathers were killed in the mines before he was born. He graduated from West Virginia Technical College, where he also received an Honorary Doctorate in Humanities.

Then, we'll go with, then, Mr. Watzman, Mr. McAteer, and Mr. Hamilton, in that order.

Mr. Roberts, great friend, welcome to this committee, and please proceed.

Again, all of your testimonies will be made a part of the record in their entirety. If you could just sum it up in 5 minutes, I'd sure appreciate it.

STATEMENT OF CECIL ROBERTS, INTERNATIONAL PRESIDENT, UNITED MINE WORKERS OF AMERICA, WASHINGTON, DC

Mr. ROBERTS. Thank you, Mr. Chairman.

I want to thank you for conducting this hearing today, I know it was at the urging of my dear friend, and the coal miner's best friend, ever, Senator Byrd.

I also want to thank you and Senator Specter for your leadership last year, when this issue came before you. I know that Senator Shelby came in, and I met him—unfortunately—during the 2001 Jim Walters No. 5 disaster, and he showed great compassion at that time.

I also think it would be very appropriate if I could express on behalf of the coal miner's of this Nation, the families who suffered through these disasters last year, our deep appreciation to all of you, for what you've done to try to make things better, and the coal miners of the United States of America. I know I speak on their behalf in expressing their appreciation.

I think it would be important to note something that I think has been expressed here today. What would happen tomorrow morning in the Nation's coal mines if we had a similar explosion—God forbid—as we did on January 2, 2006? The truth of the matter is, that we would have the same types of problems, if this occurred tomorrow morning. Why is that?

It is true that this MINER Act is a wonderful piece of legislation, and it mandates many things that we asked for at the time of this debate a year ago. The amount of oxygen that has been required by MSHA, we applaud, it's 96 hours of oxygen. I remind you, had the Sago miners had access to 96 hours of oxygen, they—at least 11 of those 12 miners—would be here with us today. So, that is a step forward. The problem we have is that all mines do not have 96 hours of oxygen underground, currently, because of one of the problems that was outlined by Mr. Stickler here, previously.

I'm going to speak, I'm going to somewhat—as I listened to the testimony earlier, so that we could have a feel for where we find ourselves today. One of the questions that was posed earlier, was this question of flammable belts and ventilating the face with belt air. If we recall, last year we pointed out, in 2001 there were 17 rules that were pending in 2001 that were eliminated by the new administration when they took office. One of those rules that happened to be pending at that time, Senator Specter, dealt with flammable belts. So, to suggest that we can't do anything about flammable belts, we were well on the way in 2001 towards doing something with respect to flammable belts.

This issue of ventilating the face with belt air, I would suggest to you that one of the problems that we have here that has taken place since 1969 is this issue of the intent of Congress being written into the law, and somehow we find ourselves here today suggesting that we need to do something about ventilating the face with belt air, and if you read the law the Congress passed in 1969, you would be hard-pressed not to come to the conclusion that it forbids that. That somehow, down through the years, we have come to this place we find ourselves in today. That is, we're arguing over whether or not it's a good practice or not, Congress knew in 1969 that that was not a good practice.

So, as we come today, we would also not be able to communicate with miners who might find themselves on the wrong side of one of these explosions, and it's true, there's been a lot of discussion, and a lot of debate, about what type of communications we should have, and the development of that technology, and I applaud everyone's efforts at NIOSH, and MSHA with respect to that.

PREPARED STATEMENT

But you know, we could—and this was discussed during the debate on the MINER Act, and when we brought the families in here, come up with a extra line, hard-line, going into mines at very little cost, while we argue over this technology. I'm very excited about being here today, I'm so pleased that we have not forgotten about this issue. It did take us awhile to get to the next piece of congressionally-mandated law of some 30 years—and I said last year, I hope it's not another 30 years before we get to the next one. But thank all of you, for this opportunity on behalf of the miners, and all those that have been left behind by these tragedies.

[The statement follows:]

PREPARED STATEMENT OF CECIL ROBERTS

IMPROVING MINE SAFETY: ONE YEAR AFTER SAGO AND ALMA

Thank you for allowing me this opportunity to appear before your Committee. As President of the United Mine Workers of America ("UMWA"), I represent the union that, for 117 years, has been an unwavering advocate for miners' health and safety.

This entire Committee has played a significant role in advancing miners' health and safety. I would like to express my appreciation to the leadership of this Committee for your efforts to protect the health and safety of all miners. Your continued oversight is critical to ensuring miners will go home safely at the end of their shift.

One year ago I testified about miners' health and safety shortly after the Sago and Alma disasters; even after those two dramatic tragedies occurred, 32 more coal miners were killed in 2006.

Following the Sago and Alma disasters and after five more miners were killed on May 20, 2006 at the Darby Mine in Kentucky, Congress moved to enact the MINER

Act. That law includes several important provisions aimed at helping miners after a mine emergency develops. It is most appropriate for you to consider whether the improvements Congress intended to accomplish through the MINER Act are being realized. The Union supports MSHA's efforts to require substantially more oxygen for every miner. The emergency mine evacuation rule also contains a number of important improvements. Having said that, my testimony will focus attention on areas that MSHA needs to dedicate additional resources to fully implement the MINER Act.

Some of the inadequacies in implementing the MINER Act may be linked to insufficient resources. However, others can be tracked to decisions made by the agency. In 2001, then Assistant Secretary for Mine Health and Safety, David Lauriski told members of the National Mining Association that MSHA would, "collaborate more with mine operators on regulatory initiatives" and become "less confrontational with mine operators, in an effort to provide companies with better compliance assistance." At a meeting with mine operators in Hindman, Kentucky, he bragged about his diminutive regulatory agenda. He noted, "if you've seen it you noticed its quite a bit shorter than some past agendas." These policy statements were accompanied by a withdrawal of many proposed regulations by MSHA and a noticeable shift to compliance assistance. These compliance assistance programs divert precious resources away from enforcement. Perhaps most tragically, in many cases, MSHA has ignored the mandate of Congress by adopting regulations and policies that place miners at greater risk.

MINE INSPECTORS /MINE INSPECTIONS

The agency is experiencing great difficulty in fulfilling the mandatory inspections required under the Mine Act. The Union is convinced that the hiring and training of more MSHA inspectors must be a top and continuing priority. The agency must have a full complement of properly trained personnel if it is to perform its primary job of enforcing the Mine Act. The ranks of the inspectors have been diminished over the years and we can expect further reductions as more of MSHA's long-time inspectors leave the profession as they reach retirement age. These needs can only be filled by hiring qualified individuals from all segments of the industry, including rank and file miners. These new inspectors must also be outfitted with state of the art equipment for personal protection and to perform their inspection duties. Sufficient monies must be allocated to ensure this equipment is readily available to these inspectors.

As the number of inspectors have decreased, MSHA's field office specialists, including ventilation specialists and its electrical and roof control support staff, have been forced to carry out routine mine inspections. These specialists must be returned to their areas of expertise. The only way to accomplish this is to hire an adequate number of inspectors which will permit the specialists to focus on the job they are trained to do. In addition, the agency must move immediately to train a sufficient number of inspectors to perform these technical tasks in the future.

I would like to thank Senator Byrd and the other members of the Committee who worked to secure $25.6 million to hire an additional 170 mine inspectors and your continuing efforts to secure future funding. Congress must ensure that funding levels at the Mine Academy in Beckley, WV remain sufficient to meet future training needs for mine inspectors. This facility is used to train mine inspectors and also offers comprehensive training for miners and other health and safety experts.

SEALS

In 1969 and again in 1977 Congress mandated that "explosion proof seals or bulkheads" be used to isolate abandoned or worked out areas of the mine from active workings. However, in the years since, MSHA has promulgated regulations regarding seals that are much less protective than what Congress mandated. The current regulation simply requires that seals withstand static pressure of 20 pounds per square inch (psi) in order to be approved for installation in the mine. The standard was further eroded when MSHA approved the use of Omega Block type seals, such as those that were used at Sago. These Omega Block seals catastrophically failed as a result of the explosion at Sago and contributed to the deaths of all 12 miners.

The UMWA urges MSHA to promulgate a regulation that would require the construction of seals that meet the mandates of Congress and the recommendations in NIOSH's draft report on mine seals.

REGULATIONS

The UMWA believes that MSHA should adopt an aggressive regulatory agenda to address important issues in addition to those contained in the MINER Act, including:

1. Improved Atmospheric Monitoring Systems
2. Develop a Nationwide Emergency Communication System
3. Revise MSHA's Approval and Certification Process for Equipment Approval
4. Occupational Exposure to Coal Mine Dust (lowering exposure limits)
5. Collection of Civil Penalties (mandatory mine closures for non-payment)
6. Air Quality Chemical Substances and Respiratory Protection Standards (update personal exposure limits)
7. Surface Haulage (truck, haul road, train and loadout safety)
8. Respirable Crystalline Silica Standard (reducing quartz standard)
9. Requirements for Approval of Flame Resistant Conveyor Belts
10. Confined Spaces (tight quartered work areas)
11. Training and Retraining of Miners (revision of Part 48)
12. Surge and Storage Piles (dozer/feeder safety surface)
13. Escapeways and Refuges
14. Accident Investigation Hearing Procedures (make them public)
15. Verification of Surface Coal Mine Dust Control Plans
16. Continuous Monitoring of Respirable Coal Mine Dust in Underground Coal Mines
17. Modify Conferencing Process (Appeals of Citations)
18. Underground Coal Mining, Self-Contained Self-Rescuer Service Life Approval and Training.

RECORDING FATAL ACCIDENTS

Just last week MSHA issued new guidelines for determining what constitutes a mine related fatality. The "Fatal Injury Guideline Matrix" narrows the scope of what the agency will define as a fatal accident chargeable to the mine operator. This will allow the agency to report numbers that are artificially low and possibly skew the actual health and safety record of the mine and the industry. In addition, fatals not listed as mine-related will not get the same scrutiny as a chargeable accident. Without the formal investigation process, lessons learned will not be available to prevent similar events in the future.

The Union also disagrees with the Committee established by the agency to review deaths where chargeability is in question. The Committee is made up of upper-level MSHA employees and not open to other agencies, organizations or the public. This type of structure does not lend itself to a fair, unbiased review of the situation.

IMPLEMENTATION OF THE MINER ACT

In the MINER Act, Congress mandated timelines for its implementation. In some cases, MSHA has failed to meet these deadlines. The Union urges Congress to allocate adequate funding to MSHA so it can fully implement this Act within the timeframes set by Congress.

The Emergency Mine Evacuation Rule, which is separate from the MINER Act but ties into the self-contained self-rescuers (SCSRs) requirements, was finalized and made effective December 8, 2006. However, miners working underground today do not have all the protections that Rule addresses. MSHA deems the operator to be in compliance with the Rule if it has placed an order for additional SCSRs. Although the Rule requires increased availability and storage of SCSRs, there is a backlog of orders for these life-sustaining units. While the Union is extremely frustrated that more than a year after the Sago and Alma disasters, many miners only have 1 additional hour of oxygen, in light of this backlog, the Union supports MSHA's approach to make the additional oxygen units equally available to all miners. In reality, it will still take a number of years before miners receive the protections mandated by Congress. Miners cannot wait for another mine disaster to occur to drive new technology, therefore, the Union strongly urges the development and approval of the next generation SCSR.

The Rule also requires "expectations" training on SCSRs. This would allow miners to experience the actual effects of donning a unit and attempting an escape. The practice units would allow miners to experience the breathing restriction and heating that SCSRs create, without risking their safety. While MSHA claims these practice units are not available for purchase, they are in fact available. The reason these devices are not being used by miners today is not availability, it is cost. Many mine operators simply do not want to spend the money to buy them. This is unacceptable

and while we commend MSHA for promulgating a rule that is intended to be "technology-driven," it must now enforce that rule.

Moreover, the finality of this emergency response and evacuation rule is somewhat uncertain as the National Mining Association (NMA) filed a court challenge. The Union is not certain which aspects of the rule NMA is contesting, but it is certain that such legal maneuvers delays the protections Congress mandated only last year.

Congress understood the importance of requiring that mine operators have comprehensive emergency response plans at all their operations. The MINER Act permitted operators a 60 day period to prepare these plans and submit them to the agency for review and approval. However, many of the mine emergency response plans that operators submitted were grossly inadequate, and not worthy of approval. We are now over 6 months beyond the deadline established by Congress. While we commend MSHA for not approving these faulty plans, we do believe it must be more aggressive and apply more pressure on the operators to get these plans completed. Unless MSHA takes decisive action and resolves all the remaining issues, miners will not get the mine emergency response improvements that Congress intended.

Further, the mine emergency response plans are to be reviewed and re-approved by MSHA every 6 months. We are already 6 months beyond the original plan due date. If those first plans are not yet approved and fully implemented, how can we expect MSHA to handle these semi-annual reviews? Perhaps MSHA needs more manpower to handle this task, but whatever the answer, until every operation has an approved plan in place, miners are not getting the protections Congress intended.

Very little has changed in the last year concerning the ability to communicate with and locate trapped miners. While we have learned more about this technology and understand that much is available, very few operators have taken advantage of it. Communication systems and tracking devices are areas that MSHA must pursue more aggressively. Current communication and tracking technology, including one-way text messaging and two-way wireless systems, some of which are available now, must be immediately installed in all mines. Any system that can increase the ability for miners to escape a mine emergency, even if it is limited in scope, must be utilized. The Federal Government, through NIOSH and MSHA, must fund and direct continued studies and research to develop the next generation of tracking and communication devices. As this newer technology becomes available, mine operators must be required to upgrade existing systems at all its operations.

We are also troubled by MSHA's failure to undertake action to facilitate the creation and training of additional mine rescue teams. Congress in the MINER Act clearly outlined its intent regarding the need for additional mine rescue teams. In addition, the language clearly defines how this is to be applied at both large and small mines. While Congress allowed MSHA 18 months in which to prepare, finalize, and give effect to rules that increase and enhance mine rescue team requirements, so far MSHA has not addressed this need. The need is real, and it is immediate. In the not-too-distant future MSHA will need additional funding to certify that mine rescue teams are qualified, as contemplated by the MINER Act.

Over the past 20 years MSHA and some operators have weakened the intent of the current regulations regarding mine rescue protections. The existing mine rescue team structure is spread too thin. It takes a lot of time and much practice for any mine rescue team to function well. The UMWA has training facilities and is willing to provide mine rescue training and first responder training if we receive the necessary funding. Miners cannot afford to wait any longer for the training of new teams to begin.

COLLECTION OF CIVIL PENALTIES

In the MINER Act, Congress charged MSHA with revising and enhancing its penalty structure. MSHA proposed a revised schedule, but it is not yet final, so it is difficult for us to comment about whether it will induce any better compliance by operators.

However, even without a new fine structure, the agency needs to do a better job of tracking and collecting the fines it imposes, and it should escalate the pressure when an operator refuses to pay a final penalty. Last year MSHA blamed computer problems on its inability to track fines. We understand that it still faces some technological challenges. If that is the case, then MSHA needs to fix the problem. When fines go unpaid it not only gives an unfair competitive advantage to the delinquent operator, but that operator's disregard for the mine health and safety laws and regulations imposes excessive risk on its employees.

To the extent that MSHA takes the position that it cannot close an operation for having substantial unpaid fines, we submit that Congress should grant the agency

such authority. MSHA's top personnel claim that if it had that authority the agency would exercise it to close operators who refuse to pay their fines. We would welcome that.

MSHA HOTLINE

The Union has complained for some time that the current hotline system miners use to report hazardous conditions is ineffective. Recently, a member of the UMWA called the 800 number listed on MSHA's website to report a problem at the mine where he worked and was frustrated by problems he encountered. The individual who answered the call, a contract employee, did not have any knowledge of mining, making it extremely difficult for the miner to convey the message. Further, the individual at the call center was not remotely familiar with MSHA's District structure and was therefore uncertain which office should receive the complaint.

The Union has stressed on many occasions that the MSHA hotline should be staffed 24 hours a day, 7 days a week by MSHA personnel with an understanding of the mining industry and the agency. The current practice of contracting this work out to call centers lessens miners' health and safety.

BELT-AIR

In keeping with the mandates of Congress in the 1969 Coal Act, and the 1977 Mine Act, which strictly prohibits the use of belt-air to ventilate working places, the Union has historically been opposed to the use of belt-air to ventilate the working places. The 2006 Alma disaster is a reminder that there is no safe way to ventilate working sections using belt-air. This mine fire was intensified by air from the belt entry, and the contaminated air was dumped onto miners working inby. In addition, conveyor belts used in the mining industry must be made of non-flammable material.

In the MINER Act, Congress directed that there be created a Technical Study Panel to provide independent scientific and engineering review and recommendations with respect to belt air and belt materials; the Study Panel is then to issue a report to the Secretaries of Labor and Health and Human Services, as well as the Senate Committee on Health, Education, Labor, and Pensions, and the House Committee on Education and Labor. While this Technical Study Panel has been constituted and had its first meetings last month, we harbor reservations about its administration. Congress was silent as to its administration, but MSHA staff is providing the support personnel. If its first meetings are any indication, MSHA seems more invested in defending the belt air decisions it has already made, than simply servicing the Study Panel. Congress assigned this Study Panel to offer an "independent" review and recommendations, and we hope it can overcome MSHA's bias in favor of belt air.

FUNDING FOR ADDITIONAL PROGRAMS AND HEALTH AND SAFETY PROTECTIONS

The Union would urge Congress to adequately fund other agencies and programs that advance the Health and Safety of the nation's miners. These include:

—Pittsburgh Research Center
—Lake Lynn Facility
—Appalachian Laboratory for Occupational Health and Safety in Morgantown, WV
—Approval and Certification Center
—Personal Dust Monitors (PDM)
—Colorado School of Mines

CONCLUSION

One year ago many of you were present when I testified before the Senate Committee on Health, Education, Labor and Pensions to discuss and review the performance of MSHA and the overall state of mine health and safety. That testimony followed the first two disasters of 2006 at the Sago and Alma Mines. At that time, I described many of the shortcomings in miners' health and safety.

I am sorry to report that MSHA's efforts over the past year would do little to change matters today if a mine were to experience an explosion like the one at Sago, or a mine fire like the one at Alma; indeed the underground miners would likely fair no better than those who perished over one year ago. Thanks to the MINER Act, I can presume that any incident would be reported within the initial 15 minutes. However, there is no reason to expect that a sufficient number of mine rescue teams would respond quickly. This is because the last year has seen virtually no

progress in either expanding the number or improving the proximity of qualified mine rescue teams.

MSHA still allows mine operators to ventilate working sections with belt-air, and non-flammable belts are still not required. Today there are no requirements that operators provide systems that would enable miners to communicate with the surface or vice versa. There is nothing in place that requires an operator to be able to locate trapped miners, and very few could do so. Safety chambers are not required, nor are safe havens prescribed. Most operators do not have a complete approved emergency response plan as required by the MINER Act. Many miners caught in a disaster would likely have one additional hour of oxygen as opposed to early 2006, but please remember that it took more than 40 hours for the first mine rescue teams to reach the miners at Sago.

We are most appreciative that Congress has worked towards increasing MSHA's budget so more mine inspectors can inspect mines to ensure compliance with the Mine Act. We implore MSHA to demonstrate a similar commitment to enforcing the Mine Act and to improving miners' health and safety so that our industry will never again experience another mine disaster like Sago or Alma. Technology is progressing on a daily basis and the UMWA urges MSHA to require mine operators to employ improvements as they become available.

Senator HARKIN. Thank you very much, Mr. Roberts.

I would turn to Mr. Bruce Watzman, Vice President for Safety, Health and Human Resources for the National Mining Association. Mr. Watzman was appointed recently to the Mine Safety and Health Research Advisory Committee. His undergraduate degree is in economics and psychology, and a post-graduate degree in environmental health management.

Mr. Watzman.

STATEMENT OF BRUCE WATZMAN, VICE PRESIDENT, NATIONAL MINING ASSOCIATION

Mr. WATZMAN. Thank you, Mr. Chairman. We appreciate the opportunity to discuss with you what we've done since the tragic events last year, and since passage of the MINER Act, which NMA supported.

In January 2006, we established the Mine Safety Technology and Training Commission, an independent body to study new technologies, procedures and training techniques that can further enhance safety in the Nation's underground coal mines.

The commission drew upon the knowledge and experience of mine safety and health professionals from academia, government, industry, and the United Mine Workers to develop an active blueprint to advance miner safety. The commission's peer review report was published in December 2006, and delivered to the National Mine Association, and that would ask that it be made a part of the hearing record.

The commission unanimously adopted 75 recommendations that are both near-term, and far-reaching in scope. Many endorse actions by Congress in its passage of the MINER Act. The central theme of the Commission's recommendations is a call for a new paradigm, that focuses on a systematic and comprehensive risk assessment-based approach towards prevention. This will require us to look at mining differently, and to train miners differently. We're currently implementing a number of the commission's near-term recommendations, and developing a blueprint for action on the more far-reaching items.

For example, we're discussing with NIOSH the development of risk-based management tools and templates to assist the industry in its implementation of the central recommendation. Our goal is

to help every company identify and address significant hazards, before they create situations that threaten life or property.

Turning to the MINER Act, which NMA supported—the requirements recognized the need for a forward-looking risk assessment, that good safety practice continually evolve based upon experience and technologic development, and that every underground coal mine presents a unique environment. As the act's legislative history succinctly states, "The goals of optimizing safety and survivability must be unchanging. But, the manner for doing so must be practical and sensible."

This serves as a useful reminder to the industry and regulators, that there is often more than one way to achieve our singular purpose of improved workplace safety. Even before enactment of the MINER Act, we were engaged with NIOSH and MSHA in an emergency communication partnership, to evaluate current practices and technologies, and design performance criteria and protocols for testing. Some of these technologies hold great promise, however, they are some years away from readiness for mine application.

Communications and safety experts agree that underground coal mines present unique challenges to radio and wire signal propagation. Another important challenge we face, is the often-conflicting regulatory requirements imposed by MSHA and State governments. We do not have the luxury of time to develop one system that complies with MSHA requirements, another for one State, and possibly a third or fourth from additional States.

Let me stress this again: Inconsistent Federal and State requirements and conflicting implementation deadlines threaten the progress we are making. It's imperative that we embrace policies that encourage the broadest possible application of technologies across all underground coal regions.

While we grapple with these technologic challenges, we continue to make substantial investments in safety, equipment, and practices to meet the mandates of the MINER Act. We've done a preliminary survey of our members, and it shows that $65 million is being spent to purchase 90,000 additional SCSRs, $19 million in communication and tracking, $15 million for additional measures required under new State requirements, and $60 million for safety equipment, training and manpower beyond the mandates of the act. This is only the beginning.

We've also undertaken several voluntary initiatives. We initiated a review of existing mine rescue procedures that resulted in the development of a generic mine rescue handbook, to help those forming teams, and developing their own protocols. We've distributed this throughout the industry, posted it on our website, and made it available to the public, and I would ask, also, that this be made a part of the record.

[The information follows:]

[CLERK'S NOTE.—This material can be found at http://www.nma.org/pdf/01110507__safety__handbook.pdf]

Mr. WATZMAN. We're also developing a protocol for communications with the media during a mine crisis, which will provide a framework for effective communications in cooperation with MSHA.

Finally, at no time in our recent history has the expertise residing at the mining program in NIOSH been more vital to improved

mine safety. The elimination of the Bureau of Mines in 1995 was a blow to the longstanding and renowned government leadership in this area. The permanent establishment through the MINER Act of the Office of Mine Safety and Health at NIOSH will begin to restore this important government function. However, without adequate resources, this area will suffer, and the MINER Act expectations for acceleration, and the pace of research and progress will be frustrated.

While NIOSH continues to develop and implement important advances in mine safety and health, progress is slowed due to the erosion of funds, and the situation is becoming critical.

PREPARED STATEMENT

We thank the subcommittee and Senator Byrd for the $10 million that was provided in the supplemental last year, but that is just the start. We urge you to, again, strengthen this vital government function, to ensure that there is sufficient funding, and we look forward to working with you to make that reality. Thank you.

[The statement follows:]

PREPARED STATEMENT OF BRUCE WATZMAN

Good afternoon. My name is Bruce Watzman, and I am the vice president of safety, health and human resources for the National Mining Association (NMA).

NMA and its member companies appreciate the opportunity to discuss with the subcommittee what we have done since the tragic events last year in West Virginia and Kentucky and since passage of the Mine Improvement and New Emergency Response (MINER) Act of 2006, which NMA supported.

Last year's events brought all members of the mining community together behind a single purpose—to ensure that every miner returns home safely to their loved ones each and every day. It is this single purpose that has guided the actions of NMA in establishing the Mine Safety Technology and Training Commission, supporting passage of the MINER Act, promoting industry awareness of the law's new requirements, and striving to find and deploy the new technologies which will improve the protection of underground coal miners.

With that common purpose in mind, I will discuss with you today the findings of the Mine Safety Technology and Training Commission, and what the industry is doing to implement its recommendations; steps the industry has taken thus far to meet the expectations of the MINER Act; and our views on enhancing mine safety research capabilities.

MINE SAFETY TECHNOLOGY AND TRAINING COMMISSION

In January 2006, NMA established the Mine Safety Technology and Training Commission, an independent body, to immediately undertake a study of new technologies, procedures and training techniques that can further enhance safety in the nation's underground coal mines. The commission drew upon the knowledge and experience of mine safety and health professionals from academia, government, industry and the United Mine Workers of America to develop a pro-active blueprint for achieving zero fatalities and zero serious injuries in U.S. underground coal mines. The product of the commission's deliberations is a peer-reviewed report released in December 2006. Mr. Chairman I would ask that the commission's complete report be made a part of this hearing record.

The commission unanimously adopted 75 recommendations that are both near-term and far-reaching in scope. Many of the recommendations endorse actions taken by Congress in passing the MINER Act. The commission's recommendations include the areas of communications technology, emergency preparedness, response and rescue procedures, training, and escape and protection strategies. The central theme of the commission's recommendations is a call for a new paradigm for ensuring mine safety—one that focuses on a systematic and comprehensive risk assessment-based approach toward prevention that serves as the foundation from which all safety efforts will flow. This new paradigm will require us to look at mining differently and to train miners differently.

The industry is currently implementing a number of the commission's near-term recommendations and is developing a blueprint for action on the more far-reaching items. For example, we are discussing with NIOSH the development of risk-based management tools and templates to assist the industry in its implementation of the central recommendation of the commission. The use of risk-analysis risk-management, while not a common practice throughout the industry, is familiar to many of the larger companies. Our goal is to create operational tools that will help every company identify and address significant hazards before they create situations that threaten life or property.

We share the commission's view that adoption ". . . of a comprehensive, risk assessment-based approach toward prevention should significantly increase the odds of survival for miners in emergency situations, [and] also provide a guideline for pursuing zero accidents from all sources." We are mindful, however, that this is a significant undertaking. As Professor Jim Joy, Minerals Industry Health and Safety Center, University of Queensland, has noted in describing the Australian mining industry's experience with implementation of a risk-based approach, [It] "is immense and fraught with stumbling blocks." Nonetheless, we are committed to the task.

MINER ACT

NMA worked toward the passage of the MINER Act. We continue to believe that its core requirements are sound. The requirements, as implemented through Emergency Response Plans, recognize the need for a forward-looking risk assessment, that good safety practices continually evolve based upon experience and technological development, and that every underground coal mine presents a unique environment and what may work in one may not be effective or desirable in another. As the Act's legislative history succinctly states:

> The goals of optimizing safety and survivability must be unchanging, but the manner for doing so must be practical and sensible.——S. Rep. No. 109–365 p. 3.

We believe that this passage not only aptly captures the intent of the law, but also serves as a useful reminder to the industry and regulators that there is often more than one way to achieve our singular purpose to improve workplace safety.

In the months following the enactment of the MINER Act, we endeavored to promote industry awareness and understanding of the law's new requirements. Toward that end, NMA, in conjunction with its state association affiliates, and in cooperation with federal and state mine safety agencies, conducted six MINER Act Workshops throughout the country. These workshops were designed to assist the industry in preparing their Emergency Response Plans, obtain information on the latest technological developments for communications and tracking systems, and assess mine rescue protocols.

Even before the enactment of the MINER Act, NMA and its members engaged NIOSH and MSHA in a mine emergency communications partnership. The purpose of the partnership is to evaluate current practices and technologies, design performance criteria and protocols for testing, and identify mines where the technologies can be tested. Our members have volunteered their mines for testing tracking and communications systems. Some of these technologies hold great promise; however, they are, in our estimation, some years away from readiness for mine application. Communications and safety experts agree that underground coal mines present unique challenges to radio and wire signal propagation. What works in one mine may not perform in another. As we seek to find and deploy the best systems, we will continue in the meantime to improve conventional systems to provide more reliable means for tracking and communicating with miners underground.

Another challenge we face is the often conflicting regulatory requirements imposed by MSHA and state governments. We do not have the luxury of time to develop one system that complies with MSHA requirements, another for one state and possibly a third or fourth for additional states. Unfortunately, the underground mining marketplace is not attractive to many technology providers. In the interest of miner safety it is imperative that we embrace policies that encourage the broadest possible application of technology across all underground coal regions.

While we grapple with the technological challenges in these areas, the industry continues to move forward in making substantial investments in safety equipment and practices to meet the expectations of the MINER Act. The preliminary data from a survey of NMA members (to date the survey responses represent about 65 percent of all underground coal production) indicates actual and planned investments in the following areas for 2006–2007:

—$65 million to purchase 90,000 additional self-contained self-rescuers (SCSRs).
—$19 million in communication and tracking systems.

—$15 million for additional measures required under new state requirements.

—$60 million for safety equipment, training, and manpower beyond the mandates of the MINER Act.

These numbers simply reflect one quantifiable measurement of the industry's commitment to the MINER Act. And it is only the beginning, just as the MINER Act itself is not the end, but rather one means for reaching our desired goal to protect our nation's miners.

Beyond the actions taken by the industry to comply with federal and state rules we have undertaken several voluntary initiatives that we would like to bring to your attention.

NMA, with the Mine Safety and Health Administration (MSHA) and the National Institute of Occupational Safety and Health (NIOSH), initiated a review of existing mine rescue procedures to determine if existing practices and protocols remain operative given the structural changes that have occurred across the industry. This effort resulted in the development of a generic mine rescue handbook that can serve as a guide for those forming mine rescue teams and developing mine rescue protocols, as well as a review tool for those with established procedures in place. This document has been distributed throughout the mining industry to be used as a pre-event planning template that will expedite the delivery of mine rescue services in an efficient manner, should they be required. It is also readily available to the industry and public on NMA's website at www.nma.org. With the chairman's permission, I would ask that a copy of the handbook be included in the record.

Working with the industry's communication specialists, NMA is developing a protocol for communications with the media during a mining crisis. The protocol recognizes the important role of the media in keeping communities informed about the facts surrounding a mining accident or fatality and the obligation of mine operators to contribute to that understanding. The protocol will provide a framework for effective communications and cooperation with MSHA, as envisioned by the MINER Act.

MINE SAFETY RESEARCH

At no time in our recent history has the expertise residing at the mining program in NIOSH been more vital to improving mine safety. The elimination of the Bureau of Mines in 1995 was a blow to the longstanding and renowned government leadership in mine safety and health research. The permanent establishment through the MINER Act of the Office of Mine Safety and Health in NIOSH will begin to restore this important function to its former prominence. However, without adequate resources, the Office of Mine Safety and Health's leadership in this area will suffer and the MINER Act's expectation for the acceleration in the pace of research and progress will be frustrated.

While NIOSH continues to develop and implement important advancements in mine safety and health, progress has slowed due to the erosion of research funds, and the situation is becoming critical. Because NIOSH's budget for mine safety and health has remained relatively flat in recent years, its purchasing power continues to decline with the increasing cost of labor, materials and other research costs.

This subcommittee's efforts and Senator Byrd's leadership last year provided NIOSH with $10 million through the Emergency Supplemental Appropriation of 2006 to facilitate the development of technologies for rapid introduction into underground coal mines. The decisions on which technologies should be supported with that funding were made in collaboration with labor and industry under the auspices of the many NIOSH partnerships that have been formed.

We urge you to again strengthen this vital government function and ensure funding for NIOSH is commensurate with the role Congress intended under the MINER Act to, "enhance the development of new miner safety technology and technological applications and to expedite the commercial availability and implementation of such technology in mining environments."

Today's mine safety and health professionals face important challenges. More complicated geological conditions, advancements in technology and a new generation of miners require the introduction of new and innovative techniques. Our ability to further advance coal mine safety will require that government and industry continue to harness their collective resources to identify new technologies and practices that eliminate accidents, illnesses and injuries in the workplace. We look forward to working with you to ensure that the resources required to achieve this goal are available so that every miner can return home safely each and every day.

Thank you, and I would be happy to answer any questions.

Senator HARKIN. Thank you, Mr. Watzman.

Now, we'll turn to Mr. Davitt McAteer, vice president of sponsored programs at Wheeling Jesuit University. He is a former Assistant Secretary of Labor of Mine Safety and Health, worked as a consultant on Mine Safety and Health to former West Virginia Governor Wise.

Mr. McAteer received his B.A. from Wheeling Jesuit University, and his J.D. from West Virginia University. Mr. McAteer.

STATEMENT OF J. DAVITT McATEER, ESQUIRE, VICE PRESIDENT OF SPONSORED PROGRAMS, WHEELING JESUIT UNIVERSITY, SHEPHARDSTOWN, WEST VIRGINIA

Mr. MCATEER. Senator Harkin, Senator Byrd, Senator Specter, and Senator Shelby, and members of the committee, good afternoon. Thank you for the invitation to come here today to speak before you.

At the request of Governor Manchin, in 2006, we published two reports on the two disasters which occurred during that year, in West Virginia. Those reports, the Sago report, and the Aracoma/Alma report—which I asked to be made part of the record—identified two problems in mine safety, as relate to those disasters.

[The information follows:]

[CLERK'S NOTE.—This report, as well as additional related information, is available at: www.wvgov.org and www.wju.edu]

Mr. MCATEER. First was the impact that lightening had—the probable impact that lightning had at the Sago Mine, and the second was the failure of the seals to hold, and for the failure of the seals to protect the miners.

In the second case, the Aracoma/Alma case—that was an operator's disregard for the safety of the miners, and the failure of MSHA and the State agency to properly enforce the law.

In April last year, we also hosted an International Symposium on Mine Safety and Health at Wheeling Jesuit University, where some 400 attendees addressed the question of, how might we improve safety and health technology, to better protect the miner? The second such symposium is scheduled for this year, in April.

Further, we held a public hearing for the Sago families, in May 2006, at West Virginia Wesleyan College in West Buckhannon, West Virginia. For the first time in our history, families were provided an opportunity to ask questions and to give testimony, and to try to reach results as, to find out the results and to find out what caused the accidents.

But, what I would like to address today are six critical factors that we identified in both of these studies, and that have been the subject of your conversation here today. My associate, Paul Miles, will be here with the charts on the right, and we've tried to identify those subjects, and say exactly where are they—where are we with regard to any, or each, of these items.

With regard to communications, there has been improvement, there has been some steps in the positive and right direction. Unfortunately, that improvement has not achieved the goal that we want to see happen. There is technology out there—the Harden leaky feeder system that was mentioned earlier today, is a technology that exists, and can be put in the mines. That technology is being identified by operators, and some operators are taking steps to put it in. Sadly, that's not the case for all operators.

Second, with regard to the most promising of the communications systems, is the medium-frequency radio. That communications system is on the horizon, and that offers the most promise of any of the communications that we've seen today.

Sadly, and unfortunately, most miners are still using the old system, the phone system, the pager/phone system, and the trolley system to provide communications outside the mine. As Mr. Roberts points out, as President Roberts points out, if we had an accident tomorrow, we would still be stuck in the same situation we were in before.

Now, let me look at the question of seals. What we need to do in the area of seals is we, we have not—NIOSH has put out a recommendation, and MSHA has suggested in its study, that recommendation. But, at the present time, we have 14,000 seals that are still in place in the mines of this country, that have not been improved, we have not taken the steps necessary to take that process.

There has been a moratorium put on seals, using alternative blocks, in the State of West Virginia, and a moratorium on the Federal level, but the Federal level has been allowed to go forward, if the seal meets a 50 psi standard. Our suggestion is that, we need to give industry guidance on how to increase their seal protection today, and we need to address the prohibit—prohibit the use of pressure piling mining techniques, as was the case in Sago, and at the Darby disaster, where the mining was done in the bottom, allowing pressure piling to occur when the explosion occurs, in getting more psi to come back through the mine.

With regard to SCSRs—the difficulty has been pointed out here by President Roberts, and by other speakers, is that we don't have additional SCSRs in the mines that we need them. It is our recommendation that a committee immediately convene a rapid, strategic task force, consisting of government, labor, manufacturing, and industry to chart out that strategic implementation plan to protect the most miners, in the shortest period of time.

Mr. Stickler recommended, suggested that he'd sent out a letter of guidance to that effect, but I believe that it's necessary for us to form a task force to involve all of the parties so that we know where it is that we need to put these, those devices currently.

So as one—as was also indicated, one manufacturer has 7,000 devices sitting on their shelves, but they're not the device of choice, two manufacturers have backlogs of 7 to 10 months. Our suggestion is that we look at what's available, and to see what steps can be taken currently.

With regard to chambers—while the MINER Act does not directly require chambers, chambers are available. There are, in this country, 50 chambers in mines—mainly hard rock mines, but three chambers in coal mines. There is nothing to prevent the use of chambers in this mine, and in the coal mines in this country today, they are permitted in the 1969 Act, and those chambers ought to be adopted where they are commercially available, ought to be allowed—put in the mines, and there's not a necessity that the mine operators reach, wait for the regulation to come through.

With regard to lightening—we believe lightening is a real problem. We've identified a number of accidents, in this country and

abroad, and we suggest that a National Academy of Science panel be initiated, and that we look at the question of, how do we prevent from—in the most likely cases, and the most difficult cases—how do we provide protection?

PREPARED STATEMENT

Last, with regard to belt air, we believe that we should revert to the period prior to 2000, only allow belt air after special consideration be given by the mine operator to come up with a plan that provides as safe as a rule prohibiting belt air, and it's only in those circumstances where the miners, their safety is improved by the use of belt air.

Thank you very much.

[The statement follows:]

PREPARED STATEMENT OF J. DAVITT MCATEER

Good Afternoon Mr. Chairman, Senator Robert C. Byrd, Chairman Senator Tom Harkin, Senator Arlen Specter and members of the subcommittee, ladies and gentlemen. My name is Davitt McAteer. I am Vice President of Sponsored Programs at Wheeling Jesuit University and special advisor to West Virginia Governor Joe Manchin, III on mine safety matters. Thank you for this opportunity to appear today.

In the past 14 months, three tragedies, Sago, Aracoma/Alma, and Kentucky Darby stunned the nation and brought the issue of miner's safety and health to millions on the front pages of the nation's newspapers and on the nightly news cast. In quick succession, first two then a third accident occurred, resulting in multiple deaths. The public was shocked that in the 21st Century, in the United States of America, we were seeing miners killed with such frequency. Especially after years of progress in reducing the numbers of men and women killed or injured in the mines.

Sadly, but less noticed, deaths continued throughout the year, one and two at a time, miners throughout the Nation have fallen not in new or novel ways, but in old carbon copy-type accidents, in circumstances that have been seen hundreds, if not thousands, of times over the past one hundred plus years. In 2006, the number of fatalities in the United States mines amounted to 72, the highest number since 2001.

Thus far in 2007, six miners have died working to bring coal and minerals out of the ground, this despite the fact that the Senate, along with the House of Representatives acted last year with commitment and dispatch to pass the Mine Improvement and New Emergency Response Act of 2006 (The MINER Act).

The MINER Act, with the support of many of you, notably Senator Byrd, was an effort to address some of the most egregious short comings in the protection of miner's safety and health.

The question that is presented to us today is—Are the Nation's miners safer today than they were on January 1, 2006? In the months since the Sago disaster, much has changed and much more is in progress; but unfortunately for the average miner underground today, not much has improved from the day-to-day safety and health standpoint. For some, there has been a heightened awareness of the risks as many companies have improved the frequency and quality of training on SCSRs, but there are still not enough SCSRs underground to effectively protect the miners or meet the requirements of the MINER Act.

In the area of communications, there has not been a transformation away from the antiquated, decades old, hard line phone technology. Although, there is movement toward the development of both wireless and improved wired and wireless systems, miners still rely upon the phones which were in place before January 2, 2006. While numerous systems have been tested by MSHA and NIOSH underground, and MSHA currently has pending twenty-one applications of communication and tracking equipment, progress toward implementing new systems is moving at a slow pace. Although one encouraging fact is that two companies have recently filed for approval of systems with the state of West Virginia in anticipation of the July 31st deadline.

In the matter of rescue chambers, few if any chambers have been installed following Sago, although I am aware of the efforts of MSHA, NIOSH and WVOMHS&T to identify and evaluate rescue chambers to comply with the upcom-

ing West Virginia state requirements. In a recent report to NIOSH, more than fifty mines, including three coal mines were identified as having chambers installed and fifteen companies were identified as marketing chambers and related equipment.

There are, in fact, a number of deadlines that are approaching, which will require compliance on a federal and state level. A report by the Wheeling Jesuit University's Mining and Industry Safety Technology and Training Innovation Center ("MISTTIC") sets out the compliance dates for various requirements.

Recently, on February 19, 2007, West Virginia Governor Joe Manchin III and I visited Consolidation Coal Company's McElroy mine with the UMWA safety director and were briefed by MSHA, NIOSH and the WVOMHS&T officials on the status of the communication technologies. As Governor Manchin stated afterwards, we are seeing some progress, but are not yet where we want and need to be.

Progress toward improved communication systems has been aided by some companies who have actively engaged in research and have invested time and effort in testing new equipment. Sadly, others have not taken up the challenge and have indeed been suggesting that change is neither necessary nor timely.

It is appropriate to commend the National Mining Association's Mine Safety Technology and Training Commission for their report published in December, 2006 which addressed the question of how the United States mining industry could improve mine safety, technology and training and establish the United States as the global leader. The panel, headed by Dr. R. Larry Grayson did an admirable job of setting out the need for change and developing a roadmap which would address the challenges in the area of safety and health equipment.

The Commission concluded that immediately, mines should use hardened pager phones or leaky feeder systems, as an interim measure, to provide emergency communication after accidents.

Further, they urged the implementation of hybrid communication systems that combine wireless communications devices and existing metallic infrastructure or leaky feeder backbone coupled with pipes, haulage track or wire lifelines. As the report stated, these systems are now available and would be a vast improvement over the current system.

Further, the report urged MSHA and NIOSH to enhance their efforts to encourage the development of wireless communications in underground mines, including efforts to assist in developing commercial alternative communications and tracking systems.

Since I appeared before this Committee last January 23, 2006, following the Sago and Aracoma Alma mine accidents much as transpired. In April, 2006, Wheeling Jesuit University hosted the first International Mining Health and Safety Symposium in Wheeling, West Virginia, sponsored by Senator Byrd, MSHA, NIOSH, the United Mine Workers of America, Wheeling Jesuit University and the Wheeling Convention and Visitors Bureau, and Wheeling Chamber of Commerce. This meeting brought together representatives from industry and labor, technology developers, legislators, and members of academia to focus on the future of the health and safety in the coal mining industry. The symposium also attracted a large number of mining experts from all over the world. Panels addressed questions of how to bring about improvements in mine safety and rescue, underground communications, and breathing devices. With 400 United States and international attendees, as well as 6,000 webcast viewers, the symposium offered an extraordinary opportunity to share information and focus on new technologies that exist in the United States and abroad.

On April 26–27 of this year, Wheeling Jesuit will again host this event. Our focus will include a review of the progress made over the last year in such critical areas as underground mine communications, breathing devices, mine seals, mine refuge chambers and rescue worker training.

Then on May 2, 2006, we convened a Public Hearing on the Sago Mine Disaster and included, as part of the hearing, panelists representatives of the twelve victims' families and the West Virginia Legislative Committees. For three days, witnesses from the Mine Safety & Health Administration, the West Virginia Office of Miners' Health Safety and Training, the International Coal Group and victim family members testified as to the cause and reasons for the disaster. The hearing was held at West Virginia Wesleyan College in Buckhannon, West Virginia. This was the first post-disaster hearing to involve the families in the process.

On July 19, 2006, with the assistance of a remarkable staff, we issued the Sago Report and, on November 10, 2006, we issued the Aracoma Alma Report.[1]

[1] The Sago Mine Disaster Report and Aracoma/Alma #1 Mine Report can be found at:

Continued

Those reports chronicle two separate and distinct problems in the mining industry in the United States. First, at Sago we found that the probable cause of the disaster was lightning. We also found that there were nine other instances of lightning or suspected lightning ignitions in other mines in the country over the past 13 years. One of our conclusions was that the mining community must deal with this issue; unfortunately, that has not come to pass.In the Aracoma Alma No. 1 Mine Fire Report, we concluded that the mine was being operated with a disregard for the safety of the miners. But equally troubling, we concluded that the MSHA inspectors and West Virginia inspectors utterly failed to detect this disregard for safety and failed to detect multiple violations of the law by Massey officials and personnel. The entire federal and state safety system completely collapsed and two men died.

I have included for your review the Executive Summaries and Recommendations we made in both the Sago and Aracoma Alma Reports.

Next, I would like to draw your attention to the five charts which we have prepared in an effort to describe the current status of each of the six critical areas:

Seals, SCSRs, Rescue Chambers, Communications, Belt Air and Lightning. These charts set out the issues we are still facing in each area and make recommendations on what should be done.

Both Senator Byrd and Senator Harkin have called for innovative approaches to make the breakthroughs which we need to protect our nations miners. This will take different forms with each of the problems areas, Rescue Chambers, Communications, SCSRs, Lightning, Seals and Belt Air.

But, what we must be driven by is the need to act. We would all be filled with remorse if today an explosion again trapped miners and we had not put in place currently available equipment to communicate with them or to enhance their chances of rescue.

We would also be derelict if we did not pursue and force new technology in areas such as wireless communications, in Seals and in Chambers. It is not a matter of deciding between existing technology currently available or waiting for improved technology which may become available at some point in the future. We must do both. We must immediately adopt technology improvements which exist today and develop new technology which can result in greatly enhanced protection. We must adopt such a two-pronged approach doing everything we can with what is available and forcing the technology to reach the next level—anything less would be irresponsible.

Historically, the development of safety and health equipment has lagged behind production equipment innovations. In fact, the development, manufacture and introduction of safety equipment into the workplace has been separate from the development and implementation of production equipment, resulting in a two-track system.

One result of this bifurcated system is that there is no continued renewal demand for improved health and safety equipment as there is with production equipment. Innovations in production speed, coal recovery or reduced expenses will drive the market for new production equipment. Machines which produce coal cheaper and faster will sell and replace slower less efficient machines. Health and safety equipment has no such economic motivation and, therefore, tends to remain stagnant, i.e., SCSRs are virtually the same models that were introduced in the 1980s and mine phones have remained largely unchanged in the last three decades.

One solution to this problem might be to incorporate safety and health requirements into production equipment specifications, which might serve as a way to renew the safety technology and cause innovation and advances in safety and health equipment.

For example, SCSRs could be installed or built into equipment, including long walls and continuous mining machines, while phone lines could be built into the electrical cables which provide power for the long walls and continuous miners, shuttle cars, etc. Rarely are these cables out of commission and never for extended periods of time because they are critical in the production cycle. And when new production equipment is purchased, new safety features would be already incorporated. The introduction of seat belts and air bags for passenger cars could serve as a model for introducing safety and health equipment into the production equipment manufacturing cycle.

Until such time as we incorporate safety and health equipment into the production process, it will remain the step-child, lagging behind and only added to the mining cycle.

---

http://www.wju.edu/sago/SagoMineDisasterReport__July2006.pdf
http://www.wju.edu/aracoma/AracomaAlmaMineReport__November2006.pdf
http://www.wvgov.org/SagoMineDisasterJuly2006FINAL.pdf
http://www.wvgov.org/McAteerAlma1106.pdf

The men and women who mine our Nation's energy and minerals deserve much more. During this first decade of the 21st Century we have the opportunity to change the mining business both in this country and abroad. We must not miss this opportunity. Those who have died in the mines, and their families, deserve no less.

I would be glad to attempt to answer any questions and to provide any additional information that may be helpful to you, thank you.

Senator HARKIN. Thank you very much, Mr. McAteer, that was a very lucid presentation.

Now, Mr. Chris Hamilton, senior vice president of the West Virginia Coal Association, an organization he's been affiliated with for over 20 years. Mr. Hamilton has Mine Forman Certifications from West Virginia and Ohio, and received his undergraduate and graduate degrees from West Virginia University.

Mr. Hamilton.

STATEMENT OF CHRIS R. HAMILTON, SENIOR VICE PRESIDENT, WEST VIRGINIA COAL ASSOCIATION, CHARLESTON, WEST VIRGINIA

Mr. HAMILTON. Thank you, Mr. Chairman. Good afternoon, members of the committee, Senator Byrd.

If I may, just momentarily, echo the sentiments expressed by my friend Cecil Roberts—we appreciate all you do for our great State of West Virginia, for the coal industry, we appreciate your leadership, your longstanding public service, and most importantly, we appreciate your friendship.

Senator Specter, Senator Shelby—thank you very much for the opportunity to participate in today's proceeding, and for your ongoing attention to the important topic of coal mine safety.

I'm pleased to appear before you today to report on the progress we have made in my home State of West Virginia over the past 12 months, and to comment on the important work that remains. Initially, allow me to offer a couple of observations which serve to form the basis from which my testimony was constructed.

First, as we've reported previously, West Virginia recorded the safest mining year in history during calendar year 2005, which literally ended just hours before the tragic Sago accident. The overall performance of this industry, our State's industry, which was brought into question as a result of several tragic accidents last year, was the culmination of many years whereby mine safety performance experienced gradual, but continual, improvement. Technological advancements in mine extractive techniques, combined with an extraordinarily skilled and experienced workforce were primarily responsible for this achievement.

In fact, it was said at one of our many forums on mine safety held throughout this past year, that the industry was a victim of its own success, and consequently, became somewhat complacent, and as such, did not devote an equal amount of attention—particularly in the technology area—to post-accident side of safety. This has now changed, which we will examine momentarily.

Second, the Sago and Alma accidents will continue to serve as a reminder that our path forward and quest to become the safest mining industry in the world should never cease. I am pleased to report today that much work has been completed, and the basis for additional safeguards and worker protections is well developed.

Third, as we progress throughout calendar year 2006 looking for ways to improve mine health and safety, and to prevent

recurrences of the accidents which claimed human life, we witnessed an unprecedented level of cooperation from all involved parties and stakeholders from around the industry.

Coal management workers, legislators, government leaders, academicians, researchers came together, and exhibited a tremendous desire to develop workable solutions to these complex and technical issues, and to achieve our shared goal of improving coal mine safety, so that every miner returns home safely, every day, to his family and to his home.

These collective efforts culminated in two significant reforms of our State and Federal mine safety acts last year, we feel it's important to note that this same level of cooperation among the various stakeholders is continuing today as additional improvements are sought.

Last, we pledged our support last year to work with you, with State and Federal governments to improve mine safety. Over the course of the past 12 months, the industry has kept that commitment, has dedicated endless resources, countless man hours to the many processes and forms underway designed to improve coal mine safety.

We have opened up our mining operations, we've assisted the technical and research communities in the design, installation, and testing of mine communications and tracking systems, and other mine safety technologies.

We reaffirm our pledge and commitment today, as we move to implement measures enacted last year, and to strive to develop a greater level of prevention, and improve mine safety. During this same hearing, held on January 23 last year, I mentioned that the State of West Virginia was on the verge of enacting landmark legislation to address many of the safety concerns identified last year in our accident investigations.

S. 247 established requirements for the following safety program components, immediate accident notification systems, wireless communications systems, additional self-contained breathing apparatuses, mine emergency plans, individual tracking devices, lifelines, miner training, miner re-training programs.

S. 247 paved the way for the Federal MINER Act, which contained many of the same provisions. On the administrative front, certain seal material has been banned from use in State mines, several administrative rules have been promulgated to implement the provisions of S. 247. The West Virginia Coal Mine Safety Task Force and the West Virginia Board of Coal Mine Health and Safety have been engaged to review the entire gamut of mine emergency operations post-accident procedures.

Most of the requirements set forth on the State level, through S. 247, are currently being implemented consistent with State compliance schedules. Mine emergency shelters, or plans for such shelters, are due this April, plans for emergency communications are due in July.

Greater numbers of SCSRs have been deployed over the past year, and provisions for increased breathable air units are in place. Moreover, every mine in our State has redesigned their mine rescue, and general mine preparedness plans, all miners have been

trained and retrained in mine emergency simulations and procedures, and in the use of SCSRs.

The State and industry's attention is now turned toward accident prevention, and the need to ensure that the tragic accidents experienced last year do not occur in the future. Toward that end, the West Virginia Office of Miner's Health Safety and Training, the West Virginia Board of Coal Mine Health and Safety, continue their joint review of the root causes of Sago, protections against lightening events and overall integrity of sealed areas, and underground mines are a prime focus.

PREPARED STATEMENT

Mr. Chairman, that concludes my prepared text, and I'd be glad to respond to any questions you may have. Thank you.

[The statement follows:]

PREPARED STATEMENT OF CHRIS R. HAMILTON

Mr. Chairman, members of the committee: Thank you for the invitation to address this committee and for placing this important topic "Coal Mine Health & Safety" on your agenda for review and discussion.

INTRODUCTION

My role and contribution to today's hearing will be defined by the following four key points: First, to express our heartfelt prayers for the families who suffered great personal loss at the Sago Mine. Our prayers continue for Randall McCloy's full recovery and for his wife and family. We now extend those prayers and our State's unique circle of support to the families of Don Bragg and Ellery Hatfield of the Aracoma Mine tragedy. The deceased miners will forever be with us as we implement the necessary steps to improve coal mine safety and prevent recurrences. We also thank the mine rescue team members, the State, Federal, and company officials who directed and guided their heroic and brave efforts at Sago, and whose performance in those dark and anxious hours will be analyzed for years to come. It is our hope that their performance will be constructively reviewed with an eye towards improving future rescue efforts; third, we are here as one of the Nation's largest trade associations to offer our pledge to work with you in whatever capacity you deem appropriate in the discharge of your important work and to direct our Association's collective attention towards the identification and implementation of appropriate remedial measures; and fourth, and subordinate to the preceding points, is the perceived need to preserve the integrity and future of the coal industry—to implement the necessary changes from the lessons learned from the horrific accident that brings us here today and to elevate the understanding and appreciation of our industry which means so much to West Virginia and to our Nation!

My personal background: I have nearly 35 years of experience in the coal mining industry beginning in 1971 during the immediate implementation of the 1969 Federal Mine Health and Safety Act and over thirty years of experience in mine health and safety.

I worked as an underground miner and for underground and surface mining companies. I have also worked for the Federal and State mine safety agencies as a mine safety professional and safety instructor—certified to train and certify miners in all aspects of mining and mine safety including mine emergency preparedness and mine rescue operations.

As Training Director for the West Virginia Department of Mines (for then Governor Jay Rockefeller), I was responsible for approving mine training facilities, mine training plans and individual mine training instructors.

I possess underground Mine Foreman—Fire Boss certifications from WV and the State of Ohio where I worked for several years in the industry. I received my undergraduate and graduate degree from West Virginia University and have also completed many college level courses in mine safety, mining technology and mine industrial engineering.

I presently serve under gubernatorial appointment on the West Virginia Coal Mine Health and Safety Board; the West Virginia Mine Safety and Technical Review Committee; The West Virginia Board of Miner Training Education & Certification; and, the West Virginia Diesel Equipment Commission.

During my tenure on as a mine safety official, I have been involved in the review/investigation of serious mining accidents and practically every single mining death in West Virginia for the past twenty-five years.

As a member of the West Virginia Board of Coal Mine Health & Safety (the only independent entity in West Virginia with a statutory charge to investigate and respond to mine accidents), I will be part of the State's investigation and regulatory response to the Sago and Aracoma accidents!

West Virginia's coal industry is comprised of approximately 40,000 individuals who work directly in, or around a coal mining facility and without exception, miners, managers, engineers and support staff along with our entire State have been deeply saddened by the "Sago and Aracoma tragedies" and will continue to mourn for years to follow.

Our hearts and prayers are with the families and loved ones of the miners who perished in the Sago incident and we continue to pray for Randall McCloy's full recovery. We now extend those prayers and our State's unique circle of support to the families of Don Bragg and Ellery Hatfield of the Aracoma mine tragedy. I would observe that next to the immediate families of the deceased miners, nobody is saddened more than mine management officials over this tremendous loss. West Virginians share a special bond with their families, church and communities.

They have an unparalleled inner strength and inner faith and no where is that bond more prominent than in the coal industry.

For the record, The West Virginia Coal Association wholeheartedly embraces Governor Manchin's sentiments "that no miner should ever be fatally injured in a West Virginia coal mine". We also fully support the Governor's commitment to operate the safest mines in the world! We will commit the necessary resources over the months to come and will do everything humanly possible to achieve that shared goal!

First and foremost, that is our commitment which we believe is realistic and achievable!

We also maintain that the primary responsibility for achieving that goal rests firmly with those who own, operate and manage coal mining operations. A responsibility we not only acknowledge but aim to fulfill!

These tragic events have caught the eye of practically all of America in the past three weeks and the media has presented an accurate portrayal of the courage and overall character of the men and woman who have selected mining as a profession. They have a passion for their work and they do it with great pride and an exceptional level of professionalism!

Unfortunately, the events of January 2nd and those of last week have not accurately portrayed how technologically advanced mining has become and all of the progress and safety achievement that's been made over the past several decades. But one mining death is one too many and despite all the progress recorded in recent years, we now realize that much work remains! Particular focus is required in the post accident phase so that the effect of an accident can be minimized or mitigated!

By its very nature, mining is unique (unlike any other business or industry) in that it is dependent on natural conditions and geology. Through their skills, training and hard work, miners attempt to control and manage the challenges of their environment—and they are good at it! It requires a supreme vigilance every minute of every shift.

Undoubtedly coal mining is a dangerous occupation with unique hazards inherent to the workplace but I would maintain that mining is much safer today than what was realistically believed possible a few short years ago.

New mining technologies such as longwall mining systems, remote-controlled equipment design and mine wide atmospheric monitoring systems combined with the extraordinary skill & experience level of today's workforce has led to safer conditions and fewer accidents.

As a relevant part of my testimony and record today, I incorporate a copy of the most recent "Directory of Mines" which is published annually by the West Virginia Office of Miners' Health, Safety & Training. It contains useful statistical information and charts the mine safety performance of the industry over the years.

The "Directory" reflects a dramatic reduction in mining related deaths since passage of the 1969 Mine Safety Act when 162 fatal accidents were recorded to 3 for all of 2005. It also depicts a significant reduction in mine accidents and lost time injuries over this same period.

The State's annual report also reveals that the State of West Virginia has one of the more comprehensive mine safety programs found anywhere in the country with a full complement of mine safety inspectors, safety officials and an extremely aggressive legislative and regulatory program.

It is also noteworthy to point out that no provision exists under Federal law for States to acquire "primacy" over the administration of mine safety laws. Consequently, all West Virginia mines are examined by State and Federal inspectors throughout each and every quarter.

The significance of the industry and the important role coal plays in our everyday lives, which ranges from our basic quality of life to national defense and national security and should also serve as a tribute to the men and families of Sago!

Over the past several weeks we have heard local, regional, national, and international media sources all ask a similar question: Why do we continue to mine coal?

Coal, and in particular, West Virginia coal, is crucial to our advanced society and extraordinarily quality of life. Coal continues to account for over fifty percent of the America's electricity. In West Virginia that figure is closer to 99 percent.

Over the past several decades our State's coal industry has a remarkably record of safety achievement, reclamation accomplishments and environmental stewardship. We are coordinating proposed mine sites with local and State planning agencies to ensure meaningful and more productive development occurs.

West Virginia is a shining example of where you can have a robust coal industry along with a thriving tourism industry—you can truly have both and I submit to you that nobody is doing it better!

Today's industry represents a technologically advanced enterprise with a highly skilled and efficient workforce and has established a healthy presence in an international marketplace.

West Virginia produces approximately 160 millions tons of coal annually. Of that total, over 105 million tons or 65 percent percent comes from underground mines and approximately 55 million tons of coal is produced from surface mines.

West Virginia continues to lead the Nation in underground coal production and is second only to the State of Wyoming in overall coal production. West Virginia is the world's leader in Longwall mining and is the leading coal export State.

All told, West Virginia coal is shipped to 23 foreign countries and accounts for approximately one half of the United States total export product leaving domestic boundaries contributing immensely to the United States balance of trade.

We also have more processing plants than any other State, more transportation outlets and one of the more elaborate transportation systems and infrastructures you find anywhere in the world. It is comprised of rails, trucks and barges and we have the best quality and variety of coals found anywhere in the world.

Due to its clean and high quality, West Virginia coal is shipped throughout the eastern half of the United States to 33 States to generate electricity for industrial and household energy and for coking and steel production. West Virginia has the highest quality of coal found anywhere in the world and we have plenty of it (Reports of our diminishing reserve base has been wrongly placed)! We have over 52 billion tons of demonstrated mineable reserves or 350 years of production remaining at today's production levels.

The coal industry remains vitally important to our State and its economy. Together, with the States electric power industry, it accounts for nearly 60 percent of the total State business tax collections. These tax dollars translate directly into important education, government and community services and provide a reliable revenue stream for many other county, local, and municipal programs.

No other State business or industry affects so many people in so many different ways! It's overall impact is staggering in terms of employment, wages, taxes and overall economic activity.

The State's industry is postured with an abundance of opportunity as the worlds thirst for low-cost, reliable energy grows on an incremental basis of nearly 2 percent annually. Thus, coal generally and West Virginia's coal particularly will continue to be a major player in the world wide energy mix on a going forward basis.

A strong energy market and high demand has created an uplifting and positive energy around the State that most of us in the business have not witnessed since the 70s—And with that optimism comes the realization that we can do so much more if we are able to capitalize on todays opportunities. West Virginia Coal will be relied upon more than ever for industrial and household energy; domestic energy independence; national strategic defense; homeland security, and today's ever popular "coal-to-liquids" and "coal conversion technologies".

And lastly, just as all miners and mine managers have come together to grieve over the tragic events of the last 3 weeks, they all need to be part of the solution so we may effectively prevent a similar event in the future. They all have unique experiences and qualifications to contribute!

Today, more than ever before miners, mine managers, engineers, research institutions and government officials need to become engaged to develop safer mining

plans, better designed equipment and more effective ways to control our environment. Matters of safety, security and stability are shared responsibilities.

And as the industry prepares to retrain its existing workforce along with the next generation of skilled miners, the "Sago" miners will be forever remembered and serve as a daily reminder of the supreme vigilance required in the workplace!

Our membership has an abundance of safety, technical and operational expertise which has been called upon to respond to the challenges before us. We hereby extend those resources for your use and dedicate the same towards making the West Virginia Coal industry the safest in the world!

I'll close by reciting the inscription on the "The West Virginia Coal Miner" statue located on the grounds of our State capital which captures the essence and summarizes best the importance of the coal miner and coal mining to West Virginia and to the Nation . . .

"In honor and in recognition of the men and woman who have devoted a career, some a lifetime, towards providing the State, Nation and world with low-cost, reliable household and industrial energy . . . Let it be said that 'Coal' is the fuel that helped build the greatest country on earth, has protected and preserved our freedom and has enhanced our quality of life. God bless the West Virginia Coal Miner"

Thank You.

Senator HARKIN. Thank you very much, Mr. Hamilton, and thank the entire panel.

I will now turn for the first round of questions, to Senator Byrd.

Senator BYRD. Thank you. Thank you, Mr. Chairman.

The Sago and Alma tragedies highlighted the weaknesses in mine emergency preparedness. What can be done to further protect miners against roof falls and lightening, and other longstanding and recurring threats to miner safety?

Mr. ROBERTS. Is that for anyone.

Senator BYRD. We'll start with you.

Mr. ROBERTS. Yes, sir.

Senator BYRD. Yes, sir.

Mr. ROBERTS. Thank you, Senator.

One of the things I don't believe has been properly dwelled upon here today—for lack of a better way of saying it—the MINER Act recognized the need for mine rescue teams, that we had a terrible lack of trained people who could go into a mine on a very rapid notice, and hopefully rescue miners who might be trapped. The MINER Act calls for a period of time for MSHA to deal with that problem. I can say to this committee today, that we're in real trouble with respect to that. We see no progress for developing additional mine rescue teams, we are concerned that if we do not deal with this situation very soon, we will have the same type problems that we had at Sago, and I remind the committee, 5 hours before the mine rescue teams, the first one arrived at Sago—and I believe it was somewhere in the neighborhood of 10 hours before the first mine rescue team went underground—that is unacceptable, under anybody's evaluation. That's one thing that I would like to draw to the committee's attention.

With respect to Senator Byrd's specific question about lightening and roof falls—there's a lot of technology that's being applied currently to protect miners from roof falls that exist out there. One of the debates that has been ongoing about what caused the explosion at Sago, whether it was a roof fall in the sealed area that ignited the methane gas, or did lightening somehow make its way into the mine.

With respect to lightening itself, this would be the first time that any of us know of—and I don't want to misspeak here, but this was

agreed-to, stated at the public hearing on Sago—and I would commend the State of West Virginia for conducting that public hearing—that this would be the first time in the history of mining that lightening made its way into the coal mine, without a conduit of some kind, such as a gas well.

I agree with the recommendation that this would be something that should be studied by the experts to determine how this is possible.

With respect to roof falls in sealed areas, we—in our testimony—suggest we need to deal with seals, to make them more explosion-proof, to the extent we can, and we support NIOSH's preliminary recommendations to increase the psi, and they also have suggested the ability to more closely monitor the gases in those sealed areas, Senator.

Senator BYRD. Mr. McAteer?

Mr. MCATEER. Thank you, Senator. You've asked several important questions.

In the first instance, the question of communication, and how fast can we get the information from the mine to the process. I had the opportunity last week to visit the McElroy mine of Consolidation Coal Company in Northern West Virginia. They have a command center that ties in all of their large mines that they can have instantaneous communication, 24-hours a day, 7 days a week, with all of those mines, and those individuals are trained to be able to locate and identify State inspectors, Federal inspectors, company people immediately. That's not being done at other places, and that's a technology that exists, and one that's in place.

With regard to roof falls, inside sealed areas, we think that's a very important concern that we have. There are two ways to do protections, and one is to put a seal in there that increases the psi, increases a likelihood that that explosion will be kept inside the sealed area. Those seals need to be increased, the psi level needs to be increased. The German model, which is the model that we've looked at, takes the seal level psi at 72. We suggest a psi level of 100, as a beginning process.

The second part of this goes back to Senator Harkin's earlier question—how do we get innovation in? Because what we have in those sealed areas, is methane gas. We have, in fact, energy. We need to be able to capture that, and remove it, and use it in a safe way.

Those three suggestions, I think, along with the National Academy of Science to look at the lightening, may help us get to where we want to be, in terms of those protections.

Senator BYRD. Mr. Watzman?

Mr. WATZMAN. Thank you, Senator.

With regard to roof falls, and roof control, the industry, I think, has made significant progress. Fortunately, we don't have the number of fatalities that we experienced historically, resulting from roof falls. Unfortunately, we continue to have some. But, this improvement has come about due to the introduction of new technologies that have allowed for better roof control, for the requirement that operators file with MSHA, and MSHA enforce roof-control plans. It is an area that we, as an industry, continue to look at, I can tell you that the manufacturers of roof control equipment continue to

look at it, and we are—we continue to explore how we can better stabilize the roofs.

Lightening is a difficult issue, and it's one that is not new. There have been previous studies related to lightening strikes at coal mines. Mr. McAteer recommends the appointment, or the recommendation of a National Academy of Sciences study. That may be the proper route, but that may not. Whether we need further study is a question that I have in my mind.

You have expressed concern earlier about delays in getting things done, that adds another increment of delay to the process. There may be a better process that we could all come up with collectively, to get to the route of the problem, and ways that we can address it, short of a—the need for another study.

Senator BYRD. Thank you, Mr. Hamilton?

Mr. HAMILTON. Yes, sir.

First, allow me to say that I don't think we should leave here today with the understanding or perception that very little—if anything—has been done over the course of the last year. Thanks in large measure to your oversight and direct involvement in this important issue, I can't speak for the entire country, but I can tell you, in the State of West Virginia, we are leap years ahead—right now, today—then where we were a year ago at this time. I beg to differ with some of my panelists—and I don't want to be argumentative—but we are so much better off today than what we were a year ago at this time, or a year and a month or so, at this time.

We have installed two, three, four times the number of breathing apparatuses in our mines in West Virginia than what we had a year ago. There are more than just a couple of mining operations that have experimented, installed with these enhanced communication systems. Communication systems that were in coal mines, prior to this time last year, have been reinforced, there's been redundancy added, there's been duplicative systems, there's been hardening of systems and other protections. Miners have been trained, re-trained, re-trained, and re-trained, on the use of self-contained breathing apparatuses, on evacuation procedures, on escape mechanisms, on mine emergency plans. We have immediate notification—we passed legislation in West Virginia creating two new mine rescue—State mine rescue teams—to enhance in the overall actions necessary in mine rescue activities, to supplement company teams. We anticipate another 30 to 35 company-sponsored mine rescue teams in West Virginia alone. Many of those teams are already on board, every existing team has also experienced training after training simulation.

Every miner in the State of West Virginia has gone to self-contained breathing apparatuses, have gone through extensive training, and how to inspect that apparatus to ensure its workability and performance in the event it is ever needed. We have lifelines throughout every single coal mine in the State of West Virginia, and multiple, multiple entries.

Some of the advanced communication technologies, such as those that go through the earth are not quite perfected at this point. All of your mine safety experts, your entire research community, everybody would concur with that point.

But, we are going forward with existing technologies, capable of providing improved, enhanced communications, particularly in the event of a mine emergency situation. So, we feel, we are—and we have also gone through practically every mine, every ventilation system, repeatedly looking at these seals, and potential explosive environments. So, there's been a tremendous amount of work that's been done, and that work's continuing as we go forward.

Senator BYRD. Thank you.

Mr. HAMILTON. Thank you, Mr. Chairman.

Senator BYRD. Thank you, thank you, Mr. Chairman.

Senator HARKIN. I'll hold my questions till later.

Senator Specter.

Senator SPECTER. Thank you, Mr. Chairman.

Mr. Roberts, you've heard Mr. Hamilton saying that there have been enormous improvements in the year, do you agree with that?

Mr. ROBERTS. I think, in my initial comments I said I thought that Congress had done a tremendous service to the coal miners of this country with the passage of the MINER Act. When it was being considered by both Houses, the UMWA went on record supporting it.

We are never satisfied. That's what we're here for. We are to be the voice of the coal miners. I suggested—and I stand by that—if we had a similar situation at the Sago Mine tomorrow morning, do we have more mine rescue teams that would get to that mine within, say, 2 hours? Would we have communications in that mine, available to talk to those miners if that same explosion occurred? The answer to that, from my perspective, is no. That does not mean I'm being critical. I think the State of West Virginia, the Governor, the Republicans and the Democrats on both sides of the aisle have worked very hard, and probably led the way to try to make improvements in miner safety.

But, we have to be honest when we come here. If we had a belt catch on fire tomorrow morning in the Nation's coal mine—a flammable belt, it's a question that you posed earlier to Mr. Stickler—could a belt catch on fire? The answer to that is, absolutely, because the belts that are in existence in the Nation's coal mines are flammable.

If you want to know what happened at Alma, get the report. There was clearly negligence, there's no question, on the operator's part. But what happened? You had a belt fire. One of the situations we're here for today is, where are we after Sago and Alma? Because Alma occurred right after Sago, the belt caught on fire. Why did those miners die? Because the ventilation system was disrupted and—and for all intents and purposes—you were ventilating the working face—you weren't supposed to be an evac plan. But, because of the negligence on the operator's part, you had the smoke, and the poisonous gases go forward into the intake—that's why two miners died. Could that happen again tomorrow? The answer to that is, yes.

Could communications be disrupted tomorrow? Yes. That's not to be critical, that is to state where we are this morning, or this afternoon.

Senator SPECTER. Mr. Roberts, when Mr. Stickler testified on these flammable belts, he's waiting for more rules. Your testimony,

which followed my questioning of Mr. Stickler, was that pre-existing statutes give Mr. Stickler's unit adequate authority to improve the quality of those flammable belts, correct?

Mr. ROBERTS. His predecessor, his predecessor, eliminated a rule that had been pending for some time, to deal with flammable belts. So, clearly, MSHA had the authority to implement a rule requiring flammable belts to be removed from the mines, and non-flammable belts to be placed in the mines.

One of the things that I would suggest here today, if I may—just because Congress said, "You've got to meet these deadlines by 3 years or 18 months," I would expect that Congress would have no problem if MSHA met them sooner than that.

Senator SPECTER. Mr. Hamilton, I would appreciate it if you would take a look at the report by the staff of the House Education and Labor Committee, and give us your comments on it, because it is significantly at variance with the picture that you have portrayed. Obviously what this subcommittee wants to do is find out what the facts are.

Mr. Roberts, you comment that the State of West Virginia has done a good job, but how about Mr. Stickler's unit? Has Mr. Stickler's unit done what it should have, in the intervening time since the enactment of the law?

Mr. ROBERTS. Let me try to be as fair as I can with respect to that.

Mr. Stickler has reached out for the coal industry, and those working in the coal industry, since this debate about whether he should be appointed, it's no secret, the UMWA opposed his appointment, and we do today. But, he's there, and we're going to do the best that we can, as all of us have to do, to work with him.

Our problem is that we believe that we need to move more rapidly to protect the Nation's coal miners than we currently are, and that would be my position with respect to MSHA, as we look at it today, and he heads that agency.

Senator SPECTER. Mr. Chairman, I have just one more question. That is directed to Mr. McAteer.

In your testimony, you outlined a great many things that could be done now. What response would you have to what Mr. Stickler has said about the law being insufficient, or rules being necessary for equipment being unavailable, or time delays being inevitable?

Mr. MCATEER. Thank you, Senator Specter. Let me first clarify the record. I did not—refer to Mr. Hamilton—we did not say, I have not suggested that we haven't made progress during the year. We have made significant progress, and many operators are moving forward, and doing things to improve the process.

But with regard to your question of whether or not the statute provides sufficient authority for the agency to move forward—yes, it does, indeed. The statute provides sufficient authority with regard to belt air, the statute provides sufficient authority with regard to belts themselves, there was a belt rule that was being moved forward at the time of my Assistant Secretaryship, and unfortunately, we didn't it attached either. I will tell you, rules are very difficult to get through.

Let me also add, as one who sat in Mr. Stickler's chair, this year has been a particularly difficult year for the agency to try to do all

of the things that they want and need to do. In some instances they've made some progress, but in many instances they haven't made the kind of progress that they would like to see, and that we all would like to see in the mining community.

I think, your question is, does the industry need to wait in every instance to incorporate some of the improvements that are found, for example, with regard to belts? No, they don't need to wait for the regulations to come forward. Can the industry, on its own, take steps forward? We believe that they can. In some instances, there are some in industry that do that. As I mentioned with regards to the communication system, that's a voluntary effort on the part of the Consolidation Coal Company. Unfortunately, we have not moved the ball forward as much as we would like. Unfortunately, as President Roberts points out, we are not as far as we would like to be. Yes, we've made progress, but we're not where we want to be.

Senator SPECTER. Thank you.

Senator HARKIN. Thank you.

Mr. Roberts, you stated that the mine rescue team structure is spread too thin, you offer a solution, you said the United Mine Workers of America has training facilities that can be used for mine rescue team training and first responder training.

How could your training facilities help solve the problem of too few mine rescue teams?

Mr. ROBERTS. The only way, Senator, that we can get additional teams is to train these people. If you look at our testimony, we mention what you just said, and we also suggest that MSHA needs to be able to approve those teams on a more rapid basis, whether or not they had the funding to do that, the personnel to do that—we don't know the answer to that. But that's the two answers to that. These people need to be trained—it takes a great commitment, by the way—on behalf of some individual who is a coal miner to start with—to decide that they want to take additional training, and place themselves in the situation where they go into the most dangerous conditions known to a human being, to go underground when a mine has exploded, and full of poisonous gases—to be willing to that for your friends, and your neighbors and your brothers in this industry. Those people should be commended for their courage that they've shown in all of these disasters, by the way.

I go all the way back to 2001, in Alabama, I go to the Sago situation, I go to Alma, I go down into the Darby mine in Kentucky—these people risk their lives. But, it takes enormous amounts of training to be able to have the skills and the ability to do this—that is the first step. You have to have the people who want to do it, and then they have to be trained. We're suggesting we can do that, we're not particularly hung up on where these people get trained, but we're offering to do that, and they need to be trained, and we need these people as quickly as possible.

Senator HARKIN. Could we offer them additional benefits and things like that? I mean——

Mr. ROBERTS. Where we get most of our mine rescue team members now, Mr. Chairman, just so the committee can understand this, is from two places. Mostly from coal companies, and I must say—we've mentioned Consolidation Coal Company today with the

leaky feeder system, we've mentioned them today about the central communications system, we offer—we suggest in our comments that we need a national communication system, so in the event of a disaster, we have someplace to go to locate mine rescue team members, locate equipment.

If you look at every disaster we've had over the years—I don't care where it's been—we're scrambling around, trying to find drills to go drill bore holes, we're scrambling around to find equipment—that is absolutely absurd, Mr. Chairman. Coal miners deserve better than that, and we can do better than that.

Senator HARKIN. Yes.

Mr. ROBERTS. We need a national communications system in place.

But, the Consolidation Coal Company has mine rescue teams at every one of their mines. They spend money to train their miners in this area, they have the best equipment available to anybody in this country. The thing that happens—and I want you to think about this, too, Mr. Chairman—when you have a Sago who doesn't do this, and didn't do this, they call who? They call Consolidation Coal Company, and say, "Would you send your team down here?" So, they send their experienced miners who—by they way, mine coal every day for them—and their experienced mine rescue team, and their equipment, down to the Sago mine and risk those people's lives to try to help out there. We'll always do that in this industry, no matter if you're a foreman or a union person, or a non-union person—when a disaster strikes in these coal fields, everybody reacts to it.

But, every company should do what Consol does, and that should be a requirement.

Senator HARKIN. Mr. Watzman, I noticed you wanted to say something about this.

Mr. WATZMAN. Yes, Mr. Chairman, I just wanted to be clear, and that we not leave the implication that the tragic outcomes at Sago, and Alma, and Darby and other tragedies were the result of the failure of the mine rescue system.

At the Alma Mine, there were 22 mine rescue teams on site available for the efforts there. One of the issues that mine rescue teams confront, and all of my panel members are aware of this, is that we want to ensure that the mine rescue teams are not sent underground until it is safe to send them underground. That causes much of the delay. At Sago, there was a delay in the teams getting there, but when it was safe for the teams to go underground, there were adequate numbers of mine rescue teams.

That's not to say that the system is perfect, the MINER Act reflects that, the MINER Act deals with mine rescue, and we supported the MINER Act, and those provisions. But, there is not a disaster looming for the industry in terms of mine rescue capability.

Senator HARKIN. My nephew is a miner. My nephew, he's been mining now for about—pretty close to 30 years, but he's out west, it's not coal mines, it's trona, trona mines. He's a team leader of a rescue team. They go to National competitions, do they do that for coal, too?

Mr. ROBERTS. Yes.

Senator HARKIN. Do they have National competitions, and that type of thing?

Mr. ROBERTS. Yes.

Senator HARKIN. I've often been, you know, and his team is—I think came in second in the Nation or something like that in one of these competitions. I've always been admiring him for that. But, but he tells me about these rescue teams, and what the kind of training they go through. It is pretty extensive. They have to continually be re-certified—is that the right word, or something like that, maybe? Something like that?

Mr. ROBERTS. Right.

Senator HARKIN. That's the same as coal, also? As trona mines?

Well, I haven't checked with him lately, but I'd offer his services, I'll have to check with him on that.

Senator Shelby.

Senator SHELBY. Thank you. Mr. Chairman, I was not here for the first panel, I wish I had been, but we have multiple committees to go to.

Mr. Roberts, you referenced my State of Alabama, and the disaster that happened down there, I was down there with you and others. Just for the record, on the afternoon of September 23, 2001, 32 miners were working to repair drilling machines and hoisting tunnel supports in the No. 5 mine of Jim Walter Resources in Brookwood, Tuscaloosa County, my home county, of Alabama.

A piece of the mine ceiling dropped on a battery charger, which set off a spark, igniting a pocket of methane gas. The explosion injured several miners, and incapacitated one, who was unable to move. Heroically, several miners set aside their own concern for safety—as they do—and rushed to his aid. As they moved into the tunnel, a second, larger explosion blasted through the mine, and killed the incapacitated miner, and his 12 rescuers. In total, 13 men died in my State, in my home county of Alabama that day. This was a severe blow—not only to the family, the friends, but everybody in the community.

In November 2005, I corresponded with Secretary Chao, and expressed my concern that an Administrative Law Judge had reduced the original fine—Mr. Roberts is very familiar with this—from the amount of $435,000, to $3,000. Earlier this year, I was notified that an appeal had failed. This brings about several questions.

First, how does a fine get reduced by such a staggering amount? Second, why did the appeal fail? Third, why would the Mine Safety and Health Administration, Department of Labor, not pursue a case where 13 miners tragically died?

Mr. Roberts, do you have an opinion?

Mr. ROBERTS. I have an opinion.

Senator SHELBY. I'd like to hear it.

Mr. ROBERTS. It's been well expressed.

Senator SHELBY. Because we've talked about this.

Mr. ROBERTS. Yes, we have. I think we met on a ball field.

Senator SHELBY. We did, at a memorial service, where there was a lot of grief, to say the least, would you say?

Mr. ROBERTS. That's, that's putting it very mildly, Senator.

I think it should be noted for the record that 12 of those miners who tried to save—Junior Adams, it's amazing these names that,

you know, when you go through this, you can remember—Junior Adams was the miner that was injured in the initial, there was two explosions.

Senator SHELBY. That's right.

Mr. ROBERTS. One was very minor, injuring three miners, one—one, Junior Adams, could not move—one miner caught on fire, and rolled himself down the entryway to put himself out.

Senator SHELBY. That's right.

Mr. ROBERTS. The place was full of smoke and dust, and he went to Junior Adams, and Junior Adams took off his light, and gave it to this miner who lost his in that initial explosion, and his name was Mike Mackey—I remember his name, too—and he staggered down the entryway to the foreman, and the foreman was so dazed that he didn't know where he was, and those two stumbled their way down to the track, and they let people know that Junior Adams was up there in the dark, injured and couldn't walk. Then 12 miners, Alabamans, brave coal miners in Alabama said, "We're going to go get him." They went to get him, and another large, just horrendous explosion occurred, and killed all 13 of them. Excuse me, and we had to go down and talk to the families about the fact—we had sealed that mine for about 2 or 3 weeks, if I remember, because it was about to blow completely off the map.

Senator SHELBY. Mr. Roberts, share with them how deep this mine is? Of course, the quality of the coal is superb, but——

Mr. ROBERTS. You go down, you go straight down a shaft about 2,000 feet, if I'm not mistaken, in Alabama is the deepest coal mines in North America——

Senator SHELBY. Some of the finest coal, other than West Virginia, right?

Mr. ROBERTS. Absolutely. Some of the best metallurgical coal in the world.

Senator SHELBY. It is, in the world.

Mr. ROBERTS. Then you get on a—once you go down to 2,000 feet, you talk about the difficulty in rescuing people, I want you to think about this. These mine rescue teams went down an elevator after mine exploded, twice, and tried to rescue people, 2,000 feet down the shaft, and then went miles and miles and miles underground after they got there trying to find these miners, but the air was so contaminated, that the CO was completely out of kilter, the methane was about to explode again, there was heat and fire everywhere, and they had to come out. They got one of the miners out, and he unfortunately, died.

Senator SHELBY. Weren't these rescuers that got blown up volunteers, too? Some of them?

Mr. ROBERTS. The rescue team members who went down after the mine exploded were volunteers, and they came back out. They went down and rescued one miner, who died the next day, but all of these miners who went up there to try to get Junior Adams, were working in a different part of the mine, and could have gotten out. They could have walked out, they could have rode out and been saved, but they chose to go risk their lives to get Junior Adams, and the mine exploded.

But, I want you to think about the story we just told, and MSHA decided—first of all, the initial fines were ridiculously low. Then on

a conference, I believed is where they were reduced down to an absurd amount. Then they were appealed to a Federal—I believe, an Administrative Law Judge——

Senator SHELBY. That's right.

Mr. ROBERTS [continuing]. Reduced those down, and this Administrative Law Judge said that these 13 miners' lives was worth something like $4,000, I believe?

Senator SHELBY. Horrible.

Mr. ROBERTS. That, that's—and in the—in our testimony that's written here——

Senator SHELBY. Can we impeach that guy?

Mr. ROBERTS. Well, he should be. We, in our testimony——

Senator SHELBY. It is shocking. It's shocking, Tom.

Mr. ROBERTS. In our testimony, we suggest that the fines, they need to be assessed, and fines need—listen to this, fines need to be collected. That's a problem that we've had for some time, and we suggest in our testimony that MSHA—if they do not have the authority now, which they say they do not have—if these fines go unpaid, it's the same as never been issued, they ought to go down, and shut these mines down, and have the authority to close these mines for the failure to pay those fines.

I think, Senator, you're making one of the arguments that we've been making for years, that this is an absurd situation that exists in this Nation.

Senator SHELBY. Well, as you well know, in my home county in Alabama, it's great coal, some of the finest metallurgical coal in the world, deep mines, a lot of methane, big risk, we should so everything we can to make it as safe as we can for our workers, should we not?

Mr. ROBERTS. Absolutely.

Senator SHELBY. In case they're trapped, we should do everything we can in a response team.

Elaborate if you would, just a minute, I know the hour's late, on some type of an emergency respond team. You have them, but some kind of national—we have SWAT teams, you know, we have everything—the FBI has a SWAT team for real emergency, dealing with crime and big things. But these coal miners' lives are very important, to all of us.

Mr. ROBERTS. I would invite the committee to, I'm sure most—many Members of Congress had, this is the UMWA's report on the Jim Walter No. 5 disaster. Many of the things that we talked about when this report was issued, we talked about again at Sago. We talked about again at Alma.

But, let me just suggest this—there is no place in the United States where there's a central communications systems where, in the event of a mine disaster, somebody knows where everything is. Somebody knows where everybody is, and somebody can find everything that you need. Every one of these situations we start—and let me commend the people who have to go through these. I went through more of the one in Alabama than I cared to go through, but let me tell you—you'll never forget it if you ever go through one. You'll never forget it, until the day you die, that's when you'll forget about it.

But let me tell you, we need a central location—you could take what Consolidation Coal Company does for their—and they're the largest underground producer in the country—you could take what they do to protect their mines, with respect to mine rescue team training, mine rescue team members, and a communications system where they can communicate with anyone and everyone that they might need in the event of an emergency, and we ought to have that available somewhere, in the United States of America, where in the event of a next disaster, somebody says, "Call Morgantown, call Alabama," wherever we put this——

Senator SHELBY. Call Tuscaloosa, my hometown.

Mr. ROBERTS. They'll know how to get everything and anything——

Senator SHELBY. That makes sense.

Mr. ROBERTS. Within the matter of an hour for these disasters. That does not exist.

Senator SHELBY. Mr. Roberts——

Mr. ROBERTS. It does not exist, and that would be relatively easy to develop.

Senator SHELBY. But we do it for other things—we have the first responders program, the chairman understands that—both the chairmen, Chairman Byrd and Chairman Harkin—very well, because we fund it, in case of terrorist attack, chemicals. But these ought to have some type of a coordinated, well-trained National response, I agree with you.

Mr. ROBERTS. Amen, Senator.

Senator SHELBY. Thank you.

Mr. Chairman, thank you for you indulgence.

Senator HARKIN. Thank you very much, Senator Shelby. Good line of questions.

Senator BYRD. Thank you, Mr. Chairman.

Senator HARKIN. Well, thank you all very much. Thank this panel, and the previous panel. Again, I think you can sense that we're all very proud of our tradition of mining in this country. These tragedies that occur tear at all of us, and we just have to re-double our efforts to make sure that the MINER Act is fully enforced and implemented as soon as possible.

ADDITIONAL COMMITTEE QUESTIONS

There will be some additional questions which will be submitted for your response in the record.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR TOM HARKIN

TECHNOLOGY

Question. You mentioned that MSHA has had contact with more than 125 parties about communications and tracking systems, but only observed testing and demonstration of 16 systems and approved 3. Why haven't you been able to test and certify more? Is this a resource issue? What specific steps are you taking to expedite the approval process for these technologies?

Answer. While MSHA has had contact with 132 parties regarding communication and tracking systems, between January 2006 and March 30, 2007, MSHA has received 39 applications for approval of communications and tracking systems. Of

these 39 applications, 24 applications are currently being evaluated and 15 have already been approved. Three of these are new approvals for communication and tracking systems and 12 are modifications to previously approved pager phones and leaky feeder systems. These are completed via the Revised Approval Modification Program (RAMP).

The 16 tests referenced above were observed as non-approval related product demonstrations. To help advance the technology MSHA has been providing non-typical assistance to communication and tracking technology manufacturers to help them develop their systems. These in-mine tests are designed to determine if the technology can work effectively in the unique mine environment and are not part of the MSHA approval process. The normal MSHA approval process determines whether or not the technology is safe and does not present a fire or explosion hazard.

MSHA has assigned top priority to all communication and tracking approval applications.

Question. The National Mining Association report released in December 2006 recommends "that mines utilized hardened mine pager phones or leaky feeder systems, as an interim measure, to meet the need for post-incident emergency voice communications." How will MSHA support this recommendation so that communications systems are improved immediately?

Answer. Various pager phones and leaky feeder systems are currently available and MSHA-approved for mine operators to use at their mines. Among the 24 communication and tracking applications currently under investigation at MSHA's Approval and Certification Center (A&CC), several are for modifications to existing approved pager phones and leaky feeder systems. These modifications are typically changes necessary to accommodate "hardening" of the devices so that the devices will be better protected to withstand explosive forces or fire. As mentioned above, in addition to the three new approvals that the MSHA A&CC issued in the previous year for communication and tracking systems, the A&CC also issued 12 modifications to previously approved pager phones and leaky feeder systems to accommodate the "hardening" changes.

Question. At the hearing last year, I saw an Australian technology known as a Personal Emergency Device (PED). It was a relatively cost-effective text message type communication device. I know that was only a 1-way communication system and we want 2-way, but where are we on that? I seem to recall that several U.S. mine operators had already bought the system. Has the number increased? Why not?

Answer. MSHA has made a significant effort to assess the performance of the PED. MSHA visited five installations in the United States as well as four stallations in Australia that are using the device. The purpose of these visits was to evaluate the performance and capabilities of the PED one-way paging system. We published our findings about the advantages and disadvantages of these devices on the MSHA website. The primary concern with the performance of the PED was that, in order for it to function properly after an accident, the required loop antenna needs to be installed on the surface. However, unlike in Australia, most mine operators in the United States do not own the surface rights to their underground mine properties, which precludes the installation of this essential component. To use the system such operators must install the antenna underground, rendering it susceptible to an explosion or fire. Also, topography is a greater challenge in the United States than it is in Australia. Other important concerns with the PED included major interference problems, no confirmation from the miner that text messages are received, and significant "dead zones."

The Mine Site Technologies PED system is a one-way paging system with little technical promise to be made an effective 2-way communication device. Some U.S. coal mine operators are not willing to purchase the one-way PED system when the MINER Act requires a two-way system. While there are companies working on two-way, through-the-earth voice communication, test results have shown that this technology does not exist at this time.

TRAINING

Question. The Mine Safety Technology and Training Commission report recommended that MSHA better validate mine rescue team training by observing training in progress in addition to checking training logs. It also recommended that MSHA should improve the quality of training during approval of mine operator training plans; and address a significant training materials gap. Does MSHA have sufficient resources this year and in the fiscal year 2008 President's budget to address the training-related recommendations in this report? Specifically, how do you plan to address these recommendations?

Answer. MSHA has sufficient funding in 2007 and under the President's 2008 Budget to address the training recommendations and implement the training requirements in the MINER Act.

The MINER Act requirements dealing with mine rescue teams are currently in the rulemaking process. The MINER Act provides for different training requirements for large and small mines. The MINER Act adds a new training requirement that mine rescue team members must participate in two local mine rescue contests and participate in training at the covered mines. These additional training requirements complement the existing training in 30 CFR Part 49.8 (training for mine rescue teams) and will enhance the current system of mine rescue capability and result in additional protection for the nation's miners.

Existing Part 49.8 requires 4 hours of refresher mine rescue training each month, or eight hours every 2 months; training sessions underground every 6 months; and team members to wear breathing apparatus for a minimum of 2 hours every 2 months.

The new requirements for training of coal mine rescue teams include training sessions underground, familiarity with operations of covered mines, and knowledge of operation and ventilation at each covered mine. MSHA inspection personnel currently monitor selected mine rescue training, participate in Mine Emergency Readiness Drills (MERD) and participate in Mine Rescue Contests as contest judges. MSHA expects to continue this monitoring and participation.

Pursuant to the requirements of the MINER Act, MSHA is currently developing regulations covering the above issues related to mine rescue teams, and expects to publish a proposed rule later this year.

EMERGENCY RESPONSE PLANS

Question. The MINER Act requires each mine's emergency response plan to be continuously reviewed, updated and re-certified by MSHA every 6 months. To date, how many have been reviewed and fully approved, and how many are pending review?

Answer. To date, there have been 481 emergency response plans (ERPs) submitted for approval from active, producing underground coal mines. Of these ERPs submitted for approval, approximately 90 percent (431) have been partially approved. MSHA's guidance on "breathable air" was recently issued as PIB 07–03 on February 8, 2007. Mine operators had 30 days after the Program Information Bulletin (PIB) was issued to submit their revised ERPs for approval by MSHA. Many of these submissions were found to be deficient and new submissions, under MSHA's plan approval process will need to be reviewed. These are due to be sent to the MSHA District Managers on March 28, 2007.

Question. What have been the major deficiencies identified in the plans that needed to be altered?

Answer. The policy on post-accident breathable air (PIB P07–03) required mine operator submission of the portion of the ERP addressing breathable air no later than March 12, 2007. MSHA found many of the submissions deficient and under MSHA's plan approval process new submissions were due to the MSHA district managers on March 28. Consequently, no ERPs have been fully approved by MSHA at this time.

Partially approved plans are those plans basically without breathable air. As explained above, MSHA expects to receive submissions of those portions by March 28. For those plans not yet partially approved and in the review process, two major areas of deficiencies have been identified by several of the districts. Questions have been raised by MSHA regarding post accident tracking and the areas or zones selected for location purposes. Some mine operators have submitted plans with very large zones or areas to work within that would make locating miners very difficult. Also, some mines have submitted plans with a voice recorder system to track the miners, but no provisions were included for monitoring the recorders during the shift worked. Consequently, in the event of an accident, several hours of recording might have to be reviewed in order determine the last known location of miners.

The MINER Act requires each mine's ERP to be reviewed, updated and approved by MSHA every 6 months. Since the first ERP submission deadline of August 14, 2006, MSHA has issued additional guidance established by policy and regulations that require mine operators to revise and update their ERPs. These include the following:

—MSHA Program Policy Letter (PPL) No. P06–V–10 Implementation of Section 2 of the Mine Improvement and New Emergency Response (MINER) Act of 2006, issued on October 24, 2006,

—Emergency Mine Evacuation Final Rule, effective December 8, 2006,

—MSHA PIB No. P07–03 Implementation of Section 2 of the MINER Act of 2006: Options for Providing Post-Accident Breathable Air to Underground Coal Miners, issued on February 8, 2007.

Question. What are the resources dedicated to this effort in fiscal year 2007 and proposed for fiscal year 2008 in dollars and FTEs?

Answer. The Emergency Response Plans are reviewed by the district specialists and these district personnel will be dedicated to reviewing and approving these plans as needed. There is not a specific line-item in the budget for this activity.

Question. How does MSHA plan to stay current with meaningful reviews of operator plans and enforcement of effective implementation of the plans?

Answer. MSHA keeps current by tracking progress on the implementation of the MINER Act and the Mine Emergency Evacuation Final Rule nationwide and at the district level. We track this progress through our review of the ERP which is required every 6 months by the MINER Act and through regular inspection activities at the mine sites.

When MSHA conducts an inspection, MSHA evaluates plan compliance. In the event non-compliance is found, appropriate enforcement action is taken and corrective action is required. Also, if MSHA receives a complaint from a concerned miner, MSHA would investigate it.

MINE INSPECTORS

Question. In a Government Accountability Office (GAO) report from 2003, GAO stated that 44 percent of underground coal mine inspectors would be eligible for retirement within the next 5 years. What is the actual record of retirements by calendar year? Does MSHA have a specific plan for preparing to replace these lost assets? What is it? How will you ensure that the new inspectors have the skills and experience needed to replace veteran inspectors?

Answer. The table below shows MSHA's record of retirements of its enforcement personnel over the last several years.

Calendar year	Number of retirements
2003	20
2004	33
2005	60
2006	56
2007 (through February)	13

With the supplemental funding provided in fiscal year 2006, MSHA is in the process of hiring an additional 170 new coal enforcement personnel. The hiring is occurring over five quarters beginning in July 2006 and ending on September 30, 2007. As of March 12, 2007, here have been 18 job fairs held with a total of 1,240 candidates being tested.

Additional job fairs will be held and recruiting measures taken to maintain MSHA's enforcement corps.

In addition, MSHA is working to backfill retiring enforcement personnel so that we net 170 new enforcement personnel by the end of September, 2007, at which time MSHA expects to have 757 coal enforcement personnel on board by the end of fiscal year 2007, the highest number since 1994.

MSHA will ensure that all new inspectors have the skills and experience to inspect mines and make mining as safe as possible. Currently, trainees are not permitted to receive their authorized representative (AR) cards until training has been completed and the trainee has received satisfactory evaluations from the Academy Instructor and the trainee's supervisor. The MSHA Coal District Manager and the Administrator for Coal Mine Safety and Health must approve the readiness of new inspectors. In addition, the trainee must have completed on-the-job training and demonstrated, during supervisory-and inspectors-accompanied inspections, the ability to independently conduct periodic on-site health and safety inspections at coal mines.

Question. MSHA has been transferring specialists back to inspectors in order to meet mandated inspections. Please identify the number of FTEs of such transfers that have taken place in fiscal year 06 and thus far in fiscal year 2007. What has the impact been on the availability of assistance with ventilation, roof, electrical, health and other operational issues? Does the fiscal year 2008 budget provided for the backfilling of these transferred specialists? If so, how many FTEs are supported by the fiscal year 2008 budget request?

Answer. In fiscal year 2006 and fiscal year 2007, MSHA did not convert any specialists to inspectors. As such, no vacancies were created which require backfilling. It was not necessary because we replace inspectors with new inspector hires and keep specialists in their designated positions.

Question. Under the educational policy and development line, your budget proposes to fund 20 entry level inspector groups during fiscal year 2008. Is this training plan sufficient to replace losses?

Answer. MSHA's training plan will accommodate training requirements of personnel hired to replace losses as well as the 170 new personnel. Of the 20 entry level inspector groups planned, 15 are for coal and five are for metal/nonmetal. The typical size of each coal mine inspector (CMI) class is 15 students; therefore 15 classes will accommodate all trainees. Coal Mine Safety and Health and Educational Policy and Development, as in the past, will continue to work in concert to make the necessary adjustments to ensure that the scheduling of CMI training classes are a top priority.

INSPECTIONS

Question. The MINE Act requires that all underground mines be comprehensively inspected 4 times per year, and that surface mines be inspected twice a year. How is MSHA complying with this requirement? What does MSHA do beyond the required inspections to address the causes for mining accidents and fatalities?

Answer. MSHA places a high priority on completion of Regular Health and Safety Inspections (E01 code) for all mines where inspections are required, surface and underground. The E01 Inspections are comprehensive and cover all aspects of safety and health for the mine. MSHA tracks the rates for completion of the regular inspections to monitor performance and adherence to the Mine Act requirements. Beyond the regular inspections, MSHA conducts special emphasis inspections covering various areas of concern for increased enforcement focus such as roof control, ventilation, electrical, surface haulage and health.

MSHA has several traditional special emphasis initiatives that are conducted annually. These include the summer Preventive Roof Outreach Program (PROP) for heightened roof hazard awareness and the Winter Alert initiative to emphasize underground explosion and fire hazards and surface area winter-related hazards. When circumstances dictate, MSHA conducts special emphasis initiatives to address areas of concern such as mine belt conveyors, slopes and shafts, roof control areas including retreat mining, seal evaluations, respirable dust, and special general mine-wide inspection saturation events to determine overall compliance at a single mine or at several mines simultaneously. For example, a special emphasis on retreat mining at 14 mines in District 4 yielded 217 citations, 21 orders, and one safeguard. The targeted enforcement effort on respirable dust at 61 mines nationwide discovered 32 violations for not complying with provisions of dust control plans.

MSHA also utilizes non-enforcement personnel from its Technical Support branch for highly technical investigations involving areas of special expertise, and MSHA uses personnel from its Education and Field Services branch to monitor miner training classes for course content and appropriateness, monitor training instructors, assist with training plan approval issues and to participate in the special emphasis initiatives.

Question. The MINE Act provides for the issuance of withdrawal orders to mine operators who exhibit a "pattern of violations" of mandatory health and safety standards that could significantly and substantially contribute to the cause and effect of the health and safety hazards. What plans does MSHA have to improve enforcement at mines that have a pattern of violations?

Answer. 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 these new criteria are in place, MSHA will issue pattern of violations notices and orders where warranted. Each Significant and Substantial (S&S) violation requires the mine operator to withdraw miners from that area if the mine until that violation is abated. Once a mine operator receives a notice of pattern of violations, there must be an inspection of the mine in its entirety where no S&S violations are found in order for the notice of pattern of violations

to be terminated. This enforcement tool will provide a powerful incentive for mine operators to comply.

Question. How will this differ from current practices?

Answer. Using objective criteria to determine whether mines are identified as having a potential pattern of violations will result in uniformity and consistency for each district and improve the overall effectiveness of this enforcement tool.

SAFETY AND HEALTH CONFERENCES

Question. In fiscal year 2007 and fiscal year 2008, how much do you expect to spend in dollars and FTEs on Safety and Health Conferences conducted by conference litigation representatives? Given your expectation that Safety and Health Conferences will increase as a result of the higher assessments under the MINER Act, specifically how will you meet this higher demand for conferences this year and in fiscal year 2008?

Answer. In fiscal year 2006, MSHA's Coal Mine Safety and Health (CMS&H) component conducted 1,612 safety and health conferences. Currently Coal has 14 full time conference litigation representatives (CLRs) and an additional three vacancies currently in the process of being filled.

CMS&H continues to adjust hiring needs in anticipation of increased workloads and attrition and will continue to adjust them. CMS&H is also working with the Office of the Solicitor, which must also be capable of meeting the corresponding increase in contested cases before the Federal Mine Safety and Health Review Commission. This increased contested case load is anticipated to result from the increased conference case load that the CLRs are unable to resolve.

Question. How much was spent in fiscal year 2006 for Office of Solicitor costs related to investigations and other work done on MSHA's behalf? How much do you anticipate will be needed in fiscal year 2007 and fiscal year 2008 for such costs? How many investigations and other workloads will these costs support?

Answer. In fiscal year 2006, the Office of the Solicitor (SOL) expended $8.267 million in support of MSHA legal enforcement, and experienced a pending investigative and enforcement-related caseload of 6,228. The SOL investigative and enforcement related caseload includes the defense of pending safety and health citations before administrative law judges, before the Federal Mine Safety and Health Review Commission, and before the courts, as well as legal advice related to investigations and legal support for MSHA regulatory initiatives. Because of ongoing substantial increases in MSHA enforcement efforts and inspection FTE and the impact of the MINER Act, the pending MSHA enforcement caseload for SOL increased by approximately 60 percent between 2005 and 2006 and is expected to continue to increase by 20–25 percent each year over the next 2 years. In fiscal year 2007, based on year-to-date actual figures, SOL estimates expenditures for MSHA legal enforcement of $8.679 million, and expects the total pending caseload to increase to 7,401. The 2008 Budget includes $11.604 million for SOL legal enforcement support of MSHA, and the total pending caseload is expected to increase to 9,125.

Question. Your fiscal year 2008 budget stated that your special investigations program has experienced a decrease of 42 percent over the past 5 years. What is the appropriate number of such staff needed? How many FTEs does your fiscal year 2008 budget support for this program?

Answer. For fiscal year 2008, we were requesting to hire 10 additional special investigators (SIs). Currently, there are 31 fulltime SIs and MSHA CMS&H is in the process of approving another seven for a total of 38. The additional 10 hires would boost that number to 48 in fiscal year 2008. MSHA may need to train as many as 19 additional special investigators for CMS&H to properly staff for the foreseeable future. Initially, however, not all of these FTEs would necessarily need to be fulltime since some special investigators are involved with collateral duties. Ultimately, this recommended number of trained investigators will likely be needed by CMS&H to cover anticipated retirements. Currently, CMS&H is balancing special investigators' existing workloads by sharing investigator resources across some districts.

ENFORCEMENT

Question. What is the working relationship between MSHA and the various mining oversight agencies at the state level? What, if any, obstacles exist to a cooperative and collaborative relationship between MSHA and the state oversight agencies?

Answer. MSHA has a long history of cooperative relationships with most of the state oversight agencies for mine safety and health. MSHA considers the state agencies among its most important stakeholders and strives to partner with those groups. For example, over the years MSHA has conducted or participated in joint mine rescue exercises or competitions, has conducted problem solving meetings with

individual states and MSHA/State summits with multiple state agencies to share ideas, issues and areas of concern, and to gain a better understanding of specific problems facing the states. On numerous occasions, MSHA and the state agencies have successfully conducted inspection activities jointly with favorable results for both.

Obstacles to cooperative and collaborative working relationships can arise from time to time stemming from divergent policies or priorities. However, MSHA and state agencies work collaboratively to resolve such situations in a manner that provides optimum safety and health for mines. Many times the affected district manager and director of the state program work together to resolve these differences in the context of a recognition that state standards may exceed MSHA requirements but not diminish protections.

Question. Last year, the Inspector General (IG) found that the coal mine hazardous condition complaint process needs strengthening. In particular, the IG found that the contractor operating the hazardous complaint call center did not have mining experience and utilized deficient call scripts. In addition, the IG found that MSHA did not quantify a benchmark by which the complaints or imminent danger allegations would be investigated. Specifically, how have you addressed the issues in the IG report? What is the basis for not having a benchmark for how quickly complaints or imminent danger allegations will be expected? For the past 2 years, what is the average response time for complaints and imminent danger allegations made to the call center?

Answer. Prior to and following the publication of the Office of the Inspector General (OIG) report on hazardous condition complaints, MSHA has taken the following actions to address the issues identified in the September 29, 2006 report:

(1) enhancements to the new Hazardous Condition Complaint tracking system for better management control and oversight of code-a-phone, on-line E-Gov, and written complaints;

(2) implementation of a 1–800 complaint answering service staffed by trained operators on a 24/7 basis;

(3) training for MSHA personnel on imminent danger hazardous condition complaints, and appropriate documentation for assessment purposes; and

(4) new procedures and policies to address tracking and recording calls, timely evaluation of complaints, other OIG findings and recommendations, such as complete and accurate recording of complaints and timely evaluation of complaints.

The OIG recommended that MSHA establish a measure to complete hazard condition complaint evaluations and imminent danger complaint investigations. MSHA has not set benchmarks that place time constraints on a safety or health activity and could have a detrimental effect on the quality of our investigation and response. If the completion performance metric is too binding, the focus is on timeliness instead of the overall need for, scope and quality of response and could result in premature and uninformed decisions, minimizing the ability for MSHA to correct the root cause(s) of the issue.

At this point we do not have the requested data for the past 2 years; and, since the call center became operational on December 8, 2006, we cannot provide the average response time for complaints and imminent danger allegations made to the call center for the past 2 years. However, MSHA has designed new reports to track the issues in the OIG report such as response times for complaints and imminent danger investigations. The enhancements to the hazardous condition complaint system are scheduled for implementation this spring.

Question. In your written testimony, you stated that MSHA will use all of the tools available to achieve your goals, including tough enforcement. Why does the budget for the Office of Assessments include no additional funding and assume that MSHA will assess fewer violations in fiscal year 2008 than in fiscal year 2006? How will MSHA practice tough enforcement, including specifically the new authority under the MINER Act for flagrant violations, without additional resources and with an expectation to assess fewer violations?

Answer. The newly final proposed penalty schedule is intended to improve compliance with mine safety and health laws, and it is MSHA's expectation that the increased penalties will ultimately result in fewer violations. MSHA has already implemented the MINER Act penalty provisions, and this has not increased the costs of assessing the associated penalties.

MSHA is also making revisions to the Civil Penalty component of its computer system to provide mine operators additional information on the status of contested, paid, and unpaid violations every month. This, coupled with another change to have the system automatically apply penalty payments, should result in fewer inquiries from the mining community and help keep the administrative costs associated with assessing and collecting civil penalties in check. When necessary, MSHA augments

existing staff with contract support to help process the civil penalty paperwork. MSHA will be able to fully and vigorously enforce the law with the resources requested in the 2008 Budget.

Question. Mr. Stickler, when I wrote to you on November 1, 2006, I had emphasized the importance for you to become a forceful advocate for adequate mine safety funding.

What actions have you taken to ensure that MSHA is a forceful advocate for mine safety funding?

Answer. I fully support the President's fiscal year 2008 budget request for $313.5 million, which I believe is a clear demonstration of this administration's strong commitment to mine safety. This request provides for 757 coal enforcement personnel—the highest number since 1994. I believe these new inspectors will enable MSHA to aggressively enforce our Nation's mine safety and health laws. I also note that a strong enforcement program for mine safety and health also needs a correspondingly well funded and adequate amount of legal support to handle the increased workload. To this end, the President's fiscal year 2008 Budget also requested $11.604 million for MSHA legal enforcement support.

Question. Many of the provisions of the MINER Act have not been implemented. To what extent has inadequate funding impacted on implementing the act?

Answer. MSHA has implemented, or is in the process of implementing, all mandated MINER Act provisions that have become due and has done so in accordance with MINER Act implementation dates. MSHA funding is adequate to meet these deadlines.

The provisions of the MINER Act that have been implemented by MSHA include:

—Reviewing emergency response plans submitted by underground coal mine operators;
—Requiring more self-contained self-rescue 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;
—Currently drafting regulations on both Seals and Mine Rescue rules that will meet the requirements of the MINER Act;
—Establishing the penalties for flagrant and failure to notify violations and increasing penalties for unwarrantable violations;
—Requiring all mine operators to notify MSHA immediately after a reportable accident;
—Installing redundant underground to surface communications systems;
—Setting up the Technical Study Panel on belt air and conveyor belting; and
—Training 14 MSHA personnel to serve as Family Liaison and Primary Communicators following mine accidents involving multiple fatalities.

Question. I understand that West Virginia and Illinois are still expecting to require mine operators in those States to provide wireless communications devices and underground shelters in just a few months. Why can't MSHA move ahead on those matters right now so miners in the rest of the country can enjoy similar protections?

Answer. Regarding wireless communication devices, the states of West Virginia and Illinois have accepted a relatively broad interpretation of the term "wireless." They intend to accept a "hardened" leaky feeder system as complying with the terms of their state laws. The leaky feeder systems that MSHA is familiar with are not wireless, because portions of the leaky feeder systems are based on wired components. The MINER Act allowed a three year period for mines to comply with the requirement to provide a "wireless two-way medium" for communications presumably to allow time for truly wireless technology to be adapted to the underground mine environment and for wireless systems to obtain MSHA approval.

As to emergency shelters, MSHA policy PIB 07–03 provided mine operators with a range of options for supporting miners who are trapped underground with breathable air adaptable for a wide variety of mining conditions. The PIB does not prohibit the use of refuge chambers as a means of providing breathable air.

With regard to specific underground refuge shelter requirements, the MINER Act stipulates that NIOSH has been given until December 2007 to provide the technical specifications for refuge chambers, on which MSHA's requirements may be based.

Following the release of NIOSH's report, MSHA will respond to Congress describing what actions, if any, the agency intends to take and the reasons for such actions. MSHA is working closely with NIOSH in their research project.

MSHA has hosted several informational meetings and demonstrations in which refuge chamber manufacturers, NIOSH, industry personnel, and state agencies par-

ticipated. In October 2006, MSHA held a Mine Rescue Technologies Expo in conjunction with the annual TRAM (Training Resources Applied to Mining) conference at the Beckley National Mine Academy. This Expo served to share current worldwide refuge chamber and related technologies with the entire U.S. mining industry. MSHA recognized it to be in the best interest of the miners to act quickly, and, after extensive research and technical data collection, has published MSHA policy PIB–07–03 as a practical, immediately implementable approach for providing breathable air, based upon the requirements of the MINER Act and what is feasible under current technology and mining conditions.

Question. The recent NIOSH draft report on "mine seals" indicates that workers are currently in "grave" danger because these walls can explode, regardless of what kind of material they are made from. The NIOSH report also suggested that the technology is there to solve this problem, and in many cases costs can be minimized.

Why can't you speed up the agencies action on this critically important area, just as MSHA did last year when it mandated that more oxygen be made available to miners working underground?

Answer. MSHA has already taken prompt interim action to increase protection for miners from hazards relating to sealed areas of underground coal mines by requiring:

(1) a temporary moratorium on the construction of new alternative seals;

(2) operators to assess the atmosphere behind existing alternative seals;

(3) operators to take remedial actions if the atmosphere behind the sealed area has the potential for an explosion;

(4) improvement of strength and construction specifications for new alternative seals;

(5) inspection and maintenance of existing alternative seals, including corrective actions, when necessary; and

(6) MSHA approval of new alternative seals. MSHA also required remedial action, in specific situations, where necessary. These actions reduced the hazards of explosions in sealed areas. MSHA is evaluating additional interim steps to improve safety conditions associated with alternative seals prior to issuance of a final standard.

MSHA is working expeditiously to develop improved standards for seals so that the Agency can meet the MINER Act requirement. MSHA will use all information available, including technical information from NIOSH, to develop the new standards.

MSHA PENALTIES

Question. I understand OMB has been reviewing a proposal on MSHA penalties for some time. When your staff briefed some of us last month they commented on how important the increases in penalties will be in helping to ensure greater compliance by the mine operators.

What is your opinion of the new fine structure under the MINER Act?

Answer. Increases in penalties are important to helping ensure greater compliance by mine operators. The penalty provisions in the MINER Act reflect the intent of Congress to ensure greater compliance with MSHA's health and safety laws. MSHA fully supports these provisions.

Question. Is OMB trying to weaken the rule on penalties that MSHA has proposed?

Answer. No. MSHA submitted the rule to OMB in accordance with Executive Order 12866 as part of the normal rulemaking development process and published a final rule that substantially increased penalties.

Question. When do you expect to move forward on this aspect of the law?

Answer. MSHA's civil penalty final rule was published on March 22, 2007, as Part IV of the Federal Register. The new rule will take effect on April 23, 2007. The civil penalty final rule will result in an across-the-board increase in penalties, with the amounts increasing more significantly for operators with histories of repeat violations of the same standard and operators with violations involving high degrees of negligence or gravity. The final rule eliminates the single penalty assessment provision of $60 for non-significant and substantial violations in favor of a regular assessment. It also includes minimum penalties of $2,000 and $4,000, depending on whether there is a withdrawal order, for unwarrantable failure violations. In addition, flagrant violations—those involving "a reckless or repeated failure to make reasonable efforts to eliminate a known violation of a mandatory health or safety standard that substantially and proximately caused, or reasonably could have been expected to cause, death or serious bodily injury"—may receive a maximum penalty of $220,000. Finally, a mine operator who fails to timely notify MSHA of a death,

or injury or entrapment with a reasonable potential to cause death, may face penalties between $5,000 and $60,000.

Question. Also, MSHA can issue a "pattern of violation" citation to those mines that repeatedly ignore mine safety requirements. Yet I understand MSHA has never issued such a citation. What steps are you taking to ensure that your District Managers know they will receive your support for initiating such sanctions in appropriate cases?

Answer. I believe the Pattern of Violations regulations can be a powerful enforcement tool, and, as my answer to Question 13 demonstrates, MSHA is working to ensure that this enforcement tool is used consistently and effectively to provide miners with additional protections against health and safety hazards. With the assistance of the Solicitor's Office and district managers, MSHA staff is developing objective criteria to identify mines that may have a pattern of violations. Ultimately, based on reports from the district manager, the Administrator for either Coal or Metal and Nonmetal Mine Safety and Health decides whether the mine will be issued a notice of a pattern of violations.

Question. MSHA's regulatory agenda indicates it is going to finally update its asbestos rule by next month. Tomorrow I will be chairing a hearing in my Employment and Workplace Safety Subcommittee on the re-introduction of my bill to ban the production and importation of asbestos in the United States. This administration has promised to do something about asbestos time and again. The current MSHA rule is much weaker than OSHA's rule, and to make matters worse, the OSHA rule is itself not protective enough according to the results of the latest study of the residents of Libby, Montana.

Are you in fact going to finally issue this rule?

Answer. Yes. MSHA, however, is currently devoting most of its regulatory resources to developing the policies and regulations required by the MINER Act of 2006.

Unlike the commercial asbestos OSHA regulates, MSHA regulates asbestos that develops naturally in certain rock formations. The U.S. mining industry does not mine or produce asbestos. MSHA's most recent summary asbestos sampling data (01/00–3/05) reveal that 19 full-shift asbestos samples at five mines, out of 812 samples at 173 mines, indicated a personal exposure that equaled or exceeded the OSHA Permissible Exposure Limit (PEL) and MSHA's proposed limit. Although MSHA has not issued the final rule, MSHA encouraged all five operators to adopt, as a company standard, the more protective OSHA PEL of 0.1 f/cc in a letter sent to each operator. In the letter, the Agency also offered guidance for reducing exposures at these mines. In its sampling program, MSHA focuses on the mines and occupations most likely to have asbestos exposures.

Question. When?

Answer. MSHA expects to issue the asbestos rule sometime in early or mid 2008, after the Agency completes the MINER Act mandated regulatory requirements.

Question. According to the MINER Act, mine owners were to submit emergency response plans to you by August 2006.

In the past 6 months, how many have you reviewed and approved, and what is the status of the plans that are still outstanding?

Answer. To date, there have been 481 Emergency Response Plans (ERPs) submitted for approval from active, producing underground coal mines. Of these ERPs submitted for approval, approximately 90 percent (431) have been partially approved for various provisions of the MINER Act, Emergency Mine Evacuation Final Rule and/or MSHA Program Information Bulletins (PIBs) and/or Program Policy Letters (PPLs) relevant to ERPs. The remainder of the ERPs are being reviewed and discussions are being held with the operators on some aspect of their plan submission.

The guidance on post-accident breathable air (PIB P–07–03) required mine operator submission of the portion of the ERP addressing breathable air no later than March 12, 2007. Because deficiencies were noted in regard to many of those submissions, the breathable air provisions are due to be resubmitted, as part of MSHA's usual plan approval process, by March 28, 2007 for review by the Districts. Consequently, no ERPs have been fully approved by MSHA.

Question. MSHA seems to be relying heavily on training in its approach to addressing safety problems in the industry. In particular, the MINER Act requires companies to provide training for emergency procedures.

Has MSHA provided training for the new inspectors it has hired recently?

Answer. Yes, all new inspectors receive extensive and intensive training in their job tasks. Training occurs in the classroom, mine simulation laboratory, and on-the-job. New inspectors must demonstrate proficiency in all areas of training before in-

specting mines. As the MINER Act requirements, new regulations and policies become effective, they are incorporated in the inspector training programs.

The current Entry Level Training (ELT) schedule has 58 courses with 669 hours of training, and 9 on-line courses totaling an additional 41 hours. There are three 4-week modules and three 3-week modules presented. Additionally, on-the-job training is incorporated with the majority of the ELT courses presented at the Academy. The last 100 coal enforcement personnel hired by MSHA have averaged more than 17 years prior mining experience.

Question. How have you evaluated the effectiveness of the current safety training programs for miners, particularly the emergency training procedures?

Answer. Our inspectors and field education staff have evaluated and continue to evaluate the effectiveness of emergency training procedures.

Our inspectors evaluate training programs during their inspections. They check emergency plans, training records, visit classes in session, talk to miners about emergency procedures, observe emergency evacuation drills and evaluate mine rescue capability. Inspectors cite violations where noncompliance with requirements are found. When inspectors encounter issues that require more in-depth training, they may recommend that MSHA field education staff work with mine operators to improve the effectiveness of emergency training procedures.

Field education personnel and Academy staff continue to evaluate the effectiveness of emergency training procedures at mines and assist mines with their emergency training programs.

Field education staff conducted extensive evaluations of the effectiveness of emergency procedures at 60 underground coal mines in 2006. Where deficiencies were found, recommendations were made to improve effectiveness. Evaluations and assistance were provided at many other mines with varying aspects of emergency procedures. The topics covered included self-contained self-rescuer (SCSR) donning, transferring and storage; work place examinations, escape and evacuation; and mine rescue and fire and explosion prevention. Field education staff will continue to evaluate the effectiveness of safety training programs for miners. Also, the Agency plans to enlist the assistance of several experienced contractors, for a short term, to work with our field education staff to evaluate safety training programs required by the MINER Act and to speed up advance compliance with emergency procedures.

The National Mine Health and Safety Academy in Beckley, West Virginia, has trained and evaluated 38 mining teams in 2006 and 9 thus far in 2007 in varying aspects of mine emergency procedures.

QUESTION SUBMITTED BY SENATOR ROBERT C. BYRD

Question. Last summer, the weekly morbidity and mortality report by the CDC noted clusters of rapidly progressive pneumoconiosis—black lung—among miners in Southwestern Virginia and Eastern Kentucky. The article noted several possible reasons for the continuing occurrence of advanced cases of black lung: (1) that the current federal respirable dust limit is too high, and needs to be lowered, or (2) that the severity of black lung may be increasing because of the toxicity of the coal being mined. I would suggest a third possible reason, that MSHA may not be enforcing the current dust laws as effectively as it should be.

How do you explain the appearance of such aggressive cases of black lung?

Answer. We anticipated this problem several years ago when we were trying to change the dust sampling regulations, unfortunately one person at the UMWA did not think we went far enough and we were allowing the limited use of masks in the narrow locations where the levels could not be held to under 2 mg. That individual is no longer at the union and their position has changed. Second the 2 mg level is no doubt too high and could be changed, but since we are not hitting it anyway what is the impact of dropping it down. What the current system does is to create the highest paying jobs at the dustiest locations and then by virtue of averaging five samples (one in the dusty job and four in the clean locations the operator meets the 2 mg standard and one individual is exposed to guite high standards. Also to continue to have the operators take samples simply defies logic no other industry in this country or abroad has the operator take compliance samples, finally the industry and this one guy said we should wait for the continuous dust sampler, that was in 2000, 6 years later we are still waiting and will be for some time but industry continues to put at risk a small but predictable number of miners. The solution drops the level to one but changes the sampling system. If you like I will forward my proposal for changing the dust regulations.

CONCLUSION OF HEARING

Senator HARKIN. I am concerned that we are not moving ahead rapidly enough on these new technologies, and we've got to look at ways of incentivizing that, and in the meantime, we have to use whatever existing technologies that are right out there, right now, to make sure that we have the highest possible level of assurance to every miner, that in case of one of these tragedies, they have the highest expectation of rescue and survival. Nothing less will do.

So, I thank you very much.

[Whereupon, at 4:25 p.m., Wednesday, February 28, the hearing was concluded, and the subcommittee was recessed, to reconvene subject to the call of the Chair.]

○