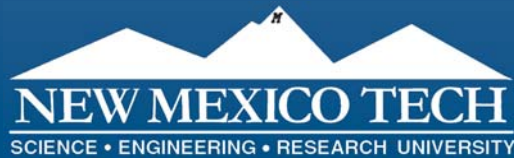




## **2010 Report to the Governor**



**New Mexico  
Bureau of Mine Safety**



# **The State Mine Inspector's 2010 Report to the Governor**

Cover Photo:

The cover photo is courtesy of BHP Billiton San Juan Coal Company. Photo is of Lisa Kennedy, an underground Miner 1. She has worked over 10 years at SJCC without a lost time accident or reportable incident. She is certified by the State of New Mexico as an Underground Mine Foreman, is a member of the mine's Joint Safety Committee and is an International Union of Operating Engineers Steward.

## **Bureau of Mine Safety Staff**

State Mine Inspector

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New Mexico Tech

# NEW MEXICO BUREAU OF MINE SAFETY

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## Overview

### Introduction

The New Mexico Bureau of Mine Safety (BMS) is a department of the New Mexico Institute of Mining & Technology (NMT).

Directed by the State Mine Inspector, the department is a state and federally funded organization providing services to New Mexico and its miners in numerous areas that include:

**Mine Rescue and Emergency Response** - Coordination of incident response, equipment and human resources.

#### **Legislative Issues Relative to Miner Safety-**

Includes being the point of contact for the Governor's office on mine safety related issues and legislation.

#### **Safety and Health Training -**

Providing safety and health training to mine workers, contractors, as well as federal and state organizations involved in mine-related activities.

The Bureau of Mine Safety and the State Mine Inspector are the representatives of New Mexico responsible for the safety of the State's miners, and accountable at state and federal levels including:

- The Mine Safety and Health Training Program and Coal Mine Official's Certification Program are mandated, certified and audited by the U.S. Department of Labor, Mine Safety & Health Administration.
- Activities including emergency response coordination and compliance with state mining law are State of New Mexico statutory duties of the State Mine Inspector.

## Excellent Miner Safety in New Mexico

Due to the concerted leadership of the governor, legislators, the mining industry, and state and federal officials at many levels, New Mexico has not only demonstrated a commitment to miner safety, but also fostered the necessary environment that upholds excellent mine safety standards.

In 2010 we saw the worst mine disaster in 40 years occur at the Upper Big Branch Mine in West Virginia. In addition to these 29 miners who we lost, 42 others died in other incidents, far surpassing the record year we had for mining safety in 2009. However, **New Mexico continues to have lower accidents per man hour worked than the national average and our miners worked fatality- free in 2010.**

In the last year significant accomplishments have contributed to miner safety in New Mexico:

### **Emergency Preparedness**

The New Mexico State Mine Inspector (SMI), in conjunction with the New Mexico Department of Homeland Security and Emergency Management (NMDHSEM), continues the process of initiating underground mine operators to the incident command system (ICS) and statewide response capabilities of NMDHSEM and other state, local and industry organizations.

This process will foster a relationship between NMDHSEM, the State Mine Inspector, and the mining operators of New Mexico, so in the future we will be able to collaborate and operate in a seamless fashion during an emergency.

### **Immediate Application of New Information**

Mining safety is an ever-evolving science. Regulatory and technological changes are tracked by the BMS in order to educate the NM mining industry. Educational methods include classroom instruction, newsletters, special bulletins, and conferences sponsored by BMS in partnership with other organizations.

### **Training is the Keystone of Safety**

The Bureau of Mine Safety exists to actively promote the safety of the miners of New Mexico. BMS trained over 2400 miners during 2010. This includes over 200 miners trained in Spanish language classes.



BMS New Miner Training

BMS training and initiatives have contributed to a superb safety record, including accident rates below the national average.

## 2010 Accomplishments

### Mine Emergency Management

The major initiative in 2010 continued to be establishing an incident command system in response to the following statutory requirement of 69-5-7.A(2) NMSA 1978:

*Upon notification of any explosion or other catastrophic event at a mine in which the lives of mine workers are jeopardized or in which fatalities have occurred, the State Mine Inspector shall allocate available resources within a twenty-four-hour time period to assist the mine operator in the rescue of persons and the subsequent accident investigation;*

To meet this requirement, the State Mine Inspector has brought together industry, BMS and the Department of Homeland Security and Emergency Management (DHSEM) to create an incident command system. The major effort this year was working with Mosaic Potash and BHPBilliton, on their Mine Emergency Response Development (MERD) exercises. These exercise involved state, federal, and mining industry groups.

The Mosaic exercise scenario was an underground fire and worker entrapment. This scenario allowed the organizations involved to test multiple resources at many different levels. The

exercise was very successful and a great deal was learned. The BHPBilliton exercise included an active shooter scenario that led to a truck accident and accidental discharge of explosives. The goal of the SMI is to continue working with mine operators conducting these types of exercises in other parts of the state.



*Miners compete in a mine rescue competition supported by BMS*

### Legislative Issues

During 2010, legislation was prepared for the 2010 regular session. HB 80 recommended changes in Coal Officials Certification requirements and proposed an appeal process for penalties imposed on mining operators. The SMI partnered with the New Mexico Mining Association (NMMA), and members of the International Union of Operating Engineers (IUOE). HB 80, sponsored by Representative John Heaton, was passed almost unanimously by the New Mexico House and Senate and was signed into law by Governor Richardson on February 22.



The major focus of the legislative change enabled recertification of Coal Mine Officials utilizing retraining and continuing education versus testing. The office of the SMI and coal operators would have incurred significant expense had retesting been required.

### **Compliance Assessment**

Legislation passed in 2006 and 2007 imposed strict requirements on the mining industry that must be assessed for compliance by the BMS. Actions completed in 2010 included:

- Review Emergency Notification Plans from approximately 300 mining operations throughout the state. Current status indicates that over 93% of the operators have complied with this requirement. We continue to request information from the remaining operators, although there are no statutory criteria, either through notice of violation or cease-and-desist orders, to require compliance.
- Review underground mine operators' implementation plans to ensure compliance with mining regulations. Review and approval by the State Mine Inspector included constant communications and frequent site visits during 2010.
- Development of rules defining Statutes was formulated, and approved by the Mining Safety Board (MSB).

Rules were placed into the New Mexico Administrative Code (NMAC) regarding revisions to the appeal process and coal certification requirements.

One violation for failure of emergency notification was issued by the SMI during 2010. The incident for which the violation was issued involved a fire at an underground gold mine. The operator failed to notify the SMI of the fire as required by regulation.



*Entry to mine where fire resulted in violation and penalty.  
(Picture by James Hollen, MMD)*

Compliance assistance continues to be a major responsibility for BMS. The Statutes require the State Mine Inspector (SMI) to provide compliance assistance including on-site audits to any mine requesting such service. As the economy improves and operations begin to recover from the recession, this service will be

utilized to a greater degree. Also, as MSHA requires greater compliance on health issues such as dust sampling, more effort will be required assisting operators in health related areas.

### **Safety and Health Training**

Engaging miners, through safety training is the primary mission of the BMS. The upswing in the mining industry in New Mexico has increased the number of miners and contractors seeking training from BMS. This trend is expected to continue into the future and be intensified by a predicted economic recovery. Safety & health training was delivered to over 2,400 miners, contractors and

ing accident in 40 years in the U.S., but New Mexico continued to have lower accidents per man hour worked than the national average and was fatality free. BMS training and programs were a significant contributor to this success.

### **Coal Mine Officials Certification Program**

During 2010, a review of re-certification requirements and testing criteria for coal mining officials was conducted. This has been a collaborative process with the coal mining industry in New Mexico. The data base of questions continues to be reviewed by the BMS to keep testing relevant.



*Candidate for Coal Mine Foreman Certification works on a ventilation map during testing*

other personnel from diverse mining environments. BMS is particularly proud of its miner training program delivered in Spanish.

As the number of mines and miners increases in New Mexico, we have enjoyed a period of extremely safe operations, evidenced by accident and fatality statistics. 2010 witnessed the worst min-

Prior to 2007 legislation, coal mine official's certification did not expire. Now, certifications must be renewed every five years. This will greatly increase the number of officials' certifications that must be renewed. The SMI worked with the Mining Safety Board, the coal industry and the affected unions to adopt regulations for the recertification process.

## Mine Safety Awards

BMS was instrumental in arranging the mine safety awards at the annual New Mexico Mining Association meeting in September. There were over 200 attendees at this convention, including representatives of mining companies, contractors, legislators, Governor's cabinet and government agencies. Awards were presented for:

- Safety and Health Innovator Award. This award was given to operators who best implemented innovative safety processes. In 2010, awards were presented to Chevron Mining Inc. – Questa Mine, BHP Billiton's San Juan Coal Company, Washington Tru Solutions –WIPP Project and Lee Ranch-El Segundo Mines.
- Safe operator of the year award was presented to seven operators representing different mine categories. Five of these operators worked for a year with no reportable accidents. These operations prove that "zero" accidents at mines is a very obtainable goal. The other award winners are listed in the table below.
- 105 zero-frequency certificates were awarded to mining organizations throughout New Mexico. These certificates were given to individual organizations or different departments within larger companies that were accident-free for a year.

The Lifesaving Response Award was continued in 2010. The mining industry invests many hours in first aid training and mine rescue training. These individuals and groups not only respond at the mines where they work, but also within their communities. Many volunteer as EMTs, first responders, and firefighters where they live, and are often leaders within these organizations. Recognition was given to individuals and the mining organizations that employ and train them. The Lifesaving Response Award was given to an individual or group who responded to a lifesaving situation, either at the mine where they work, or within the community.

Three awards were given in 2010 to El Segundo Mine, Intrepid Potash and Chevron Mining. Members of El Segundo's Mine Rescue Team conducted CPR on a victim struck by lightning and revived her.

### **Safe Operator of the Year**

| <b>Category</b>          | <b>Company Name</b>          | <b>Mine Name</b>          |
|--------------------------|------------------------------|---------------------------|
| Underground Coal         | BHP Billiton                 | San Juan Coal Company     |
| Surface Coal             | Peabody Coal                 | El Segundo Mine           |
| UG Metal/Non-Metal       | Mosaic Potash Carlsbad, Inc. | Carlsbad Operations       |
| Non-Producing Operations | Rio Algom Mining LLC         | Ambrosia Lake Reclamation |
| M/NM Mills               | Intrepid Potash NM LLC       | North Plant               |
| Sand and Gravel—Small    | Lea County Road Department   | Road Base Gravel Pit      |
| Sand and Gravel - Large  | Vulcan Materials Co.         | Santo Domingo Pueblo Mine |



Members of Lea County Road Department receive Safe Operator of the Year Award from SMI, Senator Leavell, and Lea County Commissioners

The awards were particularly gratifying because of the excellent safety record that New Mexico operations have registered during 2010. We have changed a generation of thinking that said zero accidents was not an obtainable goal, to one that says it is the only acceptable goal.

### **Communications**

In an effort to communicate more effectively and cohesively with the mining industry, our website continues to expand and is updated to insure that information is readily available to the industry as well as the public at large.

The website address is:  
[www.bmi.state.nm.us](http://www.bmi.state.nm.us).

During 2010, numerous meetings were held with mining operators throughout the state. These meetings informed industry of BMS's direction and addressed concerns of the operators. A significant effort was also extended to keep information flowing to the Office of the Governor, the NMMA, the Cabinet Secretary of the Energy Minerals and Natural Resources Department, the Director of the New Mexico Mining and Minerals Division and various groups within the NMT community.

### Mining Safety Board (MSB)

During 2010, much effort was extended working with the Mining Safety Board to update Regulations in the New Mexico Administrative Code ( NMAC).

Also, the MSB began a program to educate members on various aspects of mining. Meetings were held across the state so mining operations could be toured and experts in technical subject matter were invited to speak at meetings. This will contribute to better deci-

### Federal Grants

The BMS worked on its major grant application during 2010. This application was for renewing the FY 2010 grant agreement between the Mine Safety and Health Administration (MSHA) and New Mexico Institute of Mining and Technology. The grant has been utilized by BMS to train New Mexico miners to meet the training requirements of MSHA as required in 30CFR parts 46 and 48. The grant application was completed in August and approval of the \$147,305 grant was received in



*MSB members examine roof and rib at Intrepid's potash mine*

sion making by the MSB and better public policy.

During 2009, the terms of all MSB members expired. Ten of thirteen members applied for reappointment. This is an indicator that MSB members consider the membership rewarding and worthwhile.

September.

BMS applied for permission to use the grant funding from our special 2008 award entirely on equipment. A mine rescue trailer was purchased that houses a compressor, generator, and refrigeration equipment. This will allow quick transport of this equipment

in the unlikely event of a major mine emergency. The trailer is an integral part of the mine emergency management activities that have been undertaken by BMS.

### **Counsel from Attorney General**

Counsel provided by the Attorney General's Office was utilized in rule-making, consideration of violations and other areas of decision making. This service has been invaluable in support of such actions as violations, settlement agreements, statutory issues and other legal issues.

## **2011 Goals**

### **Mine Emergency Management**

During 2011, the Mine Emergency Management process will continue. Our goal of providing for a seamless incident command structure between the mining operation, state officials, federal inspectors and local emergency response organizations in the event of a mine emergency will be enhanced by performing extensive drills at mine sites.

The 2011 goal is to complete another functional exercise. The State Mine Inspector in conjunction with DHSEM personnel will work with local, county, state emergency managers, as well as federal and state mine safety personnel. Currently a MERD (Mine Emergency Response Development) is planned in Carlsbad that will

involve all these groups.

BMS is also facilitated training that involved mine personnel and local EMS that focused on training local EMS personnel in hazards expected at mining operations. This will allow local EMS to respond more safely in a mine emergency.

### **Legislative Issues**

The SMI will continue to act as a contact and informational source regarding any mining legislation involving mining safety. During 2011, the SMI will work with legislators, unions and industry representatives if any changes are proposed in the state mining safety statutes .

### **Mine Safety Inquiries from the Office of the Governor**

The office of the New Mexico State Mine Inspector will continue to be the focus for the Office of the Governor for information and expert opinion regarding mine safety issues. Response to these inquiries will continue to be handled expeditiously. The SMI will also continue active involvement with the Interstate Mining Compact Commission on the IMCC safety committee. This will help give New Mexico a voice on national mining safety issues.

### **Compliance Assessment**

During 2011 compliance assessment will continue to be a priority for BMS. Compliance assessment consists of reviewing implementation plans for underground

mine operators on a yearly basis. The emergency notification plans for all mine operators will be reviewed bi-annually as well. BMS works with the operators on any unresolved issues or gaps in the plans

### **Safety and Health Training**

Safety and health training will continue as the keystone to continued accident reduction in New Mexico. We anticipate training 2,400 miners in 2011. It is anticipated that a resurgent uranium industry, along with the expansion of mining in New Mexico in general, will produce a need for greater training capabilities from the BMS. It is also anticipated that Spanish-language training will be a growing need in New Mexico. Currently this training is limited. The BMS is one of the few organizations with a trainer who is both fluent in Spanish and a MSHA certified instructor. However, if funding is not increased for the BMS, the training program will continue into 2011 with little change from 2010 and the inability to meet the expected demand.

### **Certification of Coal Mine Officials**

The coal officials' certification program will continue to be updated to remain relevant. Discussions are under way with operators regarding the recertification of officials and the implementation of that process. It is anticipated that a cost savings can be realized by BMS without sacrificing miner safety due to the changed requirements for recertification from

"testing" to a program of retraining and continuing education requiring SMI approval and monitoring.

### **Mine Safety Awards**

BMS will continue this critical tool to communicate successes of safety programs throughout New Mexico. In order to continue this program, it is important to maintain the partnership between BMS and NMMA. The BMS also plans to communicate the availability of the program to encourage participation by more of the New Mexico mining industry.

### **Communications**

The BMS plans several initiatives in 2011 to increase our communications with the public and the mining industry. Our goal for 2011 is to utilize a revamped website as our primary communication tool. The site will be the primary source for training schedules, monthly newsletters, BMS reports, emergency mine notification and other mine safety issues.

Effective communications with customers will continue to be a major goal of 2011. As in 2010, interaction with the mining community, the Office of the Governor, NMT staff and other governmental entities will continue to be a communications focus.

## Mining Safety Board

Rulemaking will be a primary goal of the BMS to complete through the MSB. Education of MSB members is also a priority to enhance the Board's ability to effectively develop regulations.

Lack of functioning water sprays may have limited the machines ability to dampen and control the initial ignition which possibly spread to coal dust accumulation in the mine atmosphere.

This event was the source for various Con-



*Ambulances await mine rescue crews searching for survivors at Upper Big Branch Mine in West Virginia*

## 2010 Fatality-None

New Mexico worked fatality free in 2010. The nation and the world however, witnessed numerous mine accidents during 2010 that brought about increasing scrutiny of the mining industry.

In April, 2010 there was an explosion at the Upper Big Branch coal mine in West Virginia that took the lives of 29 miners. While the cause of the explosion is still under investigation, it appears that an ignition of methane gas occurred, released by the longwall mining cutting machine.

gressional hearings and proposals to revise mining law. The SMI has been involved both individually with New Mexico's Congressional delegation, and with the U.S House committees through IMCC in commenting on the proposed lawmaking.

It is not evident to the SMI that the new laws being proposed would have prevented the tragedy. The new proposals could affect New Mexico significantly and cause future statute and rule changes to meet the federal requirements.



## Roster of State Mine Inspectors

| NAME                | DATES       | ORDER            | LENGTH OF SERVICE |
|---------------------|-------------|------------------|-------------------|
| Rees H. Beddow      | 1912 - 1916 | 1 <sup>st</sup>  | 4 yrs             |
| W. W. Risdon        | 1916 - 1919 | 2 <sup>nd</sup>  | 3 yrs             |
| Jo E. Sheridan      | 1919 - 1920 | 3 <sup>rd</sup>  | <1 yr             |
| W. W. Risdon        | 1920 - 1925 | 4 <sup>th</sup>  | 5 yrs             |
| Warren Bracewell    | 1925 - 1927 | 5 <sup>th</sup>  | 2 yrs             |
| W. W. Risdon        | 1927 - 1931 | 6 <sup>th</sup>  | 4 yrs             |
| Warren Bracewell    | 1931 - 1947 | 7 <sup>th</sup>  | 16 yrs            |
| John Anthony Garcia | 1947 - 1959 | 8 <sup>th</sup>  | 12 yrs            |
| John Grbac          | 1959        | 9 <sup>th</sup>  | <1 yr             |
| William H. Hays     | 1959 - 1973 | 10 <sup>th</sup> | 14 yrs            |
| Joe D. Longacre, Sr | 1973 - 1981 | 11 <sup>th</sup> | 8 yrs             |
| Desi Apodaca        | 1981 - 1982 | 12 <sup>th</sup> | 2 yrs             |
| Manual Duran        | 1982 - 1986 | 13 <sup>th</sup> | 4 yrs             |
| Desi Apodaca        | 1986 - 1996 | 14 <sup>th</sup> | 10 yrs            |
| Gilbert Miera       | 1996 - 2002 | 15 <sup>th</sup> | 6 yrs             |
| Paul Pierce         | 2002 - 2005 | 16 <sup>th</sup> | 3 yrs             |
| Rebecca Boam        | 2005 - 2006 | 17 <sup>th</sup> | 2 yrs             |
| Terence Foreback    | 2007 -      | 18 <sup>th</sup> | 4 yrs             |

## AFTERWORD

The Bureau of Mine Safety has been proud to partner with the New Mexico mining industry, the NM Mining and Minerals Division, Miners' Colfax Hospital, Mining Suppliers, the Department of Energy and their contractors including Washington Tru Solutions and Portage, Inc. at the WIPP Project, and the Mine Safety and Health Administration to bring New Mexico a premier mine health and safety conference. 2010 marked the third year of the New Mexico Mine Health and Safety Conference was hosted at New Mexico Tech. This conference has been directed to serve the miners of New Mexico by presenting information on mine safety technology, educational techniques and networking opportunities. The goal is to bring miners together to make New Mexico the safest state in the nation in miner safety. Below are some images from the 2010 event.

*Excellent speakers highlighted the conference. NMT President Dr. Daniel López welcomed attendees. State Senator Howie Morales (right) discussed the importance of safety in our mines and growing up a miner's son.*



*Social events were well attended and offered the opportunity to network. Representative Don Tripp of Socorro shares a laugh with conference chair Steve Mills (left).*

*Breakout sessions were important to learn new technology promoting mine safety. Fall protection was covered in both classroom (right) and hands on (left) sessions.*

