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2008 Report to the Governor



New Mexico Bureau of Mine Safety

The State Mine Inspector's 2008 Report to the Governor

Cover Photo:

The cover photo is courtesy of Chevron Mining, Inc. – McKinley Mine. Mr. L. L. John recently retired from the McKinley Mine as an UMWA truck driver. His 30+ years were completed incident and accident free.

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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 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 responsible for the safety of New Mexico'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 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. 2008 was a record year for the country as a whole, in the reduction of mine fatalities. New Mexico continues to have lower accidents per man hour worked than the national average.

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 SMI in order to educate the NM mining industry. Educational methods include classroom instruction, newsletters, special bulletins and conferences sponsored by the SMI 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 2500 miners during 2008. This includes over 300 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.

2008 Accomplishments

Mine Emergency Management

The major initiative in 2008 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 conducting a functional exercise at the Questa Mine. This exercise involved state, federal, county, mining industry and volunteer organizations. The exercise scenario was an earthquake in Taos County that caused damage throughout the county and also trapped miners underground.

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 goal of the SMI is to continue these types of exercises in other parts of the State.



Plans are developed to rescue "trapped miners" during the functional exercise

Legislative Issues

During the 2008 legislative session, the BMS extended a substantial effort on HB 399. By working with the legislature, the New Mexico Mining Association (NMMA), and members of the International Union of Operating Engineers (IUOE) and United Steel Workers of America (USW), revisions to the statutes were made creating a safer mining environment for those employed in the industry.

The new legislation was carried almost unanimously through the New Mexico House and Senate and was signed into law by Governor Richardson on February 22, 2008. The legislation allowed under-

ground metal/non metal miners to carry self rescue devices while working underground rather than larger oxygen generating devices.

Mine Safety Inquiries from the Office of the Governor

Investigations of proposed changes in Federal mining law and the effect on New Mexico's miners required response to inquires from the Governor's Office. This included comment on an Emergency Temporary Standard (ETS) for underground coal mine seals. The ETS, and comments written regarding the ETS by various organizations, were analyzed to determine any positive or negative effects on New Mexico's miners. Another proposed change in federal mining law involved mine rescue team requirements. These changes will affect all underground mines in New Mexico, and may require greater involvement by the BMS to help mines meet the new requirements.

Compliance Assessment

The 2006 and 2007 legislation imposed strict requirements on the mining industry that must be assessed for compliance by the BMS. Actions completed in 2008 included:

Review Emergency Notification
 Plans from approximately 300 mining operations throughout the state. Current status indicates

that over 91% 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 insure compliance with mining regulations. Review and approval by the State Mine Inspector included constant communications and frequent site visits during 2008.
- 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 hoist signals, coal mine certification requirements and penalty structure for emergency notification.
- No violations were issued by the SMI during 2008.

The Statutes require the State Mine Inspector (SMI) to provide compliance assistance including on-site audits to any mine requesting such service. As new operations begin, due to expansion of the mining industry, this service will be utilized to a greater degree. Several operators requested these courtesy inspections during 2008.

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 resurgence in the uranium industry.

Safety & health training was delivered to over 2,500 miners, contractors and other personnel from diverse mining environments.

to have lower accidents per man hour worked than the national average. BMS training and programs were a significant contributor to this success.

<u>Coal Mine Officials Certification Program</u>

During 2008, a review of all 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 and industry representatives



B. Larry Sanchez, the BMS bilingual safety instructor, teaches a class in Socorro

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. 2008 was a record year for the country as a whole in the reduction of mine fatalities. New Mexico continues

to create relevant testing material.

Prior to the 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 that must be tested. The SMI worked with the Mining Safety Board to adopt regulations for this 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
 2008, awards were presented to
 Chevron Mining Inc. Questa
 Mine, GCC Rio Grande, and
 Washington TRU Solutions, WIPP
 project.
- Safe operator of the year award was presented to six operators representing different mine categories. It was noted that the Bonnell Pit not only worked the past year, for which the awards were presented, accident free and citation free, but has worked the past 3 years accident and citation free The other awards were given to:

 55 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.

A new awards category was added in 2008, the Lifesaving Response Award. The mining industry invests many hours in first aid training and mine rescue training. These individuals and groups not only respond at the mines they work at, but also within the communities they live in. 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 2008. Tommy Williams of Mosaic Potash administered CPR to a co-worker who had cardiac arrest following a heart attack. The welding shop crew of Intrepid Potash also

Safe Operator of the Year

Category	Company Name	Mine Name
Surface Coal	Chevron Mining, Inc.	McKinley Mine
UG Metal/Non-Metal	Chevron Mining, Inc.	Questa Mine and Mill
Non-Producing Opera-	Washington TRU Solutions, LLC	Waste Isolation Pilot Plant (WIPP)
tions		
Surface M/NM	Freeport-McMoRan	Tyrone Mine
M/NM Mills	Freeport-McMoRan	Chino – SX/EW
Sand and Gravel	Bonnell Sand and Gravel	Bonnell Pit



Safe Operator of the year Award presented to Chevron Mining Inc.- McKinley Mine by SMI

administered CPR to a co-worker who had cardiac arrest following a seizure. The Questa Mine Rescue Team responded to a life-threatening injury in the bottom of the Rio Grande Gorge, and helped stabilize and extricate the victim from the Gorge.

The awards were particularly gratifying because of the excellent safety record that New Mexico operations have registered during 2008. 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.

During 2008, 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 2008, much effort was extended working with the Mining Safety Board to update Regulations in the New Mexico Administrative Code (NMAC).

Federal Grants

The BMS worked on two major grant applications during 2008. The major application was for renewing the FY 2008 grant agreement between the Mine Safety and Health Administration (MSHA) and New Mexico Institute of Mining and Technology, for three additional grant periods (October 1, 2008 through September 30, 2011). 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



Chris Hefner of BMS judging a mine rescue competition

Old regulations that were contradictory to statute were removed. New regulations were added that further defined the new laws passed in 2006 and 2007 legislation. Public hearings were held on all regulations that were passed and public input used in the rulemaking process.

August and approval of the \$145,000 grant was received in September.

BMS applied for a special grant that was advertised by MSHA. BMS was successful in obtaining funding for mine rescue equipment that can be utilized at any underground mine in the state.

Along with other supplemental grants received from MSHA, funding will allow the BMS to support the ongoing development of mine emergency assistance and response coordination, for mine accidents or emergencies in New Mexico.

These activities are 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 rulemaking, 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.

2009 Goals

Mine Emergency Management

During 2009, 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 2009 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.

Legislative Issues

The SMI will continue to act as a contact and informational source regarding any mining legislations involving mining safety. During 2009 the SMI will work with legislators, unions and industry representatives regarding changes in the Statutes on Coal Officials Certification.

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.

Compliance Assessment

During 2009 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 would 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 2,500 miners in 2009. 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 2009 with little change from 2008 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 by changing requirements for recertification from "testing" to a program of continuing education.

Mine Safety Awards

BMS will continue this critical tool to communicate successes of safety programs throughout New Mexico. In order to con-

tinue 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 2009 to increase our communications with the public and the mining industry. Our goal for 2009 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 2009. As in 2008, 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 regulate mining operations.



Mr. Franklin's hard hat found at accident scene

2008 Mining Fatality

On August 6, 2008, shift supervisor Jeffrey R. Franklin, of Intrepid Potash East Mine operated by Intrepid Potash NM, LLC (Intrepid), was electrocuted. Mr. Franklin, age 38, was fatally injured when he contacted conductors for a heat tape that had been installed in a shared conduit body with the conductors of a 480-volt circuit. Mr. Franklin had over 15 years of mining experience, all at this operation. He had been a shift supervisor for almost 2 years.

On the day of the accident, Mr. Franklin was working evening shift. He was found at the hydro-separator sump near the flocculent building, lying unconscious on the ground and unresponsive. Attempts were made at resuscitation and he was transported to Carlsbad Hospital where he was pronounced dead by electrocution.

The electrocution was attributed to contact with heat tape conductors that had been installed in a shared conduit body with the conductors of a 480 volt circuit. Both the heat tape and circuit had been abandoned, but neither of them had been removed. The 480 volt circuit was energized and short-circuited to the heat tape causing it to be energized to 277 volts to ground. The heat tape overheated and portions of the heat tape insulation melted away, leaving bare conductors. Mr. Franklin contacted the bare heat tape conductors, or adjacent energized parts, while checking water valves in the area around the heat tape.

The accident occurred due to failure to ensure that all potential electrical hazards in the plant were identified and corrected. The conduit body was not effectively grounded, the 480 volt circuit was not protected from overloads with a properly sized circuit breaker, the conductors inside

the conduit body were not protected from mechanical damage, and the two abandoned circuits were not removed.

This accident was extensively investigated by MSHA, SMI and Intrepid. The investigation revealed specific deficiencies in the electrical distribution system at the East Mine. These specific deficiencies were corrected immediately. Intrepid removed the heat tape circuit and 480-volt circuit following the accident. An electrical contractor was hired to make modifications of the electrical circuits at the East Plant. The contractor was engaged to evaluate the East Plant electrical distribution systems, especially the electrical overload protection and ground continuity aspects. Subsequent to that evaluation, appropriate modifications to the electrical distribution systems were implemented.

Information on this event and corrective action was communicated by the SMI to the New Mexico mining industry.

Roster of State Mine Inspectors

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