

2007 Report to the Governor

New Mexico Bureau of Mine Safety



The State Mine Inspector's

2007

Report to the Governor

Bureau of Mine Safety Staff

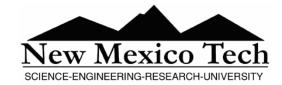
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BUREAU OF MINE SAFETY



Terence Foreback State Mine Inspector

2007 Report to the Governor

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 special minerelated 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. The standards that exist in New Mexico would have greatly mitigated the disasters we have seen in mines in West Virginia and Utah.

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

Emergency Preparedness

The New Mexico State Mine Inspector, in conjunction with the New Mexico Department of Homeland Security and Emergency Management (NMDHSEM), began a process to introduce underground and major surface mine operators to the incident command system (ICS) and statewide response capabilities of NMDHSEM.

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. These efforts were initiated prior to the Crandall Canyon Mine accident in Utah.

Immediate Application of New Information

Following the Crandall Canyon Mine tragedy, the New Mexico State Mine Inspector, under the direction of Governor Richardson, traveled to Utah. Information regarding the accident and any application to New Mexico's mines was investigated. An inspection of New Mexico's San Juan Coal underground coal mine, the only underground coal mine in the state, was later undertaken to determine any potential vulnerability.



Longtime BMS Instructor, Larry Sanchez, conducting New Miner Training

Training is the Keystone of Safety

The Bureau of Mine Safety exists to actively promote the safety of the miners of New Mexico. BMS will train over 3000 miners during 2007. This includes over 300 miners trained in Spanish language classes. BMS training and initiatives have contributed to New Mexico's superb safety record.

2007 Accomplishments

Mine Emergency Management



Table top exercise - working through a mine disaster

A major initiative in 2007 has been establishing an incident command system in response to the following statutory requirement of the 2007 legislation:

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. A kickoff meeting was held in Santa Fe in August to foster a relationship between the agencies and the mining operators of New Mexico, so in the future the organizations that would be involved

will be able to collaborate and operate in a seamless fashion during an emergency. Several sessions have been held throughout New Mexico to work toward creating the incident command system. The first meeting's intent was to familiarize underground and major surface mine operators with the state's incident management system, review the statewide response capabilities of DHSEM and to facilitate the sharing of emergency response plans amongst attendees. The

mining companies present at the initial meeting were BHP Billiton, Chevron Mining Inc.
McKinley Mine and Questa Mine,
WIPP/Washington TRU Solutions, Mosaic
Potash, Intrepid Potash, Freeport McMoRan
Inc. Chino Mine and Tyrone Mine. The
Department of Labor's Mining and Safety
Health Administration was also in
attendance.

The next activity conducted was a mine safety table top exercise held on October 4th in Carlsbad. The exercise simulated a natural gas inundation and resulting explosion, missing staff and loss of communication in the underground Mosaic Potash Mine. The scenario allowed the participants to talk through notification procedures, discuss operating periods, evaluate how to deal with the media, and fold into the incident command system. The mock disaster involved all facets of a mine rescue and allowed participants to discuss resource allocation from numerous organizations. The mining companies present at the exercise were Chevron Mining Inc.

McKinley Mine and Questa Mine, WIPP/Washington TRU Solutions, Mosaic Potash, San Juan Underground and Intrepid Potash. Eddy County's Emergency Management was also in attendance.

In late October 2007, BMS, in conjunction with DHSEM, conducted Joint Information System (JIS) - Joint Information Center (JIC) training in Albuquerque. This training educated Communications/Public Information Officers of

the organizations involved on the communications reporting during a disaster. This is a very important aspect of the incident command system (ICS).

Executive level ICS training is ongoing with the major operators in New Mexico. This training is being conducted for the management of the mining companies involved in the process.

Legislative Issues

During the 2007 legislative session, the BMS extended a substantial effort on HB 682. By working with the legislature, the New Mexico Mining Association (NMMA), and members of the International Union of Operating Engineers (IUOE) and United Mine Workers of America (UMWA), revisions to the statutes were made creating a safer mining environment for those employed in the industry.

The new legislation was carried unanimously through the New Mexico House and Senate and was signed into law by Governor Richardson on April 3, 2007. The legislation has redefined the duties for the State Mine Inspector including mine emergency operations coordination, procedures, inspections, and accident investigation relative to enforcing the new statutes, mine compliance courtesy inspections and the coal mine official's certification program. The legislation also redefined the role of the New Mexico Mine Safety Board (MSB), which is the oversight board for the actions of the State Mine Inspector.

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 2007 included:

- Review Emergency Notification Plans from approximately 300 mining operations throughout the state. Current status indicates that over 88% 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 new legislation. Review and approval by the State Mine Inspector included constant communications and frequent site visits during 2007.
- Development of rules surrounding the new 2007 legislation was formulated, and reviewed with the Mining Safety Board

- (MSB). A public hearing will be held in 2008 and the rules will be published in the New Mexico Register.
- Settlement agreements were reached with two mine operators that had been assessed fines for notification violations and the fine was received from a 3rd operator.

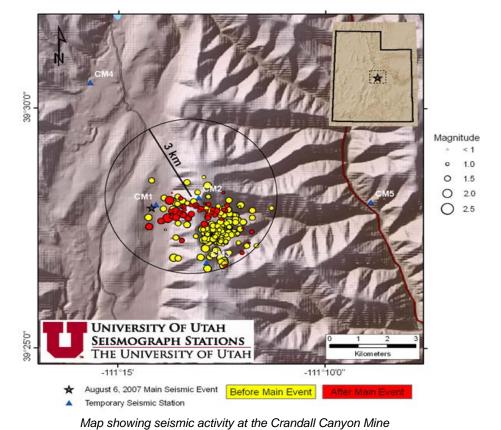
An important issue to the underground metal mines that will be addressed in the near future is the self-contained self-rescuer (SCSR) requirements of the recent legislation. This will be addressed in conjunction with compliance reviews during 2008. Meetings on this issue were held with operators throughout the state during 2007.

The new legislation requires 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 and received these courtesy inspections during 2007.

Mine Safety Inquiries from the Office of the Governor

Numerous issues surfaced during 2007 concerning mine safety in New Mexico. Paramount was research related to the Crandall Canyon Mine Disaster in Utah. Following the Crandall Canyon Mine tragedy, the New Mexico State Mine Inspector, under the

direction of Governor Richardson, traveled to Utah. Information regarding the accident and any application to New Mexico's mines was investigated. This included discussions with the Chairman of the Mining Engineering Department at the University of Utah, consultation with members of the seismic



stations at the University regarding the seismic activity surrounding the accident, and discussions and correspondence with Utah Agency representatives and staff representing members of the Utah Mine Investigation Commission.

An inspection of the San Juan Coal underground coal mine was undertaken to determine any potential vulnerability. This inspection, along with others conducted during 2007 and 2006, has revealed a state- of-the-art facility. The operator practiced neutralization and monitoring of mine gasses in abandoned areas prior to the 2006 Sago disaster in West Virginia, a practice that would have prevented the explosion at Sago. The mining method employed is different than that which led to the collapse at the Crandall Canyon Mine. All of New Mexico's underground mining operations either have completed or are in the process of investigating installation of wireless communications, miner tracking systems, underground mine shelters, and caches of oxygen producing self contained self rescuers.

All of these, if in use, could have helped in the possible survivability and rescue of the underground miners at the Crandall Canyon Mine.

Following the investigation and inspection, a fact sheet was prepared for staff in the Governor's office.

Investigations of proposed changes in Federal mining law and the effect on New Mexico's miners also 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.

Coal Mine Officials Certification Program

During 2007, 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 was reviewed by the BMS and industry representatives to create relevant testing material. The test questions have been updated and include both the new state and

federal requirements which changed during 2006 and 2007. This data base of potential questions has been created and transferred into test-generator software.

Prior to the 2007 legislation, 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 yearly

Safety and Health Training

Engaging miners, though safety training, is the primary mission of the BMS. The upswing in the mining industry in New Mexico has



B. Larry Sanchez, the BMS Bilingual Instructor, teaches a class in Socorro.

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. All factions of mining throughout New Mexico were represented in the training process. 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. For a two-year period, beginning in 2005, there were no mine fatalities in New Mexico. BMS training and programs were a significant contributor to this success. Unfortunately, an accident occurred involving a belt conveyor tailpiece striking a miner at the San Juan Coal Company in November of 2007. The miner died in December.

From the Ground Up - K-6 Education Program

From the Ground Up, the K – 6, three day workshop presented at NMT by BMS personnel, was a resounding success. The program took place June 5th – 7th, 2007 at the MSEC building. Eleven teachers from throughout New Mexico participated in the program. The focus of the workshop was mining in New Mexico. While attending the program, participants stayed in the dorms and ate at the cafeteria, exposing them to NMT's atmosphere. Expenses were paid by the program.

The first two days, mining professionals from various industries and technical backgrounds spoke on the history of mining in NM, copper mining, potash mining, underground coal mining, molybdenum mining, and mine reclamation. The sessions also included a mining industry overview and hands-on activities that the teachers could take back and utilize in their classrooms. Included were demonstrations of classroom experiments led by two award-wining elementary teachers from Socorro.

The third day included a tour of the Lee Ranch coal mine in Grants. After two days of information gathering, the teachers found it

enlightening to visit a working mine. The tour gave them a better understanding of the classroom material and New Mexico's mining industry.

During the year of preparation for this workshop, the BMS acquired copies of CD's, DVD's, videos, posters, and over 150 classroom activities about mining. The teachers took these materials back to the classroom where they will be used to teach a greater appreciation of the role mining plays in the lives of their students.

Upon completion, participants received graduate credit through the NMT Masters of Science Teachers (MST) program



Awards presentation by Bureau of Mine Safety at NMMA annual meeting

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:

2007 award was presented to San Juan Coal Company (SJCC). SJCC implemented numerous systems at their underground coal mine to protect the safety of their miners.

Safe Operator of the Year

Presented to eight operators representing different mine categories. In 2007 however, BMS felt that there was one operator of the

Safety and				
Health				
Innovator				
Award				
This award				
was given to				
the operator				
who best				
implemented				
innovative				
safety				
processes. The				

2007 Safe Operator of the Year					
Category	Company Name	Mine Name			
UG Coal	San Juan Coal Company	San Juan South Mine			
Surface Coal	Lee Ranch Coal Company	Lee Ranch Mine			
UG Metal	Molycorp. Inc	Questa Mine and Mill			
UG Non-Metal	Washington TRU Solutions	Waste Isolation Pilot Plant			
Open Pit M/NM	St. Cloud Mining Company	St. Cloud Mine			
Open Pit Stone	Chaves County Road Dept.	Chaves County Portable			
S&G Bank or Pit	St. Cloud Mining Company	Lordsburg Mine			
M/NM Mills	Rio Algom Mining LLC	Ambrosia Lake			

group, whose accomplishments were truly outstanding, and who should be recognized individually. An award for the Outstanding safe Operator of the Year was given to the Lee Ranch Coal Company. Lee Ranch worked over one million man hours and more than a year without a single reportable injury.

Zero-Frequency Certificates

85 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 awards were particularly gratifying because of the excellent safety record that New Mexico operations have registered during 2006 and 2007. We have changed a generation of thinking that said zero accidents was not an obtainable goal, to one that says it is the <u>only</u> acceptable goal.

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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 2007, 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 2007, much effort was extended working with the Governor's office regarding vacancies on the MSB. The 2007 legislation requires balance between management and non-management members of the MSB. There were three positions open during 2007 due to resignations that were filled with three non-management individuals. This will bring the make up of the board to seven management and six non-management members.

The 2007 legislation also requires new procedures for rulemaking, public hearings, appeals of certifications and evaluations of variances. The effect will increase the responsibilities of the Board and the frequency and duration of meetings. The legislation also requires that members per diem be paid by the BMS budget. A fall meeting was held on November 7th in Albuquerque to lay the groundwork for future changes including the rule making process.

Federal Grants

The BMS worked on three major grant applications during 2007. The major application was for renewing the FY 2007 grant agreement between the Mine Safety and Health Administration (MSHA) and New Mexico Institute of Mining and Technology, for one



Chris Hefner, Associate State Mine Inspector, judging a mine rescue competition

additional grant period (October 1, 2007 through September 30, 2008). 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 October and approval of the \$142,000 grant was received in November.

BMS applied for two special grants that were advertised by MSHA. They involved funding of mine rescue training activities by approved training agencies. BMS was successful in its application for supplemental funding.

This grant funding will allow the BMS to support the on-going development of mine emergency assistance and response coordination, for mine accidents or emergencies in New Mexico. The monies will be used in stages to:

- Formalize agreements of mutual assistance among mining operators
- Familiarize mine rescue team members with the mines which have entered into the agreements

ese activities are an integral part of the mine emergency management activities that have been undertaken by BMS.

An application for a special mine rescue training grant was applied for, but not awarded.

Counsel from Attorney General

Legislation in 2007 provided counsel as needed to support the enforcement of the State Mine Inspector's office. This service, provided by the Attorney General's Office, has been an invaluable service in support of such actions as violations, settlement agreements, statutory issues and other legal issues.

2007 Mining Fatality

A serious accident occurred on November 12, 2007 at San Juan Coal Company that resulted in the death of the miner involved on December 4th. This ended a period of over two years of mining in New Mexico without a fatality.

The accident occurred when 4 miners were assigned to reset the feeder breaker at the tail piece of the 72" conveyor belt. The feeder breaker and tailpiece were located approximately mid-way between cross cuts 87 and 88 in the # 4 entry. Shuttle cars dumped coal onto the feeder breaker which then crushed the coal and fed it onto the conveyor belt.

Two miners were watching the feeder breaker on the walkway side and the injured employee was watching on the off walkway side as the operator was resetting the feeder breaker. The 72" conveyor was running during the resetting process. During the process, two bolts that were part of the six-bolt anchorage system into the floor sheared off. The bolts were believed to be corroded due to hydrogen sulfide. There is some question as to impact of the feeder breaker and the tailpiece and the contribution impact may have had to the failure of the bolts, if any. Following the failure of the two bolts,

the inby, off walkway corner of the tailpiece moved laterally and struck the rib. The tailpiece did not strike the injured miner at this time. The conveyor belting then began to walk to the side and double up on the tail roller. This caused the tail piece to begin to rise and put tension on the remaining 4 bolts. These bolts then failed at the rock/resin interface and the 4 remaining bolts pulled from the floor. The tailpiece then was free to move and traveled 73' outby propelled by the belt force. The miner was then struck by the tailpiece as he tried to escape outby on the off walkway side.

The miner was Mr. Edison K. Hatathli, age 50. He was an underground Continuous Miner Setup Miner who had worked at the mine for over 6 years.

This accident was extensively investigated by SJCC, the SMI and MSHA. SJCC made immediate changes in the practice of setting feeder-breakers and on tailpiece anchorage. Information on this event and corrective action was communicated by the SMI to the New Mexico mining industry.

2008 Goals

Mine Emergency Management

During 2008, 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.

During early 2008, the State Mine Inspector in conjunction with DHSEM personnel will travel to the locations of the mining operations involved, and complete an incident command training course to mine management members. This will tie together the discussions that have been held on a technical level, with the incident command structure, so management understands the process.

A first full scale mine emergency drill will be held at Chevron Questa. We anticipate local, county, state emergency managers to participate as well as federal and state safety officers.

<u>Legislative Issues</u>

The 2008 legislative session will be a 30 day session concerning primarily budget issues. A primary goal for BMS will be to receive increased funding. Staff will be attending the session to assist in obtaining support for NMT budget in order to get additional funding to support the department's statutory requirements. It is imperative that BMS receive adequate funding to maintain current staffing levels plus add a FTE, for compliance-

management and training, related to the 2006 and 2007 legislative mandates.

It is not anticipated that additional mine safety legislation will be drafted during the 2008 session. However, the Crandall Canyon Mine disaster is still fresh in the minds of the public and the legislators. Therefore, the State Mine Inspector will attend the legislative session to act as expert witness for any possible mining issues.

Compliance Assessment

During 2008, a major goal will be to obtain funding to fulfill the BMS statutory mandate. This would entail maintaining the current BMS staff and adding a FTE for a combined training and compliance assessment role. Compliance assessment would consist of reviewing implementation plans for underground mine operators on a bi-yearly basis. The emergency notification plans for all mine operators would be reviewed bi-annually as well. BMS would

then work with the operators on any unresolved issues or gaps in the plans.

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.

Coal Mine Officials Certification Program

The coal officials certification program will complete the review that has been undertaken with the mine operators. The first exam under the revised program will occur in March. Discussions are under way with operators regarding the recertification of officials and the implementation of that process.

Safety and Health Training

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. A request for additional funding will be made during the legislative session in 2008 to meet this need. A portion of the FTE for the BMS is required for this training. 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 2008 with little change from 2007 and the inability to meet the expected increased demand.

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. Changes are anticipated in this process for 2008

and include, reducing the number of categories for Safe Operator of the Year. The BMS also plans to communicate the availability of the program to encourage participation by more of the New Mexico mining industry.

From the Ground Up - K-6 Education Program

The BMS will continue this successful program in 2008. This is an excellent communications tool for NMT and the BMS. It also helps to foster a relationship among the BMS, NMT, NMMA, and industry. The goal for 2008 is to

bring 15 teachers to the program and increase the funding received from NMMA for the program.

Communications

The BMS plans several initiatives in 2008 to increase our communications with the public and the mining industry. Our goal for 2008 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 2008. As in 2007, 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. There currently are rules that have not been repealed, that are in conflict with the statutes. Repealing these obsolete rules is a primary goal for 2008. Also,

rules that were placed in the New Mexico Administrative Code (NMAC) in 2006 require review, and new rules related to the 2007 legislation must be approved and placed in the NMAC.

Federal Grants

The MSHA federal grant will require reapplication in 2008. The goal of BMS is to increase funding received from this grant. Extensive effort will be expended for the reapplication process.