



2012 Report to the Governor
New Mexico
Bureau of Mine Safety

The State Mine Inspector's 2012 Report to the Governor

Cover Photo:

Clint Tiffner works in underground mine maintenance for Mosaic Potash Carlsbad Inc..He has worked underground for 7 years with no recordable injuries. Clint is a member of Mosaic's mine rescue team and is a United Steel Workers Union member. With Clint is Mosaic Safety Specialist Oscar Colorado.

Bureau of Mine Safety Staff

State Mine Inspector

Terence Foreback

Associate State Mine Inspector

Chris Hefner

Safety Trainer – Mine Safety Specialist

Larry Sanchez

Administration Specialist

Lorraine Archuleta

Student Intern

Catherine Blythe Lindsey

Table of Contents

2012 Overview

Introduction.....	1
Excellent Miner Safety in New Mexico.....	2
Emergency Preparedness	
Immediate Application of New Information	
Training is the Keystone of Safety	

2012 Accomplishments

Mine Emergency Management.....	3
Legislative Issues.....	4
Compliance Assessment.....	4
Safety and Health Training.....	5
Coal Mine Officials Certification Program.....	5
Veterans' Initiatives	6
Mine Safety Awards.....	7
Communications.....	8
New Mexico Mine Health and Safety Conference	9
Mining Safety Board (MSB)	10
Federal Grants.....	10
Counsel from Attorney General.....	11

2013 Goals

Mine Emergency Management.....	11
Legislative Issues.....	11
Mine Safety Inquiries from the Office of the Governor.....	11
Compliance Assessment.....	12
Safety and Health Training.....	12
Certification of Coal Mine Officials.....	12
Mine Safety Awards.....	12
Communications.....	12
Mining Safety Board (MSB)	13

2012 Fatality Free.....	13
--------------------------------	-----------

Roster of State Mine Inspectors.....	14
---	-----------

Afterword	15
------------------------	-----------



NEW MEXICO BUREAU OF MINE SAFETY

Terence Foreback
State Mine Inspector

101 East Road
Socorro, NM 87801
Phone: 505-835-5460
www.nmminesafety.com

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 2012 the U.S. mining industry recorded the second lowest number of fatalities on record. No fatalities occurred at a mine site in New Mexico during 2012. Additionally, **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 BMS in order to educate the NM mining industry. Educational methods include classroom instruction, newsletters, special bulletins, and conferences with BMS participation.

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 2300 miners during 2012. This includes over 200 miners trained in Spanish language classes.

BMS classes for the mining industry include classes on large truck safety and inspection



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

2012 Accomplishments

Mine Emergency Management

The major initiative in 2012 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. Major efforts have been made on Mine Emergency Response Development (MERD) exercises at our State's underground and surface mining operations. These exercises involve the mine's rescue team, state, federal, local EMS and mining industry groups.

An example exercise scenario was a haul road accident involving a pick-up truck and a mine haul truck. It requiring extrication of "victims" and trans-

port. The mine ambulance then was involved in an "accident" when approaching the local hospital, requiring response and interaction with local EMS. Scenarios like this allow the organizations involved to test multiple resources at many different levels. These exercises have been very successful and valuable learning experiences.

BHPBilliton's San Juan #1 underground mine experienced an underground mine ignition in September, 2011. All workers safely evacuated the mine. Experience gained from past MERD exercises played a major role in the safe evacuation of the miners.

BMS also supports mine rescue competitions that hone teams' skills in emergency response. BMS's Chris Hefner has judged competitions at regional levels as well as the MSHA national competition.

Chris Hefner of BMS judges miners competing in the



Southwest Regional Mine Rescue Competition

Legislative Issues

There were no legislative issues involving mining safety during the 2012 session. The SMI did monitor other legislation involving mining in New Mexico and testified at hearings on these issues. In addition, the SMI was involved with safety issues at the national level through participation in the Interstate Mining Compact Commission (IMCC).

Compliance Assessment

NM Statutes impose strict requirements on the mining industry that must be assessed for compliance by the BMS. Actions completed in 2012 included:

- Review Emergency Notification Plans from approximately 200 mining operations throughout the state. Current status indicates that over 89% 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 2012.

One violation was issued by the SMI during 2012. A violation was issued to Chevron Mining Inc. — McKinley Mine for a fire on a piece of mobile equipment. The operator failed to notify the SMI of the fire as required by regulation. Chevron paid a fine of \$10,000 for the violation.



Compliance assistance was given to O'Kelley Sand and Gravel during 2012 at their Deming, NM operation

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. This service is particularly valuable to small mining businesses in NM. As the economy improves and aggregate 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, diesel particulate matter and noise abatement, more effort will be required assisting operators in health related areas.

Safety and Health Training

Engaging miners, through safety training is one of the primary missions 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 2,300 miners, contractors and other personnel from diverse mining environments. BMS is particularly proud of its miner training program delivered in Spanish.



Candidates for Underground Coal Mine Certification during testing at BHPBilliton's San Juan Coal Company

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. Nationally, 2012 was the second safest year on record for mining fatalities. New Mexico continues to have lower accidents per man hour worked than the national average. BMS training and programs were a significant contri-

contributor to this success.

Coal Mine Officials Certification Program

During 2012, 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. BMS has been working with coal mining companies in New Mexico on the re-certification process for certified coal mine officials in the State. Certifications are

Valid for five years and then officials must be recertified. The SMI has worked with organizations most affected to enact a recertification program that reeducates officials to perform Safely. The SMI recertified 526 coal mine officials in 2012.

BMS also provided testing and certification for 108 miners in 2012.



Students receive instruction on explosive safety during a session of the new miner training for veterans



Representatives of Freeport McMoRan Copper and Gold were active at the job fair

Veterans' Initiatives

BMS undertook initiatives to bring the New Mexico mining community together with veterans seeking jobs. Numerous mining companies in NM are seeking desirable candidates to work in their operations. Our state also has numerous veterans returning from assignments and are looking for good jobs. BMS worked with our Veterans' Affairs Department and Workforce Solutions to hold a job fair in Albuquerque bringing the two groups together. There were 20 mining companies present plus other groups providing veterans services such as help with resume writing. The fair was attended by almost

500 veterans. As a follow up to the fair, BMS conducted a new miner training class in Grants. This was a free class for veterans teaching them the safety basics of mining and is required by the Mining Safety and Health Administration before a company can employ a person as a miner on their worksite. By attending the 24 hour



Veterans discuss job opportunities with Intrepid Potash class, veterans are one step ahead of other potential employees in the hiring process. BMS was pleased with the results of the initiatives that we plan to continue into the future.

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 2012, the award was presented to BHPBilliton’s San Juan Coal Company for their innovative underground mine safety technology.
- Safe operator of the year award was presented to five operators representing different mine categories. Two 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.

- 108 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.

We continue to recognize groups and individuals who perform emergency response activities through our 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 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 2012 to Intrepid Potash, Chevron Mining Inc—

Safe Operator of the Year

2012 Safe Operator Of the Year		
Category	Company Name	Mine Name
UG Metal and UG Non-Metal	Intrepid Potash-New Mexico, LLC	Intrepid Potash West
Surface Coal	Peabody New Mexico Services	Lee Ranch Mine
Stone Quarries, Sand and Gravel	Lea County Road Department	Lea County Rock Crusher
Non Producing Operations	Washington TRU Solutions, LLC	Waste Isolation Pilot Plant
M/NM Mills	Intrepid Potash-New Mexico, LLC	Intrepid Potash-North



SMI and NMMA President Don Purvis present Rescue Response Award to San Juan Coal Company

Questa Mine and San Juan Coal Company employees who helped with accidents on local highways, at community activities and at the mine sites that led to successful first aid, recovery of victims or successful mine evacuation.

The awards were particularly gratifying because of the excellent safety record that New Mexico operations have registered during 2012. 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 2012, 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.

New Mexico Mine Health and Safety Conference

During 2012 BMS personnel, along with the NM mining industry contributed to bring the fifth annual New Mexico Mine Health and Safety Conference to our State. This event is well attended by representatives of labor, management, contractors, regulators and safety professionals. The event is one of the premier conferences in the country. New Mexico Tech again hosted the function with events held on the campus in Socorro. The conference is approaching 200 attendees along with product exhibitors. These are some of the images from the event.



Kendall Lindenbaum, manages health and wellness programs and spoke on that subject



Chef Hussan's cooking class was quite popular



Safety breakout sessions included NM OSHA's Eddie Dominquez's on trenching safety

Robert Baldrige, General Manager of Intrepid Potash leads a leadership forum



A conference highlight was the keynote session with Charlie Morecraft followed by "A Conversation With Charlie"

Freeport McMoRan Vice President Rick Mohr shares a moment with Congresswoman Heather Wilson prior to the Miners' Dinner



Attorney Dana Svendsen discusses MSHA accident reporting requirements

Mining Safety Board (MSB)

The New Mexico Mining Safety Board continues to be a vibrant organization working to ensure the safety of our State's miners. The SMI worked with the MSB during 2012 and continued 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 decision making by the MSB and better public policy.

During 2012, MSB members' attendance at our meetings and was excellent. This is an indicator that MSB members consider the membership rewarding and worthwhile. Two new non-management members joined the MSB in 2012. These new members represent the SW New Mexico potash and

the northern NM Molybdenum industry

Federal Grants

The BMS worked on its major grant application during 2012. This application was for renewing the FY 2012 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 and award of the funding continues to be further delayed due to Federal budget issues. We did receive \$147,305 in Federal FY 2012. The Mine Safety and Health Administration (MSHA) has recommended to Congressional Budget Committees that a 60% reduction in grant level funding be made for FY13 and that MSHA instead use the



MSB members going underground at Mosaic Potash Carlsbad during October meeting

funding for enforcement. This would be unfortunate for the small businesses and county organizations that we serve. If the grant were cut, BMS would have to increase fees for training by a factor of 5 causing a major expense to the operators of small mining operations. It should be noted that BMS does not charge county and state organizations for training. If our grant funding is cut, we will be unable to train these groups.

Counsel from Attorney General

Counsel provided by the Attorney General's Office was utilized in hearings, 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.

2013 Goals

Mine Emergency Management

During 2013, 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 2013 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 will continue our efforts on mine rescue competitions in conjunction with industry and MSHA. Staff will be provided for the South West Regional Mine Rescue Competition and for the national competition.

Legislative Issues

The SMI will continue to act as a contact and informational source regarding any mining legislation involving mining safety. During 2013, 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 giving New Mexico a voice on national mining safety issues.

Compliance Assessment

During 2013 compliance assessment will continue to be a priority for BMS. Compliance assessment consists of reviewing 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 2,300 miners in 2013. 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 2013 with little change from 2012 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. Review of material required for recertification continues with operators

regarding the recertification of officials and the continuing 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. BMS will continue to recertify officials before yearly expiration dates of their certificates.

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 2013 to increase our communications with the public and the mining industry. Our goal for 2013 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 2013. As in 2012, 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

Education and regulatory policy will be a primary focus of the MSB. Contributing to the overall safety of NM miners and continuing our excellent safety performance will also be a priority of the MSB.

The trends in mining safety have been continually downward in terms of fatalities and reportable accidents, both nationally and in New Mexico. In these terms, mining ranks in the middle of all industries in the US, contrary to its reputation as a dangerous occupation. The statistical improvement in safety have occurred for a variety of reasons. These have included better training of our miners, different approaches to risk management by mining

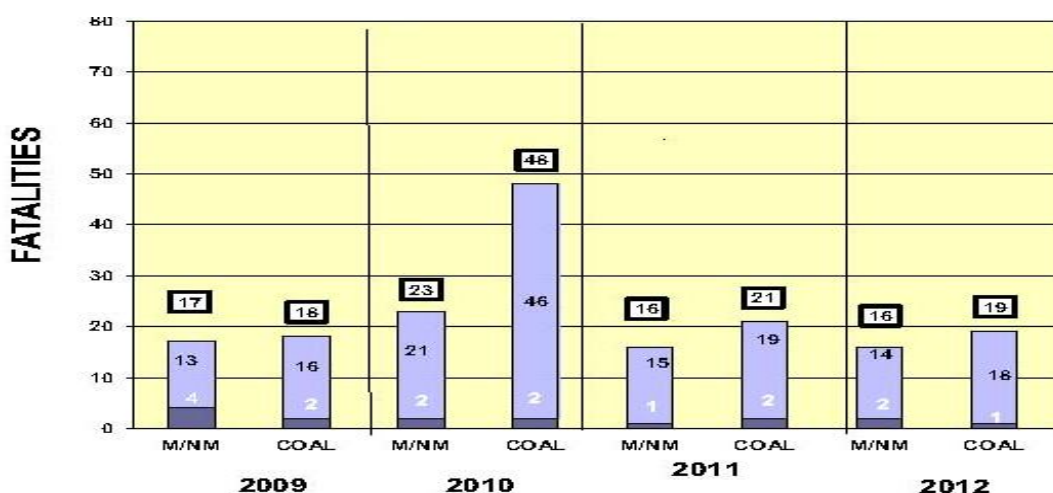


Figure 1: Comparison of fatality information for Metal/Non-Metal and Coal Mining for Recent Years

2012 Fatality Free

New Mexico was fatality free in 2012 at our state's mining operations and our accident incident rate for all our mines was below the national average. In addition, mining at a national level enjoyed its second best record in history in terms of fatalities. Figure 1 above compares fatality numbers for the last 4 years. The two bars for each year represent fatalities from the coal industry and from metal non-metal mining (MNM includes all mining other than coal, including aggregates, metal mining and industrial minerals). New Mexico employs far more miners in the MNM sector.

companies, technical advances in equipment and systems and laws and regulations. The net result is shown in the reduction from over 250 miner fatalities in 1979 to where we are today (see figure 2).



Figure 2 Mining Fatalities By Year Since 1978

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	6 yrs

AFTERWORD

The Bureau of Mine Safety is proud to represent the miners of New Mexico. New Mexico miners are our country's leading potash producers, third leading copper producers, 13th ranked in coal production and leaders in minerals such as molybdenum, zeolite and perlite. This year's Report to the Governor celebrates the miners of Mosaic Potash Carlsbad Inc. Photos courtesy of Jim Renfrow of the Carlsbad Artist Association and Mosaic Potash Carlsbad, Inc.

Below: Mosaic's HOTRODS, hourly employee group that conducts safety observations of employees and offers improvement ideas throughout the company based on their observations



Control room operator Canan Najera has worked 5 years at Mosaic with no lost time accidents. She monitors the flow of potash through the K-Mag plant's extraction cycle



Tommy Vasquez, has worked in Mosaic's surface maintenance for 8 years with no recordable injuries.

*Mosaic's underground shop facility is located 850 feet underground. It is used for major repair of underground mining equipment. Underground workers in the photo include **Kenny Blair** who has no reportable or lost time injuries in 36 years, **Frank Buffington** who has no reportable or lost time injuries in 22 years, and **Ezra Buttrey** with no reportable or lost time injuries in 6 years*



