

**LCB FILE No. 125-08**  
Mine Safety and Training Section Proposed Regulation Updates

The following statement is submitted for final adopted amendments to Nevada Administrative Code Chapter 512.

**1. A description of how public comment was solicited, a summary of public response, and an explanation of how other interested persons may obtain a copy of the summary.**

Copies of the proposed regulations, notices of the scheduled workshop and public hearing were sent by U.S. mail and email to persons who were known to have an interest in the adoption of mining regulations by the Mine Safety and Training Section (MSATS) of the Division of Industrial Relations (DIR). Notices of the workshop and public hearing were posted in the following locations:

Offices of the Division of Industrial Relations  
400 W. King Street, Suite 210  
Carson City, NV 89703

Offices of the Division of Industrial Relations  
1301 North Green Valley Parkway, Ste. 200  
Henderson, Nevada 89014

Offices of the Division of Industrial Relations (Nevada OSHA)  
4600 Kietzke Lane, Ste F-153  
Reno, NV 89502

Legislative Counsel Bureau  
401 South Carson Street  
Carson City, NV 89701

Nevada Legislative Building  
401 South Carson Street  
Carson City, NV 89701

Grant Sawyer State Office Building  
555 E. Washington Ave.  
Las Vegas, NV 89101

E-mail requests to post notices were sent to the locations listed below. However, no affirmation of postings were received:

Capitol Press Room  
Capitol Building Basement,  
Carson City, NV 89701

Nevada Attorney General's Office  
100 N. Carson Street  
Carson City, NV 89701

Donald W. Reynolds Press Center  
102 N. Curry Street  
Carson City, NV 89701  
Blasdell Building  
209 E. Musser Street  
Carson City, NV 89701

All State and County Libraries

A. On June 10, 2008, DIR conducted a public workshop to discuss the proposed changes; the workshop was held at:

Western Nevada Community College  
Cedar Building, Room 308  
2201 W. College Parkway  
Carson City, NV 89703

The June 10, 2008, workshop was also broadcast, via video conference, to the following location:

Great Basin Community College  
Greenhaw Technical Arts Building, Room 130  
1500 College Parkway  
Elko, NV 89801

The purpose of the workshop was to solicit comments from interested persons on the proposed regulation modifications and/or adoptions. Copies of the proposed regulations and adoptions were provided at the workshops. General questions were asked and answered regarding the following topics during the workshop:

- Amendment to NAC 512.158, Ladders and Ladderways;
- Amendment to NAC 512.178, Mercury Treatment Plants;
- Adoption of regulations governing Ground Support;
- Adoption of regulations governing Surface mine rescue operations and adoption of 30 CFR Part 49, Underground Mine Rescue;
- Adoption of regulations governing Permissible Exposure Limits of air contaminants;
- Adoption of regulations governing Hazard Communication Standard pursuant to 30 CFR Part 47;
- Adoption of Respiratory Protection Standards, 29 CFR 1910.134, Respiratory Protection, and
- Adoption of regulations governing Permissible Exposure Limits of Occupational Noise.

A general round table question and answer format over the topics and procedures was conducted with nine participants in Elko and eight participants in Carson City.

Regarding Ladders/Ladderways, Jim Malle of Golden Predator Mine asked if the proposed regulations required the mine to install an emergency escape/second shaft if it already had ladderways. MSATS responded that the proposed changes were for vertical shafts constructed without ladderways under a temporary rule when shafts had been constructed in the mid-1990s. Richard Tucker from Newmont Mining Company expressed his support for the proposed changes.

The workshop then reviewed changes to the regulations about Mercury Treatment Plants; Mr. Tucker indicated Newmont's request for clarification as to the time frame involved, defining the kind of exposure that would require urine testing and a physical medical examination. Shane Owen from Barrick Goldstrike Mine concurred with Mr. Tucker's comments and suggested a "trigger" mechanism as suggested by Jon Brown of Nevada Mining Association. He asked what would happen to the urine level currently listed in NAC Chapter 512. MSATS clarified that the proposed regulation would broaden its coverage to include mine workers exposed to or working with mercury in any fashion as well as mercury treatment plants. Mr. Tucker, Mr. Owen and Darrell Gerstner of Queenstake (Jerritt Canyon) had questions regarding what standards would be used for respiratory protection; MSATS explained that the respirator manufacturer's requirements would be the guide for selection and use.

The discussion then moved to Ground Support. Mr. Tucker, Mr. Gerstner and Mr. Malle had questions about the application of shotcrete in a manner consistent with that recommended by the American Concrete Institute (ACI) for ground support application. They also had questions regarding the cost and practicality of certificating nozzlemen and if a certified employee could present task training to coworkers. Tim Burns of Newmont had questions about certification of nozzlemen and whether ACI or MSHA required such certification. Randy Harris of Golden Predator asked if MSATS could certify and train mine operators. Scott Reed of Chemetall-Foote Mine asked about certification/task training. MSATS explained the engineering aspects of shotcrete use, that ACI was a minimum standard/guide as to the benefits and application of shotcrete. There was mention of a local vendor in Elko who had certified Newmont personnel as a nozzleman. Although ACI makes recommendations as to the use of shotcrete for engineering considerations, it does not specify mandatory use standards.

The workshop reviewed proposed regulations on Surface Mine Rescue/ Underground Mine Rescue (30 CFR Part 49). Mr. Reed, Chemetall-Foote mine, asked about instructor qualifications for certification and the purpose for requiring records be at the mine for inspection. Mr. Gerstner asked if the purpose of the proposed regulation was to require mines to have surface mine rescue; MSATS clarified that the regulations were to set out the training records, rope/hardware logs, and instructor certification available for inspection upon request. MSATS indicated that its adoption of 30 CFR Part 49, which has been adopted by MSHA, would allow MSATS to provide training to mines if requested and to provide assistance of underground mine rescue. Ultimately MSATS decided to withdraw proposed regulations regarding surface mine rescue.

Numerous questions were asked about Permissive Exposure Limits for Air Contaminants. Mr. Owen, Mr. Tucker, Mr. Reed, and Mr. Gerstner asked that specific levels be listed rather than using National Consensus Standards. Mr. Owen requested MSHA's current standards be adopted rather than continued use of the 1973 American Conference of Industrial Hygienists (ACGIH) so mines would not be subject to conflicting standards and wondered what personal protective equipment requirements would be required if different standards were adopted.

In discussing the proposed Hazard Communication Standard, Mr. Owen and Mr. Reed asked if MSATS was proposing to adopt the current MSHA standard; MSATS would be able to assist Nevada miners with training and consultation services if Nevada adopted the current MSHA standard. Mr. Reed indicated that both MSHA and OSHA have oversight of its operation and that by following the stricter OSHA standard, it is in compliance with the MSATS standard.

Mr. Owen, Mr. Tucker, and Mr. Gerstner asked about the effects of amending the current Respiratory Protection Standards and asked whether there would be changes to the 1969 requirements. MSATS would adopt the OSHA Respiratory Protection Standards as written in the 29 CFR 1910.134.

MSATS clarified that it was proposing to adopt the current MSHA standard for Permissible Exposure Limits of Occupational Noise to allow MSATS to assist mine operators that request training/consultation on meeting the MSHA standards for occupational noise.

B. A public hearing was held on December 1, 2010. Although notices were properly posted and e-mailed, the only persons attending the public hearing were staff from the Division of Industrial Relations. DIR sent a letter to the President of the Nevada Mining Association (NMA) dated December 1, 2010, with a copy of the Legislative Counsel Bureau draft of the proposed regulations with the anticipated changes noted on the hard copy, and a request that if it planned to submit any written comments, the record would be held open until December 15, 2010. NMA submitted its three-page written response on December 15, 2010, that listed eight points of clarification. Those items were:

- Section 5(D) and Section 14(6), request for changes were submitted however the regulations remained as written.
- Section 7 and Section 8(2) were dropped at the request of NMA.
- Section 9, Section 14(2), Section 14(6), and Section 14(7) changes were made per NMA's recommendation.

C. On March 29, 2012, the Mining Oversight and Accountability Commission (MOAC) met and considered the proposed regulations (R125-08) to be adopted by the Administrator of the Division of Industrial Relations. After hearing testimony on the proposed regulations, MOAC recommended approval of LCB File No. R125-08 as revised on March 15, 2012, by a unanimous 5-0 vote.

Additional information and records of the workshop and public comment meeting can be obtained from the Mine Safety and Training Section located at 400 W. King Street, Ste. 210, Carson City, NV 89703.

**2. The number of persons who:**

- a. Attended each hearing:
  - June 10, 2008, Public Workshop – 17
  - December 1, 2010 Public Hearing - 7
- b. Testified at each hearing:
  - June 10, 2008, Public Workshop – 12
  - December 1, 2010 Public Hearing - 0
- c. Submitted written comments:
  - June 10, 2008 Public Workshop – 3
  - December 1, 2010, Public Hearing – 1 Organization

**3. A description of how comment was solicited from affected businesses, a summary of their response, and an explanation of how other interested persons may obtain a copy of the summary.**

Affected businesses were notified on May 20, 2008, through the Mine Safety and Training Section, (MSATS) e-mail distribution data base. The Mine Safety and Training Section maintains an email database consisting of over 200 mine employers in the State of Nevada.

Affected businesses attended the workshop on June 10, 2008. The responses from affected businesses are included in the workshop summary above since they were active participants.

Interested persons may obtain a copy of the workshop summary by submitting a written request to the Mine Safety and Training Section, 400 W. King Street, Ste 210, Carson City, NV 89703.

**4. If the regulation was adopted without changing any part of the proposed regulation a summary of the reasons for adopting the regulation without change.**

The following regulations were adopted without change:

- 30 CFR 56/57 Part 47, Hazard Communication;
- 30 CFR 56/57 Part 62, Occupational Noise;
- 29 CFR 1910 Part 134, Respiratory Protection; and
- 29 CFR 1910 Section 1000, Z-1 Air Contaminants.

Those regulations were consensus standards that had not been adopted by the State of Nevada under Chapter 512 of Nevada Revised Statutes or Nevada Administrative Code. The Chapter 30 CFR regulations [Hazard Communications and Occupational Noise] are enforceable by federal Mine Safety and Health Administration (MSHA). By MSAT's adoption of Parts 47 and 62, Nevada mining operators may receive consultative services from MSATS in the areas of

Hazard Communication and Occupational Noise. Nevada MSATS supports Nevada Mine Operations by assisting with employers understanding in regulatory requirements of these laws through compliance inspections and technical assistance. Chapter 29 CFR regulations regarding respirators and air contaminants are enforceable by the federal Occupational Safety and Health Administration (OSHA) and have not been applied to mine sites in the past. Adoption will improve miner's safety by having regulations to address respirator use and measureable levels of air contaminants.

There were no public or business objections to the adoption of the above regulations during the workshop or public comment meeting. The adoption of these regulations will help ensure Nevada miners have a safe and healthful work environment by having enforceable regulations to protect workers from hazardous chemicals and occupational noise.

**5. The estimated economic effect of the adopted regulation on the businesses which it is to regulate and on the public. These must be stated separately, and each case must included:**

**a. Both adverse and beneficial effects**

Ladders and ladderways: Currently Nevada mines are required to have both shafts and ladderways. It may be cost prohibitive for mine to comply with current regulations. Adoption of this regulation provides mining employees an equally safe workplace without requiring the employer to construct ladderways and allow use of existing shafts in lieu of constructing ladderways.

Mercury Treatment Plants: These regulations are to ensure safe and healthy conditions for mine workers handling Mercury. The regulations would broaden the scope of coverage to include additional workers exposed to handling mercury. Although testing costs may be higher initially, early intervention could reduce long term workers' compensation costs. The increased cost of preliminary urinalysis is minimal to insure mercury levels of exposed mine employees stay below the permissible exposure limit (PEL). Overexposure to mercury would result in life long workers' compensation and medical costs.

Ground Support: Written ground support plan will provide for engineering/rock mechanic input, training to each worker performing excavation in an underground mine and provisions that damaged ground support materials are repaired or replaced before work or travel is permitted. This would provide for standards of ground support controls and decrease the likelihood of ground failure. Adoption of regulation would not result in any foreseeable cost increase.

Permissive Exposure Limits to Air Contaminants: It is expected there will be a decreased cost to workers' compensation claims due to decreased exposures to harmful air contaminants. Adoption of regulation would not result in any foreseeable cost increase.

Hazard Communication Program: Adoption of these regulations will reduce illnesses and injuries when employees and employers modify their behavior as a result of receiving accurate

training about the hazards. Adoption of regulation would not result in any foreseeable cost increase or adverse economic effects due to current federal standard requirements to comply with this regulation under MSHA jurisdiction.

Respiratory Protection Programs: MSAT's adoption of federal respiratory protection standards will enhance the protection of miners' health through proper training, selection and fitting of respirators. Mine employers could have an increased cost due to medical evaluations, which are required as part of the respiratory protection regulation. The medical evaluation is required to insure workers are healthy enough to wear a respirator.

Permissible Exposure Limits to Occupational Noise: Adoption of occupational noise standards will help protect miners from hearing loss due to occupational noise exposure by allowing mine operators to request training/consultation from MSATS. There are no adverse effects because mine operators currently are required to follow the MSHA exposure limits.

**b. Both immediate and long-term effects.**

Ladders and ladderways: Currently Nevada mines are required to have both shafts and ladderways. Adoption of this regulation provides mining employees an equally safe workplace without requiring the employer to construct ladderways and allow use of existing shafts in lieu of constructing ladderways.

Mercury Treatment Plants: The regulations would broaden the scope of coverage to include additional workers exposed to handling mercury. Although testing costs may be higher initially, early intervention could reduce long term workers' compensation costs. The increased cost of preliminary urinalysis is minimal to insure mercury levels of exposed mine employees stay below the permissible exposure limit (PEL). Overexposure to mercury would result in life long workers' compensation and medical costs.

Ground Support: Written ground support plan will provide for engineering/rock mechanic input, training to each worker performing excavation in an underground mine and provisions that damaged ground support materials are repaired or replaced before work or travel is permitted. This would provide for standards of ground support controls and decrease the likelihood of ground failure.

Permissive Exposure Limits to Air Contaminants: It is expected there will be a decreased cost to workers' compensation claims due to decreased exposures to harmful air contaminants. Adoption of regulation would not result in any foreseeable cost increase.

Hazard Communication Program: Adoption of these regulations will reduce illnesses and injuries when employees and employers modify their behavior as a result of receiving accurate training about the hazards. Adoption of regulation would not result in any foreseeable cost increase or adverse economic effects due to current federal standard requirements.

Respiratory Protection Programs: MSAT's adoption of federal respiratory protection standards will enhance the protection of miners' health through proper training, selection and

fitting of respirators. Mine employers could have an increased cost due to medical evaluations, which are required as part of the respiratory protection regulation. The medical evaluation is required to insure workers are healthy enough to wear a respirator.

Permissible Exposure Limits to Occupational Noise: Adoption of occupational noise standards will help protect miners from hearing loss due to occupational noise exposure by allowing mine operators to request training/consultation from MSATS. There are no adverse effects because mine operators currently are required to follow the MSHA exposure limits.

**6. The estimated cost to the agency for enforcement of the adopted regulation.**

The exact cost could not be determined. Adopting additional regulations could increase the workload of staff by increasing the standards that must be reviewed during the course of an inspection. The Mine Safety and Training Section currently has equipment to effectively accomplish enforcement and technical assistance due to the adoption of these regulations. There is no perceived direct cost by adopting these regulations.

**7. A description of any regulations of other state or government agencies which the proposed regulation overlaps or duplicates and a statement explaining why the duplication or overlapping is necessary. If the regulation overlaps or duplicates a federal regulation, the name of the regulating federal agency.**

29 CFR 1910 Section 1000 Table Z-1 Air Contaminants – This regulation duplicates the Occupational Safety and Health regulation that limits an employee’s exposure to Air Contaminants in the workplace. However, 29 CFR has not been associated with mining in the past. The current guidance utilized by the Mining Industry is the **1973** Threshold Limit Values for Chemical Substances in Workroom Air Adopted by the American Conference of Governmental Industrial Hygienists.

29 CFR 1910 Section 134 Respiratory Protection – This regulation duplicates the Occupational Health and Safety regulation that requires an employer to develop and implement a written respiratory protection program with required worksite specific procedures and elements for required respirator use. However, 29 CFR has not been associated with mining in the past. The current guidance utilized by the mining industry is the **1969** Z88.2 American National Standard, practices for respiratory protection.

30 CFR Part 47 – Hazard Communication Parts 56/57 Surface and Underground – Duplication of this Mine Safety and Administration regulation allows the Nevada Mine Safety and Training Section to assist mine operators with their mine specific Hazard Communication Programs and concerns.

30 CFR Part 62 – Occupational Noise - Duplication of this Mine Safety and Administration regulation allows the Nevada Mine Safety and Training Section to assist mine operators with their mine specific Occupational Noise Programs and concerns.

- 8. If the regulation includes provisions that are more stringent than a federal regulation which regulates the same activity, a summary of such provisions.**

N/A

- 9. If the regulation provides a new fee or increases an existing fee, the total annual amount the agency expects to collect and the manner in which the money will be used.**

N/A

- 10. Is the proposed regulation likely to impose a direct and significant economic burden upon a small business or directly restrict the formation, operation or expansion of a small business? What methods did the agency use in determining the impact of the regulation on a small business?**

Based on comments and concerns from mine operators, the Mine Safety and Training Section withdrew its proposed regulations on surface mine rescue equipment.

The Mine Safety and Training Section has determined that the proposed regulations do not impose a direct or significant economic burden upon a small business or restrict the formation, operation or expansion of a small business.