ADOPTED REGULATION OF THE ADMINISTRATOR OF THE

DIVISION OF INDUSTRIAL RELATIONS OF THE

DEPARTMENT OF BUSINESS AND INDUSTRY

LCB File No. R125-08

Effective May 30, 2012

EXPLANATION - Matter in italics is new; matter in brackets [omitted material] is material to be omitted.

AUTHORITY: §§1-12, NRS 512.131.

A REGULATION relating to mining; requiring each operator of an underground mine to establish a ground support plan for underground mine excavation; revising certain provisions relating to health and safety standards for a mine; and providing other matters properly relating thereto.

- **Section 1.** Chapter 512 of NAC is hereby amended by adding thereto the provisions set forth as sections 2 to 7, inclusive, of this regulation.
- Sec. 2. "Enforcement Section" means the Mine Safety and Training Section of the Division, or its successor.
- Sec. 3. "Mercury extraction area" means an area where mercury is removed during the processing of ore.
- Sec. 4. The operator of an underground mine shall use ground support when ground conditions in the underground mine indicate that ground support is necessary.
 - Sec. 5. 1. The operator of an underground mine shall:
- (a) Develop and maintain a ground support plan that conforms to the requirements of this section;
- (b) Provide training concerning the ground support plan to each worker who is assigned to perform excavation of the underground mine;

- (c) For each worker who is required to receive training, keep a written record of the amount and type of training completed by each worker and the name of the instructor for the training; and
- (d) Provide the Enforcement Section with a copy of the ground support plan and any changes to the plan.
 - 2. The ground support plan must:
- (a) Be prepared by the engineering staff that is employed by or contracted with the operator of the underground mine;
- (b) Provide that ground support be designed, installed and maintained to control the ground where a person may travel or work in the underground mine;
- (c) Provide that any damaged, loosened or dislodged timbers or steel sets used for ground support that create a hazardous condition to a person be repaired or replaced before any travel or work is permitted into that area;
- (d) Specify the methods and measures of primary ground support and secondary ground support that will be used during underground mine excavation for the development, production or exploration of ore; and
- (e) Provide an engineering plan, map or drawing of the proposed height and width of mining excavations, including, without limitation, information relating to:
 - (1) Geologic strata;
 - (2) Geologic faults;
 - (3) Any naturally occurring water encountered; and
- (4) Underground areas that are in horizontal or vertical proximity to the proposed area of excavation.

- 3. The ground support plan is subject to the requirements of 30 C.F.R. § 57.3203, as adopted by reference in NAC 512.151, and any certification required pursuant to that section must be made available to the Enforcement Section.
 - 4. As used in this section:
- (a) "Primary ground support" means ground support that is designed, engineered, installed and maintained to provide maximum stabilization of the ground where a person works or travels within an underground mine, including, without limitation, during the excavation and extraction process.
- (b) "Secondary ground support" means any rock fixture, wood timber, steel, arch, spilling, shotcrete with wire mesh, rock bolt bearing plate and wire mesh that is used in addition to the primary ground support.
- Sec. 6. An operator shall ensure that no worker is exposed to crystalline silica, including, without limitation, cristobalite, quartz or tridymite in the form of respirable dust of more than 0.05 mg/m³ of an 8-hour time-weighted average.
- Sec. 7. 1. All main shafts and raises equipped with hoisting machinery for personnel must be:
 - (a) Equipped with one compartment that is partitioned off and set aside as a ladderway;
- (b) Equipped with secondary or emergency hoisting machinery in the main shaft that is supplied by a secondary power supply source which supplies power to the primary hoisting machinery;
- (c) Supplemented with hoisting machinery in an additional shaft that is supplied by a secondary power supply source which does not supply power to the main shaft and is

connected by not fewer than two underground passageways to the main shaft or ventilation shaft; or

- (d) Connected by a drift or decline to the surface that does not require hoisting machinery for movement.
- 2. An operator of an underground mine shall prepare a written plan to provide a secondary power supply source to a primary hoisting machine within not more than 8 hours after the failure of a primary power supply source. The operator shall submit the plan to the Enforcement Section for approval. Any proposed modification to the plan must be submitted to and approved by the Enforcement Section before the modification becomes effective.
- 3. As used in this section, "secondary power supply source" means a source of power which is separate from the primary power supply source and which is constructed and installed or designed for emergency installation and use in the event of failure of the primary power supply source.
 - **Sec. 8.** NAC 512.010 is hereby amended to read as follows:
- 512.010 As used in this chapter, unless the context otherwise requires, the words and terms defined in NAC 512.013 to 512.140, inclusive, *and sections 2 and 3 of this regulation* have the meanings ascribed to them in those sections.
 - **Sec. 9.** NAC 512.151 is hereby amended to read as follows:
- 512.151 1. The [provisions of 30 C.F.R. Parts 55 to 57, inclusive, as those regulations exist on October 22, 1982,] following federal regulations, as they existed on May 30, 2012, are hereby [incorporated] adopted by reference [.]:
 - (a) 29 C.F.R. §§ 1910.134 and 1910.1000; and
 - (b) 30 C.F.R. Parts 47, 49, 56, 57 and 62.

- 2. A copy of the regulations may be obtained from the Department of Business and Industry, Division of Industrial Relations, Mine Safety and Training Section, 400 West King Street, Suite # 210, Carson City, Nevada 89703, free of charge. *The regulations are also available, free of charge, from the Government Printing Office at the Internet address http://www.gpoaccess.gov/cfr/*.
- 3. Each revision of these regulations shall be deemed approved by the Division unless the Division disapproves the revision within 30 days after the date of adoption.
 - **Sec. 10.** NAC 512.158 is hereby amended to read as follows:
- 512.158 1. The distance between the top of one rung and the top of the next rung on ladders must be 12 inches, and the distance between the centers of the ladder rungs must not exceed 12 inches.
- 2. [All main shafts or raises equipped with hoisting machinery must have one compartment partitioned off and set aside as a ladderway.
- —3.] Any ladderway which adjoins any chute compartment must be separated from the chute by a tight partition of sufficient strength and size to hold rock or other material from running into the ladderway.
- [4.] 3. When work is being carried on immediately above any chute ladderway, the ladderway must be protected by a solid bulkhead, for the protection of employees using the manway, against falling rock or material. Entrance to the stope or other working place must be provided at the side of the ladderway immediately below the bulkhead.
 - **Sec. 11.** NAC 512.178 is hereby amended to read as follows:

- 512.178 1. An operator shall provide training to each worker who will or may come into contact with mercury before the worker is assigned production work, including, without limitation, training related to:
 - (a) The health hazards of mercury;
 - (b) The routes of entry of mercury into a person;
 - (c) Personal protective equipment;
 - (d) The effective measures to control mercury; and
 - (e) The appropriate response to the cleanup of spills of mercury.
 - 2. In mercury [treatment plants:
- 1.] extraction areas or other areas within the mine where the health and safety of a worker may be at risk from exposure to mercury:
- (a) Hoeing tables must be completely enclosed except for the frontal opening and provided with mechanical exhaust ventilation providing a minimum hood face velocity of 100 cubic feet per minute of ventilation continuously during each shift.
- [2.] (b) Bottling operations must be as automatic as possible to reduce unnecessary exposure
 [.] to a worker. A pan containing a layer of water must be placed under each mercury flask
 during the filling of the mercury flask to catch any spilled mercury.
- [3.] (c) A polysulfide mercury depressant must be applied at least once a month to surface areas where mercury may accumulate and immediately after all mercury spills.
- [4.] 3. At each mill for refining mercury [,] and each mercury [producing] extraction area [, the]:
- (a) The operator shall provide nonabsorbent, smooth and impenetrable floors and sidewalls to a height of at least 6 inches under kilns, cooling towers, hoeing tables, retorts, bottling

operations and in any other area where mercury may be spilled or otherwise accumulate on floors.

- [5.] (b) General dilution ventilation is required in all areas where other methods are not adequate to maintain the mercury in air concentrations below the recommended threshold limit value [established] recommended by the American Conference of Governmental Industrial Hygienists.
- [6.] (c) While performing operations where exposure to mercury vapors in air concentrations may exceed the recommended limit, workers shall wear devices [recommended by the Chief] approved for respiratory protection [.
- 7.] by the National Institute for Occupational Safety and Health or the Mine Safety and Health Administration.
- 4. "No Smoking" signs must be posted in mercury [refining areas,] extraction areas and other areas where mercury vapors may be present, and workers are prohibited from smoking or eating except in designated areas.
- [8.] 5. A shower and change room must be provided *for workers who work in mercury* extraction areas, along with adequate locker space for storage of off-duty clothing.

[9. Urine]

6. The operator shall collect urine samples monthly from workers who work in mercury extraction areas and where mercury-bearing ore is processed. The operator shall submit the urine samples [must be submitted] monthly to a medical laboratory for determination of levels of mercury. Workers with a confirmed Biological Exposure Index value of 35 ug/gCRT or more or a single sample confirming mercury levels above [0.3 milligrams per liter should] 45

ug/gCRT must be removed from further exposure until their levels of mercury return to *a* normal [.

10.] level of 25 ug/gCRT or less. The operator shall notify the Enforcement Section and take appropriate action if a worker's creatinine-corrected level of mercury is found to be more than 25 ug/gCRT.

- 7. The operator shall provide annual physical examinations to [all such workers] any worker for whom a urine sample collected pursuant to subsection 6 demonstrates that the worker's level of mercury exceeds 25 ug/gCRT to determine any effects of exposure to mercury vapor.
 - 8. As used in this section:
- (a) "Biological Exposure Index" means the concentration of mercury found in the body of a worker, including, without limitation, in the urine, blood or exhaled air of the worker, that corresponds to inhalation exposure at a specific air concentration.
 - (b) "Medical laboratory" has the meaning ascribed to it in NRS 652.060.
 - Sec. 12. NAC 512.518 is hereby repealed.

TEXT OF REPEALED SECTION

512.518 "Enforcement Section" defined. (NRS 455C.110, 512.131) "Enforcement Section" means the Mine Safety and Training Section of the Division, or its successor.

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 Permissive 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 <u>Ladders/Ladderways</u>, 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 <u>Ground Support</u>. 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 nozzelmen 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 <u>Surface Mine Rescue/ Underground Mine Rescue (30 CFR Part 49)</u>. 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 <u>Permissive Exposure Limits for Air Contaminants</u>. 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 <u>Hazard Communication Standard</u>, 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 <u>Respiratory Protection Standards</u> 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 <u>Permissible Exposure Limits of Occupational Noise</u> 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 Statues 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

<u>Ladders and ladderways</u>: 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.

<u>Permissive Exposure Limits to Air Contaminants</u>: 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.

<u>Hazard Communication Program</u>: 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.

<u>Respiratory Protection Programs</u>: 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.

<u>Permissible Exposure Limits to Occupational Noise</u>: 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.

<u>Ladders and ladderways</u>: 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.

<u>Ground Support</u>: 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.

<u>Permissive Exposure Limits to Air Contaminants</u>: 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.

<u>Hazard Communication Program</u>: 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.

<u>Respiratory Protection Programs</u>: 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.

<u>Permissible Exposure Limits to Occupational Noise</u>: 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.