REVISED PROPOSED REGULATION OF THE

ADMINISTRATOR OF THE DIVISION OF

INDUSTRIAL RELATIONS OF THE

DEPARTMENT OF BUSINESS AND INDUSTRY

LCB File No. R125-08

February 29, 2012

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

AUTHORITY: §§1-15, 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; requiring certain records and training logs to be established and maintained at certain underground or surface mines; 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 10, 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 must 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. *1. An operator of a mine where rescue rope or hardware and materials used with rescue rope are utilized shall maintain purchase records and training logs for the rescue rope, hardware and materials.*

2. As used in this section:

(a) "Hardware and materials" means a sling, choker, anchor strap, pulley, edge roller, edge protection, descender, ascender, brake bar, carabiner, rigging plate, swivel, beam clamps, tripod, litter, individual rescue harness, fall protection harness and device, manufactured load-releasing hitch and manufactured mechanical advantage assembly, device or system.

(b) "Rescue rope" means rope, webbing or Prusik cord designed and manufactured exclusively for high- and low-angle rope rescue and training applications with tensile strength ratings set forth by the manufacturer.

Sec. 7. *Each instructor and each member of the mine rescue team employed by an operator shall log and record, in writing, information relating to all surface mine rescue training which is provided or received at the mine or any other location, including, without limitation:*

1. The date of the training;

2. The name of each instructor and team member who provided or received the training;

3. The duration of the training; and

4. Any information relating to the certification of each instructor.

Sec. 8. *The logs and records made pursuant to sections 6 and 7 of this regulation must be:*

1. Retained by the operator for at least 5 years; and

2. Made available upon request for inspection by the Enforcement Section.

Sec. 9. *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/m^3 of an 8-hour time-weighted average.*

Sec. 10. *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. 11. 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. 12. 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 the effective date of this regulation,*** 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. 13. 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. 14. 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 test 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 normal.

~~[10.]~~ ***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 ***who work in areas where there is potential exposure to mercury*** 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. 15. 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.