

**ADOPTED REGULATION OF THE
STATE ENVIRONMENTAL COMMISSION**

LCB File No. R052-15

Effective December 21, 2015

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

AUTHORITY: §1, NRS 519A.160; §2, NRS 519A.160 and 519A.230; §3, NRS 519A.140 and 519A.160; §§4 and 5, NRS 519A.160, 519A.190 and 519A.210.

A REGULATION relating to mining; revising provisions relating to a plan for reclamation; requiring an operator of a mining operation to perform certain types of reclamation; revising provisions relating to a surety for reclamation; revising the method for estimating the cost of a plan for reclamation in certain circumstances; and providing other matters properly relating thereto.

Legislative Counsel’s Digest:

Existing law requires a person who applies for a permit for a mining operation from the Division of Environmental Protection of the State Department of Conservation and Natural Resources to file with the Division a plan for the reclamation of any land damaged as a result of the mining operation. (NRS 519A.210) **Section 1** of this regulation defines “mine-impacted waters” as contaminated water resulting from a mining operation which requires stabilization, management, control or treatment. **Section 2** of this regulation requires a plan for reclamation to include a description of any necessary stabilization, management, control or treatment required for mine-impacted waters. **Section 3** of this regulation provides that the Division may require the operator of a mining operation to implement measures to stabilize, manage, control or treat mine-impacted waters. **Section 4** of this regulation provides that the surety an operator files with the Division or a federal land management agency may be a cash deposit. **Section 5** of this regulation provides that in estimating the cost of executing a plan for reclamation the operator must, if appropriate, include certain costs associated with the stabilization, management, control and treatment of mine-impacted waters.

Section 1. Chapter 519A of NAC is hereby amended by adding thereto a new section to read as follows:

“Mine-impacted waters” means any contaminated water:

1. Resulting from a mining operation, including, without limitation:

(a) An underground mine;

(b) A mine pit penetrating the water table; or

(c) Waste or development rock piles or other nonprocess components; and

2. Requiring stabilization, management, control or treatment to prevent or mitigate:

(a) The degradation of the waters of this State; or

(b) Adverse effects to the health of human, terrestrial or avian life.

Sec. 2. NAC 519A.270 is hereby amended to read as follows:

519A.270 The plan for reclamation for a mining operation must include:

1. A topographic map of the area of the operation depicting:

(a) The boundaries of the area of the operation;

(b) Surface ownership of the land within the area of the operation;

(c) The areas to be affected in sufficient detail so that they can be located from the ground;

(d) The kind of disturbances, including:

(1) Tailings impoundments;

(2) Leach pads;

(3) Waste rock dumps;

(4) Buildings;

(5) Roads; and

(6) All other surface facilities; and

(e) A description of the land within the area of operation which was affected by:

(1) An operation conducted by a previous operator and which is inactive on the date on

which the application for a permit for an operation is filed;

(2) The current operator before January 1, 1981, and which is inactive on the date on which the application for a permit for an operation is filed;

(3) The current operator before January 1, 1981, and which is active on the date on which the application for a permit for an operation is filed;

(4) The current operator on or after January 1, 1981, but before October 1, 1990, and which is inactive on the date on which the application for a permit for an operation is filed; and

(5) The current operator on or after January 1, 1981, but before October 1, 1990, and which is active on the date on which the application for a permit for an operation is filed.

2. A description of any land within the area of operation:

(a) On which the operation is active on or after October 1, 1990; and

(b) Comprising access roads which were created before January 1, 1981.

3. The location of any surface water body within one-half-mile down gradient of the operation which may be impacted by excess sedimentation resulting from the mining operations.

4. An estimate of the number of acres affected by each type of disturbance.

5. A proposed productive postmining use of the land.

6. A proposed schedule of the time for initiation and completion of activities for reclamation.

7. The proposed postmining topography.

8. The technical criteria used to determine the final gradient and stability of slopes created or affected by the mining operation.

9. The proposed methods to be used in reclaiming impoundments used during the operation.

10. A statement of any constraints on the estimated time to complete reclamation caused by the residual moisture content or physical or chemical qualities of impoundments.

11. The kinds of access roads and their estimated width and length which will be built and the manner in which they will be reclaimed.

12. A description of the best management practices employed during operation and reclamation to control erosion and minimize the transport and delivery of sediment to surface water, which must be the best management practices described in the *State of Nevada Handbook of Best Management Practices* or practices equivalent thereto.

13. The proposed revegetation of the land for its postmining land use, including:

(a) A plan for the management of topsoil and growth medium;

(b) A list of each species of vegetation;

(c) The rate of seeding of vegetation;

(d) The type of fertilizer and mulch to be used;

(e) When the planting will occur; and

(f) The proposed methods to monitor and control noxious weeds as described in NAC

555.010 during reclamation.

14. The proposed disposition of:

(a) Buildings;

(b) Equipment;

(c) Piping;

(d) Scrap;

(e) Reagents; and

(f) Any other equipment and materials.

15. A description of any surface facilities such as buildings or roads which will not be reclaimed.

16. A description of any necessary monitoring and maintenance of fences, signs and other structures which will be performed by the operator on the reclaimed land.

17. A description of any reclamation which is necessary because of instream mining.

18. *A description of any necessary stabilization, management, control or treatment of mine-impacted waters.*

19. A statement of the effect that the proposed reclamation will have on future mining in the area.

~~19.~~ 20. A statement setting forth the effect that the proposed reclamation will have on public safety.

Sec. 3. NAC 519A.345 is hereby amended to read as follows:

519A.345 The Division may, if appropriate, require an operator of a mining operation to reclaim:

1. Roads and drill pads by:
 - (a) Recontouring or regrading to round off, cut and fill slopes to the original contour or to approximate the form of the land before its disturbance;
 - (b) Removing culverts;
 - (c) Ripping or scarifying the surface;
 - (d) Constructing water bars;
 - (e) Revegetation; and
 - (f) Restoring or stabilizing drainage areas or streambeds.
2. Drill holes from exploration by plugging the holes with the minimum surface plug required pursuant to chapter 534 of NRS.
3. Waste and development rock piles by:

(a) Regrading to round off sharp edges, enhance the stability, reduce susceptibility to erosion and facilitate efforts for revegetation;

(b) Revegetation; ~~and~~

(c) Diverting runoff ~~and~~; *and*

(d) Implementing measures to stabilize, manage, control or treat mine-impacted waters.

4. Dams for tailings ponds by:

(a) Covering with waste rock, topsoil or growth medium;

(b) Revegetation; and

(c) Rendering the dam incapable of storing any mobile fluid in a quantity which could pose a threat to the stability of the dam or to public safety.

5. Impoundments for tailings by:

(a) Regrading to promote runoff and reduce infiltration;

(b) Covering with waste rock, topsoil or growth medium;

(c) Revegetation;

(d) Process fluid stabilization; and

(e) Diverting runoff.

6. Heaps from leaching by:

(a) Regrading to enhance structural stability, promote runoff, reduce infiltration and control erosion;

(b) Covering with waste rock, topsoil or growth medium;

(c) Revegetation;

(d) Process fluid stabilization; and

(e) Diverting runoff.

7. Solution ponds, settling ponds and other nontailings impoundments by:
- (a) Backfilling and regrading to approximate the natural land form; and
 - (b) Restoring the regime of the surface water to the regime that existed before the disturbance.
8. Buildings, foundations, facilities, structures and other equipment by:
- (a) Demolishing to the level of the foundation and burying the demolished items on the site in conformance with applicable requirements for the disposal of solid waste;
 - (b) Salvaging and sale;
 - (c) Disposal off of the site in conformance with applicable requirements for the disposal of solid waste; and
 - (d) Continuing use in a manner consistent with the postmining land use.
9. Open pit mines by:
- (a) Performing activities that will provide for public safety;
 - (b) Stabilizing pit walls or rock faces where required for public safety;
 - (c) Constructing and maintaining berms, fences or other means of restricting access;
 - (d) *Implementing measures to stabilize, manage, control or treat mine-impacted waters;*
 - (e) Creating a lake for recreational use, wildlife or other uses; and
 - ~~(e)~~ (f) Revegetation.
- Reclamation of open pits or rock faces does not require backfilling although backfilling in whole or in part with waste rock from an adjacent mining operation may be encouraged if backfilling is feasible and does not create additional negative environmental impacts.
10. Underground mines by:
- (a) Sealing shafts, adits, portals and tunnels to prevent access; ~~and~~

- (b) Constructing and maintaining berms, fences or other means of restricting access ~~H~~ ; *and*
- (c) Implementing measures to stabilize, manage, control or treat mine-impacted waters.*

Sec. 4. NAC 519A.350 is hereby amended to read as follows:

519A.350 1. An operator shall file a surety with the Division or a federal land management agency, as applicable, to ensure that reclamation will be completed on privately owned and federal land. The surety may be:

- (a) A trust fund;
- (b) A bond;
- (c) An irrevocable letter of credit;
- (d) Insurance;
- (e) A corporate guarantee; ~~for~~
- (f) A cash deposit; or*
- (g) Any combination thereof.*

2. If the surety is a trust fund:

(a) The operator shall make periodic payments to the trust fund at least annually for the term of the exploration project or mining operation.

(b) The initial payment to the trust must be:

- (1) For a new exploration project or mining operation, made before the land is affected.
- (2) For an exploration project or mining operation which is active on October 1, 1990, made within 60 days after the operator receives a permit from the Division.

(c) The balance of the trust fund must be sufficient at all times to satisfy the requirements of NAC 519A.360.

3. If the surety is the bond of a corporation:

(a) It must state that the operator shall faithfully perform all requirements of the permit issued by the Division.

(b) The corporation must be licensed to do business in the State of Nevada.

4. The operator may provide evidence of a surety provided by the program for the pooling of reclamation performance bonds developed by the Division of Minerals of the Commission on Mineral Resources pursuant to NRS 519A.290.

5. If the surety is an irrevocable letter of credit, the letter of credit must:

(a) Be executed and issued by a bank authorized and doing business in the State of Nevada or a correspondent bank which is authorized to do business in the State of Nevada.

(b) Be made at the request of the operator.

(c) State that the issuing bank will honor drafts for payment upon compliance with the terms of the credit.

(d) Be irrevocable and issued for at least 1 year.

↪ The operator shall notify the Division at least 60 days before the expiration of the letter of credit. The notice must state whether it will be renewed or replaced with another form of surety.

6. If the surety is insurance:

(a) The policy must guarantee the performance of each reclamation obligation and permitting requirement of the operator if the operator defaults on any such obligation or requirement.

(b) The insurance company issuing the policy must be authorized to conduct the business of insurance in the State of Nevada.

(c) The insurance company issuing the policy must have a superior financial strength rating and a superior credit rating as determined by A.M. Best Company of Oldwick, New Jersey, or equivalent ratings from a nationally recognized insurance rating service.

(d) The policy must provide for a financial guarantee which satisfies the requirements of NAC 519A.360 and which is available at all times if the operator defaults on any reclamation obligation or permitting requirement.

7. If the surety is a corporate guarantee:

(a) Not more than 75 percent of the required surety may be satisfied by the corporate guarantee, which is subject to periodic review and approval by the Administrator of the Division. The remaining portion of the surety must be satisfied by a surety identified in this section.

(b) The audited financial statements of the corporation must indicate that the corporation has two of the following three ratios:

(1) A ratio of total liabilities to stockholder's equity less than 2 to 1.

(2) A ratio of the sum of net income plus depreciation, depletion and amortization to total liabilities greater than 0.1 to 1.

(3) A ratio of current assets to current liabilities greater than 1.5 to 1.

(c) The net working capital and tangible net worth each must equal or exceed the amount established for reclamation pursuant to NAC 519A.360.

(d) The tangible net worth must be at least \$10,000,000.

(e) Ninety percent of the assets of the corporation must be:

(1) Located in the United States; or

(2) At least six times the amount established pursuant to NAC 519A.360.

8. *If the surety is a cash deposit:*

(a) The deposit must be deposited with and held in trust by the State Treasurer. Any interest earned on the deposit must be credited to the trust. The State Treasurer may release

the deposit either in whole or in part to the operator or the Division only upon receipt of a written request from the Administrator or his or her designee.

(b) The deposit must be sufficient to satisfy the requirements of NAC 519A.360 and the Division shall determine the portion of the deposit to be allocated as the surety for each individual exploration project or mining operation.

9. Any financial information submitted to the Division pursuant to this section must be prepared in accordance with accounting principles that are generally accepted in the United States.

Sec. 5. NAC 519A.360 is hereby amended to read as follows:

519A.360 1. The operator shall provide surety in an amount sufficient to ensure reclamation of:

(a) The entire area to be affected by his or her project or operation; or

(b) A portion of the area to be affected if, as a condition of the issuance of the permit, filing additional surety is required before the operator disturbs land not covered by the initial surety.

2. The amount of surety required must be based on an estimate of the cost of executing the plan for reclamation which would be incurred by the state or federal agency having jurisdiction over the land.

3. The operator's estimate of the cost for reclamation must be based on either:

(a) The costs of equipment rental, operation and labor which are appropriate for the geographic area undergoing reclamation and which would otherwise be incurred by a third-party contractor who performed the reclamation;

(b) Estimated costs provided by an outside contractor; or

(c) Any other method which is acceptable to the Administrator, the Bureau of Land Management, the United States Forest Service or another federal land management agency, if applicable.

4. In determining the cost of executing the plan for reclamation, the operator shall consider all activities in the plan for reclamation that are required by NAC 519A.010 to 519A.415, inclusive, *and section 1 of this regulation*, or chapter 519A of NRS, including, if appropriate:

(a) Earth moving, regrading, stabilization of heaps and dumps, recontouring of roads and erosion control;

(b) Process fluid stabilization;

(c) *Stabilization, management, control and treatment of mine-impacted waters;*

(d) Revegetation, preparation of seedbed and planting;

~~(d)~~ (e) Demolition of buildings and other structures;

~~(e)~~ (f) Removal and disposal or salvage of buildings, structures, equipment, piping, scrap and reagents;

~~(f)~~ (g) Any ongoing or long-term activities which are required to ~~maintain~~ :

(1) *Maintain* the effectiveness of reclamation or are necessary in lieu of reclamation ~~(1)~~ ;

or

(2) *Ensure the continuation of post-reclamation stabilization, management, control and treatment of mine-impacted waters to protect the waters of this State,*

↳ including , *without limitation*, periodic clean-out of sediment basins *and ponds used to collect mine-impacted waters* or maintenance of berms and fences which are used to prevent access to areas which pose a threat to the public safety;

~~(g)~~ (h) Equipment mobilization and demobilization; and

~~(b)~~ (i) Administration and management by the Division, the Bureau of Land Management, the United States Forest Service and another federal land management agency, if applicable.

5. In determining the cost of executing the plan for reclamation, the operator shall not consider the cost of any activity not included in the plan for reclamation or not required by NAC 519A.010 to 519A.415, inclusive, *and section 1 of this regulation*, or chapter 519A of NRS. This subsection does not limit in any way the authorities of the Bureau of Land Management, the United States Forest Service or another federal land management agency to require surety for purposes other than those of NAC 519A.010 to 519A.415, *and section 1 of this regulation*, inclusive, and chapter 519A of NRS.

Permanent Regulation – Informational Statement

A Regulation Relating to the Bureau of Mining Regulation and Reclamation

Legislative Review of Adopted Regulations as Required
by Administrative Procedures Act, NRS 233B.066

State Environmental Commission (SEC) LCB File No: R052-15

Regulation R052-15:

Nevada Revised Statute (NRS) 519A.160 establishes the authority of the State Environmental Commission (SEC) to adopt regulations necessary to enable the Division to carry out provisions of NRS 519A.010 to 519A. 280, inclusive, and declares that proper reclamation of mined land, areas of exploration, and former areas of mining or exploration is necessary to prevent undesirable land and surface water conditions detrimental to the ecology and to the general health, welfare, safety, and property rights of the residents of this state.

Senate Bill No. 493 established the Mining Oversight and Accountability Commission (MOAC) to oversee the activities of State Agencies that have responsibility for the taxation, operation, safety and environmental regulation of mines in Nevada. In addition to adoption of Regulation R052-15 by the SEC on October 14, 2015, the MOAC also approved this regulation on December 2, 2015.

SPECIFIC CHANGES:

Chapter 519A of the Nevada Administrative Code (NAC) was amended to include a new section defining “mine impacted waters.” NAC 519A.270 and NAC 519A.345 are revised to require a reclamation plan to describe the measures that may be required to stabilize, manage, control, or treat mine impacted waters from waste and development rock piles, and open pit and underground mines. NAC 519A.360 was amended to require the costs for stabilization, management, control, and treatment of mine impacted waters to be included in the reclamation project bond, and to provide authority for the Division to bond for long-term fluid management costs such as perpetual treatment of mine impacted waters. Clarification is provided in NAC 519A.350 to include cash deposit as an acceptable reclamation surety.

1. Need for Regulation:

At certain mines within the state, existing drainage or seepage from waste rock storage facilities, open pits and underground mines has the potential to degrade waters of the state or cause adverse effects to the health of human, terrestrial, or avian life. Although statutory authority for preventing, mitigating, and associated bonding for mine impacted waters is provided in NRS 445A (see NRS 445A.425(1)(a)) and NRS 519A (see 519A.010(1)(b) and 519A.160(4)), the previous regulations at NAC 519A did not specifically list mine impacted waters, including contaminated surface water, groundwater, and seepage from waste rock storage facilities, open

pits, and underground mines. Mine impacted waters are now defined in NAC 519A to include existing drainage or seepage from the above which have the potential to degrade waters of the state or cause an adverse effect to the health of human, terrestrial, or avian life. If a mining operation had environmental liabilities related to mine impacted waters, the revisions to NAC 519A.270 and NAC 519A.345 require the reclamation plan to include a description and strategy for implementation of the measures necessary to stabilize, manage, control, or treat the mine impacted waters. The revisions to NAC 519A.360 also specify that: 1) costs associated with reclamation measures appropriate for mine impacted waters be included in the project reclamation bond; and 2) the Division will establish financial guarantee amounts for long-term fluid management costs such as perpetual treatment of mine impacted waters. Although not specifically listed in NAC 519A, the Division has accepted cash deposits as a reclamation surety throughout the life of the mine reclamation program. Revisions to NAC 519A.350 provide clarification that a cash deposit is an acceptable surety to ensure that reclamation will be completed and describe how the cash deposit will be managed by the State Treasurer, including limitations on the interest earned.

2. 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.

On August 4, 2015 and August 12, 2015 NDEP conducted public workshops on proposed draft Regulation R052-15. The workshops were held in Carson City and Elko. The Carson City workshop was located at the Bryan Building located at 901 S. Stewart Street (Tahoe Conference Room). The Elko workshop was held at Elko City Hall, 1751 College Avenue (Counsel Chamber Room).

Six (6) members of the public attended the workshop in Carson City and four (4) members of the public attended the workshop in Elko.

Questions from the public presented at the workshop were addressed by NDEP staff; summary minutes of the workshop are posted on the SEC website at:
http://www.sec.nv.gov/main/hearing_1015.htm .

Following the workshop, the SEC held a formal regulatory hearing on October 14, 2015 at the Nevada Legislative Building located at 401 South Carson Street, Room 2135. A public notice for the regulatory meeting was posted at the meeting location, at the State Library in Carson City, at the Office of the Division of Environmental Protection in Las Vegas, at the Division of Minerals in Carson City, at the Department of Wildlife, on the LCB website, on the Division of Administration website and on the SEC website.

Copies of the agenda, the public notice, and the proposed permanent regulation R052-15 were also made available at all public libraries throughout the state as well as to individuals on the SEC mailing list and the Bureau of Mining Regulation and Reclamation's electronic mailing list.

The public notice for the proposed regulation was published in the Las Vegas Review Journal and Reno Gazette Journal newspapers once a week for three consecutive weeks prior to the SEC

regulatory meeting. Other information about this regulation was made available on the SEC website at: http://www.sec.nv.gov/main/hearing_1015.htm .

3. The number of persons who attended the SEC Regulatory Hearing:

- (a) Attended October 14, 2015 hearing: 21 (approximately)
- (b) Testified on this Petition at the hearing: 0
- (c) Submitted to the agency written comments: 0

4. 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.

Comments were solicited from affected businesses through e-mail, public workshops and at the October 14, 2015 SEC hearing as noted in number 2 above.

5. 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 regulation was adopted without change because the public was satisfied with the proposed amendments.

6. The estimated economic effect of the adopted regulation on the business which it is to regulate and on the public.

Regulated Business/Industry. These regulations may result in operators of mining operations having to submit a higher reclamation project bond to cover costs associated with stabilization, management, control, or treatment of mine impacted waters. Currently, this would only apply to projects located on private land as the Bureau of Land Management (BLM) has this bonding authority for projects on public lands.

Public. The regulation will have no economic effect on the public.

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

There is no additional cost to the Division for enforcement of the regulation.

8. 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.

The revisions to NAC 519A do not overlap or duplicate any regulations of other state or government agencies. The BLM has authority under 43 CFR 3809 to require bonding for mine impacted waters when the mine project facility or component is located on public land managed by the BLM. The Division does not have similar authority when mine impacted waters are

associated with a facility or component located on private land. A cash project bond is accepted by the BLM as a surety to guarantee performance of reclamation obligations when the project is located on public land. The proposed regulation will give the state similar authority to accept a cash bond as a reclamation surety for projects on private land.

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

The regulation is no more stringent than what is established by federal law.

10. 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.

The adopted regulation does not address fees.