

**APPROVED REGULATION OF THE
STATE ENVIRONMENTAL COMMISSION**

LCB File No. R046-18

Effective August 30, 2018

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

AUTHORITY: §§1-12, 13, 15, 16 and 18-25, NRS 445A.425 and 445A.465; §14, NRS 445A.425, 445A.465 and 445A.495; §17, NRS 445A.425, 445A.430 and 445A.465.

A REGULATION relating to mining; defining certain terms relating to mining facilities; establishing certain requirements in the event of certain closures of a facility; revising certain definitions related to mining facilities; revising certain requirements for the proposed operating plans for a facility; revising the time period during which a permit to construct, operate and close a facility must be maintained; revising certain information which must be submitted by an applicant for a permit; revising certain terms relating to a mining facility; revising certain groundwater standards; establishing certain requirements for underground mines; revising certain requirements relating to minimum design criteria for mining facilities; revising requirements relating to the permanent closure of a facility; and providing other matters properly relating thereto.

Legislative Counsel's Digest:

Existing law requires the State Environmental Commission to adopt regulations for the standards of quality of the waters of this State. (NRS 445A.425, 445A.465) Under existing regulations, the Commission has adopted requirements for mining facilities to prevent and address the degradation of waters of the State resulting from mining facilities. (NAC 445A.350-445A.447) **Sections 2-5** of this regulation define certain terms relating to mining facilities, including “Director,” “mitigate” or “mitigation,” “waste rock” and “post-closure monitoring.” **Sections 7 and 13** of this regulation make conforming changes. **Section 8** of this regulation makes a technical correction to the definition of “facility.” **Section 9** of this regulation revises the definition of “permanent closure.” **Section 10** of this regulation revises the definition of “WAD cyanide” to include alternative methods that may be used to determine the cyanide concentration.

Existing regulation requires a person who wishes to construct, operate and close permanently a facility to submit an application to the State Department of Conservation and Natural Resources. (NAC 445A.394) **Section 12** of this regulation requires the proposed operating plans for a facility to include a plan for the management of waste rock. **Section 12** also requires a tentative plan for the permanent closure of a facility to include a plan for the closure of

all sources at the facility that is detailed enough to support an estimate of the cost of executing the plan for reclamation.

Section 14 of this regulation revises the time period during which a valid permit for the construction, operation and closure of a facility must be maintained from the completion of permanent closure to until the completion of the post-closure monitoring period and the termination of the permit by the Department. **Section 15** of this regulation revises certain information which must be submitted to the Department by an applicant for a permit.

Existing regulation provides that certain modifications to the design of a facility do not require new public notice. (NAC 445A.4155) **Section 16** of this regulation revises this section to instead provide that certain modifications to the engineering design of a facility do not require new public notice. **Section 17** of this regulation makes conforming changes.

Section 18 of this regulation revises the standard for groundwater with which a facility must comply to avoid degrading the waters of the State. **Section 20** of this regulation requires underground mines to be left in a manner to minimize the inflow and outflow of water through the openings to the mine on the surface of the land in order to avoid releasing contaminants which may degrade the waters of the State.

Section 19 of this regulation eliminates the provision that states that the level of containment required by the Department for flotation facilities will depend upon the characteristics of the ore and process water. (NAC 445A.428)

Section 21 of this regulation authorizes the Department to allow a design which provides less protection than the minimum design criteria required of each process component and the site and operating conditions if the Department determines such a design is acceptable. **Section 22** of this regulation provides additional minimum design requirements for process components and fluid management systems of facilities for which the Department has not approved a final plan for permanent closure before September 1, 2018. **Section 6** of this regulation provides that if the Department learns of a planned or unplanned temporary closure of a facility that threatens the waters of the State, the Department may establish requirements for the permit holder to manage, mitigate and stabilize the affected process components and, if necessary, initiate process fluid management activities and implement the requirements established for the permit holder.

Existing regulation sets forth the procedures with which a holder of a permit must comply in the event of an unplanned temporary closure of one or more process components, including that the holder must inform the Department of such closure. (NAC 445A.445) **Section 23** of this regulation authorizes the Department to take certain actions in the event that the holder of the permit fails to inform the Department.

Under existing regulation the monitoring period required following the permanent closure of a facility may not exceed 30 years. (NAC 445A.446) **Section 24** of this regulation provides that, under certain circumstances, an additional post-closure monitoring period of up to 30 years shall be required by the Department.

Section 25 of this regulation repeals certain provisions relating to permits for a pilot or testing facility. **Section 11** of this regulation makes conforming changes.

Section 1. Chapter 445A of NAC is hereby amended by adding thereto the provisions set forth as sections 2 to 6, inclusive of this regulation.

Sec. 2. *“Director” has the meaning ascribed to it in NRS 445A.340.*

Sec. 3. *“Mitigate” or “mitigation” includes, without limitation:*

- 1. Avoiding the potential degradation of waters of the State by taking or not taking a certain action or parts of an action;*
- 2. Minimizing the degradation or potential degradation of waters of the State by limiting the degree or magnitude of an action and its implementation;*
- 3. Reducing or eliminating the degradation or potential for degradation of waters of the State by taking corrective action as defined in NAC 445A.2262; or*
- 4. Reducing or eliminating the degradation or potential for degradation of waters of the State over time through preservation and maintenance over the life of the action.*

Sec. 4. *“Post-closure monitoring” means the period of time required for monitoring of a facility following the permanent closure of that facility.*

Sec. 5. *“Waste rock” means a naturally occurring material that is mined as part of the process to reach ore and has minimal or no economic value at the time the material is mined.*

Sec. 6. *If the Department is notified or otherwise becomes aware of any unplanned or planned temporary closure at a facility where the associated process fluids are not being managed in a manner that is protective of the waters of the State, the Department may:*

- 1. Give notice to the holder of the permit that the process fluids are not being managed in a manner that is protective of the waters of the State;*
- 2. Establish requirements for the holder of the permit to manage, mitigate and stabilize the affected process components; and*

3. If necessary to stop or prevent the degradation of the waters of the State, initiate process fluid management activities and implement the requirements established pursuant to subsection 2.

Sec. 7. NAC 445A.350 is hereby amended to read as follows:

445A.350 As used in NAC 445A.350 to 445A.447, inclusive, *and sections 2 to 6, inclusive, of this regulation*, unless the context otherwise requires, the words and terms defined in NAC 445A.351 to 445A.385, inclusive, *and sections 2 to 5, inclusive, of this regulation* have the meanings ascribed to them in those sections.

Sec. 8. NAC 445A.359 is hereby amended to read as follows:

445A.359 “Facility” means all portions of a mining operation, including, ~~but not limited to,~~ *without limitation*, the mine, waste rock piles, ~~or~~ *ore* piles, beneficiation process components, processed ore disposal sites, and all associated buildings and structures. The term does not include any process component or nonprocess component which is not used for mining or mineral production, and has not been used in the past for mining or mineral production as part of an operation which is active as of September 1, 1989.

Sec. 9. NAC 445A.367 is hereby amended to read as follows:

445A.367 “Permanent closure” means ~~that~~ *the* time in the ~~operating~~ life of a facility when activities for the final stabilization, removal or mitigation of sources are ~~initiated,~~ *undertaken*.

Sec. 10. NAC 445A.383 is hereby amended to read as follows:

445A.383 “WAD cyanide” means the *weak acid dissociable* cyanide concentration ~~as~~ determined by *one of the following methods*:

1. *ASTM D2036-082, “Standard Test Methods for Cyanides in Water,” Method C, ~~Weak Acid-Dissociable Cyanide, D2036-082,~~ Part 31 . ~~of American Society of Testing Materials Book of Standards.~~ A copy of ASTM D2036-082 is available for purchase at the IHS Standards Store, 15 Inverness Way East, Englewood, Colorado 80112, or at the Internet address <https://global.ihs.com>, for the price of \$72.*

2. *ASTM D2036-06, “Standard Test Methods for Cyanides in Water,” Method C, followed by Part 16.2 (titrimetric), Part 16.3 (colorimetric) or Part 16.4 (ion-specific electrode). A copy of ASTM D2036-06 is available from ASTM International, P.O. Box C700, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428-2959, by telephone at (877) 909-2786 or at the Internet address <https://www.astm.org>, for the price of \$62.40.*

3. *ASTM D2036-09, “Standard Test Methods for Cyanides in Water,” Method C, followed by Part 16.2 (titrimetric), Part 16.3 (colorimetric) or Part 16.4 (ion-specific electrode). A copy of ASTM D2036-09 is available from ASTM International, P.O. Box C700, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428-2959, by telephone at (877) 909-2786 or at the Internet address <https://www.astm.org>, for the price of \$52.*

4. *“Standard Methods for the Examination of Water and Wastewater,” SM 4500-CN-I, followed by SM 4500-CN-D (titrimetric), SM 4500-CN-E (colorimetric) or SM 4500-CN-F (cyanide-ion selective electrode). A copy of these standards is available from Standard Methods at the Internet address <https://standardmethods.org>, for the price of \$75.*

5. *Another version or method approved by the Department and scientifically demonstrated to achieve performance in determining weak acid dissociable cyanide which is equivalent to one of the methods described in subsections 1 to 4, inclusive.*

Sec. 11. NAC 445A.392 is hereby amended to read as follows:

445A.392 1. Except as otherwise provided in subsection 2, a person wishing to construct or modify materially a process component at a facility must file an application for a permit pursuant to NAC 445A.394.

2. Persons wishing to construct a small-scale ~~[, pilot, testing,]~~ *facility*, placer *mining facility* or other facility which relies solely on physical separation methods to process ore may file an abbreviated application for a permit pursuant to NAC 445A.410 ~~[, 445A.412 and]~~ *or* 445A.414 ~~[,]~~ *, as applicable*. The application must be accompanied by the appropriate fee as required by NAC 445A.232.

Sec. 12. NAC 445A.398 is hereby amended to read as follows:

445A.398 The proposed operating plans for a facility must include:

1. A description of the mineral processing circuit which includes a flow chart of the facility and the range of operating conditions for which the process components were designed.

2. A plan for the management of process fluids which describes the methods to be used for the monitoring and controlling of all process fluids. The plan must provide a description of the means to evaluate the conditions in the fluid management system so as to be able to quantify the available storage capacity for meteoric waters and to define when and to what extent the designed containment capacity has been exceeded.

3. A plan for monitoring the facility which describes:

(a) The water quality in the area;

(b) The monitoring locations the applicant proposes to sample routinely in order to evaluate surface and groundwater at the site that may be affected by the operation of the facility;

(c) An analytical profile of each surface and groundwater that may be affected by the operation of the facility; and

(d) The locations of the leak detection systems, the frequency for sampling these systems and the analytical profile to be used for evaluation of the samples.

4. *A plan for the management of waste rock which:*

(a) Presents representative characterization data and sample locations from the waste rock that will be mined at the facility;

(b) Evaluates whether there is a potential for the waste rock to degrade the waters of the State;

(c) Describes the size and location of all proposed waste rock storage facilities;

(d) Describes the sampling and analysis protocols that will be used to verify the character of the waste rock once it is mined at the facility; and

(e) If the information required pursuant to paragraphs (a) to (d), inclusive, indicates that there is a potential for the waste rock to degrade the waters of the State, describes the management protocols or engineered containment, or both, which will be used to eliminate the potential degradation over both the short term and long term.

5. A plan for responding to emergencies which:

(a) Describes what actions must be initiated and by whom as a result of various possible failures in the fluid management system which would result in releases of pollutants; and

(b) Is designed to minimize the environmental impact resulting from the release of process fluids.

~~5.1~~ 6. A temporary closure plan resulting from conditions described in subsection 1 of NAC 445A.444 which describes the activities which must be maintained during the time of closure.

~~6.~~ 7. A tentative plan for the permanent closure of the facility which describes the procedures, methods and schedule for stabilizing spent process materials ~~and~~ *and all other sources at the facility*. The plan must include:

(a) Procedures for characterizing spent process materials as they are generated; ~~and~~

(b) The procedures to stabilize all process components *and all other sources at the facility* with an emphasis on stabilizing spent process materials and the estimated cost for the procedures ~~and~~; *and*

(c) Conceptual closure plans for all sources at the facility with sufficient detail to support an initial estimate of the cost of executing the plan for reclamation determined pursuant to NAC 519A.360.

Sec. 13. NAC 445A.408 is hereby amended to read as follows:

445A.408 Within 15 days after the end of the time for public comment regarding the issuance or renewal of a permit, the Director ~~of the Department~~ shall issue the final permit or provide written notice to the applicant why the final permit will not be issued at that time. This notice must set forth the time allowed for an aggrieved party to appeal the Department's decision.

Sec. 14. NAC 445A.409 is hereby amended to read as follows:

445A.409 1. If an application is approved, a single permit must be issued for the construction, operation and closure of the facility. A valid permit must be maintained until ~~permanent closure is complete.~~ *the time required for post-closure monitoring pursuant to NAC 445A.446 is completed, as determined by the Department, and the Department has terminated the permit.*

2. A permit may be issued for a maximum term of 5 years, at which time the holder of the permit may apply for renewal.

Sec. 15. NAC 445A.414 is hereby amended to read as follows:

445A.414 1. An applicant for a permit to construct, operate and close permanently a facility which utilizes physical separation methods of concentrating ore such as placer mining ~~and flotation~~ methods and which uses only coagulants ~~and~~ *and* flocculants ~~and reagents~~ submitted to and approved by the Department, must submit to the Department:

(a) The information required by paragraphs (a) to (e), inclusive, of subsection 2 of NAC 445A.394. ~~and~~

(b) An abbreviated area of review which covers only the site and the adjacent area, including an identification of all surface water within 1/2 mile of the site and the depth and quality of all groundwater beneath the site. ~~and~~

(c) A draft operating plan which describes the circuit for concentrating the ores and identifies all process components. ~~and~~

(d) ~~A multi-element spectrographic assay~~ *Except as otherwise provided in this paragraph, a meteoric water mobility procedure and Profile I analysis conducted using ASTM E2242-13, "Standard Test Method for Column Percolation Extraction of Mine Rock by the Meteoric Water Mobility Procedure," available from ASTM International, P.O. Box C700, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428-2959, by telephone at (877) 909-2786 or at the Internet address <http://www.astm.org>, for the price of \$46, or the most recently promulgated version thereof that is approved in writing by the Department and scientifically demonstrated as achieving equivalent performance to the ASTM E2242-13 method in determining Profile I constituent concentrations* or ~~either~~ *another* approved method of

analysis which characterizes the ore body . ~~†~~ *Unless otherwise required by the Department based on specific concerns regarding the potential to degrade the waters of the State, such an analysis is not required for a facility that will process only uncrushed alluvium.*

(e) The results of an analysis of the process make up water and process water for the inorganic constituents listed in NAC 445A.453 and 445A.455 to determine which and to what extent the process water burden of these elements is increased . ~~† and~~

(f) A certification that the applicant will not utilize any chemicals in the process except those submitted to and approved by the Department.

2. The use of a chemical not approved by the Department removes the facility from this category of operation and requires the holder of the permit to meet the requirements established in NAC 445A.394 to 445A.398, inclusive.

Sec. 16. NAC 445A.4155 is hereby amended to read as follows:

445A.4155 1. A modification to the *engineering* design of a facility for which a permit has been granted by the Department does not require a new public notice if:

(a) The modification *to the engineering design* requires review by the Department pursuant to NAC 445A.350 to 445A.447, inclusive ~~†~~, *and sections 2 to 6, inclusive, of this regulation;* and

(b) The ~~†Commission~~ *Department* determines that the modification *to the engineering design* is not a modification of such significance as to constitute a “minor modification” or a “major modification,” as those terms are described in NAC 445A.416 and 445A.417, respectively.

2. ~~†Such a~~ A modification *to the engineering design described in subsection 1* may not extend the term of the permit.

Sec. 17. NAC 445A.418 is hereby amended to read as follows:

445A.418 1. The fee for a minor modification to a permit *described in NAC 445A.416* is one-half the amount of the renewal fee for a permit, up to a maximum fee of \$5,000.

2. The fee for a major modification to a permit *described in NAC 445A.417* is equal to the amount of the renewal fee for a permit.

3. The fee for ~~the type of~~ a modification *to the engineering design* described in NAC 445A.4155 is \$500.

Sec. 18. NAC 445A.424 is hereby amended to read as follows:

445A.424 1. A facility, regardless of size or type, may not degrade the waters of the State to the extent that:

(a) The quality of surface water is lowered below that allowed by NRS 445A.565.

(b) For groundwater:

(1) The ~~quality is lowered below a~~ *concentration of a constituent exceeds the greater of:*

(I) A state or federal regulation prescribing standards for drinking water; or

(II) The natural background concentration of the regulated drinking water constituent; or

(2) The concentration of WAD cyanide exceeds 0.2 mg/L.

↪ The Department may establish a numerical limit for any constituent not regulated by subparagraphs (1) and (2) which may reasonably be expected to be discharged by the facility in sufficient volume and concentration to cause an adverse impact on human health.

(c) The quality of those waters of the State which already exceed the criteria established by subsection 2 is lowered to a level that the Department finds would render those waters unsuitable for the existing or potential municipal, industrial, domestic or agricultural use.

2. The Department may exempt a body of groundwater or portion thereof from the standards established in subsection 1 if the request for an exemption to the groundwater standards and the supporting information is submitted as part of the application for the permit. The following criteria will be considered by the Department in determining whether to exempt a potentially impacted body of groundwater from the standards in subsection 1:

(a) The impacted groundwater does not currently serve as a source of drinking water and because of the following reasons the groundwater will not serve as a source of drinking water:

(1) The groundwater produces a mineral, hydrocarbon or geothermal fluid which the applicant can demonstrate to the satisfaction of the Department exists at a concentration that is expected to be capable of commercial production and that releases by the facility will not affect this production;

(2) The groundwater is situated at a depth or location which makes recovery of water for drinking economically or technologically impractical; or

(3) It would be economically or technologically impractical to render the water fit for human consumption; or

(b) The total dissolved solids in the groundwater is more than 10,000 milligrams per liter and the groundwater is not reasonably expected to become a supply of drinking water.

Sec. 19. NAC 445A.428 is hereby amended to read as follows:

445A.428 For placer mining ~~for flotation~~ facilities, the level of containment required by the Department for process fluids will depend upon the characteristics of the ore and process water.

Sec. 20. NAC 445A.429 is hereby amended to read as follows:

445A.429 1. The holder of the permit must institute appropriate procedures to ensure that all mined areas do not release contaminants that have the potential to degrade the waters of the State.

2. Open pit mines must, to the extent practicable, be free-draining or left in a manner which minimizes the impoundment of surface drainage and the potential for contaminants to be transported and degrade the waters of the State.

3. *Underground mines must, to the extent practicable, be left in a manner which minimizes the inflow and outflow of water through the openings to the mine on the surface of the land.*

4. Bodies of water which are a result of mine pits penetrating the water table must not create an impoundment which:

(a) Has the potential to degrade the groundwaters of the State; or

(b) Has the potential to affect adversely the health of human, terrestrial or avian life.

~~4.~~ 5. The holder of a permit may apply to the Commission to establish a beneficial use with a level of protection less than that required by paragraph (b) of subsection ~~3~~ 4 for water impounded in a specific mine pit.

Sec. 21. NAC 445A.432 is hereby amended to read as follows:

445A.432 1. *Except as otherwise determined by the Department pursuant to subsection 2, the provisions of* NAC 445A.433 to 445A.438, inclusive ~~define~~ :

(a) *Define* the minimum design criteria required of each process component and the site and operating conditions which are considered to exist when these criteria are applied ~~These provisions establish~~ ;

(b) *Establish the* minimum contaminant control technologies *required* ; and ~~{define}~~

(c) *Define* the site and operating conditions which must be evaluated.

2. Based on site characterization, best engineering judgment will be applied *by the Department* to determine the degree to which *any* designs must provide more or *may provide* less protection through engineered containment ~~{H}~~ *than the minimum design criteria described pursuant to NAC 445A.433 to 445A.438, inclusive.*

Sec. 22. NAC 445A.433 is hereby amended to read as follows:

445A.433 1. The following minimum design requirements apply to all process components:

(a) In areas where annual evaporation exceeds annual precipitation, a process component must achieve zero discharge.

(b) All sources must be designed to minimize releases of contaminants into groundwaters or subsurface migration pathways so that any release from the facility will not degrade waters of the State.

(c) All process components must be designed to withstand the runoff from a 24-hour storm event with a 100-year recurrence interval ~~{H}~~ *for the operating life of the components.*

(d) The primary fluid management system must be designed to be able to remain fully functional and fully contain all process fluids including all accumulations resulting from a 24-hour storm event with a 25-year recurrence interval ~~{H}~~ *for the operating life of the system.* The

Department may require additional containment based on the following factors:

- (1) Proximity to surface water bodies;
- (2) Depth to groundwater; and
- (3) Proximity to population.

↳ Contingency plans for managing process contaminated flows in excess of the design quantity must be described in the appropriate operating plans.

(e) The fluid management system must be designed *for the operating life of the system* to be functional for 5 years after the projected operating life of the process component and permanent closure period.

(f) The design of the process components must take into consideration the proposed range of operating conditions for each component and the history of seismic events at the site in order to preclude any differential movement or shifting of the subbase, liner or contained material which endangers primary or secondary containment integrity.

2. *If the final plan for permanent closure of a facility that is required pursuant to NAC 445A.447 has not been approved by the Department before September 1, 2018, the following minimum criteria apply for the permanent closure period:*

(a) All process components must be designed or modified to withstand the runoff from a 24-hour storm event with a 500-year recurrence interval.

(b) The primary fluid management system must be designed or modified to be able to remain fully functional and fully contain all fluids, including all accumulations resulting from a 24-hour storm event with a 500-year recurrence interval. The Department may require additional containment based on the following factors:

(1) Proximity to surface water bodies;

(2) Depth to groundwater; and

(3) Proximity to population.

(c) The fluid management system must be designed or modified to be functional for 5 years after the time required for post-closure monitoring pursuant to NAC 445A.446.

3. Additional containment of process fluids may be required in areas where groundwater is considered to be near the surface. Groundwater is considered to be near the surface if:

(a) The depth from the surface to groundwater is less than 100 feet and the top 100 feet of the existing formation has a coefficient of permeability greater than that exhibited by 100 feet of 1×10^{-5} cm/sec material;

(b) Open fractured or faulted geologic conditions exist in the bedrock from the surface to the groundwater; or

(c) There is an inability to document that all exploratory and condemnation borings beneath the site have been adequately sealed.

~~3.4~~ 4. No new process component containing process fluids may be located within 1,000 feet of any dwelling which is occupied at least part of the year and which is not a part of the facility. This restriction does not apply to modifications at a facility which predate such a dwelling.

~~4.4~~ 5. The application of minimum design criteria does not release the holder of a permit from liability for degradation to waters of the State caused by the facility.

Sec. 23. NAC 445A.445 is hereby amended to read as follows:

445A.445 1. In the event of an unplanned temporary closure of one or more process components, the holder of the permit shall:

(a) Within 30 days after an unplanned temporary closure begins, inform the Department of the closure and describe the procedures and controls which have been carried out to maintain the process components during this period.

(b) Within 90 days after the Department has been notified of the unplanned temporary closure:

(1) Begin to evaluate the procedures which will be required to carry out a permanent closure of the process components affected and petition the Department to approve one or more procedures needed for the permanent closure of the process components affected; or

(2) For just cause, request that the Department grant an extension and delay permanent closure. Except as otherwise provided in subsection 2 of NAC 445A.420, the extension may not be longer than the remaining term of the existing permit or for 3 years, whichever is greater.

2. The Department shall approve or disapprove the proposed procedures for permanent closure within 30 days after they are submitted to the Department.

3. Unless the Department has granted an extension pursuant to subparagraph (2) of paragraph (b) of subsection 1 , within 270 days after the Department has been notified of the unplanned temporary closure, the holder of the permit shall initiate the approved procedures for permanent closure.

4. If the holder of the permit fails to inform the Department of an unplanned temporary closure as required pursuant to subsection 1 and the Department otherwise becomes aware of such closure, the Department may:

(a) Establish procedures and controls to maintain the process components during such closure;

(b) Establish procedures needed for the permanent closure of the process components affected; and

(c) Require the holder to implement the procedures and controls established pursuant to paragraphs (a) and (b).

Sec. 24. NAC 445A.446 is hereby amended to read as follows:

445A.446 1. The permanent closure of a facility *or a source at a facility, as applicable*, must be initiated:

(a) Following the request of the holder of the permit;

(b) For a facility which is under a temporary closure, no later than at the end of one renewal of a 5-year permit which has been issued pursuant to subsection 2 of NAC 445A.420; ~~or~~

(c) When the end of the design life of that process component is reached ~~or~~; *or*

(d) For an underground mine, and any source therein, which has the potential to degrade the waters of the State, before the elimination of safe access to the mine.

2. Permanent closure is complete when the requirements contained in NAC 445A.429, 445A.430 and 445A.431 , *as applicable*, have been achieved ~~or~~ *and all other sources at the facility have been stabilized, removed or mitigated.*

3. The time required for *post-closure* monitoring ~~the facility following permanent closure~~ depends upon the particular site and process characteristics, but ~~in no event may~~, *except as otherwise provided in subsection 4*, the time required *must not* exceed 30 years.

4. If the Department determines that chemical stabilization, source removal or mitigation has not been achieved during the post-closure monitoring period, the Department shall require the holder of the permit to take additional actions to achieve the necessary chemical stabilization, source removal or mitigation. After such actions have been taken, the Department shall require an additional period of time for post-closure monitoring. The time required for this additional period of post-closure monitoring must not exceed 30 years.

Sec. 25. NAC 445A.411, 445A.412 and 445A.413 are hereby repealed.

TEXT OF REPEALED SECTIONS

445A.411 Pilot facility or testing facility: Conditions for issuance of permit. (NRS 445A.425, 445A.465) The Department may issue a permit to construct, operate and close permanently a pilot facility or testing facility if:

1. The facility is to evaluate less than 10,000 tons of ore, except that a greater amount may be permitted if the applicant demonstrates that the greater amount is necessary for a specific purpose in the testing program; and

2. The applicant has clearly shown that the facility will not degrade the waters of the State.

↪ A permit to operate a pilot facility or testing facility may not exceed 1 year for a single test or 2 years for a facility that has several tests to conduct.

445A.412 Pilot facility or testing facility: Contents of application for permit. (NRS 445A.425, 445A.465) An application for a permit to construct, operate and close permanently a pilot facility or testing facility must include:

1. The information required in paragraphs (a) to (d), inclusive, of subsection 2 of NAC 445A.394;

2. The quantity of the material to be evaluated;

3. The time required to complete all testing;

4. The type and quantity of chemicals to be utilized in the testing process;

5. A copy of the plans for the system and individual process components;
6. A description of the monitoring systems which are to be used to satisfy the requirements of NAC 445A.424;
7. A description of the procedures to be used to stabilize and dispose of the spent ore;
8. A topographic map of the area for the test site;
9. A description of hydrogeologic conditions at the site; and
10. A draft plan for the permanent closure of the facility, including a plan to stabilize areas disturbed by the operations of the facility.

445A.413 Pilot facility or testing facility: Construction of application indicating need to conduct testing beyond 2 years. (NRS 445A.425, 445A.465) An application for a permit to operate a pilot facility or testing facility which indicates a need to conduct testing beyond 2 years will be construed to be a request to operate a facility subject to the filing requirements of NAC 445A.394 to 445A.398, inclusive.