



STATE OF NEVADA

Department of Conservation & Natural Resources

DIVISION OF ENVIRONMENTAL PROTECTION

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JUNE --, 2006

TO: GENERAL PUBLIC; COOPERATING AGENCIES; MINERALS INDUSTRY

FROM: NEVADA DIVISION OF ENVIRONMENTAL PROTECTION (NDEP)

SUBJECT: **NAC 445A.430 Stabilization of spent ore.**

RE: COMMENTS TO PROPOSED REGULATION CHANGE; NDEP RESPONSES;
FINAL DRAFT OF THE PROPOSED REGULATION CHANGE.

The Nevada Division of Environmental Protection, Bureau of Mining Regulation and Reclamation (BMRR) is proposing to amend the mining regulation **NAC 445A.430 Stabilization of spent ore.**

The existing regulation currently reads as follows:

NAC 445A.430 Stabilization of spent ore. ([NRS 445A.425](#), [445A.465](#))

1. Spent ore which has been left on pads or which will be removed from a pad must first be rinsed until:

- (a) WAD cyanide levels in the effluent rinse water are less than 0.2 mg/l;*
- (b) The pH level of the effluent rinse water is between 6.0 and 9.0; and*
- (c) Contaminants in any effluent from the processed ore which would result from meteoric waters would not degrade waters of the State.*

2. If the requirements established in subsection 1 cannot be achieved, the Department will grant a variance to those conditions if the holder of the permit can demonstrate that:

(a) The remaining solid material, when representatively sampled, does not contain levels of contaminants that are likely to become mobile and degrade the waters of the State under the conditions that will exist at the site; or

(b) The spent ore is stabilized in such a fashion as to inhibit meteoric waters from migrating through the material and transporting contaminants that have the potential to degrade the waters of the State.

3. *The Department may approve an alternate method for stabilizing ore that has been leached if the holder of the permit can clearly demonstrate that the condition in which the materials will be left will not create a potential for the waters of the State to be degraded.*

(Added to NAC by Environmental Comm'n, eff. 9-1-89)—(Substituted in revision for NAC 445.24354)

The NDEP amended the above existing regulation and formally publicly noticed these changes in the following revision:

NAC 445A.430 Stabilization of spent ore. (NRS 445A.425, 445A.465)

1. *Spent ore which has been left on pads or which will be removed from a pad, and for which a long term discharge of that spent ore effluent to the environment is anticipated, will first require an adjustment to the spent ore effluent so that:*

- (a) WAD cyanide levels in the effluent rinse water are less than 0.2 mg/l;*
- (b) The pH level of the effluent rinse water is between 6.0 and 9.0; and*
- (c) Contaminants in any effluent from the processed ore which would result from meteoric waters would not degrade waters of the State.*

2. *The holder of the permit must clearly demonstrate spent ore stabilization. Acceptable methods of demonstration may include, but are not limited to, the following:*

(a) The remaining solid material, when representatively sampled, does not contain levels of contaminants that are likely to become mobile and degrade the waters of the State under the conditions that are likely to exist at the site; or

(b) Spent ore drain-down solution, when representatively sampled, does not contain levels of contaminants that, when transported within known site conditions, and those conditions that are likely to exist at the site, are likely to degrade the waters of the State; or

(c) The spent ore is stabilized in such a fashion as to inhibit meteoric waters from migrating through the material and transporting contaminants that have the potential to degrade the waters of the State.

3. *The Department may approve a variance to subsections 1 and 2 above if the holder of the permit can clearly demonstrate that the condition in which the materials will be left will not create a potential for the waters of the State to be degraded.*

Public workshops were held on February 13 in Carson City and on February 17, 2006 in Elko. The NDEP has received four formal comment letters to the above proposed regulation change:

--BLM letter dated January 6, 2006

--BLM letter dated February 9, 2006

--USFWS letter dated February 23, 2006

--USFS letter dated February 23, 2006

In addition to the comment letters above, comments were also submitted by the Nevada Mining Association and NDEP employees.

The comments received to date have been very helpful and several are now incorporated into an updated proposed regulation provided below:

NAC 445A.430 Stabilization of spent ore. ([NRS 445A.425](#), [445A.465](#))

1. Spent ore which has been left on pads or which will be removed from a pad, and for which a long term discharge of that spent ore effluent to the environment is anticipated, will first require an adjustment to the spent ore effluent so that:

- (a) WAD cyanide levels in the effluent are less than 0.2 mg/l;*
- (b) The pH level of the effluent is between 6.0 and 9.0; and*
- (c) Contaminants in any effluent from the processed ore which would result from meteoric waters would not degrade waters of the State.*

2. The responsible party must clearly demonstrate spent ore stabilization. Acceptable methods of demonstration may include, but are not limited to, the following:

- (a) The remaining solid material, when representatively sampled, does not contain levels of contaminants that are likely to become mobile and degrade the waters of the State under the conditions that will exist at the site; or*
- (b) Spent ore effluent, when representatively sampled, does not contain levels of contaminants that are likely to become mobile and degrade the waters of the State under the conditions that will exist at the site; or*
- (c) The spent ore is stabilized in such a fashion as to inhibit meteoric waters from migrating through the material and transporting contaminants that have the potential to degrade the waters of the State.*

3. The Department may approve a variance to subsections 1 and 2 above if the responsible party can clearly demonstrate that the condition in which the materials will be left will not create a potential for the waters of the State to be degraded.

The above revision of the regulation will now be submitted to the state's Legislative Council Bureau (LCB) for final administrative review later this month. The NDEP appreciates the time taken by all parties in reviewing the proposed changes to this significant heap leach pad closure regulation.

This proposed regulation change is tentatively scheduled to be presented before the State Environmental Commission (SEC) late this September, 2006. The SEC hearing will also provide for comments.

Persons desiring a copy(s) of one or more of the four comment letters reference above may contact David Gaskin, Bureau Chief, Bureau of Mining Regulation and Reclamation at the Nevada Division of Environmental Protection, 901 South Stewart Street, Suite 4001, Carson City, Nevada 89701-5249 or call (775) 687-9397, or E-mail dgaskin@ndep.nv.gov.

All significant comments received, together with NDEP's responses to these comments, are presented below. These comments have been separated into two categories. The first category would be a comment related to a specific word, term, clause, or phrase within the proposed regulation change. The second category of comments would be those with a more philosophical, or 'big picture' approach to stabilization of spent ore.

With respect to presenting the first category of comments - those words or phrases for which a comment was received are highlighted. The specific comment(s) are then provided beneath the proposed change (also included were any relevant rationale comments contained in the PUBLIC WORKSHOP PRESENTATION document).

The second category of comments is presented below the first category.

NDEP RESPONSE BACKGROUND

Before providing responses to all comments received to date, it might help if NDEP clarifies its position or direction with respect to modifying this regulation:

--The overall intent of the proposed changes to this regulation are to clarify, but not alter in any way, the original intent of the existing regulation.

--It is NDEP's intention to remain 'structurally' as close to the existing regulation format as possible. It is our intention to not modify any words, clauses or phrases in the current regulation if not absolutely required.

--During the public comment period, the BMRR received several complete versions of the entire regulation that say essentially the same thing as the initial proposed draft above. In this case, the NDEP will either default to either our initial draft or to the existing regulation format.

NAC 445A.430 Stabilization of spent ore. ([NRS 445A.425](#), [445A.465](#))

1. Spent ore which has been left on pads or which will be removed from a pad, and for which a long term discharge^a of that spent ore effluent^b to the environment is anticipated^c, will first require an adjustment to the spent ore effluent^b so that:

(a) WAD cyanide levels in the effluent rinse water^b are less than 0.2 mg/l;

(b) The pH level of the effluent rinse water^b is between 6.0 and 9.0; and

(c) Contaminants in any effluent^b from the processed ore which would result from meteoric waters would not degrade waters of the State.

2. The holder of the permit^d must clearly demonstrate spent ore stabilization. Acceptable methods of demonstration may include, but are not limited to, the following:

(a) The remaining solid material, when representatively sampled, does not contain levels of contaminants that are likely to become mobile and degrade the waters of the State under the conditions that are likely to exist at the site^e; or

(b) Spent ore drain-down solution^b, when representatively sampled, does not contain levels of contaminants that, when transported within known site conditions^e, and those conditions that are likely to exist at the site^e, are likely to degrade^f the waters of the State; or

(c) The spent ore is stabilized in such a fashion as to inhibit meteoric waters from migrating through the material and transporting contaminants that have the potential to degrade^f the waters of the State.

3. The Department may approve a variance to subsections 1 and 2 above if the **holder of the permit^d** can clearly demonstrate that the condition in which the materials will be left will not create a potential for the waters of the State to be degraded.

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FIRST CATEGORY COMMENTS:
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a) The term "long term discharge":

COMMENTS:

--It's not clear if this proposal covers short-terms discharges or intermittent (periodic) discharges? What is meant by long term? Is this covered in the definitions section? It appears the regulations focus on anticipated discharges, what if you have discharges that are not anticipated then what applies? (Source: BMRR staff)

--Section 2 (b) (my section 1 (c)): Because drain-down solution chemistry may vary over time, it is not sufficient to show that it currently won't degrade WOTS. A reasonable effort should be made to determine what future constituent levels will be, at least for as far into the future as the discharge is approved, and show that those concentrations also won't degrade WOTS. My wording allows for land applications, so the reference to "long-term discharge" in section 1 is unnecessary. (Source: BMRR staff)

--My proposed rewording (*below*) of your section 2 (b) precludes the need for the term "long-term discharge". (Source: BMRR staff)

CURRENT PROPOSED SECTION 2(b):

(b) Spent ore **drain-down solution^b**, when representatively sampled, does not contain levels of contaminants that, when transported within **known site conditions^f**, and those **conditions that are likely to exist at the site^f**, are likely to degrade^g the waters of the State; or...

SUGGESTED SECTION 2(b):

c) Spent ore effluent does not contain, and is reasonably demonstrated that it will not contain over the period of discharge authorized by the Department, levels of contaminants that, when transported within known site conditions, and within those conditions that are reasonably inferred to exist at the site, have a potential to degrade the waters of the State; or

--The best way may be to modify section 1 to read as follows:

1. **Except for those operations proposing to maintain long-term heap discharge on containment resulting in zero discharge**, spent ore which has been left on pads or which will be removed from a pad, ~~and for which a long term discharge^e of that spent ore effluent^b to the environment is anticipated^e~~, will first require an **adjustment^d** to the spent ore effluent^b so that...(Source: NvMA)

--I agree that the wording should allow flexibility, but the undefined terms "long- term discharge," "anticipated," and "adjustment," are unclear and leave open the possibility of major differences in interpretation, and unnecessarily limit the scope of application.
(Source: BMRR staff)

NDEP RESPONSE: *The insertion of the term 'long-term discharge' in the clause is designed to make clear that this specific regulation does not apply to any terms or conditions the State may make as part of a State issued TEMPORARY PERMIT as provided for by NRS 445A.485. That statute NRS 445A.485 is presented below.*

***NRS 445A.485 Permits: Issuance of temporary permits. The Department may issue a temporary permit for the discharge of pollutants or the injection of fluids through a well. The permit is valid for not more than 180 days.
(Added to NRS by 1991, 1741; A 1993, 2790)—(Substituted in revision for NRS 445.2235)***

A 'TEMPORARY PERMIT' is valid for not more than 180 days. Neither the statues nor the regulations define either a 'long-term discharge' or a 'short-term discharge'. Any discharge proposed for greater than 180 days would be permitted either as a GENERAL permit (NRS 445A.475) or an INDIVIDUAL permit (NRS 445A.480) of which the BMRR issued Water Pollution Control Permit would be a subset. These two Department issued permits provide for fixed terms not to exceed 5 years. This proposal then is designed only to include those discharges permitted under either a GENERAL or an INDIVIDUAL permit. Periodic/intermittent discharges could possibly be permitted as either a 'short-term discharge' (NRS 445A.485) or a 'long-term discharge' (NRS 445A.475 or 480) depending on the situation. Unanticipated discharges outside the purview of the particular discharge permit in place may be overseen by a NDEP enforcement action- as is current practice.

In summary, a long-term discharge is any discharge for which a temporary permit in not specifically issued. Additionally, any 'unanticipated discharge' may be considered a 'release' and may be overseen by an NDEP enforcement action.

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b) The terms "...effluent rinse water..."; "...drain-down solution..."; the word "...effluent...":

COMMENTS:

--If your intent is to remove reference to rinsing, the term "effluent rinse water" should be replaced with "effluent". (Source: BMRR staff)

--The term "drain-down solution" is inconsistent with, and more limiting than, the term "effluent" used elsewhere in this regulation. (Source: BMRR staff)

--The best way may be to modify section 1 to read as follows:

1. *Except for those operations proposing to maintain long-term heap discharge on containment resulting in zero discharge, spent ore which has been left on pads or which will be removed from a pad, ~~and for which a long term discharge^a of that spent ore effluent^b to the environment is anticipated^c~~, will first require an adjustment^d to the spent ore effluent^b so that:*

- (a) WAD cyanide levels in the ~~effluent rinse water^b~~ are less than 0.2 mg/l;
- (b) The pH level of the ~~effluent rinse water^b~~ is between 6.0 and 9.0; and
- (c) Contaminants in any effluent^b from the ~~processed spent~~ ore which would result from meteoric waters would not degrade waters of the State. (Source: NvMA)

NDEP RESPONSE: *The terms 'effluent rinse water', 'drain-down solution', and the word 'effluent' are not defined in either the water pollution control statutes or mining regulations.*

The term 'Process fluid' is defined in the mining regulations: (Heap leach pads are considered 'beneficiation process components')

NAC 445A.376 "Process fluid" defined. ([NRS 445A.425](#), [445A.465](#)) "Process fluid" means any liquids, including meteoric waters, which are intentionally or unintentionally introduced into any portion of the beneficiation process components. (Added to NAC by Environmental Comm'n, eff. 9-1-89)—(Substituted in revision for NAC 445.24252)

Because the term 'rinsing' is proposed to be deleted from this regulation, continued use of the existing term 'effluent rinse water' would appear to be inappropriate and/or confusing. The term 'drain-down solution', while not currently incorporated into the existing regulation, was used in the proposed regulation change. This term, although used extensively within the regulated community, may not be familiar to the general public. The word 'effluent' is currently in use in the existing regulation and appears in the proposed regulation change. This word also encompasses the widest latitude with respect a definition of heap drain-down solution/effluent.

In summary, the term 'effluent' will be used to replace 'effluent rinse water' and 'drain-down solution'.

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c) *The clause "...and for which a long term discharge of that spent ore effluent to the environment is anticipated^c,...":*

COMMENT:

--The best way may be to modify section 1 to read as follows:

1. *Except for those operations proposing to maintain long-term heap discharge on containment resulting in zero discharge* (Source: NvMA)

NDEP RESPONSE: *The proposed clause "...and for which a long-term discharge of that spent ore effluent to the environment is anticipated,..." is designed to exclude those operations for which the operator is proposing to maintain long-term heap discharge on containment -*

i.e. zero-discharge heap leach pad permanent closure. A 'zero-discharge' heap leach pad closure option is considered desirable by the State of Nevada. Although the above submitted rewrite does convey the intent of the proposed clause, the inclusion of the term 'zero discharge' may require a definition of 'zero discharge'. The NDEP is not proposing at this time to amend the existing mining regulations to provide for definitions of any terms or phrases. The NDEP, therefore, would prefer to use the existing proposed clause.

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d) The phrase "...holder of the permit...":

COMMENT:

--Sections 2 and 3: References to "the holder of the permit." Requirements for stabilization should apply to whomever is responsible for the facility or doing the stabilization, regardless of whether there is a permit or who the permit holder is. Suggest rewording to remove the reference to who. (Source: BMRR staff)

NDEP RESPONSE: *The NDEP agrees that the phrase 'holder of the permit' may not be reflective of actual conditions existing at a particular site. It is possible that the 'holder of the permit' may not be available (bankruptcy for example) to perform stabilization activities. The NDEP proposes that the term 'responsible party' replace the phrase 'holder of the permit'.*

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e) The phrases "...known site conditions..." and "...conditions that are likely to exist at the site...":

COMMENTS:

--"...In Number 2(b), "known site conditions" and "conditions that are likely to exist at the site" should be clarified. Do these "conditions" mean those that existed prior to, during, or after mining?" (Source: USFS letter dated February 23, 2006)

--The words "likely to exist" are not just flexible, they are poorly defined. Suggest replacement with "reasonably inferred to exist," because while still being flexible, at least the "reasonable person" concept is defined and familiar in our legal system. (Source: BMRR staff)

NDEP RESPONSE: *Below is the section of the existing regulation containing a reference to the comments:*

(a) The remaining solid material, when representatively sampled, does not contain levels of contaminants that are likely to become mobile and degrade the waters of the State under the conditions that will exist at the site; or

Below are the two sections of the proposed draft containing the comments:

(a) The remaining solid material, when representatively sampled, does not contain levels of contaminants that are likely to become mobile and degrade the waters of the State under the conditions that are likely to exist at the site; or

(b) Spent ore drain-down solution, when representatively sampled, does not contain levels of contaminants that, when transported within known site conditions, and those conditions that are likely to exist at the site, are likely to degrade the waters of the State; or

NDEP agrees in a general sense that the phrases are somewhat vague. However, due to the limited intent with respect to amending this single regulation, the NDEP will now revise the language to reflect the existing regulation terminology.

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f) The phrases "...are likely to degrade..." and "...have the potential to degrade...":

COMMENT:

--Our regulations consistently use the term "have a potential to degrade." Suggest replacing the words "are likely to degrade" with "have a potential to degrade." (Source: BMRR staff)

NDEP RESPONSE: *Below are those sections of the existing regulation that reference either of the two terms used above:*

NAC 445A.430 Stabilization of spent ore (ORIGINAL)

...

(c) Contaminants in any effluent from the processed ore which would result from meteoric waters would not degrade waters of the State.

...

(a) The remaining solid material, when representatively sampled, does not contain levels of contaminants that are likely to become mobile and degrade the waters of the State under the conditions that will exist at the site; or

(b) The spent ore is stabilized in such a fashion as to inhibit meteoric waters from migrating through the material and transporting contaminants that have the potential to degrade the waters of the State.

3. The Department may approve an alternate method for stabilizing ore that has been leached if the holder of the permit can clearly demonstrate that the condition in which the materials will be left will not create a potential for the waters of the State to be degraded. (Added to NAC by Environmental Comm'n, eff. 9-1-89)—(Substituted in revision for NAC 445.24354)

The proposed revision to the regulation contains the following sections that reference either of the two terms used above:

NAC 445A.430 Stabilization of spent ore. (REVISED)

...

(c) Contaminants in any effluent from the processed ore which would result from meteoric waters would not degrade waters of the State.

...

(a) The remaining solid material, when representatively sampled, does not contain levels of contaminants that are likely to become mobile and degrade the waters of the State under the conditions that are likely to exist at the site; or

(b) Spent ore drain-down solution, when representatively sampled, does not contain levels of contaminants that, when transported within known site conditions, and those conditions that are likely to exist at the site, are likely to degrade the waters of the State; or

(c) The spent ore is stabilized in such a fashion as to inhibit meteoric waters from migrating through the material and transporting contaminants that have the potential to degrade the waters of the State.

3. The Department may approve a variance to subsections 1 and 2 above if the holder of the permit can clearly demonstrate that the condition in which the materials will be left will not create a potential for the waters of the State to be degraded.

The NDEP agrees with the comment and the existing phrase 'potential to degrade' will be used where applicable.

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SECOND CATEGORY COMMENTS:
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Comments in this category generally are along the four lines of thought: undefined terms; regulation change timeline; lack of recognition of federal authority on federal lands; and 'others'.

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1. Undefined terms:

COMMENTS:

--I agree that the wording should allow flexibility, but the undefined terms "long-term discharge," "anticipated," and "adjustment," are unclear and leave open the possibility of major differences in interpretation, and unnecessarily limit the scope of application. (Source: BMRR staff)

--"The language used in the proposed revision to the regulations is somewhat vague and does not provide adequate information on what the mining industry will be required to do. It would be helpful, if not essential, to define the following terms: adjustment; spent ore; spent ore effluent, effluent rinse water; representatively sampled; mobile; drain-

down solution; site conditions; variance." (Source: USFWS letter dated February 23, 2006)

-- The term "adjustment" implies to us "treatment" of effluent prior to discharge. The term "long-term discharge" may not be clear to the public. Perhaps the regulation should include a definition of what these terms mean for the public's understanding." (Source: BLM letter dated February 9, 2006)

NDEP RESPONSE: There is an inherent trade-off between detail and generalization. It is very important that the mining regulations keep pace with the dynamic nature of mine closure technology. As such, the focus on detailed definitions of various technical terms can actually cause an 'unnecessary limit to the scope of application' due to the lack of inclusion in a definition for a new technology or procedure. The NDEP, in general, feels that the state mining regulations presently work quite well. However, should the state decide to provide definitions for some or all of the terms, words or phrases mentioned above, that can be accomplished although not within this particular action regarding this single regulation.

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2. Regulation change timeline:

COMMENTS:

--"The time allowed for review and comment on the revisions, from the time of the Public Workshop Presentations to the due date for comments, does not allow adequate time for thorough review. We recommend that additional time be provided for review in the future on such regulatory changes." (Source: USFWS letter dated February 23, 2006)

--"Any final revisions to the proposed regulation that will be provided to the State Environmental Commission (SEC) should be provided to the public at least 60 days in advance of a public hearing on this issue by the SEC, to provide adequate time for review and comment to both the Nevada Division of Environmental Protection and the SEC." (Source: USFWS letter dated February 23, 2006)

NDEP RESPONSE: The proposed regulation change has been properly public noticed as required by NRS 233B.061. This proposed regulation change is tentavily scheduled to be presented before the State Environmental Commission (SEC) late this September 2006. The SEC hearing will also provide for comments.

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3. Regulation does not recognize the authority of the federal land managers on federal lands.

COMMENTS:

--Your proposed changes under Numbers 1 and 2 appear to allow an operator to leave a site "as is" as long as they do not degrade waters of the State. Recognizing that NAC 445A.430 is limited to waters of the State, you might want to add language that recognizes that when National Forest Systems lands are involved stabilization of spent ore and management of effluent must be consistent with Federal regulations and approval." (Source: USFS letter dated February 23, 2006)

--"For example, it appears that if an operator cannot demonstrate stabilization under items Number 1. and 2., then the regulation will allow for any condition as long as waters of the State are not degraded. This closure allowance may not be acceptable for public lands." (Source: BLM letter dated February 9, 2006)

--"Recognizing that NAC 445A.430 is limited to waters of the State, perhaps you could develop a preamble or some other form of documentation that recognizes that stabilization of spent ore and management of effluent must be consistent with Federal regulations and approval when public lands are involved." (Source: BLM letter dated February 9, 2006)

--"It appears the main issue is eliminating the rinsing requirement for stabilization of spent ore which allows an operator to pursue alternative methods of stabilization. The BLM does not have an issue with this. We have questions concerning the necessity to also eliminate effluent standards and use "site conditions" as the baseline. State authority for regulating waters of the State is unquestioned however BLM responsibilities for public lands is more all-inclusive including the land surface, vegetation and vadose zone." (Source: BLM letter dated January 6, 2006)

NDEP RESPONSE: *It should be made clear that NAC 445A.430 Stabilization of spent ore, as provided for within the current language and consistent with the proposed revision, focuses on precluding degradation of waters of the State. The stabilization of spent ore and management of long-term heap effluent must be consistent with Federal regulations when public lands are involved.*

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4. 'Others':

COMMENTS:

--Suggest merging sections 1 and 2 to provide all of these as equally acceptable options for stabilization. (Source: BMRR staff)

NDEP RESPONSE: *Comment noted. As stated above, It is NDEP's intention to remain 'structurally' as close to the existing regulation format as possible. It is our intention to not modify any words, clauses or phrases in the current regulation if not absolutely required.*

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--Because drain-down solution chemistry may vary over time, it is not sufficient to show that it currently won't degrade WOTS. A reasonable effort should be made to determine what future constituent levels will be, at least for as far into the future as the discharge is approved, and show that those concentrations also won't degrade WOTS. My wording (below) allows for land applications, so the reference to "long-term discharge" in section 1 is unnecessary.

1. (c) Spent ore effluent does not contain, and is reasonably demonstrated that it will not contain over the period of discharge authorized by the Department, levels of contaminants that, when transported within known site conditions, and within those conditions that are reasonably inferred to exist at the site, have a potential to degrade the waters of the State; (Source: BMRR staff)

NDEP RESPONSE: *Below is the regulation defining 'Stabilization':*

NAC 445A.379 "Stabilized" defined. ([NRS 445A.425](#), [445A.465](#)) "Stabilized" means the condition which results when contaminants in a material are bound or contained so as to prevent them from degrading the waters of the State under the environmental conditions that may reasonably be expected to exist at a site. (Added to NAC by Environmental Comm'n, eff. 9-1-89)—(Substituted in revision for NAC 445.24258)

The above 'Stabilization' regulation would appear not to be 'time dependent', and this is how the BMRR interprets it. The BMRR staff looks at potential contaminants in the long term.

As mentioned above under section a), the reference to 'long-term discharge' is designed to differentiate types of NDEP issued discharge permits. The PUBLIC WORKSHOP PRESENTATION document contained the statement "The insertion of the term 'long-term discharge' in the clause is designed to make clear that this specific regulation does not apply to any terms or conditions the state may make as part of a state issued TEMPORARY PERMIT as provided for by NRS 445A.485."

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--"Although "waters of the State" are defined elsewhere, the regulation appears to be primarily concerned with groundwater at the sites of leach heaps. Protection of groundwater may not necessarily be protective of surface waters down gradient of such sites, including protection of aquatic resources. Information in the Regulation Change Rationale states "A 'zero-discharge' heap pad closure option is considered desirable by the State of Nevada." However, pad liners will not last indefinitely and therefore will not preclude contamination of groundwater and ultimately surface waters in some situations." (Source: USFWS letter dated February 23, 2006)

NDEP RESPONSE: *The statute defining 'Waters of the State' is presented below:*

NRS 445A.415 "Waters of the State" defined. "Waters of the State" means all waters situated wholly or partly within or bordering upon this State, including but not limited to:

- 1. All streams, lakes, ponds, impounding reservoirs, marshes, water courses, waterways, wells, springs, irrigation systems and drainage systems; and*
- 2. All bodies or accumulations of water, surface and underground, natural or artificial.*

(Added to NRS by 1973, 1709)—(Substituted in revision for NRS 445.191)

'Waters of the State' includes both surface and groundwaters. The vast majority of heaps leach pads are located where surface waters are not present or seasonally ephemeral. In the analysis leading up to issuance of a discharge permit (viz zero discharge) however, the NDEP should evaluate all possible impacts to local surface waters.

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--"The regulation should clearly state that no release of liability to the industry is implied by merely following the regulations." (Source: USFWS letter dated February 23, 2006)

NDEP RESPONSE: *In general, the proposed revisions to this regulation are designed to help clarify operator responsibility with respect to the stabilization of spent ore. These proposed changes do not impact in any way the responsibility of the operator to preclude degradation of waters of the State.*