From: Werntz, James

To: Rule Making; Eric Wilson
Cc: McGrath, Patricia

Subject: EPA Comments: Docket # (20-0302-2001) and "Draft Rule Text No. 6"

Date: Friday, May 22, 2020 03:52:00 PM

Attachments: EPA Comments IDL reclamation draft6 20200521.pdf

Good afternoon Eric:

EPA Region 10 reviewed Draft Rule Text No. 6 which is the current version of Idaho's potential revisions to its Rules Governing Mined Land Reclamation (Docket 20-0302-2001). We appreciate the changes made to the draft rule that are consistent with some of the comments that we previously submitted. We offer the following additional comments which are attached to this email.

Thank you for the opportunity to participate in the negotiated rulemaking process. We believe that strengthened financial assurance requirements will benefit the mining industry and the environment.

Please feel free to contact me or Patty McGrath if you have questions regarding our comments. Jim

James H. Werntz, Director US EPA – Idaho Operations 950 W. Bannock St., Suite 900 Boise, Idaho 83702

208-378-5743

U.S. EPA Region 10 Comments and Recommendations Proposed Changes to Idaho Rules Governing Mined Land Reclamation, IDAPA 20.02.03 Draft Rule Text No. 6 (Docket No. 20-0302-2001)

Date: May 22, 2020

Page	Section	Comment and Recommendation
	General	Water Quality & Water Management. We appreciate that Idaho Department of Lands (IDL) has included provisions related to waste characterization, water quality impacts, water balance, and water management to support operating plans, reclamation plans and financial assurance cost estimates. House Bill 141 included a general provision requiring foreseeable impacts to water quality from mining operations. The purpose of the proposed rule is to more accurately reflect current industry and regulatory practice. Current regulatory practice is to include water management and treatment in reclamation and closure plans and financial assurance requirements. This is consistently required of mining operations by Federal land management agencies (BLM, US Forest Service) and many states (Alaska, Montana, New Mexico, Nevada, and others). We have some comments and recommendations below to further support portions of the draft rule related to water management.
	General	Interim Management Plan. The proposed rule does not appear to address plans or requirements for interim management during temporary closure. We recommend that requirements for an interim management plan be included. For example, see the following requirements from BLM regulations: 43 CFR 3809.401 (b) Your plan of operations must contain (5) Interim management plan. A plan to manage the project area during periods of temporary closure (including periods of seasonal closure) to prevent unnecessary or undue degradation. The interim management plan must include, where applicable, the following: (i) Measures to stabilize excavations and workings; (ii) Measures to isolate or control toxic or deleterious materials (See also the requirements in §3809.420(c)(12)(vii).); (iii) Provisions for the storage or removal of equipment, supplies and structures;

¹ State of Idaho. HB 141. Section 6, 47-1506, vii.

² HB141 Statement of Purpose

Page	Section	Comment and Recommendation
		(iv) Measures to maintain the project area in a safe and clean condition; (v) Plans for monitoring site conditions during periods of non-operation; and (vi) A schedule of anticipated periods of temporary closure during which you would implement the interim management plan, including provisions for notifying BLM of unplanned or extended temporary closures.
		43 CFR 3809.420 (c)(12) Leaching operations and impoundments (vii) In cases of temporary or seasonal closure, you must provide adequate maintenance, monitoring, security, and financial guarantee, and BLM may require you to detoxify process solutions
2-3	001.05.b.iv.	Existing operating underground mines. The proposed rule is not applicable to "Underground mines that existed prior to July 1, 2019 and have not expanded their surface disturbance by 50% or more after that date". We recommend that IDL reconsider this provision. We believe that operating underground mines, regardless of when they were constructed or expanded should have a modern reclamation plan and financial assurance. The proposed rule could consider offering a time period for existing operations to come into compliance.
3 - 7	General comment on definitions in section 010	Definition of Mining Operations. The proposed rule includes operating plan, reclamation plan, and financial assurance requirements for "mining operations". However, there is no definition of "mining operation." Without a definition of what constitutes a mining operation, the rule could be read as covering only the mining area (underground mines and open pits) and no other areas associated with a mine (e.g., waste rock piles, ponds, tailings facilities). We recommend that the rule include a definition of "mining operation" in order to clarify that a "mining operation" includes areas and operations connected to mining operations such as ore processing, water management, waste rock management and tailings management facilities. See, for example, BLM's definition of "operations" which includes language to clarify that it covers all facilities and activities "in connection with" mining and processing.
6	010.xx	Operating Plan. The definition of operating plan is a plan that describes how a mining operation will be constructed and operated to "avoid or minimize potential impacts to surface and groundwater water quality and to prepare for final reclamation." We recommend that this definition also include avoiding and minimizing impacts to land. Obviously, land will be disturbed as a result of mining, processing, and

Page	Section	Comment and Recommendation
		waste disposal. It is a worthy goal to minimize mine site footprints, as feasible, as this could reduce reclamation and financial assurance obligations and meet one of the rule goals to reduce soil erosion. (001.02).
7	010.XX	Reclamation Plan. The definition of "Reclamation Plan" is focused on reclamation of a "mine's affected land". We recommend the following edits (in italics) to the definition of Reclamation Plan to make it consistent with the broader definition of Reclamation in Part 010.19.
		"XX. Reclamation Plan . A plan using a combination of maps, drawings, and descriptions that describes how a mine is constructed and how reclamation of a mine's affected <i>facilities</i> , land, <i>and water</i> is accomplished <i>to meet objectives in 001.02</i> ."
8	010.24	Water Balance. We support the inclusion of the water balance definition and recommend two edits to the second and fourth sentences (in italics) as follows:
		"24. Water Balance. The inventory must include the water holding capacity of specific structures within the facility that contain process or stormwater <i>or other water impacted by mining operations</i> . The water balance is used to ensure that all process water and other pollutants can be contained as engineered and designed within a factor of safety as determined in the reclamation plan or permanent closure plan. <i>The water balance is also used to support development of the Water Management Plan."</i>
		The first edit is recommended to ensure that all mining impacted water is to be included in the water balance. This is necessary since the process water definition in the Rule is limited to cyanidation facilities (see Part 010.17) and there are sources of contaminated water at non-cyanidation mining facilities that are not classified as stormwater (such as water that comes into contact with tailings). In addition, waste rock seepage and mine drainage are not defined as process water under the rule definitions (since there is no contact with cyanide) and are also not classified as stormwater. We believe that it is critical to include these other potential sources in the water balance.

Page	Section	Comment and Recommendation
		The second edit is recommended since the water balance is important to developing an effective water management plan in terms of storage capacity and developing appropriate water management and treatment technologies.
12	069.04.f	Map Requirements. Application maps are required to identify the "planned location and configuration of pits" Since the draft rule now covers underground mines as well as surface mines, we recommend that the map requirements be more comprehensive to include the "planned location and configuration of pits and adits and other underground mine openings"
12	070.03	Map Requirements. Maps are required to identify the location of "process fluid ponds". Since the definition of process fluids in this rule is limited to cyanidation facilities, we recommend that the map requirements be broadened to include ponds of any mine impacted water. For example, the text could be reworded as follows (edits in italics): "process fluid ponds and other water management features such as water management ponds, surface water diversions, and water treatment facilities."
13	070.04.a.	Reclamation Plan Requirements. We have the following recommended edits (in italics) to this section. "a. A description of the planned reclamation of waste rock facilities, tailings disposal facilities or and sediment ponds; and"
		The first edit is recommended since, as currently worded, the requirements do not appear to apply to waste rock. However, improperly closed waste rock facilities can result in adverse impacts to water and land due to potential for acid generation and metal leaching and instability.
		The second edit is recommended since, as currently worded, the sentence seems to apply only to tailings stored in ponds and we recommend that it also apply to all types of tailings disposal facilities.
13	070.04.c.	Reclamation Plan Requirements. We have several recommended edits (in italics) to the following paragraph:

Page	Section	Comment and Recommendation
		"c. A description of foreseeable, site-specific water quality impacts and the BMPs and other measures and practices that will be used to mitigate water quality impacts. The purpose of this is not to duplicate a SWPPP or IPDES permit, but to have the operator characterize underground mine water, pit walls, waste rock, tailings, and other potential sources of water quality impacts. This characterization can be used to evaluate the effectiveness of the planned mine design and operating plan, support design criteria for mine components, evaluate the need and length of a post closure period, and support meeting reclamation plan goals."
		The first edit is recommended to not limit the description to just BMPs. The Part 010.02 definition of BMP is linked to the definition in ID WQS definition (IDAPA 58.01.02) which defines BMPs as methods for preventing or reducing pollution from nonpoint sources. While it is important to include a description of BMPs for nonpoint sources, it is also important to include a description of methods and practices, such as water treatment, that will be used to mitigate point sources of pollutants.
		The second edit is recommended to be inclusive of other potential sources of water quality impacts including underground and open pit mine workings.
		The edits to the last sentence are recommended to affirm that water quality impact characterization will support the operating plan and reclamation plan, which are plans required by this rule.
14	070.04.g.i.	<u>Water Quality Monitoring.</u> A description of post-closure water quality monitoring is required. We recommend that water quality monitoring be required during reclamation as well as post-closure. We recommend specifying monitoring as its own stand-alone part of 070.04. so that it clearly applies during both reclamation and post-closure.
13-14	070.04.	Reclamation Plan Requirements. We recommend that the following additional items be included in the part 070.04 list of information to include in reclamation plans: - Removal or stabilization of buildings, structures, and support facilities.

Page	Section	Comment and Recommendation
		 The Permanent Closure Plan section of this rule has specific requirements related to information to include for caps and covers at cyanidation facilities (Part 071.02.f.). We recommend that these requirements also be included for caps and covers included in Reclamation Plans. The Permanent Closure Plan section of this rule requires that closure plans provide information on how the operator will comply with Federal and state hazardous and solid waste management laws during operations and closure (Part 071.02.i). We recommend that this provision also apply to Reclamation Plans since non-cyanidation mining sites also use, store, and generate solid and hazardous wastes. The Permanent Closure Plan section of this rule includes requirements for a timeline and schedule (Part 071.02.b). We recommend that this provision also apply to Reclamation Plans so that the timeframe for conducting reclamation and post-closure activities is clear.
15	070.05.a.	Operating Plan Requirements. We recommend revising as follows to include tailings handling (edits in italics). "a. Ore, and waste rock and tailings handling flow sheets, plans, and diagrams."
15	070.05.c.	Operating Plan Requirements. We agree with inclusion of water quality monitoring and recommend that IDL consider including other types of monitoring such as stability monitoring and soil monitoring.
15	070.05.f.	Operating Plan Requirements. We recommend the following edits (in italics). Processing timelines are important since there are situations when processing will occur after mining is complete when mine rates exceed processing rates, or where ore is accepted from other mines. "f. Estimated throughput and timeline for mining and processing from start through closure".
15	070.05.	Operating Plan Requirements. We recommend the following edits (in italics). As mentioned in comments above, it is important to specify mine contact water as well as process water and fluids since the definition of process water is limited to cyanidation operations, whereas mine contact water can include other contaminated waters at mine sites.

Page	Section	Comment and Recommendation
		"h. Process and mine contact water fluid pond volumes and anticipated contents."
27 & 29	120.07.a. & 120.04xx	<u>Financial Assurance Review for Reclamation Plans.</u> The draft rule requires that financial assurance cost estimates for Permanent Closure Plans be updated every three years and when there are material changes. In addition, IDL can employ a qualified independent party to verify the accuracy of revised Permanent Closure Plan cost estimates.
		Financial assurance review for Reclamation Plans has a lower bar which appears to be tied only to increases in impacted acres. We recommend that financial assurance review requirement for Reclamation Plans be the same as the requirements for Permanent Closure Plans since there could be changes to operations or environmental impacts at non-cyanidation facilities that do not significantly increase acreage but would substantially impact the reclamation cost estimate. For example, acid rock drainage or metal leaching may be encountered at levels that were not originally predicted, which could increase water management and/or treatment costs.
		We recommend that financial assurance review requirements for Reclamation Plans be revised to be the same as for Permanent Closure Plans by either revising Part 120.07a to be consistent with 120.04xx (pg 29), including parts a and b, or revising 120.04xx to include Reclamation Plans as well as Permanent Closure Plans.
38	140.03	Water Management or Treatment. We appreciate that IDL has included water management and treatment as minimum standards to be included in reclamation plans. The first paragraph implies that this Part applies only to surface waters. We recommend revising to clarify that water management must also take into account groundwater protection.
38	140.03a.	<u>Water Management or Treatment.</u> We recommend that Part a. be revised as follows (edits in italics): "a. Capturing water seepage and runoff at the toe of a from waste rock dumps, tailings impoundments or other tailings disposal sites, ore stockpiles, or other sources of mine impacted waters."

Page	Section	Comment and Recommendation
		The first edit (include seepage) is recommended since uncaptured seepage can adversely impact groundwater and surface water. The second edit (regarding tailings) is recommended to be inclusive to all types of surface tailings disposal techniques (e.g., filtered tailings dry stacks, paste tailings, etc.) and not just impoundments.
38	140.03.b.	Water Management or Treatment. Recommend that 03.b. be revised as followed (edits in italics) to be inclusive of other forms of water treatment that do not strictly rely on chemicals (e.g., reverse osmosis). "b. Adding lime, flocculants, or other inputs to modify the physical or chemical properties of the water or other forms of water treatment".
38	140.03	 Water Management or Treatment. The section on water management does not mention open pit and underground mine water or pollution prevention. We, therefore, recommend the following additions to this section: Collection and management of these waters is required during dewatering to promote safe and dry mining. Management and treatment of underground and open pit waters may also be required into reclamation and post-closure to prevent adverse impacts to surface and groundwater. We recommend that this part include management of open pit and underground mine water. We recommend that a BMP be developed aimed at pollution prevention and source control for acid rock drainage and metal leaching in order to reduce reclamation and post-closure water management and treatment. For example, BLM requires: 43 CFR 3809.420(b)(11)Acid-forming, toxic, or other deleterious materials. You must incorporate identification, handling, and placement of potentially acid-forming, toxic or other deleterious materials into your operations, facility design, reclamation, and environmental monitoring programs to minimize the formation and impacts of acidic, alkaline, metal-bearing, or other deleterious leachate, including the following:

Page	Section	Comment and Recommendation
		(i) You must handle, place, or treat potentially acid-forming, toxic, or other deleterious materials in a manner that minimizes the likelihood of acid formation and toxic and other deleterious leachate generation (source control);
		(ii) If you cannot prevent the formation of acid, toxic, or other deleterious drainage, you must minimize uncontrolled migration of leachate; and
		(iii) You must capture and treat acid drainage, or other undesirable effluent, to the applicable standard if source controls and migration controls do not prove effective. You are responsible for any costs associated with water treatment or facility maintenance after project closure. Longterm, or post-mining, effluent capture and treatment are not acceptable substitutes for source and migration control, and you may rely on them only after all reasonable source and migration control methods have been employed.
41	140.10.c.iii	Tailings Impoundments Detoxification. Part iii states "Hazardous chemical residues within the tailings pond shall be detoxified or covered with an adequate thickness of non-toxic material, to the extent necessary to achieve water quality standards in adjacent surface waters. " We recommend that the text be revised to require that groundwater quality standards also be achieved.
44	155.03.	<u>Frequency of Inspections.</u> The proposed regulations require that cyanidation facilities be inspected at least once per year and that other mining operations be inspected at least one every five years. We recommend more frequent inspections occur for facilities with cyanide and the potential for acid drainage and metal leaching. BLM inspects operations that use cyanide or other leachate or where there is significant potential for acid drainage at least 4 times per year (43 CFR 3809.600).