

Review Comment Table

Board:	MVLWB
Review Item:	Giant Mine Remediation Project - Response to Board Information Requests (MV2007L8-0031 and MV2019X0007)
File(s):	MV2007L8-0031 MV2019X0007
Proponent:	DIAND - GIANT
Document(s):	Board-Issued Information Requests (240.45 KB) GMRP Responses to Board-Issued Information Requests (289.68 KB)
Item For Review Distributed On:	May 26 at 13:17 Distribution List
Reviewer Comments Due By:	June 10, 2020
Proponent Responses Due By:	June 18, 2020
Item Description:	<p>On May 15, 2020, the MVLWB issued a series of Information Requests to the Giant Mine Remediation Project Team regarding some comments and recommendations made during the public review of the proposed draft Water Licence conditions for MV2007L8-0007 and draft Land Use Permit conditions for MV2019X0007. The Giant Mine Remediation Project submitted its responses to the Board on May 25, 2020.</p> <p>Using the Online Review System (ORS), reviewers are invited to submit comments and recommendations on the documents linked below by the review comment deadline specified. If reviewers seek clarification on the submission, they are encouraged to correspond directly with the Applicant prior to submitting comments and recommendations.</p> <p>All documents that have been uploaded to this review are also available on our public Registry. If you have any questions or comments about the ORS or this review, please contact Board staff identified below.</p>
Contact Information:	Heather Scott 867-766-7463 Kim Murray (867) 766-7458 Shannon Allerston 867-766-7465 Tyree Mullaney 867-766-7464

Comment Summary

DIAND - GIANT (Proponent)

ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Analysis
1	General File	Comment (doc) Cover letter Recommendation		
City of Yellowknife: Kerry Penney				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Analysis
1	General File	Comment (doc) City of Yellowknife letter re: GMRP response to IR requests Recommendation		
2	IR 1	Comment Both submissions from the independent reviewers (GMOB and Bill Slater) noted the need for engineered structures to include Borrow Pits. This is something that City concurs with based on the intent and purposes of the closure plan. Secondly, it is consistent with the City’s interpretation of the project commitments of the past, including discussions around this definition during the technical proceedings. Recommendation Include Borrow Pits as and Engineered Structure	June 18: Please refer to the response to GMOB #1.	
3	IR 2	Comment The City has a residual concern regarding the limited application of water quality criteria from the site. Given that the runoff from the site will pass through: o Uncertain and varied levels of contamination, up to 3000 parts per million o The uncertain area that this runoff criteria will apply The City is not certain that the overall quality of runoff will result in	June 18: The statement that the GMRP is relying on the receiving environment to absorb contamination is not factual. The GMRP is committed to collecting contact water for treatment and cleaning up areas of waste, and installing a new water treatment plant to improve runoff and overall water quality from	

		<p>an improvement to the receiving environment.</p> <p>Recommendation Rather than relying on the receiving environment's ability to absorb the contamination, better source control would result increase the ability of the project to meet their promises.</p>	<p>the project. This is outlined in Section 4 of the EQC Report. The GMRP has clearly stated in the Water MMP, during the water license technical sessions and in IRs that these runoff criteria will apply to the runoff from the TCAs, pit covers, the landfill and South Pond.</p>	
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Environment and Climate Change Canada: Russell Wykes

ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Analysis
1	Information Request #2	<p>Comment Environment and Climate Change Canada (ECCC) has reviewed the information requests and responses between the Mackenzie Valley Land and Water Board (MVLWB) and Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) dated May 15, 2020 and May 25, 2020, respectively. ECCC does not object to the terminology proposed by CIRNAC (Information Request 2, Table 2) for water management purposes. However, it should be noted that runoff from engineered structures is still considered effluent under the Metal and Diamond Mine Effluent Regulations (MDMER) until such time that the mine attains 'Recognised Closed Mine' status.</p> <p>Recommendation N/A</p>	<p>June 18: Acknowledged, thank-you.</p>	

Fisheries and Oceans Canada: Tatiana Leclerc-Beaulieu

ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Analysis
1	Giant Mine Remediation Project - Response to Board Information Requests (MV2007L8-0031 and MV2019X0007)	<p>Comment DFO has reviewed the document&nbsp;in accordance with&nbsp;our mandate and we have no comments at this time.</p> <p>Recommendation DFO has no recommendations at this time.</p>	June 18: No response required	

Giant Mine Oversight Board: GMOB Giant Mine Oversight Board

ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Analysis
1	IR Response 1	<p>Comment The GMRP Team has provided a list of Engineered Structures for the Giant Mine Remediation. GMOB notes that the list does not include the Borrow Pits. GMOB recognizes that the location of the Borrow Pits has not been finalized, but expects that any on-site sources should be included in this list.</p> <p>Recommendation GMOB recommends the Board and GMPR consider whether on-site Borrow Pits should be included within the list of engineered structures.</p>	<p>June 18: The GMRP reviewed whether or not Borrow areas should be defined as Engineered Structures as per the MVLWB standard Water License terms. The GMRPs position is that borrow areas are not Engineered Structures and should not be included in the list. This is for two reasons: a) MVLWB standard terms and conditions and b) requirements of Engineered Structures under Part E and F,17 of the draft licence whereby an engineered structure will require additional inspections and plans. Rationale: a) Borrow areas are not used to manage or retain water or waste which is the definition of Engineered Structures as defined in the MVLWB standard conditions. Therefore</p>	

			<p>they should not be included as an Engineered Structure. b) Borrow areas are already well regulated under separate territorial legislation which will require a borrow Pit Development Plan under the Quarry Permit. Additionally the GMRP has already committed to Borrow Design Plans and the Borrow and Explosives Management Plan under the Water Licence. It is the GMRP's opinion that substantial regulatory oversight is already present for the borrow areas through the Water Licence (e.g. Design Plans, Management Plans) and related relevant conditions in the Land Use Permit as well as the Quarry Permits. Additional approvals and plans required for Engineered Structures under the Water Licence will result in confusion as to jurisdiction, timing of approvals and the precedent of the various plans. The GMRP also understands that other recent Water Licences that included borrow and quarry areas did not require borrow and quarry areas to be engineered structures in their Water Licences.</p>	
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2	IR Response 2	<p>Comment In reponse to the Board questions regarding the GMRP's definition of Contact Water, the GMRP has proposed modifications to several Water Licence definitions and clauses. GMOB will address each of the proposed changes individually.</p> <p>Recommendation None</p>	<p>June 18: No response required</p>	
3	IR Response 2 - Contact Water Definition	<p>Comment GMRP has proposed to remove "from Engineered Structures" from the definition the definition of Contact Water. Runoff or seepage is considered contact if it has come into contact with waste or wastewater within the Developed Areas (as defined in the CRP). GMOB notes that this definition of Contact Water is broad, and expects it will adequately include the intended waters.</p> <p>Recommendation None</p>	<p>June 18: No response required</p>	
4	IR Response 2 - Part F, 16	<p>Comment The GMRP Team is proposing to modify this clause to change the phrase "Discharge Criteria for Contact Water" to "Surface Water Runoff Criteria". GMOB does not have a concern with this change.</p> <p>Recommendation None</p>	<p>June 18: No response required</p>	
5	IR Responses 2 - Part F, 33 and 34.	<p>Comment The modification to this clause proposed by the GMRP appears to include removal of the reference to the specific SNP locations. Proposed wording in F, 34 references the SNP locations then references the SNP locations in F, 33. GMOB is</p>	<p>June 18: Yes, the removal of these SNP stations from the main body of the Water Licence was intentional. The GMRP would prefer that the SNP station names remain within the Annex of the Water</p>	

		<p>not certain whether the removal of the SNP stations was intended or accidental.</p> <p>Recommendation GMOB recommends that, if the removal was intentional, the GMRP Team should provide the rationale for removing the specific SNP references.</p>	<p>Licence, rather than a condition or clause in the main body of the Water Licence. This would allow flexibility for adjustments to station names, UTM's, and frequencies as remediation progresses.</p>	
6	IR Response 2 - Part F, 34	<p>Comment The proposed modification to this clause includes changing the phrase "Discharge Criteria for Contact Water" to "Surface Water Runoff Criteria". GMOB does not have a concern with this proposed change.</p> <p>Recommendation None</p>	<p>June 18: No response required</p>	
7	IR Response 2 - Schedule 1, Condition 1 2. E) iii	<p>Comment The modifications the GMRP is proposing for this clause remove the requirement to compare runoff quantity and quality against expectations, and replace it with a requirement to only compare the quality against surface runoff criteria. GMOB notes that comparing the volumes and quality against expected values will provide additional insight into whether the remediated tailings facilities are meeting design predictions, and will assist with evaluating remediation success for these components as well as contaminant loadings from the site.</p> <p>Recommendation GMOB recommends that this clause could be modified to adopt the Surface Water Runoff Criteria wording, but should</p>	<p>June 18: No, The GMRP does not support a condition to report comparisons of water quality off of TCA covers to water quality model predictions in the annual Water Licence Report. The GMRP will compare monitoring data against surface runoff criteria, volumes released if the surface runoff criteria were met, and any action level exceedances, and follow-up response plans if required.</p>	

		retain the intent of comparing the runoff results (quantity and quality) against predictions.		
8	Schedule 4, Condition 2, Item a) iv. e.	<p>Comment The GMRP proposes to change the name of the Contact Water Management and Monitoring Plan to the Contact Water Transition Plan, as well as adopting the term "runoff quality criteria". GMOB has no concerns with adopting the "runoff quality criteria" phrase. GMOB does not see a strong basis for changing the name of the Contact Water Management and Monitoring Plan to the Contact Water Transition Plan. GMOB agrees that one outcome of the remediation will be that surface water runoff quality improves to the point that it will no longer need to be collected and treated, and that there should be a process for confirming this. However, this is the final step in the surface water management process, and the original title may more accurately reflect the contents of the plan.</p> <p>Recommendation GMOB recommends the Board consider whether the proposed name change accurately reflects the contents of the Contact Water Management and Monitoring Plan. This should consider the scenario where an interested party is searching the public registry for information on how surface water on the site is managed.</p>	<p>June 18: The GMRP proposes a) there is no standalone plan, but rather be a sub-section of the Water MMP b) contact water management during remediation is and will be described in the Water MMP c) the transition from contact water to non-contact water and what water will be captured will be outlined at a high level in the next version Water MMP, with more specifics on the transition to be provided in a future version of the Water MMP to be submitted later in remediation.</p>	

9	IR 3 - Closure and Reclamation Completion Reports for parts of Project Components	<p>Comment The GMRP is proposing that separate Closure and Reclamation Completion Reports be submitted for "parts" of larger Project Components. The GMRP suggests that this will allow for more timely review, e.g. for individual pits. GMOB agrees that there may be some benefits to proceeding in this manner. However, there should be prior agreement on how each component will be broken down into sub-parts. This proposed breakdown could be included within the Design Plan. There should also be a mechanism for tying all the individual parts together when remediation of the final piece of the Project Component is finalized.</p> <p>Recommendation GMOB recommends that, should the Board adopt this suggestion, that the individual parts of the larger components should be identified within the Design Plans along with a mechanism for bringing together all the pieces together when overall remediation of the Project Component is complete.</p>	<p>June 18: It will not be feasible at the time of the Design Plans to identify fully how the component will be divided up for procurement/remediation. The GMRP has revised the previous proposal to report on completed closure activities 'in parts'. The GMRP will communicate updates to reviewers and affected parties on the progress of remediation through the Annual Water Licence report. Once remediation of a project component is complete, the Final Reclamation Completion Report will be provided to the MVLWB. Please also refer to the response to MVLWB #11.</p>	
10	IR 4 - Post-closure Monitoring and Maintenance Plan	<p>Comment Instead of a Table of Contents for a Post-Closure Monitoring and Maintenance Plan, for approval, the GMRP is proposing to submit a compilation of monitoring included in the Design Plans, and provide this as an Interim Post-Closure Monitoring and</p>	<p>June 18: The GMRP proposed this concept in an effort to address the MVLWB's Draft Water Licence Part D condition 8, which appears to try to provide a place where revisions to monitoring and maintenance proposed in the Design</p>	

		<p>Maintenance Plan. This interim plan would not be for approval, as it would be comprised of information that had previously been approved as part of other submissions. GMOB's intervention included a recommendation that a Table of Contents for a Post-Closure Monitoring and Maintenance Plan be provided for approval. GMOB believes that it will take time to develop a robust and effective plan, and work should begin soon. However, GMOB recognizes that the Post-Closure Monitoring and Maintenance Plan will be informed by the results of adaptive management and monitoring conducted during Phase 2 (per the description in the CRP) as well as work on the Perpetual Care plan and that none of this information is yet available. Without that information, it is difficult for the Board to draft a schedule outlining what the content of the Post-Closure Monitoring and Maintenance Plan; without that schedule, parties aren't able to comment on what the content of that Plan should be. GMOB's proposal for submitting a Table of Contents, for approval, was intended as a mechanism to allow parties to provide input on the contents and direction of the plan in order to improve the overall efficiency of plan</p>	<p>Plans could be captured. The GMRP recognizes that the proposed solution likely introduces more complications and confusion than it was intended to resolve and therefore agrees that for the purposes of this Water Licence a Table of Contents is most appropriate.</p>	
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		<p>development and approval process. The GMRP's current proposal would provide a plan that does not benefit from information gained during Phase 2 and adaptive management. However, GMOB notes that this information could be incorporated through updates when the interim plan is finalized. More importantly, not having the plan for approval means that parties will not have input into the contents and direction of the plan. GMOB views that the Post-Closure Monitoring and Maintenance Plan will be a significant document for future management of the site, and that it will be important to provide parties with an opportunity to ensure their concerns are addressed. GMOB does not oppose the GMRP submitting an interim plan that includes monitoring elements from the Design Plans, but is concerned that the submission should also include a mechanism for parties to provide input on what should be included in a final plan.</p> <p>Recommendation GMOB is not certain there is a need for an interim plan; however, if an Interim Post-Closure Monitoring and Maintenance Plan is accepted by the Board, we recommend that there should be a mechanism for parties to provide input regarding what will be included in a final Post-</p>		
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		Closure Monitoring and Maintenance Plan. GMOB agrees that the Perpetual Care Plan is meant only to inform Post-Closure Monitoring and Maintenance, and does not expect that the Perpetual Care Plan would be approved by the MVWLB.		
MVLWB: Shannon Allerston				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Analysis
1	Proposed Engineered Structures for GMRP and contact water	<p>Comment GMRP proposes a list of Engineered Structures for GMRP on page 1 of the IR Response. Later in the IR response (page 2) it indicates that "there are Engineered Structures outside of the Developed Areas (for example, a water crossing for Baker Creek)".</p> <p>Recommendation Can the GMRP list the Engineered Structures outside the Developed Areas that GMRP are proposing? How will the Surface Runoff from these areas be managed or monitored under the Site-Wide Management and Monitoring Plans?</p>	<p>June 18: Engineered structures outside of the Developed Areas include culverts, bridges, Baker Creek channel itself, foreshore tailings cover, and the WTP outfall. The GMRP has proposed extensive monitoring in Baker Creek and Yellowknife Bay. Surface runoff monitoring post-remediation would not be relevant to submerged outfall, foreshore cover, or runoff off bridge/culvert structures. Construction monitoring details related to the installation of the above-mentioned structures will be provided in Construction Plans and the appropriate site-wide management and monitoring plans that apply during the construction activities (e.g., sediment and erosion control).</p>	
2	Definition of Contact Water	<p>Comment GMRP have re-defined Contact Water to limit it to water encountering</p>	<p>June 18: The GMRP recommends that the Water Licence does not</p>	

	<p>and Developed Areas</p>	<p>Waste or Wastewater from within the Developed Areas. Board staff note that if the Board accepts GMRP's proposed definition, it will be important to clearly define the Developed Areas in the WL, as opposed to referencing the CRP, for clarity. The Closure and Reclamation Plan defines the Developed Areas as: "Developed Areas were developed to support mining operations (i.e., mill/roaster area, tailings retreatment plant, Townsite/Marina, roadway network, and various laydown and material storage areas). These areas were constructed primarily with mineralized granular material and, as a result, soil conditions typically consist of contaminated granular fill, underlain by natural fine-grained soil, and bedrock." GMRP have also identified at least one Engineered Structure that will not be within that Developed Areas. Board staff have several questions on this re-definition.</p> <p>Recommendation Can GMRP propose a definition for Developed Areas that could potentially be used in the WL?</p>	<p>include a definition for Developed Areas. Developed areas are described in the Water MMP and the CRP, where context, figures, sampling requirements, and application are all provided. The GMRP understands that Developed Areas will be used in the definition of contact water. The method for managing contact water in that context will be provided in the Water MMP; thus, a separate definition is not required. The GMRP submits that Condition F, 32, already enforces the need for contact water and seepage to be managed through the Water MMP.</p>	
3	<p>Definition of Contact Water and Developed Areas</p>	<p>Comment See above. Recommendation Can GMRP provide an map image with the Developed Areas from the Closure and Reclamation Plan and the runoff catchment areas from</p>	<p>June 18: The GMRP does not support that the definition of contact water needs a figure or map within the body of the Water Licence. This information is outlined</p>	

		<p>the Water Management and Monitoring Plan overlain to demonstrate the extent of waters being captured in the Developed Areas? This image could potentially be referred to in the Contact Water definition.</p>	<p>and illustrated in detail in the Water Management and Monitoring Plan the WMMP per Schedule 4 of the Post-EA Package. There are extensive figures and discussion of systems for management of contact water, piping, conveyance systems, and sumps. Refer to WMMP Figures 4.1-1 to 4.1-4 that provide detail on which watersheds are managed. The GMRP understands there will be pre-engagement and detailed review process for water management which will involve further discussion and understanding of the content and objectives of the water management framework and how that will evolve through existing conditions, early remediation, late remediation and into post-closure. The changes associated with progressing water management and when certain terms apply, is better suited to the Water MMP review/approval than simply including a clause in the licence. Therefore, GMRP recommends that the specificity of the water management system remain within the Water Management and Monitoring Plan, rather than in the definitions of the Water Licence.</p>	
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4	Definition of Contact Water and Developed Areas	<p>Comment See above.</p> <p>Recommendation If the definition of Contact Water refers to Waste and Wastewater, will all non-managed waters in that area meet the Surface Runoff Criteria? Board staff note that this can only be accomplished, as identified by GMRP, to the 'extent practical.' Board staff understood that the majority of water would be managed in this area, but not everything.</p>	<p>June 18: No, the surface runoff criteria are intended for post-remediation for a subset of structures for runoff that is no longer considered contact water (i.e., no longer in contact with waste). It is not practicable to collect and monitor all runoff on-site, so there may be some areas where water contacts unremediated soil. However, that water is anticipated to be small in volume and diffuse - surface runoff criteria would not apply to these areas. As well, water from upland non-contact watersheds that enters the site and has to be diverted around site features will also not be subject to surface runoff criteria.</p>	
5	Contact Water definition and Runoff	<p>Comment In the WL Runoff is defined as "the overland flow of Water or Wastewater that occurs when precipitation, meltwater, or other Water is not absorbed by the land". If used to define Contact Water, Board staff understand that there will be three types of Runoff: 1. Runoff that has encountered Wastewater and/or Waste in the Developed Areas and is managed and monitored as per the Water Management and Monitoring Plan (i.e. Contact Water); 2. Runoff in the Developed Areas that has met Surface Runoff Criteria and is released to the</p>	<p>June 18: Yes, in broad terms, those three categories correctly describe runoff from the Site and surrounding area. The GMRP consider #1 to be contact water that will be collected and treated to the extent practicable. #2 is surface runoff from a subset of engineered structures that after remediation will be released to the receiving environment provided it meets the surface runoff criteria. Finally, #3 is regional runoff, some of which will be directed around critical</p>	

		<p>Receiving Environment; 3.Surface Runoff outside of the Developed Areas. Recommendation GMRP to clarify if Board staff's understanding is correct re: Runoff across the site.</p>	<p>infrastructure on-site (e.g., pits) and will be routed to the receiving environment. Water management for various types of water on-site during the stages of remediation are discussed in the Water MMP.</p>	
6	Contact Water definition and Part F, condition 16	<p>Comment Based on GMRP's proposed Contact Water definition and change to Part F, condition 16 (without reference to specific structures) it is unclear to Board staff which Water from the Developed Areas will be tested and collected if Surface Runoff Criteria is not met. Also, does GMRP mean any Contact Water as the definition of Contact Water includes Seepage. Recommendation Can the GMRP to clarify which Water will be tested for Surface Runoff Criteria and collected, as applicable, as per Part F, condition 16? If not able to identify specific locations at his time, what will be the mechanism for proposing monitoring locations post-issuance?</p>	<p>June 18: Runoff from covered tailings ponds, closed pits capped with engineered covers, the landfill, and reclaimed tailings ponds (e.g., South Pond) will be tested and compared to the Surface Runoff Criteria. Draft monitoring stations have been identified in the SNP (Annex of the Water Licence), which are repeated with sampling details in the SOP and QAQC Plan and cross-referenced in the Water Management and Monitoring Plan. It is the GMRP's understanding that the SNP Annex can be changed without a Water Licence amendment. The list of runoff stations will be revisited through future updates of the Water Management and Monitoring Plan and SOP and QAQC Plan, and any updates reviewed and approved through those documents would then be subsequently incorporated into the Annex.</p>	

7	Contact Water definition and Part F, condition 34	<p>Comment For Part F, condition 34 GMRP referenced the SNP stations identified in Part F, 33. However, Board staff note that GMRP's April 16 comment ID-108 on the Draft Land Use Permit and Draft Water Licence Conditions GMRP recommends that the SNP stations referenced in condition 33 be removed to allow for WL flexibility.</p> <p>Recommendation GMRP to clarify if they still recommend removing the SNP stations referenced in Part F, condition 33. If GMRP still recommends the SNP stations be removed, can the GMRP provide updated proposed wording for Part F, condition 34?</p>	<p>June 18: The GMRP proposes the following wording: "A minimum of five days prior to commencing post-remediation release of surface runoff to the Receiving Environment at the runoff locations outlined in the Surveillance Network Program, the Licensee shall submit the runoff Water quality data to the Board and an Inspector to confirm surface Runoff Criteria, as specified in the Water Management and Monitoring Plan, can be met."</p>	
8	Part F, condition 16, and condition 32.	<p>Comment In Part F, condition 16, b, and condition 32 refer to "Seepage or Contact Water". Board staff note that the definition of Contact Water includes Seepage.</p> <p>Recommendation Can Part F, condition 16, b and condition 32 refer to just "Contact Water"?</p>	<p>June 18: Yes, the GMRP agrees that Part F, condition 16, b and condition 32 can refer to just "Contact Water"</p>	
9	Definition of Surface Runoff Criteria	<p>Comment Board staff note that it may be appropriate to define Surface Runoff Criteria in the WL.</p> <p>Recommendation Can GMRP propose a definition for Surface Runoff Criteria for possible use in the WL?</p>	<p>June 18: The GMRP would prefer not to have a definition in the Water Licence and have all the information on locations, quality, protocols in the Water Management and Monitoring Plan. Water quality criteria used to determine if runoff from designated areas as</p>	

			identified in the Water Management and Monitoring Plan can be allowed to drain freely to Baker Creek or Yellowknife Bay. Please also refer to the response to MVLWB #2 and #3.	
10	Scope of Licence and Post-Closure	<p>Comment Board staff note that there is quite a bit of evidence on the record in support of a shorter term of Licence than that proposed by the GMRP. In response to some of the concerns identified by parties, Board staff asked about limiting the scope of the Licence to Phases 1 and 2 of the Project (as defined in the Updated Project Description) during the Public Hearing. GMRP did not note any major concerns with the idea of limiting the scope of the WL at that time. If the Board decides to limit the scope of the Licence in this way, it could have implications on the appropriateness of reviewing and potentially approving a (Interim) Post-Closure Monitoring and Maintenance Plan (since Post-Closure would not be within the scope of the Licence in this scenario). Board staff suggest that if updates or changes to monitoring from that approved in Design Plans are appropriate in the Post-Construction/Adaptive Management Phase of the Project, they could be proposed through updates to</p>	<p>June 18: The GMRP agrees that it is appropriate to use Site-wide Management and Monitoring Plans as a mechanism to update or make changes to monitoring in relation to completion of a closure activity and resulting monitoring. It is anticipated that once monitoring is approved under a Design Plan that this information will be updated in the next revision to the Site-wide Management and Monitoring Plans.</p>	

		<p>the Site-Wide Management and Monitoring Plans and presented to reviewers and the Board for approval. Draft condition Part E, condition 14 (Update Plans) of the Licence would require GMRP to update the Site-Wide Management and Monitoring Plan to reflect monitoring approved in the Design Plans, so details of Component-specific monitoring should be included, and therefore able to be updated whenever necessary (as provided in Part B, conditions 9 and 10).</p> <p>Recommendation Can GMRP comment on the process proposed above in the event the Board decides to limit the scope of the Licence to Phases 1 and 2 only?</p>		
11	<p>Closure and Reclamation Completion Reports</p>	<p>Comment In its comments on the Draft Licence and the IR responses regarding the submission of Closure and Reclamation Completion Reports, GMRP suggested that due to the duration of remediation of a given Project Component, the GMRP would like to maintain the flexibility to submit Closure and Reclamation Completion Reports as portions of each component is completed. Board staff understand why GMRP are making this recommendation but are concerned about the volume of reports this could generate and the complications that</p>	<p>June 18: The GMRP would accept this suggestion and report on milestones for closure in the Water License annual report. Please note, the GMRP will also have other mechanisms for communication with parties outside of the Water License process: annual community meetings, monthly meetings with a Working Group, annual reporting to the Giant Mine Oversight Board, the Project Website, and community newsletters.</p>	

		<p>could arise for all parties in identifying how many 'parts' or reports make up the story of the whole component. Since the 'parts' or 'portions' of each component are hard to predict or define, Board staff suggest that these updates could be best provided each year in the Water Licence Annual Report, and suggest that the Closure and Reclamation Completion Reports be reserved to address the completion of all construction associated with each Project Component covered under each Design Plan. This way, there is a 1:1 ratio to the Design Plans/Completion Plans that can be directly linked to one another, and a method of providing Project updates to reviewers as construction milestones are met during the life of the Licence.</p> <p>Recommendation Can GMRP comment on the process proposed above for keeping parties informed on the progress of remediation for the life of the Licence?</p>		
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North Slave Metis Alliance: Jess Hurtubise

ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Analysis
3	General File	<p>Comment (doc) NSMA supports Slater Environmental's comments and recommendations to the GMRP's Reponse to Information Request. We are attaching his Memorandum</p>		

		to our submission, for the record. Recommendation		
2	Table 2 - Schedule 4, Condition 2, Item a) iv. E.	Comment For the sake of clarity and specificity, the GMRP has proposed changing the title of the Contact Water Management Plan to the new name "Contact Water Transition Plan". Although we appreciate the GMRP's attempt to clarify the title to better describe its contents, we believe the new proposed title does not bring enough additional detail to make it worth changing. With so many plans and documents relating to the remediation of the Giant site, consistency in this case should be kept. Recommendation To ensure consistency and clarity, we recommend that the title of the Contact Water Management Plan remain as is and that the Board consider requiring a specific section in the plan detailing the transition process between contact water and non-contact water.	June 18: The GMRP would accept this recommendation if this was the MVLWB's preference. The Contact Water Management Plan is not intended to be a stand-alone plan, but rather a section within the Water MMP as described in the response to GMOB #8.	

Slater Environmental Consulting: Bill Slater

ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Analysis
1	Comments from Technical Advisor for Giant Mine Working Group	Comment Bill Slater of Slater Environmental Consulting is the technical advisor for the Giant Mine Working Group. The comments provided by Slater Environmental Consulting are being submitted after being shared for review and	June 18: No response required	

		<p>comment by the Giant Mine Working Group. Several members of the Working Group provided feedback and recommended that the comments be submitted for consideration by the Land and Water Board.</p> <p>Recommendation None.</p>		
2	Request No. 1 re: Engineered Structures	<p>Comment As requested, the GMRP Response provides a list of "Engineered Structures." The GMRP proposes that a construction plan be associated with each engineered structure. Construction and use of borrow areas require many of the same management activities that are associated with other engineered structures, and which are to be described in construction plans (Schedule 3, Condition 3 of the draft water licence). For example, construction plans are to address construction schedules, characteristics of materials, operational requirements, monitoring and mitigation, and quality control. All of these may be relevant for borrow pits.</p> <p>Recommendation The list of engineered structures should include Borrow Pits.</p>	June 18: Please refer to the response to GMOB #1.	
3	Request No. 2 re: Definition of Contact Water	<p>Comment In responding to the Board's question No. 2 about the definition of Contact Water, the GMRP proposes several changes to the definition and also to water licence conditions beyond the definition (Tables</p>	June 18: The GMRP does not support a Water Licence clause because the GMRP is already mandated to manage contact water through the Water MMP per Condition F, 32. The	

		<p>2 and 3 of the GMRP Response). These changes include instances where references to Discharge Criteria are changed to references to Surface Runoff Criteria. As rationale, the GMRP Response states that runoff from some Engineered Structures would "no longer be considered Contact Water" and it would "not be appropriate to accept the language 'Discharge criteria for Contact Water.'" The GMRP proposal appears to make a distinction between areas where Contact Water would have enforceable water quality criteria, and those where runoff would be subject to monitoring and management under the Water Monitoring and Management Plan, but not subject to enforceable criteria. This concept of applying surface runoff criteria to water from certain areas after completion of remediation (and based on some as yet undefined program for testing/confirmation) was presented in the application and discussed at the July 2019 technical session. Continued in next cell.</p> <p>Recommendation The final water licence should clarify the limited conditions in which the proposed Surface Runoff Criteria can apply. The proposed Surface Runoff Criteria and associated management under the Water Monitoring and Management</p>	<p>Water Management and Monitoring Plan outlines how the surface runoff criteria apply and where. A separate clause is not required. The evidence the GMRP filed with the MVLWB including the Water MMP and the Closure criteria are explicit that the surface runoff criteria are meant to cover a subset of runoff from specific engineered structures after remediation. The GMRP thinks specificity in the Water MMP, which is for approval, is sufficient to prevent misinterpretation of the application of the criteria to items such as seepage waters during remediation.</p>	
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		<p>Plan should only apply in circumstances when all of the following conditions: - During the post-remediation phase, - For surface runoff only, - From remediated areas designed and constructed with surface materials that are not expected to contribute unacceptable loading of contaminants, and - After completion of testing that confirms stable, suitable runoff water quality.</p>		
4	None	<p>Comment However, the licence changes proposed in the GMRP Response potentially expand the scope of application of the proposed Surface Runoff Criteria in two significant ways. First, the proposed revisions do not make it clear that Surface Runoff Criteria could only be applied in the post-remediation phase for an engineered structure, and only once testing has been completed to confirm that the post-remediation runoff criteria are appropriate. For example, the proposed revision of Part F, 16 in the licence appears to indicate that Surface Runoff Criteria can be applied in existing conditions to determine whether water from disturbed areas (e.g., tailings) requires treatment. This application is likely not the intent, and it would not be appropriate for existing site conditions. Until remediation is complete, runoff and seepage from</p>	<p>June 18: No response required</p>	

		<p>disturbed areas should be collected and treated unless it meets the effluent quality criteria. Continued in next cell.</p> <p>Recommendation None</p>		
5	None	<p>Comment Second, the proposed revisions (combinations of definitions and conditions) appear to apply the proposed Surface Runoff Criteria to seepage as well as runoff. Even in the post-remediation conditions, seepage from disturbed areas could have very different characteristics than surface runoff. For example, surface runoff from tailings covers would likely only contact cover materials. On the other hand, seepage may have direct contact with underlying tailings materials. Discussions during the application process did not consider application of Surface Runoff Criteria for seepage water. Seepage water from disturbed areas should continue to be subject to effluent discharge criteria even after remediation is complete.</p> <p>Recommendation None</p>	June 18: No response required	
6	Request No. 4 re: Post-Closure Monitoring and Maintenance	<p>Comment The GMRP Response confirms the GMRP's proposal to submit a compiled Post-Closure Monitoring and Maintenance Plan, as initially described in the GMRP's April 2020 comments on the draft water licence. The proposal builds on the proposed condition in</p>	June 18: Based on comments from the MVLWB, the GMRP understands that this suggestion caused unintended complications. The GMRP defers to the MVLWB and accepts that the submittal of the Table	

		<p>the draft water licence for submission of a table of contents for the plan. Having a compiled Post-Closure Monitoring and Maintenance Plan submitted during the term of the licence is a positive step. It will provide more clarity about the scope of post-closure monitoring and maintenance activities, including post-closure monitoring and maintenance activities that will likely begin for some components during the term of the licence. Nonetheless, there would still be benefit in retaining a condition that requires earlier submission and approval of a Table of Contents for the Post-Closure Monitoring and Maintenance Plan. This initial step would provide an opportunity for interested parties to provide input about the scope of the plan.</p> <p>Recommendation The water licence should include requirements for two submissions related to post-closure monitoring and maintenance: 1) a Table of Contents and Schedule, for approval, and 2) a compiled draft Post-Closure Monitoring and Maintenance Plan.</p>	<p>of Contents for the Post Closure Monitoring and Maintenance Plan is appropriate.</p>	
7	None	<p>Comment None</p> <p>Recommendation ·</p>	<p>June 18: No response required.</p>	



PO BOX 1500
YELLOWKNIFE NT X1A 2R3

June 18, 2020

Shannon Allerston
Regulatory Specialist
Mackenzie Valley Land and Water Board
7th Floor, 4910-50th Avenue
PO Box 2130
Yellowknife, NT X1A 2P6

RE: Giant Mine Remediation Project – MV2007L8-0031 and MV2019X007– Response to Reviewer Comments on Response to Information Requests

Dear Ms. Allerston,

Crown-Indigenous Relations and Northern Affairs Canada, on behalf of the Giant Mine Remediation Project (GMRP) Team is pleased to submit the following response to reviewer comments on the response to Information Requests.

Should you require any further information or require clarification, please contact the undersigned by telephone at (867) 669-2823 or by email at Natalie.Plato@Canada.ca.

Sincerely,

Natalie Plato

Natalie Plato
Deputy Director
Crown-Indigenous Relations and Northern Affairs Canada
Giant Mine Remediation Project

Encl.





PO BOX 1500
YELLOWKNIFE NT X1A 2R3

June 18, 2020

Shannon Allerston
Regulatory Specialist
Mackenzie Valley Land and Water Board
7th Floor, 4910-50th Avenue
PO Box 2130
Yellowknife, NT X1A 2P6

RE: Giant Mine Remediation Project – MV2007L8-0031 and MV2019X007– Response to Reviewer Comments on Response to Information Requests

Dear Ms. Allerston,

Crown-Indigenous Relations and Northern Affairs Canada, on behalf of the Giant Mine Remediation Project (GMRP) Team is pleased to submit the following response to reviewer comments on the response to Information Requests.

Should you require any further information or require clarification, please contact the undersigned by telephone at (867) 669-2823 or by email at Natalie.Plato@Canada.ca.

Sincerely,

Natalie Plato

Natalie Plato
Deputy Director
Crown-Indigenous Relations and Northern Affairs Canada
Giant Mine Remediation Project

Encl.





CITY OF YELLOWKNIFE

June 10, 2020

E-MAILED to sallerston@mvlwb.com

Shannon Allerston
Mackenzie Valley Land and Water Board
7th Floor, 4922 48th St, PO Box 2130
Yellowknife, NT X1A 2P6

Dear Ms. Allerston:

RE: City of Yellowknife – Giant Mine Water License, Response to GMRP Information Requests

The City has reviewed the Giant Mine Remediation Project (GMRP) responses to the Board Information Requests issued May 15, 2020, as well as the responses from the Giant Mine Oversight Body (GMOB) and Bill Slater, the Working Group's technical expert.

The City generally supports both submissions, though we wish to highlight the following responses:

(i) **IR1**

Both submissions from the independent reviewers (GMOB and Bill Slater) noted the need for engineered structures to include Borrow Pits. This is something that City concurs with based on the intent and purposes of the closure plan. Secondly, it is consistent with the City's interpretation of the project commitments of the past, including discussions around this definition during the technical proceedings.

(ii) **IR2**

The City has a residual concern regarding the limited application of water quality criteria from the site. Given that the runoff from the site will pass through:

- Uncertain and varied levels of contamination, up to 3000 parts per million
- The uncertain area that this runoff criteria will apply

The City is not certain that the overall quality of runoff will result in an improvement to the receiving environment. Rather than relying on the receiving environment's ability to absorb the

Ms. Shannon Allerston
June 10, 2020

contamination, better source control would result increase the ability of the project to meet their promises.

Sincerely,

Sincerely,

A handwritten signature in black ink, appearing to read "Kerry L. Penney". The signature is fluid and cursive, with a large, sweeping initial "K".

Kerry L. Penney LL.B.
Director, Economic Development & Strategy

DM#612332



Memorandum

To: Giant Mine Working Group

From: Bill Slater

Date: June 10, 2020

**Re: Giant Mine Remediation Project
May 25, 2020 GMRP Responses to Board information Requests**

I have reviewed the May 25, 2020 Giant Mine Remediation Project (GMRP) “Response to Information Requests Issued May 15, 2020” (the “GMRP Response”) that provides responses to four specific information requests from the Wek’èezhìi Land and Water Board (WLWB). Comments and recommendations related to the GMRP Response are provided in this memo. Please contact me if you have questions or would like to discuss the comments or recommendations.

1. Request No. 1 re: Engineered Structures

Recommendation: The list of engineered structures should include Borrow Pits.

Rationale:

As requested, the GMRP Response provides a list of “Engineered Structures.” The GMRP proposes that a construction plan be associated with each engineered structure. Construction and use of borrow areas require many of the same management activities that are associated with other engineered structures, and which are to be described in construction plans (Schedule 3, Condition 3 of the draft water licence). For example, construction plans are to address construction schedules, characteristics of materials, operational requirements, monitoring and mitigation, and quality control. All of these may be relevant for borrow pits.

2. Request No. 2 re: Definition of Contact Water

Recommendation: The final water licence should clarify the limited conditions in which the proposed Surface Runoff Criteria can apply. The proposed Surface Runoff Criteria and associated management under the Water Monitoring and Management Plan should only apply in circumstances when all of the following conditions:

- During the post-remediation phase,
- For surface runoff only,
- From remediated areas designed and constructed with surface materials that are not expected to contribute unacceptable loading of contaminants, and
- After completion of testing that confirms stable, suitable runoff water quality.

Rationale

In responding to the Board’s question No. 2 about the definition of Contact Water, the GMRP proposes several changes to the definition and also to water licence conditions beyond the

definition (Tables 2 and 3 of the GMRP Response). These changes include instances where references to Discharge Criteria are changed to references to Surface Runoff Criteria. As rationale, the GMRP Response states that runoff from some Engineered Structures would “*no longer be considered Contact Water*” and it would “*not be appropriate to accept the language ‘Discharge criteria for Contact Water.’*” The GMRP proposal appears to make a distinction between areas where Contact Water would have enforceable water quality criteria, and those where runoff would be subject to monitoring and management under the Water Monitoring and Management Plan, but not subject to enforceable criteria. This concept of applying surface runoff criteria to water from certain areas after completion of remediation (and based on some as yet undefined program for testing/confirmation) was presented in the application and discussed at the July 2019 technical session.

However, the licence changes proposed in the GMRP Response potentially expand the scope of application of the proposed Surface Runoff Criteria in two significant ways. First, the proposed revisions do not make it clear that Surface Runoff Criteria could only be applied in the post-remediation phase for an engineered structure, and only once testing has been completed to confirm that the post-remediation runoff criteria are appropriate. For example, the proposed revision of Part F, 16 in the licence appears to indicate that Surface Runoff Criteria can be applied in existing conditions to determine whether water from disturbed areas (e.g., tailings) requires treatment. This application is likely not the intent, and it would not be appropriate for existing site conditions. Until remediation is complete, runoff and seepage from disturbed areas should be collected and treated unless it meets the effluent quality criteria.

Second, the proposed revisions (combinations of definitions and conditions) appear to apply the proposed Surface Runoff Criteria to seepage as well as runoff. Even in the post-remediation conditions, seepage from disturbed areas could have very different characteristics than surface runoff. For example, surface runoff from tailings covers would likely only contact cover materials. On the other hand, seepage may have direct contact with underlying tailings materials. Discussions during the application process did not consider application of Surface Runoff Criteria for seepage water. Seepage water from disturbed areas should continue to be subject to effluent discharge criteria even after remediation is complete.

3. Request No. 4 re: Post-Closure Monitoring and Maintenance

Recommendation: The water licence should include requirements for two submissions related to post-closure monitoring and maintenance: 1) a Table of Contents and Schedule, for approval, and 2) a compiled draft Post-Closure Monitoring and Maintenance Plan.

Rationale:

The GMRP Response confirms the GMRP’s proposal to submit a compiled Post-Closure Monitoring and Maintenance Plan, as initially described in the GMRP’s April 2020 comments on the draft water licence. The proposal builds on the proposed condition in the draft water licence for submission of a table of contents for the plan. Having a compiled Post-Closure Monitoring and Maintenance Plan submitted during the term of the licence is a positive step. It will provide more clarity about the

scope of post-closure monitoring and maintenance activities, including post-closure monitoring and maintenance activities that will likely begin for some components during the term of the licence.

Nonetheless, there would still be benefit in retaining a condition that requires earlier submission and approval of a Table of Contents for the Post-Closure Monitoring and Maintenance Plan. This initial step would provide an opportunity for interested parties to provide input about the scope of the plan.