

**Giant Mine Remediation Project response to Parties Technical Report Recommendations**

Source	#	Recommendation / Measure	Response
DFO	1	DFO recommends the completion of a sediment assessment and the development of associated remedial options to assist in selecting final remediation plans for reaches O, 2, 5 and 6 of Baker Creek. DFO will require this information in order to determine the overall scale of the HADD for Baker Creek.	Accept
DFO	2	DFO recommends that the restoration plan (habitat compensation) and design that will achieve the offsetting of fish habitat for Baker Creek be developed as part of the overall remediation design for the creek. The restoration plan and channel designs must be submitted to DFO for approval as a requirement of the <i>Fisheries Act</i> Authorization.	Accept
DFO	3	DFO recommends the development of a mitigation and monitoring plan for the remediation and restoration of Baker Creek. The mitigation measures and monitoring plan will be a requirement of the <i>Fisheries Act</i> Authorization. The plan should include details on: <ul style="list-style-type: none"><li>- mitigation measures to be implemented to manage and minimize downstream impacts to fish and fish habitat during remediation;</li><li>- how the mitigation measures will be monitored; and,</li><li>- a monitoring plan to evaluate the restoration of Baker Creek as functioning fish habitat.</li></ul>	Accept
DFO	4	DFO recommends that the commitments made to engage the public and aboriginal groups on the Baker Creek remediation options and restoration plan (as	Accept



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		outlined in The Consultation and Engagement Plan, response to Round 1 RB_IR_18 and YKDFN IR 13) be completed prior to finalizing the remediation options, channel designs and fish habitat restoration plan. DFO will use the results of the public and aboriginal engagement when developing its regulatory tool (Authorization).	
DFO	5	DFO recommends that the final designs of any future Baker Creek channel realignments and in-stream habitat features be developed with a clear understanding of potential seasonal base flows to minimize the potential for channel barriers and impacts to fish passage. The habitat restoration plan and supporting channel designs must be submitted to DFO for approval as a requirement of the Fisheries Act Authorization.	Accept
DFO	6	DFO recommends the completion of the fish habitat assessment in Yellowknife Bay along the proposed route of the outfall and at the location of the diffuser.	Accept
DFO	7	DFO recommends the development of a mitigation and monitoring plan for the construction and operation of the proposed outfall and diffuser in Yellowknife Bay to ensure adverse physical impacts to fish and fish habitat are avoided.	Accept
DFO	8	DFO will require the final design and associated mitigation measures for the outfall and diffuser to inform a review pursuant to the habitat provisions of the <i>Fisheries Act</i> .	Accept
DFO	9	DFO recommends the completion of a fish habitat assessment in Yellowknife Bay in the area of the historic tailings, including the extent of the proposed tailings cover.	Accept



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DFO	10	DFO recommends the development of a plan to mitigate adverse impacts to fish and fish habitat during construction of the cover for historic foreshore tailings area and a monitoring plan to ensure that the cover is functioning as intended.	Accept
DFO	11	DFO requests the final design and mitigation measures for the submerged tailings cover be provided to inform a review pursuant to the habitat provisions of the <i>Fisheries Act</i> .	Accept
DFO	12	<p>DFO recommends that a fish habitat monitoring program be developed for the Baker Creek remediation and restoration and be incorporated into the overall monitoring framework for the Giant Mine remediation. This monitoring plan must be submitted to DFO for approval as a requirement of the <i>Fisheries Act</i> Authorization. DFO recommends that this monitoring program:</p> <ul style="list-style-type: none"><li>- clearly state the objectives, performance criteria and goals for the habitat restoration, which are well defined, quantitative and measureable;</li><li>- use appropriate scientific method and experimental designs (e.g. before-after-control-impact), include reference sites, baseline data and replicates to measure habitat productivity;</li><li>- include measures of both habitat quantity and quality using a range of physical and biotic attributes; and, have a sufficient frequency and duration to detect and measure ecological recovery over time.</li></ul>	Accept
DFO	13	DFO recommends that GMRT develop and implement an Aquatic Effects Monitoring Program (AEMP) in accordance with the June 2009 "Guidelines for	Accept The GMRP has committed to developing "an aquatic effects monitoring program" (DAR, pg 14-32, YKDFN Rd #2, IR#1.



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		Designing and Implementing Aquatic Effects Monitoring Programs for Development Projects in the Northwest Territories” to monitor and detect change in the aquatic ecosystems associated with the Giant Mine Remediation Project. A multi-trophic approach should be used. The AEMP should be within an adaptive management framework, where thresholds, triggers and management actions are identified.	
Environment Canada	1	EC recommends that ammonia, sulphate, and major ions be measured in influent as well as in the effluent and receiving environment in order to ensure levels are not elevated. Whole effluent acute toxicity testing should be done on a higher frequency until flooding is completed, and effluent quality stabilizes.	Further discussion is required.  Flooding will not be complete for a long time. Consider modification to “until effluent quality stabilizes”? The term “higher frequency” is also vague. MMER stipulates twice a year or quarterly. May be merit to committing to toxicity testing during periods where you may expect a change in water quality (eg.flooding).
Environment Canada	2	EC recommends that a full characterization of the diffuser location be done, including ongoing measurement of water temperatures, water quality sampling, benthic invertebrate community characterization, and sediment characterization. This information will inform the proponent of the risks associated with potential sediment disturbance, as well as provide baseline data for future comparisons.	Accept  Assumption that this will form part of the water licence process.
Environment Canada	3	EC recommends that the diffuser stability and performance be monitored continuously during initial commissioning and at a higher frequency during the first year of operation.	Accept  Assumption that this will form part of the water licence process.
Environment Canada	4	EC recommends that the air quality monitoring plan as described in SENES (2011) be continued for the entire period during remediation activities at the Giant Mine site in addition to at least one year after the remediation activities are completed.	Accept



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Environment Canada	5	EC recommends that the Proponent develop trigger levels for which dust suppression mitigation strategies are employed.	Accept
Environment Canada	6	EC recommends that continuous ambient monitoring for PM2.5 and NO2 is conducted near the Niven Lake residential area.	Further discussion is required. Further discussion with GNWT and Environment Canada.
Environment Canada	7	EC recommends that the Proponent consult the fact sheet "Planning Ahead to Reduce Risks to Migratory Bird Nests" available at: <a href="http://www.ec.gc.ca/paom-itmb/">http://www.ec.gc.ca/paom-itmb/</a>	Accept
Environment Canada	8	EC recommends that remediation work in known nesting areas should be undertaken either before or after the nesting season. Structures with known nests should be taken down either before or after the nesting season.	Accept Further discussion is required with Environment Canada, GNWT and affected First Nations to discuss appropriate mitigation measures.
Environment Canada	9	EC recommends that if other demolition or remediation work occurs during the nesting season, these areas should be inspected for active nests before any demolition or remediation work starts. Areas should be thoroughly surveyed for active nests using a scientifically sound approach a maximum of 4 days before destruction/clearing. Surveys should be carried out by an avian biologist or naturalist with experience with migratory birds and migratory bird behaviour indicative of nesting (e.g. aggression or distraction behaviour; carrying nesting material or food).	Accept Further discussion is required with Environment Canada, GNWT and affected First Nations to discuss appropriate mitigation measures.
Environment Canada	10	EC recommends that if active nests (i.e., nests containing eggs or young) are discovered, the Proponent should delay any work in the area is complete (i.e., the young have left the nest). Nests should be protected by an appropriately sized buffer.	Accept Further discussion is required with Environment Canada, GNWT and affected First Nations to discuss appropriate mitigation measures.



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Environment Canada	11	EC recommends that the tailings cover be redesigned to be a greater depth to provide a greater vegetation support layer so that the cover does not have the potential to be comprised by vegetation growth.	Further discussion is required as depth is determined in the final design stage.
Environment Canada	12	EC recommends that if the tailings cover design remains at its current planned depth, that evidence needs to be provided that the vegetation will not penetrate into bottom tailings cover layer. A monitoring plan should also be put in place to ensure that the tailings cover is performing as per its design specifications and to prove that vegetation is no infiltrating the cap.	Further discussion is required.  Depth is determined in final design stage. Further discussions required during detailed design and regulatory process.
Environment Canada	13	EC recommends that once all scientific information is made available regarding sediments in Baker Creek, that the selection of remedial options for Reaches 2, 5, and 6 are made with input from all interested parties, including EC.	Accept
Alternatives North	1	To reduce significant public concern with the development and to build better working relationships, trust and public confidence, AANDC will work collaboratively with YKDFN and others in Yellowknife, to make a formal apology for the environmental and social legacy of the Giant Mine. A healing process and/or programs and a ceremony should be <i>EA0809-001 Giant Mine Remediation Plan— Alternatives North Technical Report</i> considered as part of an apology. There should be negotiated compensation to the YKDFN for the impacts of the Giant Mine on its citizens and traditional territory.	Requests for compensation will be addressed during the negotiation of an Akaitcho lands, resources and governance agreement. Canada will not determine, in any mathematical or other objective way, the value of the environmental and social legacy of the Giant Mine, nor will Canada seek proof of any alleged loss suffered by Akaitcho.  Canada will, however, accept responsibility to remediate the Giant Mine site; to protect the health and safety of Aboriginal people, Northerners, and the integrity of the environment.
Alternatives	2	To prevent significant adverse impacts on winter	Further discussion is required.



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North		users of Back Bay as a result of ice thinning caused by diffuser effluent discharges, the Developers need to do the following before any approval or construction: <ul style="list-style-type: none"><li>- Complete thermal modelling and field tests for the potential to cause ice thinning on Back Bay;</li><li>- Prove to the satisfaction of regulatory authorities that a diffuser can be designed in such a way as to not thin ice on Bay Bay [sic]; and</li><li>- Prepare an ice thickness monitoring program for the approval of regulatory authorities that includes public reporting of the results.</li></ul>	Term “approval” is vague and should be modified to provide clarity.
Alternatives North	3	To prevent significant adverse impacts from Giant Mine water effluent, the Developers needs to do the following before any approval or construction: <ul style="list-style-type: none"><li>- Complete far field water quality modelling to properly assess the effects of the diffuser and minewater effluent on water quality in Back and Yellowknife bays;</li><li>- Commit to pay for any incremental costs for municipal water treatment costs caused by the Development;</li><li>- Prepare a comprehensive aquatic effects monitoring program for the approval of regulatory authorities. Such a program should include an adaptive management or response framework where thresholds are identified and tied to specific actions for key contaminants of concern including arsenic</li></ul>	Further discussion is required. Term “approval” is vague and should be modified to provide clarity. <ul style="list-style-type: none"><li>- The remediation measures planned for Giant Mine will result in decreased loadings of arsenic into Yellowknife Bay as compared to the loadings of arsenic entering Yellowknife Bay pre-remediation. This, and the contingency measures in the DAR and in AN Rd #2, IR 8, lead the Project Team to conclude that there will not be adverse impacts on the water quality in Yellowknife Bay. As a result, the Project Team does not feel that it is appropriate to commit to pay for incremental water treatment costs.</li><li>- The GMRP has committed to developing “an aquatic effects monitoring program” (DAR, pg 14-32, YKDFN Rd #2, IR#1).</li></ul>
Alternatives North	4	To prevent significant adverse environmental effects related to exposure of wildlife or humans to arsenic in the tailings, the Developers submit the final cover	Agree





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		design, objectives and performance criteria for approval by regulatory authorities prior to any construction of this part of the development.	
Alternatives North	5	To prevent significant adverse environmental effects related to exposure of wildlife or humans to arsenic in the tailings from wind-blown dust, the Developers prepare a comprehensive air quality monitoring program for the approval of regulatory authorities to test the performance of any tailings covers with regard to dust control. Such a program should include an adaptive management or response framework where thresholds are identified and tied to specific actions for key contaminants of concern including arsenic.	<p>Accept in principle</p> <p>As noted in Environment Canada's recommendation # 4 the Project Team has an air quality monitoring plan as described in SENES (2011) and will continue to operate this program throughout the entire period during remediation activities at the Giant Mine site in addition to at least one year after the remediation activities are completed. As with all monitoring programs the air quality monitoring plan will include adaptive management responses and will be subject periodic reviews to ensure it is performing.</p>
Alternatives North	6	To prevent significant adverse environmental effects related to accidents and malfunctions or non-performance of elements of the project resulting in arsenic releases to water or air, environmental management plans be approved by regulatory authorities prior to any construction of the project. Such plans to be developed based on mine components and contain the following elements: The environmental management plans be developed collaboratively with interested parties as part of an overall Environmental Agreement (see Measure 11).	<p>Further discussion is required.</p> <p>In principle the Project Team agrees that environmental management plans be development and approved by appropriate regulatory authorities prior to construction. The Environmental Management Plans for the Project will be developed with the following: objectives;</p> <ul style="list-style-type: none"><li>• measureable performance or closure criteria (measures of success);</li><li>• monitoring systems to track performance;</li><li>• triggers or thresholds for specific actions;</li><li>• in collaboration with interested parties and regulatory agencies; and</li><li>• will include research and design work to fill gaps where there is uncertainty.</li></ul> <p>The Project Team has an existing process is in place please see the August 10, 2012 letter from the EMS Chair, Erika Nyyssonen outlining the existing status of EMS working group and path forward .</p>
Alternatives North	7	To reduce and avoid significant public concern, AANDC develop clear written guidelines for its employees who perform various functions with regard to Giant Mine including project management, inspections and technical advice, so as to avoid real	<p>Further discussion is required.</p> <p>The <i>Mackenzie Valley Resource Management Act</i> (MVRMA) allows AANDC to have other roles in addition to the role of proponent throughout the Environmental Assessment (EA) and regulatory processes.</p>





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		and perceived conflicts of interest. The guidelines should be publicly available within six months of the government response to this Report of Environmental Assessment.	
Alternatives North	8	To reduce and avoid significant public concern, a mutually agreeable public oversight body for the Giant Mine be established before the project proceeds (see Measure 11).	Aboriginal Affairs and Northern Development Canada (AANDC) and the Government of the Northwest Territories (GNWT) commit to ongoing discussions with the Yellowknives Dene First Nation, the City of Yellowknife and Alternatives North to establish a community based environmental monitoring advisory/oversight committee for the Giant Mine Remediation Project as outlined in the June 11, 2012 letter to Review Board.
Alternatives North	9	To prevent significant adverse environmental effects related to accidents or malfunctions and resulting emissions of arsenic to the environment, and to reduce and avoid significant public concern, a research and development plan be developed collaboratively amongst the parties to investigate a more permanent solution (one that minimizes perpetual requirements for Giant Mine) for the underground arsenic within a year of the government response to this Report of Environmental Assessment. AANDC and GNWT shall fund the tasks and activities to carry out the plan. This plan will be part of an Environmental Agreement for Giant Mine (see Measure 11), and subject to regular review and public reporting.	Further discussion is required.  As committed to in Review Board, Round #2, Information Request #6 the Giant Mine Remediation Project Team will conduct a review of emerging technologies ten years following the implementation of the Frozen Block Method. The review will include interested parties and will be submitted to an Independent Review Panel.
Alternatives North	10	To prevent significant adverse environmental effects related to accidents or malfunctions and resulting emissions of arsenic to the environment, and to reduce and avoid significant public concern, a perpetual care plan be developed collaboratively amongst the parties in the Oversight Working Group within a year of the government response to the	Further discussion is required. Please see the letter from Adrian Paradis, A/Manager, Giant Mine Remediation Project (EA0809-001) - Long-Term Stewardship of the Giant Mine, dated August 10, 2012.



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		<p>Review Board EA report. This plan will be part of an Environmental Agreement for Giant Mine (see Measure 11). The Plan will build on lessons learned from waste management in other locations and apply best practices. The Plan shall contain provisions for the following:</p> <ul style="list-style-type: none"><li>• A comprehensive inventory of historical and project related records and a records management and preservation system including full public disclosure;</li><li>• An assessment and selection of appropriate land use controls and site designations;</li><li>• Long-term funding options for perpetual care of the site;</li><li>• Communicating with future generations including signage, monuments, symbols or other culturally-appropriate means of communications suggested by the YKDFN;</li><li>• Building possible future scenarios that include;<ul style="list-style-type: none"><li>○ inadvertent or purposeful human intrusion into the underground workings and arsenic storage chambers,</li><li>○ collapse or transition of central government authority, and</li><li>○ long-term but high consequence events such as glaciations or shoreline change;</li></ul></li><li>• Transition planning for the change of the site from active remediation to passive care and maintenance.</li></ul>	
Alternatives	11	In the event that an agreement-in-principle for a	Aboriginal Affairs and Northern Development Canada (AANDC) and the Government of the Northwest



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North		<p>legally binding Environmental Agreement is not concluded by the current members of the Oversight Working Group prior to the public hearing, and to prevent significant adverse environmental effects related to accidents or malfunctions and resulting emissions of arsenic to the environment, and to reduce and avoid significant public concern, the parties to the Environmental Assessment conclude an Environmental Agreement within 90 days of the government response to the Report of Environmental Assessment. In the event such an Agreement is not reached, the parties should enter into mediation and if necessary, a binding arbitration to secure such an Agreement before the project proceeds.</p> <p>An Environmental Agreement for the Giant Mine shall provide for the following:</p> <ul style="list-style-type: none"><li>• An independent oversight body made of appointees from the current members to the Oversight Working Group with a clear advisory mandate, public reporting, and adequate funding from the Developers for the duration of the project;</li><li>• Public reporting by the developers on environmental matters including environmental effects and trends, project performance and adaptive management;</li><li>• Ability to receive project information without recourse to formal Access to Information and Privacy processes;</li><li>• Environmental management plans and monitoring programs that meet or exceed</li></ul>	<p>Territories (GNWT) commit to ongoing discussions with the Yellowknives Dene First Nation, the City of Yellowknife and Alternatives North to establish a community based environmental monitoring advisory/oversight committee for the Giant Mine Remediation Project as outlined in the June 11, 2012 letter to Review Board.</p>



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		<p>AANDC's own policies and guidelines including adaptive management, performance criteria, triggers and thresholds for specific actions;</p> <ul style="list-style-type: none"><li>• A perpetual care plan (as outlined in Measure 10);</li><li>• On-going research and development program and public reporting into a permanent solution to the arsenic trioxide to be stored underground;</li><li>• A step-wise, binding dispute resolution process; and</li><li>• A regular review and process for amending the Agreement with the consent of all the parties.</li></ul>	
<b>Alternatives North</b>	S1	AANDC should implement an ongoing participant funding program for all Environmental Assessments and Environmental Impact Reviews in the Mackenzie Valley. There should be a lessons learned meeting or workshop after the government response to this Report of Environmental Assessment with a view to improving the application, review and disbursement of participant funding.	Not within the mandate of the project team.
<b>Alternatives North</b>	S2	AANDC and/or GNWT (in the case of devolution) should conduct a public review of the legal framework for mine closure and reclamation with a view to strengthening the regulatory system and make mandatory requirements for closure plans and financial security to avoid further perpetual care mine sites.	Not within the mandate of the project team.
<b>Alternatives</b>	S3	AANDC should develop a management team and	The Giant Mine remediation is a national project and as such has a multifaceted team located in various



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North		structure for implementation of the Giant Mine Remediation Plan with authority and technical support located in Yellowknife so as to increase accountability, transparency, responsiveness and build local confidence	centers across Canada including Yellowknife, Edmonton and Ottawa.
Alternatives North	S4	Environment Canada as the lead agency on the Federal Contaminated Sites Action Program should develop a policy framework and guidance for the perpetual care and management of remediated contaminated sites. Giant Mine should serve as a case study and model of how proper perpetual care planning can be conducted with community involvement and the full implementation of the measures recommended from this Environmental Assessment.	n/a
Yellowknives Dene First Nation	3.1	<i>The Board must make a Measure requiring the establishment of an independent environmental oversight panel.</i> This should be developed by agreement amongst the parties, recognizing the work that's already been done and submitted to the registry. This will ensure the panel's independence, local representation, and most importantly, effectiveness in ensuring the proponents plans will achieve desired results in a manner consistent with best practices.	Aboriginal Affairs and Northern Development Canada (AANDC) and the Government of the Northwest Territories (GNWT) commit to ongoing discussions with the Yellowknives Dene First Nation, the City of Yellowknife and Alternatives North to establish a community based environmental monitoring advisory/oversight committee for the Giant Mine Remediation Project as outlined in the June 11, 2012 letter to the Review Board.
Yellowknives Dene First Nation	3.2a	To develop an appropriate Environmental Management systems, with input from YKDFN, prior to the issuance of Land and Water Board permits or prior to implementation of any remediation work at site. YKDFN suggest that part of this measure should include an EMS working group charged to	In principle the Project Team agrees that environmental management plans be development and approved by appropriate regulatory authorities prior to construction. The Environmental Management Plans for the Project will be developed with the following: objectives; <ul style="list-style-type: none"><li>• measureable performance or closure criteria (measures of success);</li><li>• monitoring systems to track performance;</li><li>• triggers or thresholds for specific actions;</li></ul>



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		develop/review the Environmental Management Plans, establish when modifications to the EMS are required, and provide overall improvements to the clarity and certainty of the closure plan prior to the issuance of permits	<ul style="list-style-type: none"><li>• in collaboration with interested parties and regulatory agencies; and</li><li>• will include research and design work to fill gaps where there is uncertainty.</li></ul> <p>The Project Team has an existing process in place please see the August 10, 2012 letter from the EMS Chair, Erika Nyysönen outlining the existing status of EMS working group and path forward .</p>
<b>Yellowknives Dene First Nation</b>	3.2b	To provide full and complete answers to all information requests, as well as providing further clarity on how the department will ensure that the different sections will fulfill their duty without creating the perception of conflict. This needs to include details regarding monitoring, inspections, and audits from the Giant Mine Project as well as decision making at upper management in Yellowknife, Edmonton and Ottawa.	The Project Team held a Pre-Technical Workshop to update all interested Parties to the Giant Mine Project Environmental Assessment, prior to the Technical Report submissions, on site work and progress since the Technical Sessions in October 2011 and IR Round II in February 2012 and the Review Board IRs in June 2012.
<b>Yellowknives Dene First Nation</b>	3.3a	To consult with Interested Parties, including YKDFN, to determine what information cannot be reported to regulators (eg. the default position must be 'release'). If information cannot be released, AANDC should be required to at least note the existence of the report in the Giant Mine Registry and provide explanation why it cannot be released.	<p>Further discussion is required.</p> <p>Project activities – and the monitoring results – will be subject to regulatory agency oversight and review by parties and the public.</p> <p>Parties to the Environmental Assessment have been involved in advising on and shaping the project's Environmental Management System (EMS) and will continue to be involved in the development, implementation, and review and updating of the EMS and the associated monitoring results and reporting.</p>
<b>Yellowknives Dene First Nation</b>	3.3b	For all inspections to be publically filed with the MVLWB within 14 days.	The Giant Mine Remediation Project Team is unable to respond for the inspectors on this request.
<b>Yellowknives Dene First Nation</b>	3.3c	The Review Board provide clear and prescriptive guidance on information to be reported, and it's frequency, as condition of their environmental assessment ruling to achieve. This should include, but not be limited to, the following:	<p>Further discussion is required.</p> <p>The Project Team is developing environmental management plans in collaboration with the parties to the Environmental Assessment. The EMP include be development and approved by appropriate regulatory authorities prior to construction. The Environmental Management Plans for the Project will be developed</p>



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		<ul style="list-style-type: none"><li>○ If reclamation activities are being completed on schedule.</li><li>○ Reclamation of mine components is being conducted as designed/planned.</li><li>○ If there are deviations in reclamation planning as a result of new information.</li><li>○ Results of reclamation monitoring with comparison to predictions.</li><li>○ Comparison of residual effects to predictions.</li><li>○ When mine components are successfully reclaimed and by what standard.</li><li>○ Results of internal and 3rd party audits.</li></ul>	<p>with the following:</p> <ul style="list-style-type: none"><li>• objectives;</li><li>• measureable performance or closure criteria (measures of success);</li><li>• monitoring systems to track performance;</li><li>• triggers or thresholds for specific actions;</li><li>• in collaboration with interested parties and regulatory agencies; and</li><li>• will include research and design work to fill gaps where there is uncertainty.</li></ul> <p>The Project Team has an existing process in place please see the August 10, 2012 letter from the EMS Chair, Erika Nyssonen outlining the existing status of EMS working group and path forward .</p>
<b>Yellowknives Dene First Nation</b>	3.4	The Board should recommend that the Giant Mine Oversight Committee be established in a more permanent manner to better allow the project to meet their engagement and potentially, their consultative obligations. Depending on the composition and terms of reference, a group such as this may be suited to provide community feedback and advice for options analysis.	Aboriginal Affairs and Northern Development Canada (AANDC) and the Government of the Northwest Territories (GNWT) commit to ongoing discussions with the Yellowknives Dene First Nation, the City of Yellowknife and Alternatives North to establish a community based environmental monitoring advisory/oversight committee for the Giant Mine Remediation Project as outlined in the June 11, 2012 letter to the Review Board.
<b>Yellowknives Dene First Nation</b>	3.5	The Board should require that the final/detailed design be required to perpetual care needs of the site are achieved and report on how the facilities meet the objectives of perpetual care.	Further discussion is required. Please see the letter from Adrian Paradis, A/Manager, Giant Mine Remediation Project (EA0809-001) - Long-Term Stewardship of the Giant Mine, dated August 10, 2012.
<b>Yellowknives Dene First Nation</b>	3.6a	Prior to the completion of the EA, AANDC is to complete detailed design of the diffuser that allows accurate and meaningful characterization of the impacts on the structure, thickness and strength of the ice in the area. Specifically, this should focus on the 'shoulder seasons' where fall ice formation and spring ice strength/persistence are of significant	Further discussion is required. The Project Team believes this is part of detailed design and will be a part of the water licence process. The work is progressing and will be completed during the detailed design and water licence stage.





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		importance. This should be updated prior to the issuance of any permits and as part of the long term monitoring of the diffuser design.	
Yellowknives Dene First Nation	3.6b	To confirm performance of the diffuser by comparing design assumptions and design performance to measured data (as stated in response to YKDFN IR#4).	Further discussion is required.  Should outline what we intend to do (eg thermal modelling, complete detailed design etc) and commit to those steps.
Yellowknives Dene First Nation	3.6c	This monitoring program is to be independent of, and not reliant on (but complimentary of), the City of Yellowknife monitoring.	Agree the Project's monitoring programs should be independent of the City of Yellowknife and where possible should complement the work done through the City of Yellowknife.
Yellowknives Dene First Nation	3.7a	To improve the effluent treatment plant water quality should the water quality in the receiving environment not meet water quality objectives	Agree in principle, further clarification is required.
Yellowknives Dene First Nation	3.7b	End of pipe water quality should meet the Health Canada's Guidelines for Canadian Drinking Water Quality.	Further discussion is required during the regulatory process. The objective of the water treatment plant is to achieve the protection of Freshwater Aquatic Life as established by the Canadian Council of Ministers of the Environment.
Yellowknives Dene First Nation	3.8a	Confirm "that water quality objectives are being met and aquatic communities are not adversely impacted" through an "environmental effects monitoring program, which focuses on assessing effects on aquatic biota (e.g., benthic communities and fish) in the exposure area on a period basis". (response to 2nd round YKDFN IR#1)	Agreed.  The GMRP has committed to developing "an aquatic effects monitoring program" (DAR, pg 14-32, YKDFN Rd #2, IR#1.
Yellowknives Dene First Nation	3.8b	Complete additional monitoring of Yellowknife Bay and Back Bay water quality to establish background levels and quantification of water quality objectives.	Accept
Yellowknives Dene First Nation	3.8c	Determining the contaminants of potential concern in the effluent waters discharged from Giant Mine.	Accept
Yellowknives Dene First Nation	3.8d	Ensure effluent water quality at the edge of the mixing zone will be at or below CCME guidelines for the protection of aquatic life.	Accept



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Yellowknives Dene First Nation	3.9a	<p>For each mine component, the details of closure objectives, criteria, and any information gaps are to be developed in accordance with the framework and concepts presented in the following Northwest Territories and Federal guidelines and presented in a stand-alone closure and reclamation plan.</p> <ul style="list-style-type: none"><li>• DRAFT Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories (2011). Developed by the Land and Water Boards of the Mackenzie Valley and Aboriginal Affairs and Northern Development Canada.</li><li>• Mine Site Reclamation Guidelines for the Northwest Territories (2007). Indian and Northern Affairs Canada.</li><li>• Best Practices – see:<ul style="list-style-type: none"><li>○ Diavik Diamond Mines Inc. (2011). Interim Closure and Reclamation Plan – Version 3.2</li><li>○ BHP Billiton Canada Inc. (2011). Ekati Diamond Mine, Interim Closure and Reclamation Plan.</li></ul></li></ul>	<p>Further discussion is required.</p> <p>The Project Team has committed to developing a Consolidated Project Description (CPD) prior to resumption of the Water Licensing Process. The CPD will: a) incorporate changes to the Remediation Plan from the EA; b) clearly identify commitments made by all parties and how they will be implemented; and c) describe how the Project Team will account for and implement the mitigation measures recommended by the Review Board (section 2.6 of DAR, page 2-12).</p> <p>The Project Team is developing environmental management plans in collaboration with the parties to the Environmental Assessment. The EMPs will be approved by appropriate regulatory authorities prior to construction. The Environmental Management Plans for the Project will be developed with the following:</p> <ul style="list-style-type: none"><li>• objectives;</li><li>• measureable performance or closure criteria (measures of success);</li><li>• monitoring systems to track performance;</li><li>• triggers or thresholds for specific actions;</li><li>• in collaboration with interested parties and regulatory agencies; and</li><li>• will include research and design work to fill gaps where there is uncertainty.</li></ul>
Yellowknives Dene First Nation	3.9b	<p>Performance monitoring and adaptive management are to be integrated into the closure planning process to assess if success is achieved and when changes to the reclamation approach are needed respectively. Clear links between the Environmental Management Plan, Aquatic Effects Monitoring Plan, and adaptive management plan need to be identified for the closure criteria of the each mine component objectives</p>	<p>Further discussion is required.</p>



Source	#	Recommendation / Measure	Response
Yellowknives Dene First Nation	3.9c	Key items of importance for successful reclamation plan include, without limitation: ice conditions about the diffuser to not be degraded from natural conditions; mine effluent waters at end of pipe to have concentrations that achieve drinking water quality guidelines; end land use about the tailings containment areas that meets expectations of YKDFN uses; and community oversight and engagement to have confidence that reclamation is successfully completed.	Further discussion is required.
Yellowknives Dene First Nation	3.10a	The Crown should look to establish a mechanism to ensure that the long term operation of this site isn't compromised. At a minimum, this should include the establishment of an endowment to create a reserve fund for the project operations to access if they feel that the funding is not acceptable relative to operational demands. This will ensure that the site is not compromised while consultations on funding priorities and allocations are undertaken.	Further discussion is noted.
Yellowknives Dene First Nation	3.10b	Should future Parliament consider providing insufficient funding to execute the Remediation Plan and perpetual care of the site, consultation with affected parties, including YKDFN, must occur. Consultation must, without limitation, detail the resulting environmental and socio-economic impacts.	Further discussion is noted.
Yellowknives Dene First Nation	3.11a	The project should identify this as a primary objective with the same value as stabilizing the arsenic trioxide.	Further discussion is required.
Yellowknives Dene First Nation	3.11b	Complete an Environmental Monitoring and Evaluation Framework to measure community perceptions regarding the environment and success of the Remediation Project. The timeframe and	Further discussion is required.



Source	#	Recommendation / Measure	Response
		frequency to be directed by the MVEIRB.	
Yellowknives Dene First Nation	3.12a	For the reclamation of the Tailings Containment Area to consider YKDFN end land use and achieves the expectations of the YKDFN uses.	Further discussions is required to under stand the expectations of the YKDFN uses.
Yellowknives Dene First Nation	3.13a	Improved communication strategy to report upset conditions at Giant that is cognizant of the multiple languages spoken in the region, as well as, accessibility for the public to readily receive the information (e.g., email, radio, public announcements, etc.).	Further discussions is required.
Yellowknives Dene First Nation	3.13b	The Board should require the Proponent to always make it plain who the appropriate community contact is. Furthermore, if this contact is not within Yellowknife, the proponent should be required to provide yearly updates as to why this is the case and when this will be rectified. It is essential that this project is run locally.	Further discussion is required.
Yellowknives Dene First Nation	3.14	YKDFN ask the board to ensure that the water and sediment quality of the reclaimed area is of a quality equal to a site that has not been impacted by industrial development.	Further discussion is required. A remediation criteria of “equal to a site that has not been impacted by industrial development” is not technically feasible.
Yellowknives Dene First Nation	3.15	YKDFN ask the board to make a measure requiring a perpetual care plan to be developed and implemented within 3 years of any Environmental Assessment decision.	In principle agree with the development of a perpetual care plan, however, further discussion is required on the timing and contents of the plan.