



Mackenzie Valley Land and Water Board
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Staff Report

Applicant: De Beers Canada Inc.	
Location: Kennady Lake, NT	Application: MV2005C0032 and MV2005L2-0015
Date Prepared: March 8, 2017	Meeting Date: March 16, 2017
Subject: Interim Closure and Reclamation Plan - Objectives	

1. Purpose/Report Summary

The purpose of this Report is to present to the Mackenzie Valley Land and Water Board (MVLWB/the Board) the closure objectives of the Gahcho Kué Interim Closure and Reclamation Plan (ICRP), as submitted by De Beers Canada Inc. (De Beers) to fulfill condition 84 of Land Use Permit (Permit) MV2005C0032 and Part J, item 1 of Water Licence (Licence) MV2005L2-0015.

2. Background

- November 28, 2013 – Conceptual Closure and Reclamation Plan (ICRP V.1) submitted to the Board following conclusion of Environmental Impact Review;
- August 11, 2014 – Board approves and issues the Permit MV2005C0032 to De Beers and submits recommendation for approval of the Licence MV2005L2-0015 to the Minister of Environment and Natural Resources – Government of the Northwest Territories (Minister of GNWT-ENR);
- September 23, 2014 – Minister of GNWT-ENR approves Licence MV2005L2-0015;
- September 24, 2014 – Board issues Licence MV2005L2-0015 to De Beers and De Beers hosts a closure and reclamation workshop;
- February 17, 2016 – De Beers distributes draft ICRP (V.2) to reviewers;
- March 2, 2016 – De Beers hosts a workshop to discuss draft ICRP (V.2);
- July 25, 2016 – De Beers submits ICRP (V.3) to the Board;
- January 12, 2017 – Board acknowledges receipt of the ICRP (V.3) and defers the approval of the ICRP to allow additional time for major components of the ICRP to be refined. Board requests the objectives of the ICRP be revised and resubmitted in accordance with comments received during the review;
- February 1, 2017 – De Beers submits the revised objectives to the Board;
- February 9, 2017 – Revised objectives sent out for review;
- February 23, 2017 – Review comments due and submitted;

- March 1, 2017 – De Beers’ responses submitted;
- **March 16, 2017 – Revised objectives presented to the Board for consideration.**

3. Discussion

Background

On August 11, 2014, the Board included conditions in Licence MV2005L2-0015 and Permit MV2005C0032 relating to the ICRP. Part J, item 1 of Licence MV2005L2-0015 states that:

*Within twenty four (24) months following issuance of this Licence, the Licensee shall submit an **Interim Closure and Reclamation Plan** to the Board for approval, in accordance with the Mackenzie Valley Land and Water Board and Aboriginal Affairs and Northern Development Canada’s November 2013, or subsequent editions, Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories. In addition to conforming with the Guidelines, the Licensee shall:*

- a) Propose methods to reduce the period of time required for the recovery of the Water Management Pond;*
- b) Include a research plan for investigating cover options for the Waste Rock piles and processed kimberlite; and*
- c) Include any implications the results of the Rock Placement Verification Program required under Part E, item 7 have on Waste Rock handling and closure and Reclamation options.*

Condition 84 of Permit MV2005C0032 states that:

*The Permittee shall submit an **Interim Closure and Reclamation Plan**, to the Board for approval, in accordance with the Mackenzie Valley Land and Water Board and Aboriginal Affairs and Northern Development Canada’s November 2013, or subsequent editions, Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories.*

On July 25, 2016, De Beers submitted ICRP (V.3) for a Board decision (attached). This ICRP (V.3) was sent out for review on August 19, 2016 with comments due on October 18, 2016. A notice from Board staff was also sent to reviewers informing them that the Board was proposing to host a Technical Workshop to allow reviewers the opportunity to ask any questions and seek clarification prior to submitting comments to the Board. It was scheduled for October 7, 2016 based on feedback received from reviewers. By September 30, 2016, questions of clarification were submitted by Ni Hadi Xa, Deninu K’ue First Nation, GNWT-ENR, and Board staff to help narrow the focus of the workshop so time could be used effectively.

An analysis of the reviewer comments and De Beers’ responses on the ICRP (V.3) suggests that work was required to clarify and further develop certain aspects of the ICRP. The ICRP includes a combination of generic objectives (per the *Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories*) and additional site-specific objectives to address unique site components and the input of interested parties.

The Board determined that as there was still some uncertainty in the final list of objectives, a focused, exclusive review of the objectives was required to ensure a common understanding amongst reviewers. De Beers submitted the updated objectives to the Board on February 1, 2017 (attached).

Definition

The closure objectives are a fundamental component of the ICRP and guide the entire closure planning process. The determination of closure objectives is one of the most important steps in the process as all options, research, criteria and actions must relate to and follow from the objectives. It is important to have objectives that are clear and measurable, but which aren't too prescriptive so that they unintentionally restrict reasonable closure options from being considered. The following definition and discussion of objectives has been included to provide some context to the Board when considering the proposed objectives:

Closure objectives are statements that describe what the selected closure activities are aiming to achieve; they are guided by the closure principles. Closure objectives are typically specific to project components, are measurable and achievable, and allow for the development of closure criteria.¹

As discussed in the Closure and Reclamation Guidelines, the closure objectives for each of the mine components should support and be consistent with the closure goal – which for any mining operations is “to return the mine site and affected areas to viable and, wherever practicable, self-sustaining ecosystems that are compatible with a healthy environment and with human activities”. A closure objective describes what the selected closure activity aims to achieve. Closure objectives must also take into consideration the principles of physical stability, chemical stability, and future use and aesthetics at the site.

Approach and Analysis

In evaluating the proposed closure objectives, Board staff applied the following approach:

- Considered De Beers' proposed Objectives using the definition of Closure Objective;
- Considered reviewer comments and De Beers' response to the comments; and,
- Compared recent closure objectives (Snap Lake) for overlap or similarities.

The end result of this approach is that many of the recommended closure objectives are similar or in some cases identical to the closure objectives for the Snap Lake Project.

The following table compares the approved closure objectives for Snap Lake and those proposed by De Beers for Gahcho Kué. Having an approved set of closure objectives allows the closure planning process to progress; however, it is important to note that closure objectives may need to be altered in the future based on continual community engagement, results from reclamation research, or if they are found to not be achievable.

¹ *Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories*. Mackenzie Valley Land and Water Board – November 2013.

Table 1: Comparison of Snap Lake’s Approved Objectives (on January 30, 2014) and Gahcho Kué’s Proposed Objectives:

Tracking #	Closure Objectives – Snap Lake Approved on January 30, 2014	Tracking #	Proposed Closure Objectives – Gahcho Kué
Site Wide Objectives (SW):		Site Wide Objectives (the mine footprint):	
SW1	Dust levels safe for people, vegetation, aquatic life and wildlife.	SW1	Air quality levels safe for people, vegetation, aquatic life and wildlife.
SW2	Drainage pathways for surface runoff are physically stable.	SW2	Drainage pathways for surface runoff are physically stable.
SW3	Surface runoff and seepage water quality that is safe for people, vegetation, aquatic life, and wildlife.	SW3	Surface runoff and seepage water quality that is safe for people, vegetation, aquatic life, and wildlife.
SW4	Mine areas are physically stable and safe for use by people and wildlife.	SW4	Mine areas are physically stable for use by people and wildlife.
SW5	Landscape features (shape and vegetation) match aesthetics of the surrounding natural area.	SW5	Safe passage and use for Caribou and other wildlife.
SW6	Safe passage and use for Caribou and other wildlife.		
SW7	Re-vegetation targeted to priority areas.		
North Pile Specific Objectives:		Processed Kimberlite Facilities (includes the Coarse PK Facility and the Fine PK Facility):	
NP1	Prevent PK from entering the surrounding terrestrial and aquatic environment.	PK1	Prevent PK from entering the surrounding terrestrial and aquatic environment.
NP2	Physically stable PK containment area to limit risk of failure that would affect safety of people or wildlife.	PK2	Physically stable PK disposal areas to limit risk of facility failure.
		PK3	Chemically stable Processed Kimberlite Facilities (Piles) that do not endanger human, wildlife, or environmental health and safety.
Underground Specific Objectives:		Open Pits (5034 Pit, Hearne Pit, Tuzo Pit):	
UG1	Flooding of the underground mine will have no impacts to aquatic habitats in source lakes.	OP1	The backfilled and/or flooded pits will not adversely impact establishment and/or maintenance of sustainable aquatic ecosystems and life in the overlying Kennady Lake and downstream waterbodies.
UG2	Underground mine should not contribute to the contamination of ground or surface water.	OP2	Physically stable pit walls to limit risk of a failure impacting people and aquatic life.
UG3	Underground mine workings are physically stable.		

Tracking #	Closure Objectives – Snap Lake Approved on January 30, 2014	Tracking #	Proposed Closure Objectives – Gahcho Kué
Infrastructure Specific Objectives:		Infrastructure Specific:	
I1	Prevent remaining infrastructure from contaminating land or water.	I1	Disturbed areas will be safe for people, wildlife, and vegetation.
I2	On-site disposal areas are safe for people, wildlife, and vegetation.	I2	Re-vegetation targeted to priority areas.
I3	Contaminated soils and waste disposal areas that cannot contaminate land and water.	I3	Aesthetic conditions of the infrastructure areas are similar to surrounding natural conditions.
		Kennady Lake:	
		KL1	Return Kennady Lake to a state that will support a functioning aquatic ecosystem and traditional uses.
		KL2	Physically stable constructed banks of Kennady Lake to limit risk of failure that would impact aquatic life, wildlife, and people.
		KL3	Kennady Lake is reconnected with the upstream and downstream and small craft navigation is possible within the Kennady Lake basin through the dyke and pit areas.
		Mine Rock Piles (South Mine Rock Pile and West Mine Rock Pile):	
		MR1	Physically stable slopes to limit risk of failure that would impact the people or wildlife.
		MR2	Contaminated rock and non-hazardous waste disposal areas within piles <u>will be safe for aquatic life, people or wildlife.</u>
		MR3	Chemically stable mine rock piles that <u>are safe for aquatic life, humans and wildlife.</u>

MR2 and MR3 have been slightly adjusted based on the comments and recommendations submitted by Lutsel K'e Dene First Nation.

MR2 originally stated:

Contaminated rock and non-hazardous waste disposal areas within piles do not pose an unacceptable risk to aquatic life, people or wildlife.

MR3 originally stated:

Chemically stable mine rock piles that do not endanger human, wildlife, or environmental health and safety.

Next Steps

Following the Board's decision on the closure objectives, the next stage, as outlined in the draft work plan, is for De Beers to resubmit the reclamation research plan details and closure options for review and comment.

4. Comments

N/A

5. Reviewer Comments

By February 23, 2017, comments and recommendations on the revised objectives were received from 6 reviewers:

- Deninu K'ue First Nation;
- Lutsel K'e Dene First Nation;
- Environment and Climate Change Canada;
- Fisheries and Oceans Canada;
- GNWT-ENR; and
- North Slave Métis Alliance.

According to the Online Review System, the North Slave Métis Alliance submitted comments after the review deadline (on February 24, 2017).

De Beers responded on March 1, 2017. The reviewer comment summary table (attached) presents the concerns identified through the review of the revised objectives.

6. Security

The GNWT currently holds reclamation security in the amounts of \$23,776,270.00 under Licence MV2005L2-0015 and \$13,817,863.00 under Permit MV2005C0032 for the Gahcho Kué project. De Beers' next deposit of security (in the amount of \$40,713,234 under Licence MV2005L2-0015 and \$1,382,934 under Permit MV2005C0032) is due prior to year 4 of Operations (the end of mining of the Hearne Pit).

No changes to the security are proposed.

7. Conclusion

Board staff conclude that the interim objectives, as submitted, are in conformity with the definition of Closure Objective as outlined in the *Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories*, were considered against reviewer comments, and are comparable to recently approved closure objectives for a similar project (Snap Lake).

Board Staff note that having an approved set of closure objectives allows the closure planning process to progress; however, it is important to note that closure objectives may need to be altered in the future based on continual community engagement, results from reclamation research, or if they are found to not be achievable.

8. Recommendation

- 1) Board staff recommend the Board make a motion to approve the Objectives on an Interim basis, until such time as the full Interim Closure and Reclamation Plan is submitted for Board approval; as well as the associated Reasons for Decision.
- 2) Board staff recommend the Board direct De Beers to:
 - a) Submit details on their reclamation research plan and closure options in accordance with Tables 1 and 2 (attached) to reflect reviewer comments and responses captured through the ICRP (V.3) review, and submit to the Board by **April 6, 2017**.
- 3) Board staff recommend including the following text in the decision letter:
 - a) The Board notes that closure objectives may need to be altered in the future based on continual community engagement, results from reclamation research, or if they are found to not be achievable.

9. Attachments

- [Interim Closure and Reclamation Plan V.3](#)
- [Revised Objectives](#)
- Reviewer Comment Summary Table
- Draft Reasons for Decision
- Draft Decision Letter from the Board
- Draft Direction Letter from the Board
- Table 1: Board Directive on Reclamation Research Plan Updates
- Table 2: Board Directive on Closure Options/Activities

Respectfully submitted,



Angela Love
Regulatory Officer

Review Comment Table

Board:	MVLWB
Review Item:	De Beers Gahcho Kue - Interim Closure and Reclamation Plan – Objectives (MV2005C0032 - MV2005L2-0015)
File(s):	
Proponent:	De Beers Canada Inc - Gahcho Kue
Document(s):	Interim Closure and Reclamation Plan (356 KB)
Item For Review Distributed On:	Feb 9 at 13:30 Distribution List
Reviewer Comments Due By:	Feb 23, 2017
Proponent Responses Due By:	Mar 2, 2017
Item Description:	<p>De Beers Gahcho Kué (De Beers) has submitted revised objectives to the Interim Closure and Reclamation Plan on February 1, 2017. These revisions were requested by the Board on January 12, 2017.</p> <p>Reviewers are invited to submit questions, comments, and recommendations on this submission using the Online Review System (ORS) by the review comment deadline specified below.</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>
General Reviewer Information:	<p>In addition to the email distribution list, the following organizations received review materials by fax:</p> <p>Fort Resolution Métis Council - Trudy King (867)394-3322</p> <p>Hay River Metis Council - Trevor Beck, President (867)874-4472</p> <p>NWT Metis Nation - Tim Heron, NWTMN IMA Coordinator (867)872-3586</p>
Contact Information:	<p>Angela Love 867-766-7456</p> <p>Jen Potten 867-766-7468</p> <p>Kierney Leach 867-766-7470</p> <p>Shannon Allerston 867-766-7458</p>

Comment Summary

Deninu K'ue First Nation: Marc d'Entremont				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Analysis
1	SW2	<p>Comment The original SW2 objective had a proposed closure criteria that read: "No significant deformation and degradation is indicated at drainage pathways by visual monitoring as part of site geotechnical inspections completed by a professional engineer." It is unclear what is meant by significant (vs not significant) for these criteria.</p> <p>Recommendation We recommend that De Beers confirm whether the proposed closure criteria for this objective has changed and if not, to provide clarity around how significant impacts will be measured.</p>	<p>Mar 1: As per the Boards workplan for the ICRP, De Beers re-submitted revised objectives for a focussed review on February 2. De Beers did not re-submit revised criteria. As per the Boards workplan for the ICRP, the criteria will undergo a focussed review after conclusion of the focussed review of objectives. In our letter to the Board on February 2, 2017, De Beers requested further discussion with the Board regarding the process and scope of the additional review as well as the workplan for the ICRP. The Board has not yet provided a response to our request. De Beers requests that that the Board process includes approval of each phase of the ICRP (objectives, criteria, research) prior to initiating the focussed review of the the next phase. Without approved objectives we cannot progress efficiently through the remainder of the staged review of the ICRP.</p>	<p>As indicated in the 'Item Description' section of the Online Review System, this review was specific to the Objectives of the ICRP as directed by the Board to De Beers on January 12, 2017.</p> <p>The draft Work Plan provides further details for the ongoing review and analysis of the ICRP (including criteria). Comments and Recommendations are encouraged to be provided on these other sections of the ICRP once submitted.</p>
2	SW5	<p>Comment The original SW5 objective - "Promote accelerated natural recovery of vegetation at disturbed areas" Is removed in the revised objectives and appears to be replaced by I2 - 'Revegetation targeted to priority areas".</p> <p>Recommendation We recommend that De Beers provide further explanation as to why SW5 was removed from the list of objectives. In regard to I2, please explain what criteria will be used to select key priority areas for establishment of vegetation and whether this criteria will include traditional knowledge and input from Ni Hadi Xa.</p>	<p>Mar 1: SW5 was primarily removed to address the DKFN recommendations 5 from the November 2016 review of the ICRP which stated that: DKFN 5 Comment: "It is stated: "Promote accelerated natural recovery of vegetation at disturbed areas." DKFN 5 Recommendation: "It should be clear that this site wide objective is exclusive of the mine rock piles and processed kimberlite containment facilities. We recommend that this be clearly noted in the plan". As the DKFN reviewer pointed out, the former SW5 was not in fact a site-wide</p>	<p>SW5 was moved to I2 in response to reviewer comments received through the review of V.3 of the ICRP (DKFN 5 NSMA 10 & Tłıchq 9 NSMA 23 & Tłıchq 22 NSMA 25 & Tłıchq 24).</p> <p>As outlined in Part J, item 1 b) of Water Licence MV2005L2-0015, the ICRP shall:</p> <p><i>Include a research plan for investigating</i></p>

			<p>objective as it did not apply to the entire site. Therefore it was appropriate to remove it from the site-wide objectives. The mine rock piles and PK facilities will be capped with mine rock. Revegetation efforts will be focussed on infrastructure areas. As per the Board's workplan, criteria will undergo a focussed review following completion of the focussed review of objectives.</p>	<p><i>cover options for the Waste Rock piles and processed kimberlite;</i></p> <p>The draft Work Plan provides further details for the ongoing review and analysis of the ICRP (including criteria). Comments and Recommendations are encouraged to be provided on these other sections of the ICRP once submitted.</p>
3	SW3	<p>Comment The definition of 'safe' was added to the objective and De Beers stated that the proposed criteria will provide specific measures to this objective.</p> <p>Recommendation We recommend that Ni Hadi Xa should inform the closure criteria and the definition of 'safe passage'.</p>	<p>Mar 1: As per the Board's workplan for the ICRP, all reviewers, including NHX members may provide input during the review of the proposed criteria. As discussed previously, Ni Hadi Xa includes De Beers. Each NHX member speaks for itself on regulatory matters concerning De Beers.</p>	<p>The draft Work Plan provides further details for the ongoing review and analysis of the ICRP (including criteria). Comments and Recommendations are encouraged to be provided on these other sections of the ICRP once submitted.</p>
4	OP1	<p>Comment The original OP1 had proposed closure criteria that read: "Water and sediment quality in the flooded/backfilled pits will not adversely affect Kennady Lake water quality such that it prevents re-establishment of the aquatic ecosystem in Kennady Lake." Clarity is required around the meaning of adversely affecting water and sediment quality.</p> <p>Recommendation If the intention is to meet the applicable water and sediment quality standards, then we recommend these standards are specifically mentioned here.</p>	<p>Mar 1: Specific measures regarding how to determine achievement of the objectives will be provided as criteria. As per the Board's workplan, criteria will undergo a focussed review following completion of the focussed review of objectives.</p>	<p>As indicated in the 'Item Description' section of the Online Review System, this review was specific to the Objectives of the ICRP as directed by the Board to De Beers on January 12, 2017.</p> <p>The draft Work Plan provides further details for the ongoing review and analysis of the ICRP (including criteria). Comments and Recommendations are encouraged to be provided on these other sections of the ICRP once submitted.</p>

5	OP2	<p>Comment The original OP2 had proposed closure criteria that read: “No visual indications of significant deformation and degradation is observed during a final inspection by a professional engineer.” It is unclear what is meant by significant (vs not significant) for these criteria.</p> <p>Recommendation We recommend that De Beers confirm whether the proposed closure criteria for this objective has changed and if not, to provide clarity around how significant impacts will be measured.</p>	<p>Mar 1: As per the Board's workplan, criteria will undergo a focussed review following completion of the focussed review of objectives. For clarity, engineered designs and engineered assessments are done according to industry standards, guidelines and best management practices. It is a Engineer who determines significance when compared to approved design and performance. Frequency can be dictated by the board, but it is an engineer in their best professional judgement who inspects these facilities and establishes criteria that is appropriate for the design. This should be reflected in all criteria that is measured against a engineering design.</p>	<p>As indicated in the ‘Item Description’ section of the Online Review System, this review was specific to the Objectives of the ICRP as directed by the Board to De Beers on January 12, 2017.</p> <p>The draft Work Plan provides further details for the ongoing review and analysis of the ICRP (including criteria). Comments and Recommendations are encouraged to be provided on these other sections of the ICRP once submitted.</p>
6	KP2	<p>Comment The original OP2 had proposed closure criteria that read: “No significant deformation and degradation indicated at constructed banks, confirmed by visual monitoring as part of site geotechnical inspections completed by a professional engineer.” It is unclear what is meant by significant (vs not significant) for these criteria.</p> <p>Recommendation We recommend that De Beers confirm whether the proposed closure criteria for this objective has changed and if not, to provide clarity around how significant impacts will be measured.</p>	<p>Mar 1: As per the Board's workplan, criteria will undergo a focussed review following completion of the focussed review of objectives. See response to OP2 for clarity on Engineering Assessment responsibility</p>	<p>Noted.</p> <p>As indicated in ID11, this comment was submitted in error.</p>
7	KL2	<p>Comment The original KL2 had proposed closure criteria that read: “No significant deformation and degradation indicated at constructed banks, confirmed by visual monitoring as part of site geotechnical inspections completed by a professional engineer.” It is unclear what is meant by significant (vs not significant) for these criteria.</p>	<p>Mar 1: As per the Board's workplan, criteria will undergo a focussed review following completion of the focussed review of objectives. See response to OP2 for clarity on Engineering Assessment responsibility</p>	<p>As indicated in the ‘Item Description’ section of the Online Review System, this review was specific to the Objectives of the ICRP as directed by the Board to De Beers on January 12, 2017.</p> <p>The draft Work Plan provides further</p>

		<p>Recommendation We recommend that De Beers confirm whether the proposed closure criteria for this objective has changed and if not, to provide clarity around how significant impacts will be measured.</p>		<p>details for the ongoing review and analysis of the ICRP (including criteria). Comments and Recommendations are encouraged to be provided on these other sections of the ICRP once submitted.</p>
8	MR1	<p>Comment The original MR1 had proposed closure criteria that read: "No significant deformation and degradation is indicated at Mine Rock Piles by visual monitoring as part of site geotechnical inspections completed by a professional engineer." It is unclear what is meant by significant (vs not significant) for these criteria.</p> <p>Recommendation We recommend that De Beers confirm whether the proposed closure criteria for this objective has changed and if not, to provide clarity around how significant impacts will be measured.</p>	<p>Mar 1: As per the Boards workplan for the ICRP, the proposed criteria will be reviewed after the objectives have been approved. See response to OP2 for clarity on Engineering Assessment responsibility</p>	<p>As indicated in the 'Item Description' section of the Online Review System, this review was specific to the Objectives of the ICRP as directed by the Board to De Beers on January 12, 2017.</p> <p>The draft Work Plan provides further details for the ongoing review and analysis of the ICRP (including criteria). Comments and Recommendations are encouraged to be provided on these other sections of the ICRP once submitted.</p>
9	MR4	<p>Comment In its explanation for the changes to MR4, De Beers stated "A component of reclamation research is to evaluate where priority areas for vegetation could be integrated into the mine rock pile if it is decided that we want to encourage wildlife to access and use the mine rock piles."</p> <p>Recommendation The previous version of the ICRP stated: "De Beers has agreed to investigate potential opportunities (e.g. access and egress ramps on Mine Rock Piles for caribou travel, revegetation options at priority areas on or around the Mine Rock Piles) for the final landform design that may provide improved habitat quality for local wildlife expected to</p>	<p>Mar 1: As per the Board's workplan, criteria will undergo a focussed review following completion of the focussed review of objectives. As per the Boards's workplan for the ICRP, the reclamation research will be reviewed following focussed review of the Objectives and Criteria.</p>	<p>As outlined in Part J, item 1 b) of Water Licence MV2005L2-0015, the ICRP shall:</p> <p><i>Include a research plan for investigating cover options for the Waste Rock piles and processed kimberlite;</i></p> <p>The draft Work Plan provides further details for the ongoing review and analysis of the ICRP (including criteria). Comments and</p>

		return to the Mine area post-closure." The mine rock piles have the potential to provide various habitat functions including perch sites, shelter, concealment, escape cover, nest sites and den sites. The above noted comments make it appear as if De Beers will make the final determination regarding wildlife use of the mine rock pile. We recommend that Ni Hadi Xa be used to inform the decision on the reclamation of the mine rock piles and that the various habitat functions, mentioned above, be researched for the final landform design and be included in the research objectives.		Recommendations are encouraged to be provided on these other sections of the ICRP once submitted.
10	PK1	Comment The original PK1 had proposed closure criteria that read: "No significant deformation and degradation indicated at PK facilities, confirmed by visual monitoring as part of site geotechnical inspections completed by a professional engineer." It is unclear what is meant by significant (vs not significant) for these criteria. Recommendation We recommend that De Beers confirm whether the proposed closure criteria for this objective has changed and if not, to provide clarity around how significant impacts will be measured.	Mar 1: As per the Board's workplan, criteria will undergo a focused review following completion of the focused review of objectives. See response to OP2 for clarity on Engineering Assessment responsibility	As indicated in the 'Item Description' section of the Online Review System, this review was specific to the Objectives of the ICRP as directed by the Board to De Beers on January 12, 2017. The draft Work Plan provides further details for the ongoing review and analysis of the ICRP (including criteria). Comments and Recommendations are encouraged to be provided on these other sections of the ICRP once submitted.
11	Error	Comment Comment #6 was submitted in error. Please ignore. Recommendation No recommendation	Mar 1: acknowledged	Noted.
Environment and Climate Change Canada: Melissa Pinto				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Analysis
1	General	Comment ECCC has reviewed the De Beers Gahcho Kue Interim Closure and Reclamation Plan	Mar 1: acknowledged	Noted.

		Objectives according to its mandate and has no comments at this time. Recommendation None		
Fisheries and Oceans Canada: Laura Watkinson				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Analysis
1	General	Comment DFO has reviewed the De Beers Gahcho Kue Interim Closure and Reclamation Plan in accordance with its mandate and does not have any comments at this time. Recommendation N/A	Mar 1: acknowledged	Noted.
GNWT - ENR: Central Email GNWT				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Analysis
6	General File	Comment (doc) ENR Letter with Comments and Recommendations Recommendation		Noted.
1	Topic 1: KL1	Comment There has been some discussion with regards to De Beers "supporting" a functioning habitat and traditional use within Kennady Lake as opposed to "establishing". De Beers has included several references from previous commitments and the Environmental Impact Review which illustrates similar language to "support". As noted in the Joint Closure Guidelines (2013), closure objectives should incorporate the principle of future use by considering various factors such as: . Local community values and culturally significant or unique attributes of the land; and . Land use of surrounding areas, and potential future use by humans and wildlife. Regarding community values and future use, at the October 2016 workshop, Ni Hada Xa requested that components of the DFO Authorization be integrated in the closure objectives (MVLWB meeting minutes for October 7, 2016 workshop). It is ENR's understanding these objectives include, in regards to Kennady Lake, "documented fish presence" at "appropriate life stages" in "successive years" of monitoring.	Mar 1: The objective as proposed is consistent with our Fisheries Authorization. De Beers does not believe that it is appropriate of the Board to re-create regulatory requirements already managed by a different regulatory agency (i.e. DFO), under the auspices of the water license. A detailed explanation of the choice of words was provided in the February 2nd submission of revised objectives for KL1.	KL1 states "Return Kennady Lake to a state that will support a functioning aquatic ecosystem and traditional uses". De Beers has legal obligations to adhere to the Fisheries Authorization. Having De Beers submit the additional information for this process is redundant as DFO enforces the Fisheries Act, therefore administering the Fisheries Authorization. De Beers has in the past provided documents related to the Fisheries Authorization as a "for your information" to the Board.

		<p>Recommendation 1) ENR recommends that closure objectives and criteria related to Kennady Lake be inclusive of terminology and requirements included in the Fisheries Act Authorization. ENR notes that some of the wording identified above would pertain to “establishing” versus “supporting” functioning habitat.</p>		
2	Topic 2: KL2	<p>Comment Objective KL2 references "constructed banks" of Kennady Lake and an example given relates to banks constructed between waste rock piles and the lake. In our comments dated November 10, 2016, we requested that De Beers outline all locations where constructed banks will be located within Kennady Lake.</p> <p>Recommendation 1) ENR notes De Beers’ new commitment to include this information in future iterations of the ICRP and we will review that information at that time.</p>	Mar 1: acknowledged	Noted.
3	Topic 3: MR3 and PK3	<p>Comment Regarding the closure objective related to the chemical stability of the mine rock piles (MR3) and processed kimberlite pile (PK3), De Beers has added objectives to align with the closure guidelines which they believe are clearer and simpler to interpret than those proposed earlier. They are stated as follows: MR3 - Chemically stable mine rock piles that do not endanger human, wildlife, or environmental health and safety. PK3 - Chemically stable Processed Kimberlite Facilities (Piles) that do not endanger human, wildlife, or environmental health and safety ENR believes that this still meets the intent of our recommendation.</p> <p>Recommendation 1) ENR concurs with the revisions made by De Beers.</p>	Mar 1: acknowledged	Noted.
4	Topic 4: Re-vegetation	<p>Comment ENR notes that several comments were brought forth by stakeholders regarding a more active role by De Beers in terms of re-vegetation efforts at site (MR4, PK4, I3). ENR supports these comments and believes that re-vegetation</p>	Mar 1: De Beers is eager to begin research however we will not begin any research prior to the approval of the reclamation research plan. Revegetation trials are expected to begin within 12 months of the approval of the	Noted. As outlined in Part J, item 1 b) of Water Licence MV2005L2-0015, the ICRP shall:

		<p>research and field trials are an important component of Closure and Reclamation Research Plans. This is a standard component of other closure plans at other mine sites in the NWT.</p> <p>Recommendation 1) ENR recommends that closure objectives related to revegetation be finalized early in the process so that research plans in this area can begin to be developed.</p>	<p>Reclamation Research Plan and ICRP.</p>	<p><i>Include a research plan for investigating cover options for the Waste Rock piles and processed kimberlite;</i></p>
5	<p>Topic 5: "Safe" as an Objective</p>	<p>Comment Several parties communicated concern with the use of the word "safe" in relation to various objectives including air and water quality. ENR is also concerned with the uncertainty in this terminology, as there are challenges with establishing suitable criteria for ambiguous closure objectives. This is also one of the reasons that ENR has made previous comments regarding the need for appropriate water quality objectives to be developed earlier in the process in order to provide clarity as the process progresses (November 10, 2016 - ENR comments to MVLWB on ICRP). ENR has recently been experiencing specific divergent opinions on what is "safe" at other mine sites that are nearer to closure, such as should Human Health Risk Assessments or Aquatic Life Benchmarks be used to determine "safe" conditions. ENR cautions that the specific discussions about what is safe in terms of ambiguous closure objectives results in lost time having meaningful discussion and supporting study on what is actually achievable upon closure in efforts to avoid post-closure conditions that require a Risk Assessment.</p> <p>Recommendation 1) ENR agrees with parties that more objectively measureable terminology and overall intent should be included in closure objectives and the term "safe" should be avoided. This would provide additional certainty in the closure</p>	<p>Mar 1: The MVLWB directed De Beers to provide a definition of Safe. De Beers did so. De Beers believes the term is appropriate for inclusion in the objectives, consistent with the approved objectives at Snap Lake and the Guidelines for the Closure and Reclamation of Advanced (MVLWB/ANNDCC November 2013) which uses this word throughout, and in particular in the example objectives provided within those guidelines (e.g. "Examples of objectives for the closure and reclamation of open pit mine workings are as follows.....water quality in flooded pits is safe for humans, aquatic life, and wildlife"). Please note that some reviewers are supportive of using the term 'safe' for the very fact that it is widely understood - see LKDFN comments 5 and 6. The criteria are where the measurability of achieving objectives is set and as such where statements concerning territorial/federal guidelines or site-specific risk-based criteria would occur. As per the Board's workplan, criteria will undergo a focussed review following completion of the focussed review of objectives.</p>	<p>Objectives are meant to be clear and measurable but which aren't too prescriptive so that they unintentionally restrict reasonable closure options from being considered.</p> <p>The draft Work Plan provides further details for the ongoing review and analysis of the ICRP (including criteria). Comments and Recommendations are encouraged to be provided on these other sections of the ICRP once submitted.</p>

		planning process, especially when directing reclamation research, developing closure criteria and determining whether objectives are met at closure.		
Lutsel K'e Dene First Nation - Chief or Wildlife, Lands and Environment: Lauren King				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Analysis
1	Site wide objectives; SW4	<p>Comment Creating a "physically stable" area does not restore the mine or a portion of the mine to be compatible with traditional use.</p> <p>Recommendation LKDFN recommends that at least 50% of the mine site area is compatible with traditional use including restoring area designated as high quality or good caribou habitat.</p>	<p>Mar 1: The intent of SW4 is to address the physical stability of the entire project site. A physically stable site will contribute to the safe use of the land by traditional users and wildlife. Each feature of the mine site will have different land use expectations and utility for wildlife, and therefore it is not appropriate for objectives related to those outcomes to apply site wide. The objectives related to the Mine Rock Piles, Process Kimberlite Facilities, and Infrastructure areas address land use and terrestrial aspects for the project. With regards to land use and habitat, De Beers has previously provided a response to these topics (see De Beers Feb 2, 2017 response to the Board's direction on MR4, PK4, and I2). Further specificity regarding how to measure progress towards the objectives will be discussed for the closure criteria and will be informed by the reclamation research plan. As per the Board's workplan, criteria will undergo a focused review following completion of the focused review of objectives.</p>	<p>Board staff agree with De Beers relating to the objective. The comments and recommendation submitted by LKDFN relates more to the criteria of achieving the objective.</p> <p>The draft Work Plan provides further details for the ongoing review and analysis of the ICRP (including criteria). Comments and Recommendations are encouraged to be provided on these other sections of the ICRP once submitted.</p>
2	Kennedy Lake; KL1	<p>Comment The term "support" and "functioning" are ambiguous</p> <p>Recommendation LKDFN recommends that clearer language is used. Kennedy Lake should be safe for fish and people to drink</p>	<p>Mar 1: De Beers agrees with the reviewer that Kennedy Lake should be safe for fish and people to drink. The objective is written in such a way as to be inclusive of those traditional uses, as well as the return of a functioning aquatic ecosystem. As per the Board's workplan for the ICRP, criteria are not under review at this time, but</p>	<p>Objectives are meant to be clear and measurable but which aren't too prescriptive so that they unintentionally restrict reasonable closure options from being considered.</p>

			will undergo a focussed review following completion of the review of the Objectives.	The draft Work Plan provides further details for the ongoing review and analysis of the ICRP (including criteria). Comments and Recommendations are encouraged to be provided on these other sections of the ICRP once submitted.
3	Kennady Lake; KL2	<p>Comment No mention of re-naturalization</p> <p>Recommendation The objective should include re-vegetation / re-naturalization</p>	<p>Mar 1: KL2 is focussed on physical stability, and not aquatic biotic components. KL1 is the objective related to returning Kennady lake to a functioning aquatic ecosystem. It is assumed that shoreline vegetation would contribute to meeting that objective, though the specific areas to be targeted for aquatic vegetation have not yet been determined. The reclamation research plan proposed in the ICRP V.3 included a component to develop an aquatic vegetation plan for Kennady lake. As per the Boards workplan for the ICRP, reclamation research, and establishment of criteria, will be reviewed through a focussed review following the completion of the Objectives review</p>	<p>During the EIR, De Beers committed to re-vegetate riparian and aquatic habitat.</p> <p>The draft Work Plan provides further details for the ongoing review and analysis of the ICRP (including criteria). Comments and Recommendations are encouraged to be provided on these other sections of the ICRP once submitted.</p>
4	Mine Rock Piles; MR1	<p>Comment No mention of vegetation of rock piles</p> <p>Recommendation LKFDFN recommends that a portion of the rock pile be vegetated</p>	<p>Mar 1: De Beers cannot agree to an objective requiring revegetation of rock piles. At this time, it is not clear that the rock piles can, or even should be revegetated. Any objective including revegetation of rock piles is not achievable. As per the Boards workplan for the ICRP, Research regarding revegetation will be reviewed through a focussed review following the completion of the review of the objectives and criteria.</p>	<p>As outlined in Part J, item 1 b) of Water Licence MV2005L2-0015, the ICRP shall:</p> <p><i>Include a research plan for investigating cover options for the Waste Rock piles and processed kimberlite;</i></p> <p>The draft Work Plan provides further details for the ongoing review and analysis of the ICRP (including</p>

				criteria). Comments and Recommendations are encouraged to be provided on these other sections of the ICRP once submitted.
5	MR2	<p>Comment Issue with the use of "unacceptable" risk</p> <p>Recommendation The objectives should state "...will be safe for aquatic life, people and wildlife"</p>	<p>Mar 1: De Beers does not object to the proposed wording adjustment of MR2 to the following "Contaminated rock and non-hazardous waste disposal areas within piles will be safe for aquatic life, people or wildlife."</p>	Noted.
6	MR3	<p>Comment Issue with the use of "endanger"</p> <p>Recommendation Should replace with the word "safe" for humans and wildlife</p>	<p>Mar 1: De Beers does not object to the proposed wording adjustment of MR3 to the following "MR3 - Chemically stable mine rock piles that are safe for aquatic life, humans and wildlife."</p>	Noted.
7	MR4	<p>Comment Refusal to vegetate rock piles</p> <p>Recommendation LKDFN agrees with other Parties comments that a portion of the rock piles should be vegetated. A commitment to investigate vegetating rock piles in the research plan is not sufficient.</p>	<p>Mar 1: De Beers wishes to clarify that not all parties agree that the mine rock piles should be vegetated. Some parties have expressed a preference to keep wildlife, and in particular caribou, off of the mine rock piles, rather than encouraging them to access the mine rock piles. De Beers cannot commit to an objective that includes revegetation of mine rock piles as stated previously (see De Beers response to the Boards direction on MR4).</p>	<p>As outlined in Part J, item 1 b) of Water Licence MV2005L2-0015, the ICRP shall:</p> <p><i>Include a research plan for investigating cover options for the Waste Rock piles and processed kimberlite;</i></p> <p>The draft Work Plan provides further details for the ongoing review and analysis of the ICRP (including criteria). Comments and Recommendations are encouraged to be provided on these other sections of the ICRP once submitted.</p>
8	I2	<p>Comment Objective is too vague</p> <p>Recommendation LKDFN strongly recommends that at least 45% of the disturbed areas be actively re-vegetated and the area identified as very good and good caribou habitat</p>	<p>Mar 1: It is not possible at this time, prior to the completion of any revegetation research, to agree to an objective requiring a certain percentage of revegetation. Further specificity regarding how</p>	Objectives are meant to be clear and measurable but which aren't too prescriptive so that they unintentionally restrict

		should be prioritized and actively re-vegetated.	to measure progress towards the objective will be discussed for the closure criteria. As per the Board's workplan, criteria will undergo a focussed review following completion of the focussed review of objectives.	reasonable closure options from being considered. As outlined in Part J, item 1 b) of Water Licence MV2005L2-0015, the ICRP shall: <i>Include a research plan for investigating cover options for the Waste Rock piles and processed kimberlite;</i> The draft Work Plan provides further details for the ongoing review and analysis of the ICRP (including criteria). Comments and Recommendations are encouraged to be provided on these other sections of the ICRP once submitted.
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North Slave Metis Alliance: Shin Shiga

ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Analysis
1	Use of "safe" in objectives (SW1, SW3, I1)	Comment (Submitted after Due Date) A number of parties, including NSMA previously, have commented on the use of the word "safe" in establishing the closure criteria. NSMA concurs with the comment provided with the Government of the Northwest Territories Department of Environment and Natural Resources (ENR) that it provides for better discussion if more specific objective are set early in the process. In general, NSMA would like objectives that would achieve; CCME guidelines (for water, aquatic life) or baseline condition (pre-development), whichever that most minimizes waste deposition. In demonstrated cases where such objective is not achievable, risk-based closure	Mar 1: Repeat Comment. See response to ID2 Reviewer 0 above.	Objectives are meant to be clear and measurable but which aren't too prescriptive so that they unintentionally restrict reasonable closure options from being considered. The draft Work Plan provides further details for the ongoing review and analysis of the ICRP (including criteria). Comments and Recommendations are encouraged to be provided on these

		objective/criteria may be acceptable. Recommendation NSMA recommends that use of the word "safe" be avoided in favor of more specific terminology that is conducive to measurement, and provides for more clarity as to what closure condition may look like.		other sections of the ICRP once submitted.
2	KL1	Comment (Submitted after Due Date) NSMA previously shared our concerns respecting the use of the word "support", as it does not directly promises presence of fish. In De Beers' response, the company cites the Gahcho Kue Panel Report of Environmental Impact Review and Reasons for Decision, Suggestion 1: "Post-closure conditions in all waters in the region, including the refilled Kennady Lake, shall support all traditional water uses. Traditional uses include: drinking the water; harvesting and consuming fish..." NSMA understands that this Suggestion forms a part of the company's list of commitments. NSMA also reads that ability to harvest fish is included in the commitment, which seems to implies presence of fish. If this is a correct reading of the commitment, NSMA accepts the objective. Recommendation Proponent please clarify whether the commitment to "post-closure conditions in all waters...shall support...harvesting and consuming fish" implies presence of fish in the water, and that criteria will accordingly include traditional harvest of fish. If this is not the case, NSMA supports the ENR's comments to reflect the conditions of DFO authorization in this objective.	Mar 1: Repeated Comment. See response to ID3 reviewer 0 above.	Objectives are meant to be clear and measurable but which aren't too prescriptive so that they unintentionally restrict reasonable closure options from being considered. The draft Work Plan provides further details for the ongoing review and analysis of the ICRP (including criteria). Comments and Recommendations are encouraged to be provided on these other sections of the ICRP once submitted.
3	Revegetation and Aesthetics (general comment, SW, MR, and PK)	Comment (Submitted after Due Date) NSMA commented in support of revegetation of the mine site and efforts to make the site blends with the surrounding landscape. NSMA's interest is to bring the site as close to the pre-development condition as possible, be it infrastructure areas, rock piles, or the PKC facility. NSMA	Mar 1: Repeated Comment. See response to ID4 reviewer 0 above.	As outlined in Part J, item 1 b) of Water Licence MV2005L2-0015, the ICRP shall: <i>Include a research plan for investigating cover options for the</i>

	<p>understands that it will never be the same. To that end, NSMA appreciates the company's commitments in the Reclamation Research Plan and to do "an evaluation (which) will consider the physical aspects of re-vegetation, such as re-contouring, erosion control techniques, seedbed preparation, surface roughening, and the use of soil amendments, which collectively promote natural secondary succession" (commitment no. 31). Having that in mind, it would be irresponsible for NSMA to accept an objective that does not promise the best possible (technologically and economically) outcome to the land. It is NSMA's view that the current proposed wording such as "promote accelerated natural recovery..." does not compel the company to do the best possible job in restoring the vegetation and aesthetics of the mine site.</p> <p>Recommendation NSMA recommends that the objective reflects the reclamation research efforts in revegetation techniques. The wording should assure the affected Aboriginal land users that the company will in fact utilize the research outcome to the maximum extent (see also DKFN comment 9, which NSMA supports). In NSMA's view, this allows the company to avoid committing to an objective that is not achievable.</p>		<p><i>Waste Rock piles and processed kimberlite;</i></p> <p>The draft Work Plan provides further details for the ongoing review and analysis of the ICRP (including criteria). Comments and Recommendations are encouraged to be provided on these other sections of the ICRP once submitted.</p>
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February 23, 2017

Jen Potten
Regulatory Officer
Mackenzie Valley Land and Water Board
7th Floor – 4910 50th Avenue
P.O. Box 2130
Yellowknife, NT
X1A 2P6

Dear Ms. Potten,

**Re: DeBeers - Gahcho Kue
Water Licence – MV2005L2-0015
Interim Closure and Reclamation Plan – Objectives
Request for Comment**

The Department of Environment and Natural Resources (ENR), Government of the Northwest Territories has reviewed the information at reference based on its mandated responsibilities under the *Environmental Protection Act*, the *Forest Management Act*, the *Forest Protection Act*, the *Species at Risk (NWT) Act*, the *Waters Act* and the *Wildlife Act* and provides the following comments and recommendations for the consideration of the Board.

Topic 1: KL1

Comment(s):

There has been some discussion with regards to De Beers “supporting” a functioning habitat and traditional use within Kennady Lake as opposed to “establishing”. De Beers has included several references from previous commitments and the Environmental Impact Review which illustrates similar language to “support”.

As noted in the Joint Closure Guidelines (2013), closure objectives should incorporate the principle of future use by considering various factors such as:

- Local community values and culturally significant or unique attributes of the land; and
- Land use of surrounding areas, and potential future use by humans and wildlife.

Regarding community values and future use, at the October 2016 workshop, Ni Hada Xa requested that components of the DFO Authorization be integrated in the closure objectives (MVLWB meeting minutes for October 7, 2016 workshop). It is ENR's understanding these objectives include, in regards to Kennady Lake, "documented fish presence" at "appropriate life stages" in "successive years" of monitoring.

Recommendation(s):

- 1) ENR recommends that closure objectives and criteria related to Kennady Lake be inclusive of terminology and requirements included in the *Fisheries Act* Authorization. ENR notes that some of the wording identified above would pertain to "establishing" versus "supporting" functioning habitat.

Topic 2: KL2

Comment(s):

Objective KL2 references "constructed banks" of Kennady Lake and an example given relates to banks constructed between waste rock piles and the lake. In our comments dated November 10, 2016, we requested that De Beers outline all locations where constructed banks will be located within Kennady Lake.

Recommendation(s):

- 1) ENR notes De Beers' new commitment to include this information in future iterations of the ICRP and we will review that information at that time.

Topic 3: MR3 and PK3

Comment(s):

Regarding the closure objective related to the chemical stability of the mine rock piles (MR3) and processed kimberlite pile (PK3), De Beers has added objectives to align with the closure guidelines which they believe are clearer and simpler to interpret than those proposed earlier. They are stated as follows:

MR3 – Chemically stable mine rock piles that do not endanger human, wildlife, or environmental health and safety.

PK3 – Chemically stable Processed Kimberlite Facilities (Piles) that do not endanger human, wildlife, or environmental health and safety

ENR believes that this still meets the intent of our recommendation.

Recommendation(s):

- 1) ENR concurs with the revisions made by De Beers.

Topic 4: Re-vegetation

Comment(s):

ENR notes that several comments were brought forth by stakeholders regarding a more active role by De Beers in terms of re-vegetation efforts at site (MR4, PK4, I3).

ENR supports these comments and believes that re-vegetation research and field trials are an important component of Closure and Reclamation Research Plans. This is a standard component of other closure plans at other mine sites in the NWT.

Recommendation:

- 1) ENR recommends that closure objectives related to revegetation be finalized early in the process so that research plans in this area can begin to be developed.

Topic 5: “Safe” as an Objective

Comment(s):

Several parties communicated concern with the use of the word “safe” in relation to various objectives including air and water quality. ENR is also concerned with the uncertainty in this terminology, as there are challenges with establishing suitable criteria for ambiguous closure objectives.

This is also one of the reasons that ENR has made previous comments regarding the need for appropriate water quality objectives to be developed earlier in the process in order to provide clarity as the process progresses (November 10, 2016 – ENR comments to MVLWB on ICRP). ENR has recently been experiencing specific divergent opinions on what is “safe” at other mine sites that are nearer to closure, such as should Human Health Risk Assessments or Aquatic Life Benchmarks be used to determine “safe” conditions. ENR cautions that the specific discussions about what is safe in terms of ambiguous closure objectives results in lost time having meaningful discussion and supporting study on what is actually achievable upon closure in efforts to avoid post-closure conditions that require a Risk Assessment.

Recommendation:

- 1) ENR agrees with parties that more objectively measurable terminology and overall intent should be included in closure objectives and the term “safe” should be avoided. This would provide additional certainty in the closure planning process, especially when directing reclamation research, developing closure criteria and determining whether objectives are met at closure.

Comments and recommendations were provided by ENR technical experts in the Water Resources Division and the North Slave Region and were coordinated and collated by the Environmental Impact Assessment Section, Conservation, Assessment and Monitoring Division (CAM).

Should you have any questions or concerns, please do not hesitate to contact Patrick Clancy, Environmental Regulatory Analyst at (867) 767-9233 Ext: 53096 or email patrick.clancy@gov.nt.ca.

Sincerely,



Patrick Clancy
Environmental Regulatory Analyst
Environmental Impact Assessment Section
Conservation, Assessment and Monitoring Division
Department of Environment and Natural Resources
Government of the Northwest Territories