

REVIEW COMMENT TABLE

EA1819-01 - Diavik Letter Re: Scope Considerations (MVEIRB)

File(s):**Proponent:** Diavik Diamond Mines (2012) Inc.**Reviewer Comments Due By:** May 10, 2019**Proponent Responses Due By:** May 13, 2019**Documents:****Item For Review Distributed On** May 3 at 17:08 [Distribution List](#)
May 6 at 11:01 [Distribution List](#)**Item Description**

The Review Board issued its [Scope of Environmental Assessment and Reasons for Decision](#) for this EA on April 18, 2019. Diavik's [May 2, 2019 letter](#) requested clarification of the Review Board's scope considerations. Diavik discussed how it interpreted the Review Board's scope of development and scope of assessment and requested confirmation of its understanding. Below, Review Board staff provide a summary of the content of Diavik's letter and the considerations for scope.

Regarding the **scope of development** (what is the proposed project is):

- The Board's scope of development said the EA includes transporting, depositing, and storing processed kimberlite "*into pits and underground mine workings*".
- Diavik wants to confirm that this phrase means "*into A418, A154, and/or A21 pits and underground mine workings*".
- The Review Board notes that Diavik's wording includes any one of these pits or any combination of these pits.

Regarding the **scope of assessment** (what impacts the Review Board assesses, and how):

- Diavik has requested that this environmental assessment examine
 - the impacts of putting processed kimberlite from the process plant into existing pits and mine workings, as well as
 - any additional adverse impacts of a closure option it is considering (that is, adding processed kimberlite *from the existing containment facility, including fine processed kimberlite*, to the pits and mine workings beneath them).
- The Review Board notes that this change would mean examining the impacts of what is now proposed in combination with the impacts of what could happen in the future (that is, impacts of additional processed kimberlite).

General Reviewer Information

Parties are invited to review Diavik's letter and comment on the content and on any implications for the environmental assessment.

Contact Information

Catherine Fairbairn 867 766-7054 Kate Mansfield 867-766-7062

Comment Summary

CanNor NWT Region: Adrian Paradis

ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Response
1	Fish and Fish Habitat Protection Program	<p>Comment NPMO on behalf of DFO notes that all of DFO's comments provided on March 22, 2019 relating to the scope of development, assessment, and geography have been incorporated into MVEIRB's Scope of the Environmental Assessment and Reasons for Decision (April 18, 2019). After review of DDMI's May 2, 2019 letter DFO has no comments and believe that all other concerns relating to DFO's mandate can be addressed in during the technical phase of the environmental assessment.</p> <p>Recommendation N/A</p>	<p>May 13: DDMI appreciates this confirmation from DFO.</p>	
2	General	<p>Comment NPMO on behalf of the Federal Departments have no further comments on the scope of the environmental assessment.</p> <p>Recommendation N/A</p>	<p>May 13: DDMI appreciates this confirmation from NPMO.</p>	


Environmental Monitoring Advisory Board: EMAB EMAB

ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Response
1	Clarifications on scope of development and scope of assessment - processed kimberlite into pits	<p>Comment During the pre-screening review of Diavik's application to deposit PK into mine workings, EMAB stated its support in principle for the deposit of PK into the pits (coarse PK, fine PK and extra-fine PK also known as slimes), as long as it can be done safely and there are no significant adverse environmental impacts to water quality or the health of the aquatic environment. In particular EMAB noted its support for the concept of slimes being removed from the PKC and deposited to the pits as this was seen to improve the likelihood of a successful closure of the PKC. EMAB's previous comments on this topic are included below (from August 1, 2018 submission to WLWB). EMAB notes that parts of the original comments below have been removed to make them relevant to MVEIRB's clarification.</p> <p>Recommendation EMAB supports including PK deposition from any source into the Diavik mine workings in the scope of the Environmental Assessment. EMAB would prefer that the scope include the activities of re-mining in the PKC and looks forward to Diavik</p>	<p>May 13: DDMI appreciates EMAB's continued support for including processed kimberlite (PK) deposition from any source into the Diavik Mine workings. DDMI understands EMAB's preference to include the activities associated with re-mining in the Processed Kimberlite Containment (PKC) Facility within the current scope but clarifies that DDMI has not yet advanced this work sufficiently for inclusion at this time. If there is positive determination from the Mackenzie Valley Environmental Impact Review Board regarding PK deposition and the Wek'èezh?i Land and Water Board subsequently approves the Water License amendment, the DDMI will be in a position to advance engineering work to consider the closure options for the PKC Facility, including consideration of re-mining extra fine processed kimberlite (EFPK) with deposition in completed mine workings.</p>	

		advancing this element of the proposed project.	
2	Application Section 10 - Potential Impacts and Mitigation; and Amendment Overview 3.3.6 and 4.6.1	<p>Comment A key mitigation measure is relocation of very fine PK (slimes) from the PKC to the A418 pit. From an environmental perspective, the primary advantage of depositing PK into mine workings is the ability to store PK, especially slimes, in a location with virtually no long-term physical stability risks. However, at Diavik most of the long-term physical stability risk associated with PK storage already exists because the Processed Kimberlite Containment (PKC) Facility contains Fine PK materials and slimes that will require long-term physical containment and create challenges for closure. DDMI's application identifies the possibility of relocating slimes from the PKC Facility to mine workings, but there is no information about the feasibility or effects of relocating the material.</p> <p>Recommendation EMAB strongly supports the concept of placing the slimes from the PKC into the A418 pit, and encourages Diavik to pursue this concept.</p>	May 13: DDMI appreciates EMAB's clarity on this issue.
3	Application Section 10 - Potential Impacts and Mitigation; and Amendment Overview 3.3.6 and 4.6.1 continued	<p>Comment Relocation of slimes into mine workings should be seen as an opportunity that arises from use of mine workings for PK storage. Primarily it is an opportunity to reduce long-term physical stability risks at the site – risks that are inherent in the current closure plan for the PKC Facility. If Diavik is able to relocate the slimes and use a dry cover to close the PKC this concept would have a greater likelihood of success than the current proposal that includes a pond and spillway.</p> <p>Recommendation see recommendation above</p>	May 13: DDMI is supportive of EMAB's comment on this issue.
4	Clarifications on scope of development and scope of assessment - confirmation that the phrase "into pits and underground mine workings" means into A418, A154 and/or A21 pits	<p>Comment During the MVEIRB scoping review of Diavik's application to deposit PK into mine workings, EMAB stated that the scope should be limited to the A418 pit, Lac de Gras and effects on downstream users due to lack of information on potential impacts in other pits. EMAB's previous comment on this topic is provided below (from March 22, 2019 submission to MVEIRB).</p> <p>Recommendation None</p>	May 13: See DDMI comments below.

5	Scoping	<p>Comment None</p> <p>Recommendation Geographic scope should include the A418 pit, Lac de Gras and effects on downstream users, in terms of fish and water quality as well as the communities of traditional users. Given the lack of information on the potential impacts in other pits, the proposal should be limited to A418 (see also comments on Engagement Record below).</p>	<p>May 13: The Summary Impact Statement will include relevant information for the option of processed kimberlite (PK) deposition in A154 and A21 including water quality modelling predictions for the same three scenarios (2a, 3a and 4a) as has been provided for A418 - the preferred mine location.</p>	
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GNWT - Lands: Katie Rozestraten

ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Response
7	General File	<p>Comment  Cover letter</p> <p>Recommendation</p>		
1	Timing and Content of Summary Impact Statement	<p>Comment Should the Review Board approve the changes to the scope of development and scope of assessment, the GNWT notes this will require Diavik to update its Summary Impact Statement (SIS). The current workplan has Diavik providing a SIS by May 16, 2019 which may be the same date the Review Board's final scope and reasons for decision are released to the public.</p> <p>Recommendation If the Review Board approves any changes to the scope, this new content should be captured in Diavik's Summary Impact Statement. Parties should have adequate time to consider any new information Diavik provides resulting from the change in scope. If Diavik submits an addendum or a smaller SIS after May 16 to address the possible changes in scope, parties should be given additional time to develop information requests regarding the new material.</p>	<p>May 13: The Summary Impact Statement to be submitted to the Mackenzie Valley Environmental Impact Review Board on May 16, 2019 will include the full scope of assessment as requested by DDMI.</p>	
2	Scope of Development	<p>Comment The GNWT understands that DDMI's modelling work to date has not included the deposition of PK to multiple pits.</p> <p>Recommendation The scope of development should only reflect either pit A418, A154, A21 and underground mine workings, or combination of pits and mine workings, for PK storage if DDMI can produce comprehensive modelling that reflects reasonably expected combination of deposition of PK (including PK types) to multiple pits. This information must</p>	<p>May 13: The Summary Impact Statement (SIS) will include relevant information for the option of processed kimberlite (PK) deposition in A154 and A21 including water quality modelling predictions for the same three scenarios (2a, 3a and 4a) as has been provided for A418 - the preferred mine location. The SIS will also include an assessment of the significance of effects and impacts to valued components from the deposition and storage of PK in A418, A154, and/or A21 mine workings.</p>	

		<p>be provided during the process to allow for sufficient time for evaluation of the material by parties and an opportunity to question DDMI on the results prior to the submission of interventions.</p>		
3	Scope of Development	<p>Comment The scope of development does not specify that "transporting, depositing, and storing processed kimberlite" includes processed kimberlite (PK) from the Processed Kimberlite Containment Facility (PKC Facility). If Diavik would like the effects "from all sources (including processed kimberlite from the PKC Facility)" to be assessed, the scope of development should specify that the PKC Facility is a source. If the re-mining of the PKC Facility is not captured under the scope of development, it is not directly clear how the effects of PK will be effectively assessed from that source. It will also be difficult to assess the potential benefit of re-mining PK from the PKC Facility if the re-mining of the PKC Facility (from Diavik's letter: "Having the ability to deposit any PK in mine workings provides a benefit for the closure of the PKC Facility in that it enables consideration of an additional option – re-mining and disposal in mine workings – that would not be possible without this project") is not included in the scope of development. Section 3.8 of MVEIRB's March 2004 Environmental Assessment Guidelines lists three criteria that are "used to determine whether or not a physical work or activity is an accessory development, and therefore should be included in the development." The first test, dependence, states that "if the principal development could not proceed without the undertaking of another physical work or activity, then that work or activity is considered part of the scoped development." In the GNWT's view, it will be challenging to assess the effects of PK from the PKC Facility if there is no way to get the PK from the PKC Facility into the pits. Assessing re-mining PK from the PKC Facility for effects would be straightforward if the scope of development includes the PKC Facility and as such, the scope of development should be amended.</p>	<p>May 13: DDMI understands that the Scope of Development can exclude the activity of re-mining extra fine processed kimberlite (EFPK) from the Processed Kimberlite Containment (PKC) Facility while the Scope of Assessment can include potential effects from deposition of EFPK. As noted in DDMI's response to the Wek'èezhii Land and Water Board's Information Requests following the technical session at the preliminary screening stage, the activity of re-mining EFPK from the PKC Facility is not sufficiently advanced at this time to assess potential environmental effects from this activity.</p>	

		<p>Recommendation Amend the scope of development to include re-mining, transporting, depositing, and storing processed kimberlite (from all sources, including processed kimberlite from the PKC Facility).</p>		
4	Terminology	<p>Comment Throughout Diavik Diamond Mines (2012) Inc. (DDMI's) May 2, 2019 letter to the Mackenzie Valley Environmental Impact Review Board (MVEIRB or the Review Board) regarding confirmation of the scope of development and assessment, DDMI refers only to "processed kimberlite (PK)". The GNWT notes that DDMI does not distinguish between coarse PK (CPK), fine PK (FPK), or unconsolidated fine PK (also referred to by DDMI as extra fine PK, slime fine PK, or slimes) as they have previously done in their ICRP (Versions 3.2 and 4.0) and initial PK Water Licence Amendment application. As discussed in DDMI's approved PKC Facility Plan - Version 3.2, CPK and FPK (including unconsolidated fine PK) require different management practices that directly impact water management and closure plans. DDMI states in their letter that "Having the ability to deposit any PK in mine workings provides a benefit for the closure of the PKC Facility in that it enables consideration of an additional option – re-mining and disposal in mine workings – that would not be possible without this project". While it appears this statement is referring to the source of PK (i.e., process plant PK vs re-mined PKC PK), it is unclear if this is also referring to the type of PK (e.g., FPK vs slimes). The GNWT is uncertain if the updated scope proposed by DDMI also contains FPK or unconsolidated fine PK that is included in the supernatant water from the PKC Facility. As such, the GNWT is seeking clarification from DDMI on the specific PK that is being requested for inclusion in the scope of this assessment. Specifically, DDMI should clarify whether this includes CPK, FPK and unconsolidated fine PK (including semi-fluid FPK).</p> <p>Recommendation The GNWT recommends DDMI clarify their request on updating the scope of environmental assessment to specify</p>	<p>May 13: DDMI clarifies that the only fraction of processed kimberlite (PK) that is not being considered for deposition in the mine workings is coarse processed kimberlite (CPK). The CPK material is currently transported by truck to the Processed Kimberlite Containment (PKC) Facility. If PK deposition to mine workings is approved, the CPK fraction will be minimized through changes within the process plant operations to revert to about an 20:80 mix of CPK:FPK (fine processed kimberlite) with the CPK trucked to the PKC Facility and the FPK deposited in the completed mine workings.</p>	

		<p>the type of processed kimberlite (PK) that is to be included. Specifically, DDMI should confirm if CPK, FPK and unconsolidated fine PK, including semi-fluid FPK, are to be included in the scope. The GNWT recommends DDMI use consistent terminology and definitions when discussing PK, in particular when referring to extra fine PK or slimes, in all future documentation.</p>	
5	<p>Diavik's proposed scope of assessment & clarity on future regulatory reviews</p>	<p>Comment The GNWT understands that DDMI is requesting clarity on the scope of the environmental assessment. The GNWT believes further clarity is required from DDMI and then from the Review Board in terms of scope of the EA.</p> <p>Recommendation The GNWT recommends that DDMI clarify what reasonably foreseeable activities and impacts are included in the scope of assessment based on the uncertainty identified by the GNWT. The GNWT recommends that the Review Board ultimately make a determination on the scope which includes both re-mining and the direct deposition from the processing plant of all forms of PK into one (or more) pit(s) and underground workings. The reasons for decision for the final scope should provide a clear and detailed explanation as to why components were or were not included in both the scope of development and the scope of assessment.</p>	<p>May 13: For clarity, DDMI requests that the Scope of Assessment include:</p> <ul style="list-style-type: none"> • Construction of up to three processed kimberlite (PK) slurry pipelines from the process plant to mine workings A418, A154 and/or A21. • Option for the construction of up to three extra-fine (EFPK) slurry pipelines from the Processed Kimberlite Containment (PKC) Facility to mine workings A418, A154 and/or A21. • Deposition of fine processed kimberlite (FPK) to one or more mine workings (A418, A154 and/or A21). • Option to deposit EFPK to one or more mine workings (A418, A154 and/or A21). • Decanting (collection of) PK porewater discharged during consolidation of PK slurry once placed in mine workings. • Infill of remaining space in up to three mine workings with water from Lac de Gras at mine closure. The above has been included as the basis for the Summary Impact Statement. To be certain the Scope of Assessment does not include potential effects directly related to the activity of re-mining EFPK from the PKC Facility. DDMI would also appreciate confirmation of the Scope of Assessment from the MVEIRB.
6	<p>Terminology</p>	<p>Comment "Re-mining" has not been defined. It is unclear if re-mining PK from the PKC Facility only means removal of PK. The GNWT has understood re-mining to include removal of PK from the PKC Facility and its transport and deposition into a pit.</p> <p>Recommendation Please clarify the definition of "re-mining".</p>	<p>May 13: DDMI suggests the definition of "re-mining" in the context of the PKC Facility would be the removal of any processed kimberlite that has already been deposited within the facility.</p>



MAY 10 2019

Kate Mansfield
Senior Environmental Assessment Officer
Mackenzie Valley Environmental Impact Review Board
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VIA ONLINE REVIEW SYSTEM

Dear Ms. Mansfield:

Territorial government's comments on the clarifications to scope for Diavik EA1819-01

The Government of the Northwest Territories (GNWT) has reviewed the Mackenzie Valley Environmental Impact Review Board's (Review Board) May 3, 2019 Notice of Proceeding – Clarifications to scope and workplan update. We have also reviewed and considered Diavik's May 2, 2019 letter requesting clarification on the Review Board's "scope considerations". After considering this material, our specific comments on the scope as proposed by Diavik have been uploaded to the Online Review System (ORS). Along with the specific comments provided on the ORS, the GNWT also requests that the Review Board provide a reasons for decision for the final scope for the environmental assessment, which should provide a fulsome reasoning as to why components were included, or not, in the scope of the environmental assessment. The components should be described in detail, so as to be explicit as to what is included and excluded from the scope.

If you have any questions or concerns, please contact Katie Rozestraten, Project Assessment Analyst, at Katie_Rozestraten@gov.nt.ca or 867-767-9180 ext. 24022 or me at Melissa_Pink@gov.nt.ca or 867-767-9180 ext. 24021.

Sincerely,

Melissa Pink
Manager, Project Assessment
Lands

Attachment: Comments in ORS format