#### PO Box 2301 Yellowknife, NT X1A 2P7

October 4, 2019

Mark Cliffe-Phillips
Executive Director
Mackenzie Valley Review Board
PO Box 938
200 Scotia Centre, 5102-50<sup>th</sup> Ave
Yellowknife, NT X1A 2N7
W: (867) 766-7055

Emails: mcliffephillips@reviewboard.ca

Dear Mr. Cliffe-Phillips:

# Re: NSMA Closing Remarks for the Diavik EA1819-01 – Processed Kimberlite in Mine Workings (PKMW)

The North Slave Metis Alliance ("NSMA") is pleased to submit its closing remarks to the Mackenzie Valley Environmental Impact Review Board ("the Board") for the Diavik Diamond Mines ("DDMI") Processed Kimberlite in Pits and Underground Environmental Assessment (EA1819-01).

NSMA would like to recognize the hard work done by both the Board as well as DDMI during this EA process. The Board led a fruitful and engaging discussion during the September 2019 Public Hearing and NSMA was pleased to hear the shared concerns expressed by participants, notably on acceptable water quality thresholds, potential impacts from climate change, and community involvement in pit lake monitoring. In addition, the NSMA appreciates DDMI's and the Board's willingness to address its questions and concerns outside of Hearing hours. The flexible availability of both the former and the latter assisted the NSMA in clarifying questions that cropped up during the Hearings.

DDMI has addressed and not addressed some of NSMA's concerns as listed in its August 07, 2019 Intervention Letter.

These following concerns have been addressed by DDMI:

- a. (NSMA Issue #3) Aquatic Effects Monitoring Plan ("AEMP") Benchmarks for Zinc;
- b. (NSMA Issue #4) Climate Change Impact on Meromictic Condition.

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DDMI is committed to addressing the following concerns:

- a. (NSMA Issue #4) climate change impact on meromictic conditions;
- b. (NSMA Issue # 6) the possibility of an acoustic monitoring program for fish inhabiting pit lakes below 40m depth;
- c. (NSMA Issue #7) updating the wildlife monitoring program to address concerns of nitrite concentrations impacting migratory waterfowl.

Unfortunately DDMI did not commit to addressing the following concerns:

1) Outstanding concern #1: Need for a change in significance rating criteria (Follow-up to NSMA Issue #2 - Significance Thresholds for Wildlife)

On Sept. 20, 2019, DDMI responded to NSMA's comments on water quality magnitude definitions for impacts on wildlife. NSMA does not agree with DDMI's response with respect to DDMI's application for the Board's acceptance of its significance rating criteria for impacts on wildlife. In our view, DDMI's significance rating criteria in the AEMP can be considered as precedent-setting and that considering it as such is not solely "for policy objectives" (i.e future mine developments). With that in mind, NSMA believes that caution should be taken with new types of project designs and that thorough monitoring should be in place to ensure disposal methods are effective. Furthermore, it is up to the proponent to prove negligible biological impact. To use non-conservative or outdated significance rating criteria for this project could set a dangerous precedent for other projects to do the same thing - the Board should seriously consider this possibility.

The NSMA also disagrees with DDMI's view that the only time and place to deal with Lac De Gras water quality issues is when its water licence application goes before the Mackenzie Valley Land and Water Board. The NSMA (as well as many other participants) is of the view that DDMI can address some of the AEMP significance rating criteria now with specific details of conceptual plans refined through the water licence phase. That said, at this stage in the environmental assessment, affected parties need to know that DDMI is measuring significance rating criteria correctly with a view to ensuring expeditious detection of changes to the environment (including water) in time to effectively apply adaptive mitigation measures.

With the above in mind, it is worth noting here that caribou herds (particularly the Bathurst herd) are in a very delicate state: more so than when the significance rating criteria thresholds were originally set in 1998. To ensure the sustainability of caribou in the north it is necessary to use criteria that reflect current water quality guidelines and environmental changes that caribou herds can tolerate.

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2) Outstanding concern #2: Water Quality Monitoring (in response to NSMA's undertaking from the Board during the EA Public Hearing in Sept. 2019)

Water quality monitoring in the pit lakes is necessary to ensure that the meromictic state is stable, maintained, and is meeting acceptable thresholds. Monitoring water quality in Lac de Gras should be conducted at regular intervals both prior to and after breaching of the pit dikes. Water quality monitoring should be done at the confluence of the pit lakes that flow into Lac de Gras, as well as at several near field sites (within 1km of the pits), and far field sites (>1km from the confluence with the pits). Monitoring should be conducted at various depths to ensure that water quality meets threshold objectives and that adaptive mitigation can be expeditiously implemented should any water quality parameters surpass set thresholds. NSMA requests that we be involved (a request also made by other participants) in the development of the water quality monitoring program for Lac de Gras.

3) Outstanding concern #3: Monitoring of Potential Effects to Fish Health (Follow-up on NSMA Issue #6 – Presence of Fish Species Below 40m Depth in Pit Lakes)

Monitoring of pit lakes for use by fish below 40m should be conducted using appropriate methods (e.g. acoustic monitoring) after the pit lakes have been reconnected with Lac de Gras. While most fish species are likely to stay above 40m there is potential for sculpin to seek refuge in deeper areas of the pit lakes. If fish are found occupying areas below 40m, water quality monitoring should be conducted at these depths and adaptive measures should be implemented to prevent fish from accessing areas where water quality is found to be above set water quality thresholds.

4) Outstanding concern #4: Community-Based Monitoring Post-Closure

NSMA members are very interested in participating in community-based monitoring initiatives respecting the closure and post-closure processes at DDMI's Lac De Gras diamond mine. NSMA recognizes the invaluable advice and wisdom provided by the Traditional Knowledge Panel. However, additional steps should be taken to utilize our members' (and other affected Aboriginal groups' members) expertise in environmental monitoring (e.g., water and wildlife) and remediation procedures.

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NSMA looks forward to DDMI addressing and implementing its commitments as listed in its letter of Sept. 20, 2019. However, NSMA is not prepared to support DDMI's proposed plan for the Depositing of Processed Kimberlite into Mine Workings, until DDMI addresses the four above-listed outstanding concerns.

Yours truly,

William (Bill) A. Enge

President

CC: Kate Mansfield – Senior Environmental Assessment Officer, Mackenzie Valley Review Board Catherine Fairbairn – Environmental Assessment Officer, Mackenzie Valley Review Board