

5019 – 52nd Street Yellowknife, NT X1A 1T5

July 4, 2019

Ms.Kate Mansfield
Senior Environmental Assessment Officer
Mackenzie Valley Environmental Impact Review Board
5102 – 50th Avenue
PO BOX 938
YELLOWKNIFE, NT X1A 2N7

VIA ONLINE REVIEW SYSTEM

Dear Ms. Mansfield,

Government of Canada Response to the Mackenzie Valley Environmental Impact Review Board Information Requests for Diavik EA1819-01

On behalf of the Government of Canada, please find the attached responses to the Mackenzie Valley Environmental Impact Review Board information requestst to Transport Canada, Environment and Climate Change Canada and the Department of Fisheries and Oceans.

We look forward to participating in further stages of the review of this proposed project. Should you have any questions, please do not hesitate to contact Senior Project Manager Adrian Paradis at 867-669-2595 or by email at adrian.paradis@canada.ca.

Sincerely,

Lisa Dyer

Director General

Northern Projects Management Office





CC:

David Rochette, Regional Director General, Crown Indigenous Relations and Northern Affairs Canada

Mary Taylor, Environmental Protection Operations Directorate Environment and Climate Change Canada

C. Thomas Hoggarth, Regional Director, Ecosystems Management Central and Arctic Region, Fisheries and Oceans Canada

Shari Currie, Regional Director General, Prairie and Northern Region, Transport Canada

David Kitchen, A/Director, Environmental Protected Persons, Health Canada Mark Hopkins, Director General, Crown Indigenous Relations and Northern Affairs



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P.O. Box 8550 3rd Floor, Programs – Environmental Services 344 Edmonton Street Winnipeg, Manitoba R3C 0P6

Your file Votre reference EA1819-01

Our file Notre reference 7075-70-2-186

July 4, 2019

Kate Mansfield and Catherine Fairbairn
Mackenzie Valley Environmental Impact Review Board
Box 938
#200 Scotia Centre
5102-50th Avenue
Yellowknife, NU, X0B 0C0

RE: Response to Information Request to Transport Canada – Depositing Processed Kimberlite into Pits and Underground – Diavik Diamond Mines Inc.

Dear Ms. Mansfield and Ms. Fairbairn,

Transport Canada (TC) received your letter dated April 29, 2019 in which the following question was posed as an Information Request to the department:

Information Request 6: Navigable Waters Permit requirements Directed to:

Transport Canada

Question:

1. If re-connection of the pits with Lac de Gras is not desirable or achievable based on observed water quality in the pits, please describe what impact this will have on Diavik's Navigable waters permit.

Transport Canada has reviewed the original approval (# 8200-2007-600656) issued by Transport Canada for a dyke, as part of the Diavik Diamond Mine. The approval states that the dyke would be breached during decommissioning of the project. Should the proponent deem that re-connection of the pits with Lac de Gras is no longer desirable or feasible, the proponent must apply to Transport Canada for an amendment to the approval for changes to the work. Any changes to the conditions and mitigations measures within the approval will be identified once the application has been received.

Should you have any questions regarding Transport Canada's response, please contact Jackie Barker via email at jackie.barker@tc.gc.ca or by telephone at (204) 983-4042.

Regards,

Anita Gudmundson

Regional Manager, Environmental Services Transport Canada / Government of Canada



Environmental Protection Operations Directorate Prairie & Northern Region 5019 52nd Street, 4th Floor P.O. Box 2310 01 Yellowknife, NT X1A 2P7

June 13, 2019

Via email to: cfairbairn@reviewboard.ca

Catherine Fairbairn **Environmental Assessment Officer** Mackenzie Valley Environmental Impact Review Board 200 Scotia Centre Box 938, 5102-50th Ave Yellowknife, NT X1A 2N7

Dear Catherine Fairbairn:

RE: EA1819-01 – Diavik Diamond Mines Incorporated – Processed kimberlite to mine workings Environmental Assessment - Response to Board **Information Requests**

ECCC File: 5100 000 015/011

MVEIRB File: EA1819-

Environment and Climate Change Canada (ECCC) has reviewed the Information Request from the Mackenzie Valley Environmental Impact Review Board (MVEIRB) and is submitting a response via email. ECCC's specialist advice is provided based on our mandate, in the context of the Canadian Environmental Protection Act, the pollution prevention provisions of the Fisheries Act, the Migratory Birds Convention Act, and the Species at Risk Act.

ECCC has provided the following information in response to the Board's Information Requests.

IR#2

1. When determining if the pits should be reconnected to Lac de Gras at closure, is water quality in the pit lake the only criteria that should be considered?

Water quality will be a primary consideration for reconnection of the pits to Lac de Gras at closure because of the potential for impacts to species at risk, migratory birds and other aquatic species. The Proponent will have to comply with subsection 36(3) of the Fisheries Act, which prohibits the deposit of a deleterious substance in waters frequented by fish. Section 5.1 of The Migratory Birds Convention Act prohibits persons





from depositing substances harmful to migratory birds in waters frequented by migratory birds or in a place from which the substance may enter such water or such an area. ECCC views water quality as the primary consideration

Prior to reconnection, the Proponent must ensure stability of the tailings, i.e. that no mixing, dissolution, resuspension or release of a deleterious substance will occur from the materials deposited in the pits, or from pore water that moves up through the tailings and into the pit waters. Monitoring and modeling of pore water and pit water quality would be needed during filling and closure. After reconnection to Lac de Gras, it will be important for water that may leave the pit to meet the criteria established by the water licence conditions.

2. If not, please describe what additional criteria for re-connection should be considered

If adequate water quality is observed, there are no other areas of concern within FCCC's mandate that should be considered.

IR#4

Would putting processed kimberlite into mine workings require authorization by ECCC under section 36 of the FA?

As the mine workings are not waters frequented by fish or connected to waters frequented by fish, authorization by ECCC under section 36 of the Fisheries Act is not required for putting processed Kimberlite into mine workings.

2. If processed kimberlite is deposited into the mine workings, would reconnection to Lac de Gras at closure be affected by any authorization made under section 36 of the FA?

Subsection 36(5) of the Fisheries Act enables the government to make regulations authorizing the deposit of deleterious substances; the mine is subject to the Metal and Diamond Mining Effluent Regulations (MDMER) enacted under this section. Any discharges from the pit to Lac de Gras would be subject to the MDMER until the mine becomes a recognised closed mine; thereafter the general prohibition on the deposit of deleterious substances (ss. 36(3) of the Fisheries Act) would apply.

The Fisheries Act defines deposit as "any discharging, spraying, releasing, spilling, leaking, seeping, pouring, emitting, emptying, throwing, dumping or placing". Therefore, if the tailings are placed in the bottom of the pits and if these tailings eventually enter the lake waters that are frequented by fish after such waters have been introduced or allowed to mix with the waters in the pits, this may constitute a "deposit" under subsection 36(3) of the Fisheries Act. This could occur should the tailings dissolve, resuspend or otherwise mix with the lake waters.





IR#5

1. Please confirm if the deposition of processed kimberlite into mine workings, or the reconnection of the mine workings to Lac de Gras, would be subject to the MDMER.

The deposit of kimberlite into the mine workings would not require an amendment to Schedule 2 of the MDMER for designation as a Tailings Impoundment Area as this does not constitute a deposit into waters frequented by fish. If the waters of the pit contain deleterious substances, then reconnection to Lac de Gras could potentially be considered a discharge or deposit, and subject to MDMER discharge criteria and the conditions of the MDMER.

2. If yes, please describe the authorizations that would be required and any conditions that would apply based on those authorizations.

Any discharges would be subject to the MDMER until the mine becomes a recognised closed mine; thereafter the general prohibition on the deposit of deleterious substances (ss. 36(3) of the Fisheries Act) would apply.

Should you require further information, please do not hesitate to contact Russell Wykes at (867) 669-4743 or Russell. Wykes@Canada.ca.

Sincerely,

Andrea McLandress **Regional Director**

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Georgina Williston, Head, Environmental Assessment North (NT and NU) cc:



Suite 301, 5204 50th Avenue Yellowknife, NT X1A 1E2

July 5, 2019

MVEIRB file Votre référence EA1819-01

DFO file Notre référence 98-HCAA-CA6-00021

Mark Cliffe-Phillips Executive Director Mackenzie Valley Environmental Impact Review Board P.O. Box 938 Yellowknife, NT X1A 2N7

Dear Mark Cliffe-Phillips,

Re: EA1819-01 Information Requests – Diavik Diamond Mines Inc. Processed **Kimberlite into Mine Workings Project**

The Fish and Fish Habitat Protection Program (FFHPP) of Fisheries and Oceans Canada (DFO-FFHPP) wishes to thank the Mackenzie Valley Environmental Impact Review Board (MVEIRB) for the opportunity to provide additional information for the Review Board Information Request to Parties dated April 26th, 2019.

DFO-FFHPP reviewed the associated information relating to the abovementioned submission for IR #2 and #3:

IR #2:

When determining if the pits should be reconnected to Lac de Gras at closure, is water quality in the pit lake the only criteria that should be considered?

DFO's position is that water quality will have direct impacts on the productivity and health of fish, it is the key factor on determining whether the pit should be connected to the lake.

IR #3:

Please elaborate on and explain DFO's position that the deposition of processed kimberlite into the pits change the "intended use" of the A418 pit from the original approved plan and Fisheries Act Authorization?

This concern was based on DFO's inability to legally amend Fisheries Act Authorizations, as A418 was not originally intended for storage prior to A21 being used. The passing of Bill C-68 has now provided the ability to amend existing authorizations, meaning that DFO can now accommodate changes to intended pit use.

2. Please describe if and how changing the "intended use of the A418" pit (that is, by storing processed kimberlite in it) relates to the potential for significant adverse impacts to water, or fish and fish habitat.

The concerns are the same as the other pits. Water quality must meet Environment and Climate Change Canada's standards for the pit to be reconnected with the lake.

For further inquiries related to this letter or DFO-FFHPP's mandate, please contact Dan Coombs at: 867-669-4927, or daniel.coombs@dfo-mpo.gc.ca

Sincerely,

Marek Janowicz

Regulatory Review Manager, DFO Fish and Fish Habitat Protection Program

Fisheries and Oceans Canada

cc:

Dan Coombs, Senior Fisheries Protection Biologist, DFO Angie McLellan, Fisheries Protection Biologist, DFO