

Environmental Protection Operations Directorate
Prairie & Northern Region
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ECCC File: 6100 000 036/004
NWB File: 2BE-CHI1823



May 15, 2023

via email at: licensing@nwb-oen.ca

Robert Hunter
Licensing Administrator
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Dear Robert Hunter:

RE: 2BE-CHI1823 – DeBeers Canada Inc. – Chidliak Diamond Mine – Type B Water Licence Renewal – ECCC Comments to Proponent Responses

Environment and Climate Change Canada (ECCC) has reviewed the information submitted to the Nunavut Water Board (NWB) regarding the above-mentioned Proponent responses to comments for the Type B Water License Renewal Application.

ECCC provides expert information and knowledge to project assessments on subjects within the department's mandate, including climate change, air quality, water quality, biodiversity, environmental preparedness and emergencies. This work includes reviewing proponent characterization of environmental effects and mitigation measures, and providing advice to decision makers on activities needed to mitigate these environmental effects. Any comments received from ECCC in this context does not relieve the proponent of its obligations to respect all applicable federal legislation.

The following comments are provided:

1. Topic: Waste Rock

Reference(s)

- April 14, 2023, response letter and attachments (updated plans) from DeBeers Canada Inc. to Nunavut Water Board re: 2BE-CHI1823 – DeBeers – Chidliak Exploration Project – Type B Water Licence Renewal Amendment
- Bulk Sample Monitoring Plan, Version 1.1 – Chidliak Exploration Project (DeBeers; April 2023)
- April 3, 2023, comment letter from ECCC to Nunavut Water Board re: 2BE-CHI1823 – DeBeers – Chidliak Exploration Project – Type B Water Licence Renewal Amendment



Comment:

On April 3, 2023, ECCC provided the following recommendation:

ECCC recommends that the Bulk Sample Monitoring Plan be updated to describe how bulk sampling waste rock is tested to determine whether it is free of contaminants and is non-acid generating and non-metal leaching, in alignment with Part D (Conditions Applying to Waste Disposal), Item 10 of the water licence. The plan should also discuss options to manage any waste rock that does not meet the requirements of Part D, Item 10.

In response to this recommendation, the Proponent added Section 3.2 (Contaminants) to the Bulk Sample Monitoring Plan, which states in part:

Kimberlite is an ultrabasic rock. Should the drill encounter country rock, the rock will be sampled to determine if it is potentially acid generating or at high risk of metal leaching. If it is found to be PAG or at high risk of metal leaching, the rock will be contained in a designated area and continue to be monitored. Plans for longer term storage and containment will be developed in consultation with the necessary regulators and professionals at that time.

The inclusion of country rock sampling provides an important update to the plan. However, monitoring should also be extended to include visual inspections of the kimberlite. Although kimberlites are ultrabasic rocks, in some cases they contain small amounts of sulphides.

ECCC Recommendation(s):

ECCC recommends that kimberlites be inspected visually to monitor for the presence of any sulphides and managed appropriately to prevent acid rock drainage and metal leaching. The Bulk Sample Monitoring Plan should be updated to reflect this recommendation.

If you need more information, please contact Eva Walker at Eva.Walker@ec.gc.ca.

Sincerely,



Jennifer Sabourin
Acting Senior Environmental Assessment Officer

cc: Melissa Pinto, Acting Head, Environmental Assessment North (NT and NU)