



**Mackenzie Valley Land and Water Board**  
**7th Floor - 4922 48th Street**  
**P.O. Box 2130**  
**YELLOWKNIFE NT X1A 2P6**  
**Phone (867) 669-0506**  
**FAX (867) 873-6610**

## Staff Report

<b>Applicant:</b> De Beers Canada Inc.	
<b>Location:</b> Kennady Lake, NT	<b>Application:</b> MV2005L2-0015
<b>Date Prepared:</b> December 5, 2014	<b>Meeting Date:</b> December 8, 2014
<b>Subject:</b> Meteorological Management Plan	

### 1. Purpose/Report Summary

The purpose of this Report is to present to the Mackenzie Valley Land and Water Board (MVLWB or the Board) a request to modify the compliance date of the Meteorological Management Plan (MMP) and to consider approval of the MMP as submitted by De Beers Canada Inc. (De Beers) under Water Licence (Licence) MV2005L2-0015.

### 2. Background

- August 11, 2014 – Board submits recommendation for approval of the Licence to the Minister of Environment and Natural Resources;
- September 23, 2014 – Minister of Environment and Natural Resources approves Licence;
- September 24, 2014 – Board issues Licence to De Beers;
- November 4, 2014 – MMP received;
- November 6, 2014 – MMP sent out for review;
- November 27, 2014 – Review comments due;
- December 5, 2014 – De Beers submits a request to modify the compliance date of the MMP; and
- December 8, 2014 – MMP presented to the Board.

### 3. Discussion

#### Request to Modify Compliance Date

As specified under Part B, item 7, De Beers has submitted a request to modify the compliance date of the Meteorological Management Plan as required under Annex A of the Licence, SNP, Part C, item 2 which states “A minimum of sixty (60) days prior to commencement of Drawdown the Licensee shall submit to the Board, the location, methods and frequency for

measuring and recording the meteorological data identified in Part C, item 1 of this Annex.”

De Beers submitted version 1 of the Meteorological Management Plan on November 4, 2014. On December 5, 2014 De Beers submitted a request to commence dewatering, following the conclusion of the Board’s evaluation of the Meteorological Management Plan.

#### Meteorological Management Plan (MMP)

On November 28, 2013 De Beers submitted meteorological monitoring information within their Air Quality and Emissions Monitoring and Management Plan, with their Updated Project Description package following the completion of their Environmental Impact Review.

In Annex A of the Licence, SNP, Part C, item 3 states that “The location, methods and frequency referred to in Part C, item 2 of this Annex shall be implemented as and when approved by the Board.”

De Beers submitted the MMP on November 4, 2014 and is seeking approval of the MMP under the Licence to commence drawdown.

#### **4. Comments**

Not applicable.

#### **5. Reviewer Comments**

On November 6, 2014 the MMP was sent to the distribution list for review. No comment letters were received from Environment Canada and Environment and Natural Resources (GNWT). Board staff had one question regarding how evaporation will be measured or calculated (please see the attached reviewer comment table). De Beers responded to Board staff’s question on November 28, 2014.

#### **6. Security**

Not applicable.

#### **7. Conclusion**

Board staff concludes that the Meteorological Management Plan can be approved at this time.

#### **8. Recommendation**

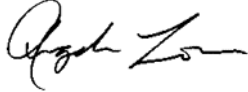
Board staff recommends that the Board approve the:

1. Request to modify the compliance date of the Meteorological Management Plan; and
2. The Meteorological Management Plan.

## 9. Attachments

- [Meteorological Management Plan](#)
- [De Beers Request to Modify Compliance Date](#)
- Reviewer Comment Summary Tables
- Draft Decision Letter

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Angela Love".

Angela Love  
Regulatory Officer

## Review Comment Table

<b>Board:</b>	MVLWB
<b>Review Item:</b>	De Beers Canada Inc - Gahcho Kue - Meteorological Management Plan (Version 1) - MV2005L2-0015
<b>File(s):</b>	<a href="#">MV2005L2-0015</a>
<b>Proponent:</b>	De Beers Canada Inc - Gahcho Kue
<b>Document(s):</b>	<a href="#">Meteorological Management Plan (Version 1)</a> (2 MB)
<b>Item For Review Distributed On:</b>	Nov 5 at 13:05 <a href="#">Distribution List</a> Nov 6 at 13:13 <a href="#">Distribution List</a> Nov 6 at 13:13 <a href="#">Distribution List</a>
<b>Reviewer Comments Due By:</b>	Nov 27, 2014
<b>Item Description:</b>	<p>In accordance with the requirements of Water Licence MV2005L2-0015, De Beers Canada Inc. has submitted their Plan to the Mackenzie Valley Land and Water Board.</p> <p>Please submit comments using the Online Review System by downloading the excel comment table or using the "add comment" button.</p> <p>If you have any questions or comments regarding this Plan or using the Online Review System, please contact Tyree Mullaney at 867-766-7464 or <a href="mailto:tyree@mvlwb.com">tyree@mvlwb.com</a></p>
<b>Contact Information:</b>	Angela Love 867-766-7456 Angela Plautz 867-766-7459 Jen Potten 867-766-7468 Tyree Mullaney 867-766-7464

## Comment Summary

Environment Canada: Sarah-Lacey McMillan				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Response
1	General File	<b>Comment</b> ( <a href="#">doc</a> ) EC no Comment Letter <b>Recommendation</b>		N/A
GNWT - Environment and Natural Resources: Central Email GNWT				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Response
1	General File	<b>Comment</b> ( <a href="#">doc</a> ) ENR No Comments or Recommendations <b>Recommendation</b>		N/A

**MVLWB: Lindsey Cymbalisky**

ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Response
1	Evaporation	<p><b>Comment</b> Part C, item 1(e) of the SNP requires that De Beers measure and record evaporation. This is not discussed in the Meteorological Management Plan.</p> <p><b>Recommendation</b> Please describe how evaporation will be measured or calculated.</p>	<p><b>Nov 28:</b> De Beers will calculate new evaporation using a variation of the Penman–Monteith equation that requires input daily mean temperature, wind speed, relative humidity and solar radiation, which are captured as continuous measurements at site. This calculation also applies a correction coefficient (the “pan” coefficient), or by using energy budget relationships and computations based on the net energy input to the evaporation process. These methods are described in detail in the EIS Annex H and Addendum HH Climate and Hydrology Baseline (Section H4.8).</p>	<p>Acceptable response.</p> <p>The proponent shall ensure that this information is included in the next revision which will help avoid confusion.</p> <p>A summary and a reference to the information would also be acceptable.</p>



Environment Canada  
Environnement Canada

Environmental Protection Operations Directorate (EPOD)  
Prairie and Northern Region  
5019 52<sup>nd</sup> Street, 4<sup>th</sup> Floor  
P.O. Box 2310  
Yellowknife NT X1A 2P7

November 27, 2014

EC file: 5100 000 013 /007  
MVLWB file: MV2005L2-0015

Angela Love  
Mackenzie Valley Land and Water Board  
7th Floor, 4922 48th St  
PO Box 2130  
Yellowknife NT X1A 2P6

Via Online Registry

**RE: MV2005L2-0015 – De Beers Canada Inc, Gahcho Kue Mine Project –  
Meteorological Management Plan (Version 1)**

Environment Canada (EC) has reviewed the above Plan submitted by De Beers Canada Inc. and has no comments to add at this time. The review was conducted pursuant to EC's mandated responsibilities arising from the Canadian Environmental Protection Act, 1999, the pollution prevention provisions of the Fisheries Act, the Migratory Birds Convention Act and the Species at Risk Act.

Should you have any questions or wish clarification on any aspect of this letter, please contact me at (867) 669-4724 or [sarah-lacey.mcmillan@ec.gc.ca](mailto:sarah-lacey.mcmillan@ec.gc.ca).

Sincerely,

Sarah-Lacey McMillan  
Senior Environmental Assessment Coordinator

cc: Loretta Ransom A/Head Environmental Assessment North (NT & NU), EPOD  
EC Review Team



November 27, 2014

Angela Love  
Regulatory Officer  
Mackenzie Valley Land and Water Board  
7<sup>th</sup> Floor – 4910 50<sup>th</sup> Avenue  
P.O. Box 2130  
Yellowknife, NT  
X1A 2P6

Dear Ms. Love,

**Re: DeBeers Canada Inc.  
Water Licence – MV2005L2-0015  
Meteorological Management Plan (Version 1)  
Request for Comments**

The Department of Environment and Natural Resources has reviewed the plan at reference based on its mandated responsibilities under the *Environmental Protection Act*, the *Forest Management Act*, the *Forest Protection Act*, *Waters Act* and the *Wildlife Act* and has no comments or recommendations for the consideration of the Board at this time.

Should you have any questions or concerns please do not hesitate to contact Patrick Clancy, Environmental Regulatory Analyst, at (867) 920-6118 or email at [patrick.clancy@gov.nt.ca](mailto: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