



Mackenzie Valley Land and Water Board
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Staff Report

Applicant: De Beers Canada Inc. – Gahcho Kue Project	
Location: Kennady Lake, NT	Application: MV2005L2-0015
Date Prepared: July 5, 2018	Meeting Date: July 17, 2018
Subject: To consider cancelling the public hearing associated with the May 2, 2018 Amendment Application	

1. Purpose/Report Summary

The purpose of this Report is to present to the Mackenzie Valley Land and Water Board (MVLWB/the Board) a request from De Beers Canada Inc. (De Beers) to cancel the planned public hearing for the May 2, 2018 Amendment Application to Type A Water Licence (Licence) MV2005L2-0015 for the Gahcho Kue Project (Project), as per paragraph 41(3)(a) of the *Waters Act*.

2. Background

- August 11, 2014 – Board submits recommendation for approval of Licence MV2005L2-0015 to the Minister of Environment and Natural Resources;
- September 23, 2014 – Minister of Environment and Natural Resources approves Licence MV2005L2-0015;
- September 24, 2014 – Board issues Licence MV2005L2-0015 to De Beers;
- April 30, 2018 – De Beers submits an Amendment Application for Licence MV2005L2-0015;
- May 1, 2018 – The Amendment Application is deemed incomplete;
- May 2, 2018 – De Beers submits additional information; May 2, 2018 Amendment Application is subsequently deemed complete;
- May 3, 2018 – Review commenced;
- May 17, 2018 – Reviewer comments and recommendations on the draft Work Plan due and received;
- May 23, 2018 – Reviewer comments and recommendations on the May 2, 2018 Amendment Application due and received;
- May 28, 2018 – Responses received, including a letter from De Beers which gives consent for processing the May 2, 2018 Amendment Application without a public hearing;
- May 30, 2018 – Technical Session;
- June 4, 2018 – Notice of public hearing advertised in newspaper;
- June 7, 2018 – Board confirms the May 2, 2018 Amendment Application is exempt from preliminary screening as per the Exemption List Regulations;
- June 11, 2018 – Pre-Hearing Conference;

- June 14, 2018 – Interventions due; Board received a letter from Fisheries and Oceans Canada;
- June 22, 2018 – Board received letter from Lutsel K'e Dene First Nation;
- June 26, 2018 – De Beers submits responses to letters received from Fisheries and Oceans Canada and Lutsel K'e Dene First Nation;
- July 15, 2018 – Tenth day before the proposed hearing;
- **July 17, 2018 – Motion to cancel the Public Hearing for the May 2, 2018 Amendment Application presented to the Board for decision; and**
- July 25-26, 2018 – Proposed date for the public hearing.

3. Discussion

Water Licence MV2005L2-0015 (Licence) Background

De Beers' [Updated Project Description](#) for Licence MV2005L2-0015 dated November 28, 2013, stated that water will be managed as follows:

- Water management during Construction/Dewatering:
 - During construction, the potable water required will be about 60,000 cubic metres per year (m³/y).
- Water management during Operations:
 - During operations, the potable water required from Area 8 will be about 27,000 m³/y (as there will be a smaller workforce).

The Board defined a number of terms used in Licence MV2005L2-0015 in order to ensure a common understanding of conditions and to avoid future differences in interpretation. The Board created the following project-specific definitions:

- **Construction** - any activities undertaken to construct or build any components of, or associated with, the development of the Project, including any Construction activities undertaken during Operations and closure phases of the Project.
- **Operations** - the activities which occur following the commencement of mining ore for milling in the process plant.

The above noted definitions are used throughout Licence MV2005L2-0015 to establish deadlines for various submissions, and several Licence conditions stipulate that Construction cannot begin until the Board has approved those submissions. They also identify the transition of Kennady Lake into a Water Management Pond; the start of milling; and the shift into closure.

No concerns were raised during the initial 2013/2014 regulatory process regarding the proposed allotment of water. The Board included Schedule 3, condition 1 in Licence MV2005L2-0015 to address the quantity of fresh water authorized for withdrawal, which reads as follows:

The annual quantity of fresh Water withdrawn referred to in Part D, item 2 of this Licence shall not exceed the following:

- 60,000 (sixty thousand) cubic meters (m³) annually, during the operational phase of Construction;*
- 27,000 (twenty-seven thousand) cubic meters (m³) annually, during the operational phase of Operations; and*
- 1,555,200 (one million, five hundred and fifty five thousand, two hundred) cubic meters (m³) per year for every three out of four years for downstream flow mitigation.*

Submission Description

On April 30, 2018, De Beers applied to amend Type A Licence MV2005L2-0015 for the Gahcho Kue Project (May 2, 2018 Amendment; attached). The purpose of the May 2, 2018 Amendment is to increase the annual quantity of fresh water withdrawn, as described in Schedule 3, Part D, condition 1(b) of Licence MV2005L2-0015 from 27,000 m³ to 35,000 m³. This amendment is to ensure the mine has enough water to support the camp during the period when the March 19, 2018 Amendment Applications to Licence MV2005L2-0015 and Land Use Permit (Permit) MV2005C0032 are under consideration by the Board.

During the first full year of Operations (2016/17), the average camp occupancy was higher than expected (310 people instead of the approximately 170 people) and water usage was 26,428 m³. Camp occupancy during the remainder of Operations is anticipated to range between 278 and 339 people, with periodic increases above that as project or contract work proceeds. The maximum camp capacity is approximately 430 people. Because there are more people working at the mine site, De Beers requires more water. During the second year of operations (2017/18), water usage is anticipated to be approximately 34,500 m³.

4. Comments

Water Allotment

Schedule 3, condition 1(a) of Licence MV2005L2-0015 allowed for up to 60,000 m³ to be annually withdrawn during the Construction phase. Construction took place over two years (2014/15 and 2015/16), and in each of those years De Beers used less than this annual allotment.

De Beers entered into the Operation phase in September 2016. In their Updated Project Description, dated November 28, 2013, De Beers requested that the annual water allotment be decreased (to 27,000 m³/y) as it was anticipated that there would be a smaller workforce onsite.

No concerns were raised during the initial 2013/2014 regulatory process regarding the annual quantity of water of up to 60,000 m³.

Timeline of Annual Water Allotment

Licensees are authorized to use a certain volume of water on an annual basis over the duration of the licence. Under the Waters Regulations, in advance of using the water, licensees are required to pay fees on the issuance (and subsequent anniversary dates) of the licence. Therefore, annual water allotments are based on these dates rather than on January 1 of each year.

For Licence MV2005L2-0015, the annual water use allotment is from September 24 to September 23 (i.e. the allotment resets at the end of day on September 23) because, in this case, the Board issued the Licence on September 24, 2014.

The current water use allotment of 27,000 m³ is expected to be reached in early August 2018 (which is before the September 23 date of when the allotment would restart). To ensure De Beers remains in compliance with Licence MV2005L2-0015, and the camp and mine site remain fully functional, De Beers is requesting a temporary increase to the water use allotment to 35,000 m³ while the March 19, 2018 Amendment Applications are processed by the Board (further information below).

Concurrent Amendment Application – March 19, 2018

Previous to this amendment for water use, De Beers submitted Amendment Applications on March 19, 2018 (attached) to the Board for Licence MV2005L2-0015 and Permit MV2005C0032 to address a geotechnical issue identified in the open pits, namely, the presence and orientation of joint sets. Several other changes to the Project are also proposed including:

- Increase footprint of 85.23 ha;
- Increase the depth of Tuzo Pit to a max of 373 m;
- Increase the height of the West Mine Rock Pile to a max of ~135 m;
- Expansion of the West Mine Rock Pile to store ~228 Mt of waste rock;
- Construction of the A2 North Perimeter Berm;
- Increase the annual quantity of fresh water withdrawn to not exceed 45,000 m³/y;
- Increase in aviation fuel from 303,000L to 500,000 L (an increase of 197,000 L); and
- Additional equipment (major pieces of additional equipment included in the Permit Application).

As noted above, the March 19, 2018 Amendment Applications are requesting an increase to the fresh water usage to 45,000 m³/y. During the review of these applications, only the Government of the Northwest Territories – Environment and Natural Resource (GNWT-ENR) commented on the request to increase the water use volumes. GNWT-ENR noted that as per the Operational Water Management Plan V.5, the amount of water available under ice in Area 8 is 1,300,000 m³. If 10% was withdrawn as per Fisheries and Oceans protocol, a total of 130,000 m³ would be available for use. However, as Kennady Lake has since been dewatered, GNWT-ENR was unclear if the previously referenced available water volumes were current, because the water withdrawal could have impacted the aquatic environment through the reduction of dissolved oxygen under ice. As such, GNWT-ENR requested De Beers:

1. Outline the date when the initial assessment of available water within Area 8 was completed; and
2. Requested an update on the volume of available water for use within Area 8, which takes into account any changes in water levels that may have occurred as a result of the dewatering of Kennady Lake.

In response, De Beers stated that:

1. The assessment for water use during construction (i.e., 60,000 m³/yr) and operations (27,000 m³/yr) considered the construction of Dyke A and dewatering of Kennady Lake, as well as the reduced drainage area reporting to Area 8. The initial assessment of available water within Area 8 was completed as part of the Gahcho Kué Mine Construction Water Management Plan v.2 (June 2014). Operational data was collected, including surface water elevations in Area 8, and were taken into consideration for the March 19, 2018 Amendment Applications; and
2. The potable water requirements are expected to be similar to the annual quantities withdrawn in 2015 and 2016 during construction and will continue to be monitored. The conservative assessment of Area 8 water supply presented considered an approximate lake water surface elevation of 420.7 m and assumed 2 m thick ice cover. Under normal conditions, Area 8 water surface elevations would be expected to be approximately equal to the Area 8 lake outlet zero-flow elevation (approximately 420.5 m) during the freeze-up period; the lake water surface elevation may increase over the winter period due to local runoff and precipitation while the lake outlet is frozen, which may partially offset water withdrawals. The

potable water supply from Area 8 is a small annual supply volume compared to the volume of Area 8 and predicted outflows during construction and operations. Any effects to fish habitat from the increase in the annual water use during operations from 27,000 m³/y to 45,000 m³/y would be expected to be negligible (i.e., likely not measurable).

Technical Session

Board staff held a technical session on May 30, 2018 pertaining to this May 2, 2018 Amendment (transcript attached). Following a presentation by De Beers on the Camp Water Use (attached), the floor was opened to allow any questions. No direct questions were asked regarding the increase to camp water use; however, the GNWT-ENR provided a follow up response to their initial questions as a part of the March 19, 2018 Amendment Applications (noted above under the heading Concurrent Amendment Application – March 19, 2018) in that they had reviewed the information and had no further concerns regarding the requested water use.

Public Hearing

As per subsection 41(2) of the *Waters Act*, a mandatory hearing is required when:

- (2) Subject to subsection (3), a public hearing shall be held by the Board if the Board is considering
 - (a) the issuance or renewal of a type A licence;
 - (b) an amendment to a type A licence pursuant to which the use, flow or quality of waters, or the term of the licence, would be altered;
 - (c) the cancellation of a type A licence under paragraph 36(1)(c);
 - (d) the cancellation of a type B licence under subparagraph 36(1)(c)(ii) or (iii); or
 - (e) an application under section 61 for permission to enter on, use, occupy, take and acquire any lands or any interest in those lands.

Public hearings have been scheduled for July 25 and 26, 2018 from 8:30 a.m. to 5:00 p.m., in Yellowknife, Northwest Territories for both the May 2, 2018 Amendment Application and the March 19, 2018 Amendment Applications.

As per paragraph 41(3)(a) of the *Waters Act*, the mandatory public hearing required by subsection 41(2) of the *Waters Act* does not apply if:

- (i) the applicant or the licensee, as the case may be, consents in writing to the disposition of the matter without a public hearing, and
- (ii) after giving notice of a public hearing in connection with the matter under section 43, the Board receives no notification on or before the tenth day before the day of the proposed hearing that any person or body intends to appear and make representations in connection with the matter;

On May 28, 2018, De Beers submitted a letter stating that they are ‘...fully in support of processing the Bridging Amendment via written proceeding rather than a Public Hearing.’ (attached).

5. Reviewer Comments

By May 23, 2018, comments and recommendations on the May 2, 2018 Amendment Application were received from 1 reviewer: GNWT-ENR. De Beers responded on May 29, 2018. The Review Summary and Attachments (attached) presents the recommendations identified through this review.

The following summarizes the comments received during the review:

GNWT-ENR has had an opportunity to request additional information regarding potential impacts from increased water use (related to the March 19, 2018 Amendment Applications) and notes that as De Beers has already factored in the current conditions of Area 8, current operational data when calculating available water volumes, and the requested volume is within typically allowable limits, there are no concern with De Beers' request to increase their annual water withdrawals from Area 8 to 35,000 m³/year.

On June 14, 2018, the deadline to submit interventions, a letter was received from Fisheries and Oceans Canada stating that they have '...no comments at this time with respect to the May 2018 Amendment Application for temporary increased water use.' (attached).

The Board also received a written submission on June 22, 2018 from Lutsel K'e Dene First Nation (LKDFN) stating that '...with this letter of notification that it is the opinion of the LKDFN that the minor increase of 8,000m³ should proceed without the need for a Public Hearing.' (attached).

In response to the comments received, De Beers submitted an acknowledgement letter on June 26, 2018, stating that they were appreciative of the comments (attached).

6. Security

The status of security for this project will not be affected by the Board's decisions.

7. Conclusion

Board staff concludes, based on the available evidence received, that there are no outstanding issues or concerns. Should the Board decide to cancel the public hearing for the May 2, 2018 Amendment Application, the public hearing for the March 19, 2018 Amendment Application will still proceed on July 25 and 26, 2018.

8. Recommendation

Provided no submissions or notifications are made to the Board prior to or on July 15, 2018, which is the tenth day before the planned public hearing, that any person or body intends to appear and make representations in connection with this matter, Board staff recommends the Board **make a motion to cancel the public hearing associated with the May 2, 2018 Amendment Application** as per paragraph 41(3)(a) of the *Waters Act*.

A draft decision letter is attached.

9. Attachments

- [May 2, 2018 Amendment Application](#)
- [Technical Session Transcript – May 30, 2018](#)
- [De Beers' Presentation 1 from Technical Session](#)
- [March 19, 2018 Amendment Applications](#)
 - [Updated Project Description](#)
 - [Environmental Screening Assessment conducted by De Beers](#)

- [De Beers' Letter Consenting to Proceed Without a Hearing Received on May 28, 2018](#)
- [Fisheries and Oceans Canada Comment Received on June 14, 2018](#)
- [Lutsel K'e Dene First Nation Comment Received on June 22, 2018](#)
- [De Beers Acknowledgement Letter Received on June 26, 2018](#)
- Review Summary and Attachments
- Draft Decision Letter from the Board
- Draft Work Plan V.6

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Angela Love', written in a cursive style.

Angela Love
Regulatory Specialist

Review Comment Table

Board:	MVLWB
Review Item:	De Beers Gahcho Kue - May 2018 Amendment Application - Camp Water Use (MV2005L2-0015)
File(s):	MV2005L2-0015
Proponent:	De Beers Canada Inc - Gahcho Kue
Document(s) :	May 2018 Amendment Application - Camp Water Use (0.7 MB) Last Preliminary Screening Conducted by the Board (0.5 MB) Draft Work Plan (185 KB) March and May 2018 Amendments - Technical Session Agenda (163 KB)
Item For Review Distributed On:	May 3 at 16:55 Distribution List
Reviewer Comments Due By:	May 23, 2018
Proponent Responses Due By:	May 28, 2018
Item Description:	<p>May 23 Update - Board staff have released the Technical Session Agenda for both the March and May 2018 Amendments and is attached.</p> <hr/> <p>On March 19, 2018 De Beers Canada Inc. (De Beers) applied to amend Permit MV2005C0032 and Licence MV2005L2-0015 in order to allow them to make necessary changes to the mine plan as a result of a geotechnical issue within the pits.</p> <p>On May 2, 2018 De Beers submitted a second amendment application for Water Licence (Licence) MV2005L2-0015, to increase water use. Specifically, De Beers is requesting to amend Schedule 3, Part D, condition 1b from 27,000 m3 to 35,000 m3. De Beers has stated that this second Water Licence amendment application (May 2018 Amendment Application) is necessary to ensure the mine has enough water to support the camp during the period when the March 2018 Amendment Applications are under consideration by the Board. On May 2, 2018, the Mackenzie Valley Land and Water Board (MVLWB or the Board) deemed the May 2018 Amendment Application complete.</p> <p>In the May 2018 Amendment Application, De Beers indicated while they expect a technical session and a public hearing as part of their March 2018 Amendment Applications, they have suggested that the May amendment application could be conducted through a written proceeding.</p> <p>As per Section 41, subsection (3)(a)(ii) of the Waters Act, if after giving notice of a public hearing, if the Board receives no notification on or before the tenth day before the day of the proposed hearing that any person or body intends to appear and make representations in connection with this matter,</p>

a Mandatory Hearing does not apply. **Board staff are seeking reviewer input on this matter.**

Reviewers are invited to submit questions, comments, recommendations, and notices of application for water compensation on the Amendment Application using the Online Review System (ORS) by **May 23, 2018 at 5pm MST.**

In this May Amendment Application De Beers states that this amendment request is exempt from preliminary screening, in accordance with the Preliminary Screening Exemption List Regulations and Exemption List Regulations. **If you have comments or recommendations on the possible exemption, please include them in your submission with rationale.** The most recent preliminary screening that was approved by the Board is located under Document(s) below.

A draft Work Plan will be added to this review within the next several days. Board staff are proposing the following dates related to the Regulatory Process for this May 2018 Amendment Application.

- Technical Session - May 30/31, 2018 (in Yellowknife)
- Pre-hearing Conference - June 11, 2018
- Deadline for Interventions - June 14, 2018
- Proponent response to Interventions - June 22, 2018
- Public Hearing - July 25-26, 2018 (in Yellowknife)

Comments specific to these proposed dates or the Work Plan (once it is added to the review) should be sent via email to kleach@mvlwb.com by **May 17, 2018.**

All documents that have been uploaded to this review are also available on our public registry. If you have any questions or comments about the ORS or this review, please contact Board staff identified below.

General Reviewer Information: In addition to the email distribution list, the following organizations received review materials by fax:

Hay River Metis Council - Trevor Beck, President [\(867\) 874-4472](tel:867-874-4472); hrrmc@northwestel.net

NWT Metis Nation - Tim Heron, NWTMN IMA Coordinator [\(867\) 872-3586](tel:867-872-3586); rcc.nwtmn@northwestel.net

Contact Information:

Angela Love 867-766-7456
 Jen Potten 867-766-7468
 Kierney Leach 867-766-7470

Comment Summary

GNWT - ENR: Central Email GNWT				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Staff Analysis
2	General File	Comment (doc) EMR Letter with Comments and Recommendations Recommendation		Noted.
1	Topic 1: Water Use	Comment As noted on the Board's Online Review System: On May 2, 2018 De Beers submitted a second amendment application for Water Licence (Licence) MV2005L2-0015, to increase water use. Specifically, De Beers is requesting to amend Schedule 3, Part D, condition 1b from 27,000 m3 to 35,000 m3. De Beers has stated that this second Water Licence amendment application (May 2018 Amendment Application) is necessary to ensure the mine has enough water to support the camp during the period when the March 2018 Amendment Applications are under consideration by the Board. On May 2, 2018, the Mackenzie Valley Land and Water Board (MVLWB or the Board) deemed the May 2018 Amendment Application complete. Of note, the March 2018 Water Licence amendment applications also include an increase to water withdrawal, originally requesting 35,000 m3/year and then increasing the request to 45,000 m3/year in a letter dated April 30, 2018. As such, ENR has had opportunity to request additional information regarding potential impacts from increased water use. In ENR's submission to the MVLWB dated May 7, 2018 related to the March 2018 amendment, ENR requested clarification on the date that assessments of available water for withdrawal in Area 8 was completed and to clarify that the volumes provided have taken into account any changes to water levels in the area as a result of the dewatering of Kennady Lake. On May 21, 2018, De Beers provided a response noting that the initial assessment of available water within Area 8 considered the construction of Dyke A and dewatering of Kennady Lake, as well as the reduced	May 29: Acknowledged	Noted.

	<p>drainage area reporting to Area 8. De Beers also noted that operational data collected and reported annually, including surface elevations in Area 8, were also taken into consideration during the environmental screening assessment (Attachment 2 of the March 2018 amendment) conducted for the current amendment. In a previous Construction Water Management Plan, DeBeers identified the maximum water withdrawal corresponding to DFO protocols at 130,000 m3.</p> <p>Recommendation 1) As De Beers has already factored in the current condition of Area 8 (as outlined above) current operational data when calculating available water volumes, and the requested volume is within typically allowable limits, ENR has no concern with De Beers request to increase their annual water withdrawals from Area 8 to 35,000 m3/year.</p>		
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May 23, 2018

Kierney Leach
Regulatory Officer
Mackenzie Valley Land and Water Board
7th Floor – 4910 50th Avenue
P.O. Box 2130
Yellowknife, NT
X1A 2P6

Dear Ms. Leach,

**Re: DeBeers - Gahcho Kue
Water Licence Amendment Application – MV2005L2-0015
Camp Water Usage - Amend Schedule 3, Part D, Condition 1b from
27,000 m³ to 35,000 m³
Request for Comment**

The Department of Environment and Natural Resources (ENR), Government of the Northwest Territories has reviewed the amendment application at reference based on its mandated responsibilities under the *Environmental Protection Act*, the *Forest Management Act*, the *Forest Protection Act*, the *Species at Risk (NWT) Act*, the *Waters Act* and the *Wildlife Act* and provides the following comments and recommendations for the consideration of the Board.

Topic 1: Water Use

Comment(s):

As noted on the Board's [Online Review System](#):

On May 2, 2018 De Beers submitted a second amendment application for Water Licence (Licence) MV2005L2-0015, to increase water use. Specifically, De Beers is requesting to amend Schedule 3, Part D, condition 1b from 27,000 m³ to 35,000 m³. De Beers has stated that this second Water Licence amendment application (May 2018 Amendment Application) is necessary to ensure the mine has enough water to support the camp during the period when the March 2018

Amendment Applications are under consideration by the Board. On May 2, 2018, the Mackenzie Valley Land and Water Board (MVLWB or the Board) deemed the May 2018 Amendment Application complete.

Of note, the March 2018 Water Licence amendment applications also include an increase to water withdrawal, originally requesting 35,000 m³/year and then increasing the request to 45,000 m³/year in [a letter dated April 30, 2018](#). As such, ENR has had opportunity to request additional information regarding potential impacts from increased water use. In [ENR's submission to the MVLWB dated May 7, 2018](#) related to the March 2018 amendment, ENR requested clarification on the date that assessments of available water for withdrawal in Area 8 was completed and to clarify that the volumes provided have taken into account any changes to water levels in the area as a result of the dewatering of Kennady Lake.

On May 21, 2018, De Beers provided a response noting that the initial assessment of available water within Area 8 considered the construction of Dyke A and dewatering of Kennady Lake, as well as the reduced drainage area reporting to Area 8. De Beers also noted that operational data collected and reported annually, including surface elevations in Area 8, were also taken into consideration during the environmental screening assessment (Attachment 2 of the March 2018 amendment) conducted for the current amendment. In a previous Construction Water Management Plan, DeBeers identified the maximum water withdrawal corresponding to DFO protocols at 130,000 m³.

Recommendation(s):

- 1) As De Beers has already factored in the current condition of Area 8 (as outlined above) current operational data when calculating available water volumes, and the requested volume is within typically allowable limits, ENR has no concern with De Beers request to increase their annual water withdrawals from Area 8 to 35,000 m³/year.

Comments and recommendations were provided by ENR technical experts in the Water Resources Division and the North Slave Region and were coordinated and collated by the Environmental Assessment and Monitoring Section (EAM), Conservation, Assessment and Monitoring Division (CAM).

Should you have any questions or concerns, please do not hesitate to contact Patrick Clancy, Environmental Regulatory Analyst at (867) 767-9233 Ext: 53096 or email patrick.clancy@gov.nt.ca.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Clancy', written in a cursive style.

Patrick Clancy
Environmental Regulatory Analyst
Environmental Assessment and Monitoring Section
Conservation, Assessment and Monitoring Division
Department of Environment and Natural Resources
Government of the Northwest Territories