



November 8, 2012

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Dear Mr. Hubert:

**Technical Report Responses – Tlicho Government**

De Beers is pleased to provide the Mackenzie Valley Environmental Review Board with Responses to the Technical Submission from the Tlicho Government dated October 22, 2012.

Should you have any questions regarding this submission, please contact our office.

Regards,

Veronica Chisholm  
Permitting Manager

Attachment

c: Laura Duncan, Tlicho Executive Officer





DE BEERS

CANADA

GAHCHO KUÉ PROJECT

**Tłıchǫ Government**  
**Technical Report Responses**

**November**  
**2012**

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# **1 INTRODUCTION**

On October 22, 2012 Tłıchǵ Government submitted their technical report to the Mackenzie Valley Environmental Impact Review Board (MVEIRB) for the De Beers Canada Inc. (De Beers) proposed Gahcho Kué Project (Project). This report provides responses to those recommendations outlined in the Tłıchǵ Government technical report (Tłıchǵ Government 2012).

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## **2 TŁıCHQ GOVERNMENT RECOMMENDATIONS AND RESPONSES**

### **2.1 DEVELOPING SSWQOS BASED ON TRADITIONAL USE AND KNOWLEDGE**

#### **2.1.1 Recommendation 1**

The proponent will consider, in setting the SSWQOs, the traditional use of the Aboriginal people of the region and the levels will be set suitably to protect these traditional uses.

#### **2.1.2 Response**

De Beers commits to consider the traditional uses of the region by Aboriginal people in the process to develop the proposed water quality benchmarks and Site Specific Water Quality Objectives (SSWQOs) through the Water License permitting process.

#### **2.1.3 Recommendation 2**

The proponent will consider, in deriving the SSWQOs:

- Expected receiving environment water quality based on the effluent quality;
- Existing background concentrations;
- Canadian Council of Ministers of the Environment guidelines for the protection of freshwater aquatic life;
- Health Canada drinking water quality guidelines; and
- Review of available toxicity literature and/or developing new toxicological information, conducting of ecological risk assessments, and other investigations

## **2.1.4 Response**

The development of proposed water quality benchmarks and SSWQOs (see Golder [2012a], titled, *Water Quality Objectives (WQO) and Sediment Quality Objectives (SQO) for the Proposed Gahcho Kue Project – Recommendations*) included consideration of the bulleted recommendations listed above.

De Beers will continue to consider the above recommendations as the SSWQOs are further developed through the Water License permitting process.

## **2.2 FISH HABITAT COMPENSATION PLAN**

### **2.2.1 Recommendation 3**

The proponent should consider options other than flooding of adjacent lakes, and should consider options such as off-site compensation.

### **2.2.2 Response**

During the October 20, 2012 Fish Habitat Compensation Plan Workshop, De Beers stated that the flooding of the adjacent lakes option would no longer be considered. At this workshop, De Beers received input from the participants on additional off-site compensation options which are documented in the No Net Loss Plan (submitted to the public registry, November 2012 [Golder 2012b]). De Beers will continue to seek input on additional off-site compensation options as part of the permitting phase.

## **2.3 APPROACH TO TRADITIONAL KNOWLEDGE ENGAGEMENT**

### **2.3.1 Recommendation 4**

The proponent should work more closely with Aboriginal authorities in planning of sessions that will engage with traditional knowledge holders, particularly when there are going to be discussions for inform WEMP and/or AEMP plans.

### **2.3.2 Response**

De Beers acknowledges the request of the Tłı̨chǫ Government for the Company to work more closely with Aboriginal authorities in the planning of sessions that will engage Traditional Knowledge holders, particularly when there are sessions that will inform the Wildlife Effects Monitoring Program (WEMP) and/or Aquatic Effects Monitoring Program (AEMP). De Beers commits to work with the leadership of Aboriginal communities to determine the appropriate approach and level of involvement in the opportunities that the company is providing, and to discuss how best to engage Traditional Knowledge holders.

## **2.4 INDEPENDENT OVERSIGHT**

### **2.4.1 Recommendation 5**

The proponent and respective Parties should collaboratively develop an agreement that creates an independent oversight body. The oversight body will review environmental monitoring and management proposals as well as activities and reports from the proponent and the regulators, and develop appropriate recommendations or submissions for follow-up action.

### **2.4.2 Response**

De Beers is currently in discussion with Aboriginal groups, including the Tłı̨chǫ, on the development of a mutually agreeable mechanism to ensure that Aboriginal groups have access to the resources required to participate in the development and review of monitoring and management plans for the Gahcho Kué Project (Project).

In areas with perceived regulatory gaps such as wildlife and air, De Beers has made clear commitments and provided detailed actions as demonstrated through the early development and submission of the Wildlife Effects Monitoring Program, Wildlife and Wildlife Habitat Protection Plan, Air Quality and Emissions Monitoring and Management Plan, and Incinerator Management Plan (De Beers 2012a,b,c).

## **2.5 SOCIO-ECONOMIC AND WELLNESS INITIATIVES**

### **2.5.1 Recommendation 6**

The Tłıchǵ Government asks the Panel to require the commissioning of an independent economic analysis and labour force study that evaluates a series of likely scenarios to determine what options would provide maximum benefits for the residents of the Mackenzie Valley and to identify the labour force and barriers to this Aboriginal labour force in particular.

### **2.5.2 Response**

Impact Economics is undertaking an economic analysis and labour force study that will evaluate a series of mine initiation scenarios, which will be submitted as a separate technical memorandum. The analysis reported in the 2010 EIS indicates that the timing of the construction of this Project would not result in barriers to employment for Northwest Territories (NWT) residents (De Beers 2012). The 2010 EIS indicated that one of the key barriers to employment for the Aboriginal labour force is education. De Beers is collaborating with the Government of the Northwest Territories (GNWT) and Aboriginal communities on education and training initiatives (refer to the response to YKDFN Recommendation #13 [De Beers 2012d]).

### **2.5.3 Recommendation 7**

The proponent will work with the Tłıchǵ Government to provide adaptive support to social wellness programming, in partnership with the Tłıchǵ Community Services Agency regarding health, education and social services.

### **2.5.4 Response**

De Beers commits to work with the Tłıchǵ Government and with the Tłıchǵ Community Services Agency on adaptively managing opportunities in the area of health, education and social services that enhance the ability of Tłıchǵ citizens to participate successfully in the Project.

### **2.5.5 Recommendation 8**

The proponent will ensure there is sufficient space on site for contractors to pursue and maintain training programs.



## **2.5.6 Response**

De Beers will ensure there is adequate space on the Company's premises to pursue and successfully complete the training programs for site-based employees and contractors.

## **2.5.7 Recommendation 9**

The proponent will fund and support on-the-land counselling programs, and prioritize them over dependence upon standard EFAP programs delivered through services in Yellowknife or through telephone-based counselling, and provide country foods at the mine.

## **2.5.8 Response**

De Beers understands the spirit and intent of the Tłıchq Government's recommendation. De Beers commits to meeting with the Tłıchq Government and the Tłıchq Community Services Agency periodically over the life of the Project to learn about the alternative services and programs that the Tłıchq Government or its service agencies offer for on-the-land counseling programs. De Beers will make this information available to its Employee Assistance Program (EAP) provider. De Beers believes that by doing so, we enable broader choices in providing counseling services to our employees.

There is flexibility in this service to determine what local supports are suitable and available to the employee. There is further flexibility in this service to incorporate alternative options to formal counseling; however, that decision is made by the employee together with the counsellor. As it is an anonymous and confidential process, respecting the employee's privacy, De Beers does not get involved in the specifics for any individual.

See also the Company's response to Tłıchq Government Recommendation #7.

## **2.6 CLOSURE**

### **2.6.1 Recommendation 10**

The proponent will work together with aboriginal authorities to develop a closure plan based on each component with guidance from the Tłıchq Government.

## **2.6.2 Response**

De Beers will commit to working together with Aboriginal authorities in the development of the closure plan.

## **2.7 CARIBOU**

### **2.7.1 Recommendation 5 (REPEATED)**

The proponent and respective Parties should collaboratively develop an agreement that creates an independent oversight body. The oversight body will review environmental monitoring and management proposals as well as activities and reports from the proponent and the regulators, and develop appropriate recommendations or submissions for follow-up action.

### **2.7.2 Response**

See response to Tłıchq Government Recommendation #5.

### **2.7.3 Recommendation 11**

The proponent should develop an enforceable Wildlife Monitoring Plan to be undertaken principally by De Beers, and under purview of the independent oversight body. This WMP must be collaboratively designed by the proponent and respective Parties, with a reporting requirement similar to that of the Wek'èezhií Aquatic Effects Monitoring Program, and an agreed upon review and approval system.

### **2.7.4 Response**

De Beers is currently in discussion with Aboriginal groups, including the Tłıchq, on the development of mutually agreeable mechanism to ensure that Aboriginal groups have access to the resources required to participate in the development and review of monitoring and management plans for the Project.

De Beers has developed in collaboration with Aboriginal groups, including the Tłıchq, and federal and territorial governments, the WEMP that was submitted to the public registry on October 4, 2012 (De Beers 2012a). De Beers is in discussion with the GNWT on the development of a memorandum of understanding to further address the implementation, technical review and adaptive management of the WEMP.

## **2.7.5 Recommendation 12**

DeBeers should develop and implement a monitoring program to address the issue of whether the Winter Access Road and associated vehicular traffic affects behavior and/or impedes movement by caribou. Some key considerations are: i) develop a method for detecting a predefined threshold density for caribou in the vicinity of the Winter Access Road, which would trigger a sampling methodology; ii) design the caribou sampling methodology to systematically record behavior of individuals and groups of caribou and their reactions to winter roads and vehicles; iii) pilot the monitoring and sampling program along the Tibbett to Contwoyto winter road corridor to identify and address potential problems in methodology, and establish a comparative baseline; and iv) implement an automated vehicle monitoring system to document volume, timing and characteristics of winter road traffic.

## **2.7.6 Response**

De Beers will consider this recommendation within the Adaptive Management Response Framework if caribou are present in suitable densities to allow for an informed assessment. The options for monitoring of the Project Winter Access Road have been presented in the WEMP submitted to the public registry on October 4, 2012 (De Beers 2012a; also refer to responses to LKDFN Recommendation #3 [De Beers 2012e] and to YKDFN Recommendation #7 [De Beers 2012d]).

## **2.7.7 Recommendation 13**

The ZOI represented a critical assumption in the proponent's EIS; the proponent should develop and conduct specific monitoring studies to define and estimate the ZOI for the Gahcho Kué mine through its development phases from construction to closure.

## **2.7.8 Response**

De Beers has committed to monitoring of the zone of influence (ZOI) in the WEMP submitted to the public registry on October 4, 2012 (De Beers 2012a; also refer to response to GNWT Recommendation #3 [De Beers 2012f] and YKDFN Recommendation #8 [De Beers 2012d]).

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## **2.7.9 Recommendation 14**

The effect of mine activities on caribou behavior and activity within the ZOI was a key assumption in the proponent's EIS and conclusion on the predicted impacts and energetic consequences to caribou. The proponent should design and implement robust monitoring designs to estimate impacts to behavior and activity of caribou that enter the ZOI. Paired monitoring of appropriate environmental co-variables, such as a site-specific insect harassment index are important design component, which will allow overall effects on caribou behavior to be attributed to mine activity and disturbance, versus variability in natural environmental factors.

### **2.7.10 Response**

De Beers has included the collection of data on caribou behaviour as a function of distance from the mine in the WEMP submitted to the public registry on October 4, 2012 (De Beers 2012a). The sampling methods would follow the same protocols used at the Ekati and Diavik mines, which would collect data on time spent by individual caribou groups on different behavioural activities (e.g., feeding, lying, walking, and running; Golder 2011). Data would be collected on caribou groups with calves and without calves. The statistical models would include variables such as distance to mine, year (or level of mine activity) habitat, and insect harassment index, as developed from site-specific weather data (e.g., hourly wind speed and temperature).

## **2.7.11 Recommendation 15**

A comprehensive analysis and discussion of all data from the monitoring program should be conducted every five years. The 5-year evaluation should include a comprehensive site-specific assessment of effects mitigation and monitoring, as well as an updated cumulative assessment of all industrial activities and developments on the range of the Bathurst herd. The cumulative effects update and summary should be done collaboratively to advance the 'state-of-the-art' in assessment methodologies, test and update critical assumptions, contribute to a regional cumulative effects monitoring approach, and incorporate a review of range-wide industrial development activities relative to recovery and health of the Bathurst herd. This regular review and assessment should be conducted so that it specifically contributes to and is consistent with the ongoing caribou management efforts including (but not limited to) the GNWT-ENR barren-ground caribou management strategy, Aboriginal Affairs and Northern Development Canada's (AANDC) NWT Cumulative Impact Monitoring Program (CIMP) and the initiative to develop a comprehensive management

proposal for the Bathurst caribou herd as outlined in section 12.11 of the Tłıchǫ Agreement.

### **2.7.12 Response**

The WEMP provides for a detailed analysis of Project-related effects to wildlife on a 3 to 5 year cycle. The data and results can be used by the GNWT to analyze and manage cumulative effects, and by other proponents to increase their confidence in future environmental assessments. Additional mitigation for Project-related effects can be suggested by the Project's Adaptive Management Response Framework (De Beers 2012g; also refer to response to YKDFN Recommendation #6 [De Beers 2012d]).

## **2.8 MISCELLANEOUS**

### **2.8.1 Recommendation 16**

The Tłıchǫ Government requests a table that includes a summary of the commitments made by De Beers Canada in the proposed Gahcho Kué project.

### **2.8.2 Response**

De Beers commits to providing an updated commitments list prior to the closure of the public registry.

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### 3 REFERENCES

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## 4 ACRONYMS AND ABBREVIATIONS

AANDC	Aboriginal Affairs and Northern Development Canada
AEMP	Aquatic Effects Monitoring Program
CIMP	Cumulative Impact Monitoring Program
De Beers	Beers Canada Inc.
EAP	Employee Assistance Program
EIS	Environmental Impact Statement
GNWT	Government of the Northwest Territories
LKDFN	Lutsel K'e Dene First Nation
MVEIRB	Mackenzie Valley Environmental Impact Review Board
NWT	Northwest Territories
Project	Gahcho Kué Project
SQO	Sediment Quality Objectives
SSWQO	Site Specific Water Quality Objectives
WEMP	Wildlife Effects Monitoring Program
WMP	Wildlife Monitoring Plan
WQO	Water Quality Objectives
YKDFN	Yellowknives Dene First Nation
ZOI	zone of influence