



March 8, 2012

VIA EMAIL

Chuck Hubert, Panel Manager
Gahcho Kué Environmental Impact Review Panel

chubert@reviewboard.ca

Dear Mr. Hubert

Re: GNWT Round 1 IR Response #20, EIR0607-001, Gahcho Kué Diamond Mine Project

I am pleased to provide a response from the Government of the Northwest Territories (GNWT) to Round One Information Request (IR) #20 for the Gahcho Kué Diamond Mine Project.

Please contact me at gavin_more@gov.nt.ca if you have any questions regarding the attached submission.

Sincerely

A handwritten signature in blue ink that reads "Gavin More".

Gavin More
Manager
Environmental Assessment and Monitoring
Environment and Natural Resources

cc. Veronica Chisholm, Permitting manager, DBCI (via email)

IR Number: GKP 20

Source: Gahcho Kué Panel

To: Government of the Northwest Territories

Reference: EIS Analysis Session, Day 3, pg. 74, 173, 191, 234

Subject: Carnivore Mortality

Preamble:

At the EIS Analysis Session, De Beers indicated that they had not considered the effect of mineral exploration sites on carnivore mortality because that information is generally not made available by the Government of the Northwest Territories (EIS Analysis Session Day 3 Transcript, page 234).

Information provided by De Beers (EIS Analysis Session Day 3 Transcript, pg. 74, 173, and 191) and EIS (Table 7.5-1) show that mineral exploration sites are the most abundant features on the landscape, so these sites could represent a substantial source of carnivore mortality.

Request / Response:

- 1. Provide information on the annual number of wolf, grizzly bear, and wolverine incidents and mortalities at mineral exploration sites and the measures considered to be most successful to reduce these incidents/mortalities.***

On January 13th 2012, ENR's Wildlife Division forwarded a series of data files to Golder and Associates (Dan Coulton) under an ENR Data Sharing Agreement that summarize regional carnivore mortality patterns within the North Slave region and eastern portion of the South Slave region since 1996.

This IR Response is specific to "mineral exploration camps"; the summary does not include other forms of human activities on the landscape, such as established mines or outfitting camps.

ENR notes that a portion of the mineral exploration camps across the Slave Geological Province occur within the Kitikmeot region of Nunavut. ENR's information for 1996-1998 includes available information for the Kitikmeot region until Nunavut became a separate Territory on April 1st, 1999. Therefore, the Panel may wish to also approach the Nunavut government, and request comparable information for the Kitikmeot region after 1998.

Since not all mortalities or incidents are likely reported, Table 1 only represents available information for grizzly bears, wolverine and wolves. The use of the term “incident” can be somewhat subjective, but is interpreted to represent a close encounter involving an attraction to the camps.

Table 1. Reported carnivore mortalities and incidents at mineral exploration camps¹ in the NWT portion of the Slave Geological Province based on ENR North Slave Region - Occurrence Records between 1996-2011.

	Grizzly Bear		Wolverine		Wolf	
	Mortality	Incidents ²	Mortality	Incidents	Mortality	Occurrence
1996 ³		5		2		1
1997		3		1		
1998	1	7		1		
1999		4				
2000		6				
2001						
2002		2		1		
2003		3		1		
2004	4	1				
2005	1	10				1
2006		9				
2007		1		1		
2008						
2009						
2010						
2011						
Totals	6	51	0	7	0	2
Annual Mean	0.4	3.2	0.0	0.4	0.0	0.1

Notes:

1. "Exploration Camps" include: Ekati prior to Oct. 1998, Diavik prior to Sept 2000, and Snap Lake prior to May 2004.
2. Grizzly Bear Incidents. 11 of these 51 Grizzly Bear Incidents involve females with 1 or more cubs.
3. Shaded cells include Kitikmeot region; prior to NWT/NU division in April 1999.

The level of mineral exploration activity on the central barrens can vary considerably on an annual basis. During peak years, there has been a lot of activity as numerous exploration crews try to take advantage of a short summer season.

Currently, there is no systematic collection of wildlife data or analysis of specific mitigation measures that provide a concise summary of which measures are most effective. However, based on the practical experience of ENR field staff involved in addressing problem wildlife situations at exploration camps, out-fitting camps and mine sites, several common themes emerge.

Adoption of the following recommendations would likely assist in reducing wildlife incidents and mortalities.

- a) Bear Safety Awareness. Given the importance of human safety while working in remote regions of the north, it's important that individuals and companies understand that they are working in bear habitat. Individuals working outdoors, involved with food or waste management, or who might potentially encounter bears, would benefit from taking a comprehensive bear safety training.
- b) Perhaps the most important consideration involves the management of food and waste material. Bears and wolverines have a highly developed sense of smell, and are often attracted to food and waste odours. Therefore, all aspects of food handling and storage, as well as waste storage and disposal require close attention. An effective waste management plan requires ongoing staff education and ensuring compliance with the plan.
- c) Camp design and lay-out is also important; careful camp planning during the set-up phase can serve to minimize future wildlife encounters. The kitchen and any potential wildlife attractants should not be located in close proximity to sleeping quarters. Various forms of fencing and robust building skirting can assist in preventing wildlife from gaining access to sensitive areas, or from seeking/gaining shelter under buildings.
- d) Electric fencing can be an effective tool for providing additional protection. Depending on the size or permanency of the exploration camp, various electric fencing options are available. A properly maintained electric fence can provide an effective barrier to bears, and prevent direct access to people, buildings and equipment.

- e) Periodic inspections can serve to provide a pro-active check on the layout and operation of camps, and identify potential vulnerabilities. Obviously, detecting a problem early can help in preventing wildlife from gaining access to a food reward, or becoming habituated to human attractants.