

EA1314-01 - Jay Project

September 3, 2015

Mr. Ernie Campbell
Deputy Minister
Environment and Natural Resources
Government of the Northwest Territories
Yellowknife, NT X1A 2L9

Ms. Colleen Swords
Deputy Minister
Aboriginal Affairs and Northern Development Canada
10 Wellington St.
Gatineau, QC K1A 0H4

Dear Mr. Campbell and Ms. Swords,

Re: EA1314-01 Jay Project – Request for progress report on environmental assessment measures for NWT barren ground caribou on operating mines in the NWT

The Mackenzie Valley Environmental Impact Review Board (the Review Board) is conducting an environmental assessment of the Jay Project, a proposed expansion of the Ekati Diamond Mine. The potential for impacts to the Bathurst caribou herd from the Jay Project is a key line of inquiry in the environmental assessment.

The Bathurst caribou herd has been a key component of previous environmental assessments conducted by the Review Board. Of those assessments, the Ekati diamond mine (Sable, Pigeon, Beartooth), Snap Lake diamond mine, and Gahcho Kué were assessed, received conditional approval, and are in operation or are under construction. These approvals were conditional upon the implementation of measures, including measures that related to the Bathurst caribou herd which were directed at governments and/or developers.

The Review Board requires a clear understanding on the status of its previous measures related to the Bathurst caribou herd from the Government of the Northwest Territories and the Government of Canada. Table 1, attached, lists the measures and suggestions related to Bathurst caribou for Gahcho Kué, Ekati Sable-Pigeon-Beartooth, and Snap Lake environmental assessment. For each, please describe whether it has been carried out, and if not, why not. Please also describe, for each measure that has been carried out, how effective it has been, and if it has not been effective, why not.



Other projects have been assessed within the Bathurst caribou range, but are not currently in operation or under construction. Describing the status of any measures for those projects is not relevant to the Review Board at this time. A list of the measures related to Bathurst caribou for all environmental assessments completed by the Review Board has been attached as Table 2 for your reference.

Please submit your response by September 9, 2015. If you have questions, please contact Chuck Hubert, Senior Environmental Assessment Officer, at the Review Board at 867 766-7052 or chubert@reviewboard.ca.

Sincerely,

JoAnne Deneron
Chairperson
Mackenzie Valley Review Board

Attached:

- *Table 1: Summary of Review Board measures for Bathurst caribou at Gahcho Kué, Ekati Sable Pigeon Beartooth, and Snap Lake*
- *Table 2: Summary of Review Board measures from all environmental assessments related to Bathurst caribou*

Table 1: Summary of Review Board measures related to Bathurst caribou - Gahcho Kué, Ekati Sable Pigeon Beartooth, and Snap Lake



Table 1: Summary of Review Board Measures for Bathurst caribou at Gahcho Kué, Ekati Sable Pigeon Beartooth, and Snap Lake

Gahcho Kué		
ID # (from report of EA)	Recommendation Type: Follow-up Program	Modified or rejected by Minister
Page A-v	<p>The GNWT is the primary authority for wildlife, and therefore should ensure that the requirements for follow-up are met through existing licenses, permits, authorizations, or additional agreements, if necessary. As land managers, AANDC and associated regulators should ensure that monitoring and associated feedback to operations for modifying or adopting new mitigation designs, policies, and practices related to wildlife habitat are incorporated into the Land Use Permit and/or Water License where appropriate. The follow up program should include, but is not limited to:</p> <ul style="list-style-type: none"> • monitoring the zone of influence and its likely causes (e.g. noise, dust, mine activity) (can be completed as part of the Wildlife Effects Monitoring Program); • using results from monitoring the extent of the zone of influence and likely causal mechanisms (completed as part of the Wildlife Effects Monitoring Program) to intensify or reduce mitigations that will minimize the zone of influence; • monitoring the presence of caribou along the winter access road and the effects of the road on caribou movement and behaviour; • describing action levels that will be used to determine when monitoring or mitigations or changes to existing mitigation are necessary; and demonstrating how existing baseline information (such as the caribou trails as a model for likely caribou approaches to the site) and Traditional Knowledge are incorporated in monitoring and management plans. 	Minister approved all measures and follow-up programs.

Table 1: Summary of Review Board measures related to Bathurst caribou - Gahcho Kué, Ekati Sable Pigeon Beartooth, and Snap Lake



ID # (from report of EA)	Recommendation Type: Measures	Modified or rejected by Minister
3	<p>The GNWT and AANDC will:</p> <ul style="list-style-type: none"> • Develop and implement a cumulative effects framework that links project specific monitoring and mitigation (project specific wildlife effects monitoring program and wildlife and wildlife habitat protection plan) to cumulative effects monitoring and mitigation and ensure there is two-way feedback between the project and cumulative scales. The implementation of the cumulative effects framework should lead to effective management including best management practices that can be applied at the Project scale; • Report annually on the development, implementation and results of the framework. <p>De Beers will:</p> <ul style="list-style-type: none"> • Monitor project specific effects (e.g. size of the Zone of influence, changes in habitat, effects of the Winter Access Road on caribou movement and behaviour) and will report to the GNWT and make the results public on how project specific effects contribute to cumulative effects for the duration of the Project. 	
1	<p>De Beers will:</p> <ul style="list-style-type: none"> • Minimize impacts to caribou and the extent of the zone of influence around the mine site to the extent that is technically feasible. Prior to construction, develop a caribou protection plan that ensures protection of caribou and caribou habitat. The caribou protection plan should include an adaptive management framework demonstrating how the Wildlife Effects Monitoring Program and the Wildlife and Wildlife Habitat Protection Plan are linked. <p>Governments, land managers and regulators will:</p> <ul style="list-style-type: none"> • Include conditions for habitat protection in the Land Use Permit. 	
2	<p>De Beers will:</p> <ul style="list-style-type: none"> • Construct and operate the Winter Access Road in a way that minimizes its adverse effects as a partial barrier to caribou movement and migration; • Monitor to determine the presence and behaviour of caribou along the winter access road using means in addition to satellite collar data, such as track counts and visual observations; 	

Table 1: Summary of Review Board measures related to Bathurst caribou - Gahcho Kué, Ekati Sable Pigeon Beartooth, and Snap Lake



	<ul style="list-style-type: none"> and ensure that the caribou protection plan, the wildlife effects monitoring program and the wildlife and wildlife habitat protection plan address the effects on caribou movement and behaviour along the winter access road. 	
Ekati (Sable Pigeon Beartooth)		
ID # (from report of EA)	Recommendation Type: Measures	Modified or rejected by Minister
43	That BHP limit traffic on the Sable access road from the Pigeon lease area, north to the Sable site during caribou migration periods to that described in the BHP EAR. That BHP establish a monitoring program for the road in collaboration with aboriginal organizations. Given the importance of caribou, it is essential that the study approach be scientifically sound, take advantage of traditional knowledge, and ensure adequate data collection for improving prediction confidence for future effects and cumulative effects assessments	Minister stated that: "With regard to the remaining 60 recommendations, the Board did not make a finding of significant adverse impacts regarding each of the matters addressed... Consequently, it is not open to the responsible Ministers to adopt these Board recommendations." ¹

¹ Letter goes on to state that "In the spirit of fostering a sound environmental management, I have instructed Northwest Territories regional officials to provide you with comments on these recommendations, and to forward copies to the Mackenzie Valley Land and Water Board and other regulators for their consideration in the regulatory process." Letter from Minister of AANDC to Review Board, dated April 12, 2001, posted to the Review Board public registry (www.reviewboard.ca).

Table 1: Summary of Review Board measures related to Bathurst caribou - Gahcho Kué, Ekati Sable Pigeon Beartooth, and Snap Lake



Snap Lake		
ID # (from report of EA)	Recommendation Type: Measures	Modified or rejected by Minister
R19	De Beers shall design and implement a pre-construction baseline data collection program for caribou within the RSA, in cooperation with the GNWT, Aboriginal groups, and renewable resource users. This program shall be designed such that it can contribute to regional monitoring initiatives.	
R20	De Beers shall design and implement a specific monitoring program to detect effects of the SLDP and the Snap Lake winter access road on caribou behaviour. The requirement for this program shall be included in the Environmental Agreement.	
R15	De Beers shall evaluate and incorporate the results of the project-specific monitoring into the Wildlife Management Plan (see recommendation 2.5.3.3.2) to minimize impacts on grizzly bear, wolverine, and caribou behaviour and movement.	
R13	De Beers shall, in consultation with the GNWT, develop a Caribou Protection Plan that imposes increasingly stringent mitigation measures as the number of animals potentially exposed to disturbance from the site increases. This plan could be modeled on the caribou protection measures included as terms and conditions of land use permits by INAC in the past.	
R14	De Beers shall, in consultation with the GNWT, develop a monitoring program to test the predictions of the EAR for grizzly bears, wolverines, and caribou and to further the scientific understanding of behavioural responses of these species to mine-related disturbance.	
R26	The Board recommends that the Government of Canada take the lead in implementing a regionalized, multi-party response to the monitoring for and management of cumulative effects in the Slave Geological Province preferably under the umbrella of the CEAM Strategy and Framework.	

Table 1: Summary of Review Board measures related to Bathurst caribou - Gahcho Kué, Ekati Sable Pigeon Beartooth, and Snap Lake



R21	The GNWT shall, within 24 to 36 months, develop a model that detects and evaluates the effects of development on caribou movements and populations in the Slave Geological Province. This model shall enable the setting of thresholds of allowable caribou disturbance for use in future EAs in the Slave Geological Province	
R35	The Government of Canada and GNWT should consider the feasibility of establishing a research based institute devoted to improving the scientific understanding of baseline conditions and environmental responses to renewable and non-renewable developments within the Slave Geological Province.	
R34	The Government of Canada and the GNWT in consultation with the REVIEW BOARD shall within 12 months undertake an analysis of the role of Environmental Agreements in the evolution and operation of the environmental regulatory regime in the NWT.	
R32	The Government of Canada, along with all other interested Parties, shall take immediate action to implement the Blueprint for the Cumulative Effects Assessment and Management Strategy and Framework in the NWT and its Regions. The Board further recommends that the Government of Canada allocate long-term, stable funding to this initiative for a term of no less than ten years.	Minister stated that: "government funding decisions are subject to the annual appropriation of funds by the Parliament of Canada or the Legislative Assembly of the Northwest Territories...That said, we will commit to expending reasonable efforts to meet the intent of this measure." ²

² Letter of from Minister of AANDC to Review Board, dated October 10, 2003, posted to the Review Board public registry (www.reviewboard.ca).

Table 1: Summary of Review Board measures related to Bathurst caribou - Gahcho Kué, Ekati Sable Pigeon Beartooth, and Snap Lake



ID # (from report of EA)	Recommendation Type: Suggestions	
S21	De Beers should design a project-specific monitoring protocol to test for behaviourally-induced habitat avoidance effects as a result of the project, and include this in an Adaptive Management Plan. There is a need to develop scientifically sound research projects to address this issue and to examine the relationship between project activities and a reduction in habitat effectiveness. This protocol should apply to grizzly bear, wolverine and caribou and should be developed in consultation with the GNWT and TK holders.	
S22	The GNWT, using results gained from the monitoring undertaken in the above suggestion and information from the other mines, should evaluate whether there is a population level avoidance response to the SLDP.	
S29	The GNWT should develop cumulative effects thresholds relating to direct and indirect habitat loss for various wildlife species of management concern (e.g., caribou, grizzly bear, wolf, wolverine) as a wildlife management tool for use in responding to development in the Slave Geological Province.	
S30	The GNWT should within 24 to 36 months develop a standard methodology or model for quantifying direct and indirect wildlife habitat loss. The GNWT should encourage developers of future developments to utilize these models for purposes of impact assessment.	

Table 2: Summary of Review Board measures related to Bathurst caribou - from Environmental Assessments for projects that have not yet been constructed.



Table 2: Summary of Review Board measures related to Bathurst caribou - from Environmental Assessments for projects that have not yet been constructed.

Avalon		
ID # (from report of EA)	Recommendation Type: Measures	Modified or rejected by Minister
4	<p>To reduce or prevent significant adverse impacts on wildlife and wildlife habitat, in particular barren ground caribou, from project activities and to inform adaptive management of mitigation that will further prevent significant impacts, the Review Board requires the timely and collaborative development of a Wildlife Effects Monitoring Program by the Developer. Before starting mine construction, the Developer will collaborate with the GNWT to complete and implement a Wildlife Effects Monitoring Program. At a minimum, this program is to include:</p> <ul style="list-style-type: none"> • Both traditional and scientific knowledge; • An adaptive management approach designed to use monitoring to test impact predictions, assess how well mitigation measures perform, and support the adoption of new mitigation measures, if necessary; • Best practices for monitoring and mitigation; • Monitoring to test effect predictions and effectiveness of mitigation related to sensory disturbances, energy costs, the estimated zone of influence through all mine phases; • Monitoring that involves Aboriginal people in the Project study area; • Monitoring that can be readily integrated into regional cumulative effects programs; • And a communications component to ensure Wildlife Effects Monitoring Program results are being reported back to Aboriginal community members on at least an annual basis. 	All measures approved by Minister.

Table 2: Summary of Review Board measures from all environmental assessments related to Bathurst caribou



Nico		
ID # (from report of EA)	Recommendation Type: Measures	Modified or rejected by Minister
11	In order to mitigate significant adverse impacts from the project on caribou, the Tłıchǫ Government and Fortune Minerals will collaborate in ensuring that harvesting of caribou along the NICO Project Access Road does not occur.	
8 (as modified)	<p>To mitigate and manage significant adverse cumulative impacts on barren ground caribou, the Government of the Northwest Territories and Tłıchǫ Government will, in co-ordination with a working group including the Wek'èezhìi Renewable Resource Board, the Yellowknives Dene First Nation, the North Slave Metis Alliance, Fortune Minerals Limited, other traditional harvesters, and other parties as appropriate, use a response framework for the Bathurst barren ground caribou herd to address NICO-Project-specific contributions to cumulative effects. The Government of the Northwest Territories has taken a lead facilitating role in collaboratively developing timelines and work plans for this task and the Tłıchǫ Government will have a leadership role in the implementation of the response framework where and when applicable to the NICO Project.</p> <p>The mitigation of NICO Project-level contributions to cumulative effects on the Bathurst barren ground caribou herd will be addressed through:</p> <ul style="list-style-type: none"> • The development of a Wildlife and Wildlife Habitat Protection Plan (WWHPP), which, among other mitigation measures, identifies and applies best practices at the local-scale of the NICO Project to minimize footprint, sensory disturbance to caribou, project-related wildlife mortality, and increased harvester access; • The design of a Wildlife Effects Monitoring Program (WEMP) to test NICO Project impact predictions related to the herd. The information from the monitoring program may support and contribute to broader cumulative effects assessment and management for the herd; and • The use of the WWHPP and the WEMP monitoring results to support adaptive management at the local-scale of the NICO Project. <p>To address cumulative effects monitoring, assessment, and management at a scale appropriate to the</p>	Modified by minister ³

³ Letter of from Minister of AANDC to Review Board, dated October July 17, 2013, posted to the Review Board public registry (www.reviewboard.ca).

Table 2: Summary of Review Board measures from all environmental assessments related to Bathurst caribou



	<p>herd and as it pertains to the NICO Project, the cumulative effects response framework will:</p> <ul style="list-style-type: none"> • Be informed and guided by the working group; • Demonstrate how the results from the NICO Project WEMP may inform cumulative effects assessment and management programs at the scale of the Bathurst caribou range; • Demonstrate how the NICO Project WEMP may inform the Bathurst caribou management planning process; and • Demonstrate how updated and ongoing cumulative effects management may refine or adapt the WWHPP and the WEMP for the NICO Project. 	
10	<p>To reduce or prevent significant adverse impacts on caribou and caribou habitat from project activities and to inform adaptive management of mitigation that will further prevent significant impacts, the Board requires the timely and collaborative development of a Wildlife Effects Monitoring Program by the developer. Before starting construction, Fortune Minerals will collaborate with others including the Tłıchǫ Government, the North Slave Métis Alliance, the YKDFN, the GNWT, and the Wek'eezhii Renewable Resources Board to complete and implement a Wildlife Effects Monitoring Program. At a minimum, this program is to include:</p> <ul style="list-style-type: none"> • both traditional and scientific knowledge; • an adaptive management approach designed to use monitoring to test impact predictions, assess how well mitigation measures perform, and support the adoption of new approaches, if necessary; • best practices for monitoring and mitigation; • monitoring to test effect predictions and effectiveness of mitigation related to sensory disturbances, energy costs, the estimated zone of influence, and caribou and harvester use of the road through all mine phases; monitoring that involves people in Tłıchǫ communities; • monitoring that can be readily integrated into regional cumulative effects programs; • and a communications component to ensure Wildlife Effects Monitoring Program results are being reported back to community members and the Tłıchǫ Government on at least an annual basis 	

Table 2: Summary of Review Board measures from all environmental assessments related to Bathurst caribou



9	<p>To reduce or prevent significant adverse impacts on caribou and caribou habitat from project activities, and, to inform adaptive management through active monitoring that will further prevent significant impacts from the mine and NICO Project access road, the Board requires the timely and collaborative development of a Wildlife and Wildlife Habitat Protection Plan by the developer. At a minimum, this plan is to include:</p> <ul style="list-style-type: none"> • both traditional and scientific knowledge; • an adaptive management approach designed to assess how well mitigation measures perform and support the adoption of new mitigation, if necessary; • best practices for mitigation and monitoring; the development of clear protocols and standard operating procedures for Project employees and contractors to ensure the implementation of site-specific mitigation; • And instructions and training to mine staff to reduce the potential for interactions between people and wildlife. 	
ID # (from report of EA)	Recommendation Type: Suggestions	
5	Fortune Minerals should work with the Tłı̨chǫ Government, and especially elders, to discuss opportunities and possibilities for offsite caribou habitat compensation in the development of their Wildlife Effects Monitoring Program and Wildlife and Wildlife Habitat Protection Plan.	
6	Responsible wildlife co-management authorities should begin implementing actions described in the “Action Plan for Boreal Woodland Caribou Conservation in the Northwest Territories 2010-2015”, as well as developing and implementing range management plans and a comprehensive monitoring program that will track boreal caribou population indicators and landscape activities across the boreal caribou range in the Northwest Territories. The NICO Project footprint, including the access road, should be reviewed by responsible co-management authorities under the principles defined in the Action Plan.	

Table 2: Summary of Review Board measures from all environmental assessments related to Bathurst caribou



Taltson		
ID # (from report of EA)	Recommendation Type: Measures	Modified or rejected by Minister
1	To prevent significant adverse impacts on caribou from increased hunting access, Dezé will put a gate at the Slave River end of the proposed winter road. This gate should use natural features to prevent circumvention if possible. It is preferable for this gate to be staffed. If Dezé is unable to obtain a lease for this purpose, then INAC, the GNWT and Dezé will collaborate to find another means to allow a gate at this location.	EA application withdrawn, at developer's request, prior to Minister's decision
2	To prevent significant adverse impacts on caribou from increased hunting access, if Dezé is not permitted to block the road on Crown land at the end of each hauling season as proposed, Dezé will block the ice road on the Slave River using snow berms at the end of each hauling season	
ID # (from report of EA)	Recommendation Type: Suggestion	
2	Dezé should examine the literature regarding transmission lines in the vicinity of barren ground caribou to determine if certain tower design features are preferable. If so, Dezé should incorporate these features in its project design to the extent feasible.	
3	The Board encourages Dezé to conduct its monitoring in a manner that complements other efforts to study the Bathurst, Ahlak and Beverly herds where feasible, provided that this does not compromise Dezé's own monitoring objectives.	
1	The GNWT should maintain a staffed check station on the proposed winter road at the Slave River to monitor harvest and road activity for purposes other than project construction. If results of this check station indicate any harvest of caribou cows, the GNWT and Dezé should identify and implement additional physical measures to prevent increased hunting access.	