



Yellowknives Dene First Nation

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April 7th, 2014

Rebecca Chouinard
Mackenzie Valley Land and Water Board
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Dear Ms. Chouinard:

Re: Gahcho Kue – Permit and License Intervention (MV2005L2-0015 & MV2005C0032)

During the week of February 10th, 2014 the Mackenzie Valley Land and Water Board hosted a technical session focusing on the License and Permits for the Gahcho Kue (GK) Mine being developed within the Chief Drygeese Territory.

Outstanding Measures:

YKDFN would again like to point out that the Measures of the Environmental Impact Review Panel remain unfulfilled and Part 5 of the MVMRA is unfinished. This is particularly true of Measure 3¹:

- *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 in a publically accessible manner.*

The implications of this measure reach far beyond the Gahcho Kue project itself. Development of a Cumulative Effects Framework has been a joint initiative for many years yet little if any progress has been made. YDKFN fully supports the Board's intention to link CE with project-specific measures, but until multi-level agencies are activated Measure 3 remains and empty promise. It is unacceptable for Gahcho Kue to be let off the hook for CE management simply because those before them have failed. The facts are plain:

¹ http://www.reviewboard.ca/upload/project_document/EIR0607-001_Gahcho_Kue_Diamond_Mine_Project_Report_of_EIR.PDF

- The GNWT does not have a cumulative effects framework (AANDC has done nothing beyond accepting the Panel's report). They have an effort designed at providing recommendations towards this at some point in the future (2+ years). To date, there has been no political initiative to empower this effort. YKDFN staff have been involved in three similar processes over the last decade, resulting in no action. As the process is similar, there seems little likelihood that the result will be different and it seems clear that this effort does not meet Panel's measure.
- At minimum, best practices must be developed to give projects like GK a guide for developing their own CE plans. In the absence of this, YKDFN would be willing to partner with DeBeers and other parties to take on some of the leg work and propose guidelines for government consideration and approval. This action would at least demonstrate DBC's commitment to satisfying part two of Measure 3. Neither GNWT or AANDC have issued anything that addresses this issue (there was a similar recommendation in the 2011 WRRB report on the Bathurst Caribou Harvesting Plan that is unfulfilled)
- GNWT and AANDC have failed to produce an annual report outlining the development and results of the Cumulative Effects Framework.

Recommendation:

- YKDFN ask the Board to write to the Minister to ask that this Measure be acted on under *s.136(2)* where the "responsible ministers *shall* carry out a decision under section 135 to the extent of their respective authorities" [emphasis added]. Meaningful progress must be made on behalf of government, not only to satisfy their regulatory obligations, but to enable independent developers to do the same. The status quo must be changed for the protection of YKDFN's most precious resources.

Wildlife Monitoring and Management:

- **Wildlife Effects Monitoring Plan (WEMP):**

Measure 1 requires De Beers to:

- *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.*

At present, the WEMP (and other plans) fails to address this Measure because it fails to provide the clear linkages and adaptive responses. Parties still have no idea how the WEMP and WWHPP interact nor what conditions would trigger management responses. YKDFN accept that this falls outside the enforcement of this Board, but YKDFN again want to note that the project has consistently failed to address the concerns of the Panel and the YKDFN, particularly in regards to caribou. These concerns have been raised numerous times since the initial meetings with the proponent and its consultants and remain to this day.

YKDFN are simply asking for the mitigations required by the Panel be implemented to try and ensure that the significant impacts they were designed to mitigate are reduced in magnitude. It is disappointing to see both the Federal and Territorial Government fail to address this requirement.

- Wildlife and Wildlife Habitat Protection Plan (WWHPP):

YKDFN have significant concerns relating to the projects WWHPP, which falls under the authority of this Board and is within its jurisdiction. Particularly relevant is another measures issued by the Review Panel, which remain to be addressed.

Measure 2 is directed at the company:

- *The project must demonstrate that it is constructing and operating the winter road in a way that minimizes the effects on caribou movement and migration.*
- *The project will monitor the presence and behaviour of caribou along the winter road by means other than collars.*
- *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.*

Addressing this measure on a point by point manner:

- During the technical sessions the project admitted that they did not construct the winter road in a way that would allow different methods of construction to be assessed in order to determine what effects the road was having on caribou movement and migration.
- Without an established benchmark for assessing impacts of the road on caribou behaviour, it is impossible to assess effective strategies for reducing observed impacts.
- During the technical session, the project admitted that there is no specific caribou protection plan, with YKDFN pointing out the obvious flaws in the WWHPP approach – the activities within the WEMP and WWHPP do not meet the language or the spirit of this measure.

The Caribou protection plan was also a focus of Measure 1, where it was supposed to be developed prior to construction and to pull together various aspects of the monitoring plan

and provide the mechanism by which these programs fed into adaptive management. Perhaps if this measure had been complied with, the project would have been in a position to respond in a coordinated and directed after the vehicle collisions.

It's worth noting the proponents approach to addressing the concerns and suggestions of the Parties. Initially, the project fought against any actual recognition that their project was occurring in the Caribou range. After that, they struggled against developing meaningful monitoring programs. Most recently, this was shown in the project's initial behaviour monitoring proposal, submitted around the development of the PLUP. During a conference call shortly afterwards, YKDFN expressed strong reservations at the lack of study design or identified personnel – the logistics of pulling this kind of study together requires thought and planning. These concerns were brushed aside with certainty that the project could put the people in the field very quickly and that the appropriate study design would be developed. After the vehicle collisions, YKDFN followed up on this matter during the technical sessions – to find out that the project still had not deployed monitors, more than three weeks after the clear trigger that caribou were on the road and behaviour monitoring was required (though caribou were known to be in the area prior to the collisions, the project had not initiated any additional monitoring efforts).

The methods and approach selected for the distribution/zone of influence, road permeability and behaviour modelling remain fundamentally flawed. As currently designed they will be simply unable to deliver the desired results.

At present, the detection regime is to drive up and down the road by truck. The monitoring will occur by truck. As such, the only monitoring activity is occurring within a few hundred metres of the road, which itself is within the affected zone. This approach does not allow for measuring behaviour of caribou independent of the variable of disturbance – the road itself! As mentioned, YKDFN has continuously raised this failure, but the project has not changed their approach.

The project has chosen to use track counts as its distribution monitoring method, despite the fact that this approach was discarded at Ekati because it was difficult and unwieldy. When confronted with this reality, the project simply assured us that they would be able to conduct the monitoring without providing a rationale why De Beers will succeed where BHP failed. Once again the project presumes to know better - To expect different results with the same approach is not rational.

After the vehicle strikes, the proponent updated it's monitoring plan, but instead of improving on the monitoring approach, it was made worse, with less detail and more imprecision in terms of the actions to be undertaken – with the fundamental limitations still very evident.

The objectives of the monitoring are disconnected and unclear, the triggers by which activities will occur lack clarity (i.e. common use of the word may), with the management actions and adaptive management responses unconnected. As a result, the Measure is not met and the resulting mitigations are weak and do not provide for protection of Caribou or mitigation of potential effects. The Dene people will continue to sacrifice while industry creates new impacts.

Unless the monitoring approach is improved, there is little point to undertaking the work – the design will produce inconclusive results, with no change to planned operations, regardless of real world impacts to Caribou. We must do better – the Dene people are sacrificing and facing real hardships – industry can seek to better mitigate their impacts.

Recommendation:

- The Board should require the immediate formation of a working group to improve the design of the WWHPP such that it provides useful monitoring data for the short and long term. This working group should hold its first meeting within 90 days of licence issuance.

- This working group should be charged to improve the habitat protection plan, to be submitted for approval, particularly the monitoring aspects with the following:
 - o Clarify language and decision processes – A review of the project documents will reveal an abundance of optional actions and imprecise language. This must be clarified so that the action(s) is tied to the observations and not a decision for the company to make based on costs. This requires clarity of language for all parties, meaning that precise language must replace discretionary language wherever possible.
 - o Identify meaningful and clear mitigation/action levels – as presently written, the monitoring actions are at best, weakly linked to management insofar as they occasionally slow vehicles down. The project's approach to behaviour and avoidance monitoring is not linked to adaptive management nor can it produce meaningful results to adjust operations and lower impacts.
 - o Improve monitoring of the road beyond visual range – The zone of influence (as defined by the project) for the winter road extends between 1.5 and 3.5 km, which is the area which must be monitored for changes in behaviour, avoidance, deflection (i.e. refusal to cross the road). This must include distribution monitoring as well.
 - o Develop timelines for mobilization and deployment of monitoring efforts and resources. Caribou can quickly enter and leave an area – we cannot have three plus weeks to develop a monitoring program.

- The project must develop a program that seeks to address potential barrier/permeable filter effect of the winter road. The current proposal does not include even simple mitigations to minimize this effect (road bank height < 1m, road back push outs to encourage crossing, or other known mitigation by design efforts established through operations at other mines). There is no method to utilize the beyond visual range monitoring and observations or actual crossing efforts to determine if the road acts as a barrier or what local mitigations were utilized.
- To establish a community perspective with regards to roads and impacts to Caribou, a special study should be initiated that requires the project to work with YKDFN TK division to develop research study scope for impacts of roads on caribou behaviour and health.

Water Quality:

- The project has consistently and repeatedly stated that the project the proponent has submitted volume after volume of paper – many thousands of pages. But ultimately, the fact is simple. This project will not meet the conservative, protective guidelines established by the Canadian Council of Ministers for the Environment. They need their own unique limit so that they can operate without treatment and release contaminants at a level higher than those guidelines. Conservation and protection of the environment to support the Dene way of life is a fundamental part of the review that we're undertaking. YKDFN accept that the Review Board has found that the project would not have significant impacts, but the question that remains is just what level of pollution the project should be licensed to release into the environment.

The start of this answer is to look at the receiving environment – which is termed Lake N11. The baseline work shows that Ammonia and Nitrates at very low levels. This is a healthy environment – the water is very clean and the fish and animals can be trusted to support the Dene way of life. The project believes that releasing water that is 500 to 750 times higher² is protective of the aquatic ecosystem. YKDFN do not agree – it may not be acutely toxic, but it cannot be considered protective.

Recommendation:

- The project should be required to meet more stringent limits for the level of contamination that it releases, which will ensure conservation and protect the Dene way of life.

² from March 26th De Beers email

- The SSWQO's were derived through a process that YKDFN neither understand nor have the expertise to review, but if they are protective of the environment, it should be demonstrated through appropriate monitoring and testing. Given the failures at Snap Lake, this is an essential part of showing effective environmental stewardship and adaptive management.

Recommendation:

- The license must require toxicity testing similar to that at Snap Lake
- The project has argued that it does not need Effluent Quality Criteria for hydrocarbons, despite the history of contamination observed at the CCF facility operated by this company. Furthermore, given the history of malfunctions and accidents associated with De Beers, we believe that including this as a license condition is a protective and proactive. Naturally, we hope that this matter is shown to be a non-issue over time, but given the history, good stewardship requires more than hope.

Recommendation:

- Include appropriate license monitoring requirements for hydrocarbons.
- During the technical sessions, the project undertook a commitment to provide EQCs for Area 8. The response to this effort was to note that they were unable to provide this response until April 3rd. The limited information seems to suggest that this area will more impacted than those proposed by lake N11. As such, it seems probable that the company will simply suggest even higher SSWQO so that treatment remains unnecessary. YKDFN hope that the Board imposes a high barrier, seeking to ensure that the water quality remains similar to that pre-development as the project often cited the 'saving' of Area 8 as a central mitigation of their planning/designing for closure.

Recommendation:

- Any EQCs for Area 8 should be similar to the baseline quality

Closure Planning:

YKDFN is concerned with much of the language surrounding the closure goals/objectives to date. Despite the mines short life, the closure plan is still ill-defined. While we all understand that the details can be established at some point in the future, YKDFN have consistently sought to see the broad commitments advanced to a point where they have been collaboratively agreed on – that this site will not simply be a gravel pad beside a rock mountain overlooking a very deep lake which bears little resemblance to the one that will be destroyed to access the diamond bearing kimberlite. The site must be reclaimed to something that reflects the surrounding

environment. The area should be similar to what is there now – those of us who've been there have seen a productive part of the taiga. Muskox, caribou and bears use this area. The Yellowknives Dene fished, hunted and travelled all through this area. That is the standard that must be achieved.

- **Post Closure Vegetation and Land Cover** - YKDFN believe that the site should be reflective of the surrounding environment and provide effective habitat for the wildlife that use the area presently. As the De Beers executive Dave Putnam said in the Snap Lake Water Licensing process – the company is borrowing the land. We expect that it will be returned in a manner that is similar to the state it is in now.

During the technical sessions it became clear that there is a disconnect between the project's stated closure objectives: "salvage and stockpile soil, overburden and lakebed sediments, to the extent practical, from areas of disturbance" to facilitate reclamation, and the operational plans, where this material was simply going to be placed in a part of the rock pile. We know from every mining development that projects are extremely reluctant to return to the rockpile to access material. In this case, the material would be at the bottom of several hundred million tons of rock, so the current operational approach will involve the permanent exclusion of irreplaceable material for potential re-vegetation. Throughout the environmental review, De Beers has been reluctant to commit to successfully re-vegetate the site and if this step were to occur, they would have a strong case for excluding that option. During the technical session, we finally heard De Beers say that they will actively re-vegetate some areas of the site. As noted during those sessions, YKDFN has been pursuing clarity on this matter since the start of the Environmental Impact Review, but now that we're looking at building the mine, we need to be clear on how to close this mine.

Recommendation:

- The Board should require the company to prepare a draft reclamation research plan to be completed within 6 months of the issuance of this license. This will allow the long term research items (particularly vegetation trials) to be commenced immediately and inform the closure planning process prior to the project being required to finalize sections of that plan.
- The Board should require a Closure Working Group to be initiated immediately after the submission of the reclamation research plan
- The Board should provide direction to parties that establishment of closure components and objectives should be collaboratively completed within 1 year of the license/permit being issued. These objectives should be aimed at ensuring that

the current land use – wildlife habitat – can be continued.

- The closure plan for the Fine PK storage does not reflect any vegetation or medium for vegetative growth. As a large gravel pad is not reflective of the surrounding environment and provides little benefit to the wildlife who will depend on this area post closure, the Board should reject this portion of the closure plan.
- An interim closure and reclamation plan, conforming to the Board's published guidelines, should be submitted for approval prior to mill processing.
- **Post Closure Water Quality-** Water quality after the mine operations will be degraded and no longer reflective of the pre-existing conditions. All major ions will be higher and nutrient levels will be higher, moving the lake away from its oligotrophic status; eight elements will be higher than background conditions, in excess of twice the current condition for perpetuity. With the current closure plan, the water quality for these headwaters will be forever changed. Again, I'm sure that the project will describe this as protective of the environment, but YKDFN don't see the permanent alteration of the lake as protective.

Recommendation:

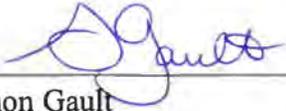
- The projects post closure water quality plan must be improved. A permanent doubling of the baseline concentrations after this operation has ceased is an excessive alteration of the environment and improvements must be sought. This places the recovery and health of Kennady Lake and the health of the aquatic ecosystem at risk.

Closing Concerns:

YKDFN would like to compliment the company on a much improved application, compared to the PLUP. While there are many outstanding concerns, YKDFN have chosen these four areas to seek further action on – failure to address these matters will result in greater impacts than originally foreseen. Action now will ensue that the impacts during operation can be mitigated and that after operation, we can see this land returned to a state similar to present day. We have enough gravel pads in the Chief Drygeese Territory.

As always, YKDFN look forward to working with the project to improve these plans and in the process, hope that it becomes a model of environmental stewardship by industry.

Sincerely,



Shannon Gault
Director, Lands and Environment

cc: Veronica Chisholm (By Email)