## Lutsel K'e

## Wildlife, Lands and Environment Department

Lutsel K'e Dene First Nation P.O. Box 28 Lutsel Ké, N.T. X0E 1A0

Telephone: (867) 370-3197 Fax: (867) 370-3143

\_\_\_\_\_

July 16<sup>th</sup>, 2012

Via email: chubert@reviewboard.ca

Mackenzie Valley Environmental Impact Review Board #200 Scotia Centre 5102-50th Avenue Yellowknife, NT X1A 2N7

RE: Lutsel K'e Dene First Nation – 2<sup>nd</sup> Round Information Requests for the De Beers Canada Inc.'s proposed Gahcho Kue Diamond Mine Project.

Lutsel K'e Dene First Nation is pleased to provide the following 2<sup>nd</sup> round Information Requests to De Beers for the proposed Gahcho Kue Diamond Project.

If you have any concerns regarding the IRs, please feel free to contact me.

Sincerely,

Mike Tollis

Wildlife, Lands and Environment Manager Lutsel K'e Dene First Nation lkdfnlands@gmail.com

P: 867-370-3197 F: 867-370-3143

Source: Lutsel K'e Dene First Nation

**To**: De Beers Canada Inc.

**Subject**: Fish Habitat Compensation Plan

**Concern**: "As part of this process, several meetings have occurred with local and regional DFO staff to further the compensation planning and allow for DFO feedback."

**Rationale**: LKDFN believes that the members of the community have important traditional knowledge information to share that could inform the approach that DBC should be taking, as well as the finalization of options selected to compensate for the destruction of fish and fish habitat.

**Request**: LKDFN requests that DBC indicate how they considered TK in the selection of options for fish compensation.

Source: Lutsel K'e Dene First Nation

**To**: De Beers Canada Inc.

**Subject**: Objectives for Water Quality and Sediment Quality

**Concern:** "Copper and cadmium have been identified as being above CCME WQGs in Kennady Lake under baseline conditions (Table 1). Per CCME (2007), these naturally elevated baseline concentrations indicate that site-specific WQOs for copper and cadmium should be above the CCME WQOs."

Rationale: In Table 1, total copper has a CCME WQG of 0.002-0.004mg/L depending on hardness, yet under baseline conditions in column 4, total copper has a value of 0.0012mg/L, and there is no baseline hardness measure. However, in the projected long-term steady state concentrations, copper ends at 0.002mg/L, exceeding CCME WQGs. In dissolved metals, copper's baseline is 0.00069mg/L with the same 0.002-0.004mg/L guideline. Further, it appears that baseline for aluminum (total and dissolved) is above CCME WQGs at baseline as well, and no consideration has been paid to aluminum.

**Request:** (3.1) LKDFN requests DBC to explain further why a site-specific WQO is required for copper if the baseline concentration listed in the table is below CCME WQOs.

(3.2) LKDFN also requests that DBC provide reasoning for not considering aluminum in their site-specific WQOs.

**Source**: Lutsel K'e Dene First Nation

**To**: De Beers Canada Inc.

**Subject**: Objectives for Water Quality and Sediment Quality

**Concern:** "The water quality modeling results indicate that baseline levels of only cadmium and copper exceed CCME WQGs and therefore these [are] the only two parameters predicted to exceed CCME WQGs at closure."

**Rationale:** According to Table 1, under the predicted long-term steady state concentrations column, the predicted concentrations of aluminum and fluoride both appear to exceed CCME WQGs.

**Request:** LKDFN requests DBC to explain why the parameters of aluminum and fluoride are not considered to exceed CCME guidelines.

Source: Lutsel K'e Dene First Nation

**To**: De Beers Canada Inc.

**Subject**: Objectives for Water Quality and Sediment Quality

**Concern:** "1. Apply generic national (CCME) WQGs and sediment quality guidelines (SQGs) or, where such do not exist for some substances, the nearest equivalent benchmarks (e.g., USEPA water or sediment quality criteria).

"3. If baseline/reference concentrations are above the guidelines or benchmarks, replace the guidelines or benchmarks with those concentrations."

Rationale: LKDFN believes that DBC should be striving to minimize their impacts to water quality, and making their best efforts to try and leave the water, post-closure, in as close to baseline conditions as they possibly can. It is understood that if a baseline parameter exceeds national guidelines, the guidelines should be adjusted in a site-specific way, with the intention of maintaining baseline values post closure. Under the *Process for Development of Water and Sediment Quality Objectives* section, DBC seems to endorse the idea that the baseline value of the exceeding parameter becomes the new guideline, in essence, the baseline value *is* the objective. LKDFN supports this idea, and believes that this notion should be applied to all parameters, not just those in excess of the CCME guidelines.

In Table 1, every single parameter measured is predicted to be higher post closure, and long term steady state than the current baseline concentrations; some will experience more than ten-fold increases in concentration. But these elevated values are still below CCME guidelines, so as far as "best practices" are concerned, DBC is following protocol. The national guidelines are in place as a conservative approach to protecting water quality, yet if all guidelines were exactly reached in these pristine lakes at closure, the water quality would be worse than its natural state. However, if the baseline water quality measurements *are* the guidelines, in trying to meet these objectives, DBC would be decreasing their water quality impact, and improving their environmental performance by holding themselves to a higher standard.

**Request:** LKDFN requests that DBC provide information on why all baseline values cannot be the objectives for water quality, or at the least, why baseline values cannot be the objectives for the parameters that do not have a CCME WQG.

**Source**: Lutsel K'e Dene First Nation

**To**: De Beers Canada Inc.

**Subject**: Environmental Monitoring and Management Framework

Reference: 3.2.5

Concern: "Concerns regarding the access road relate to the potential for increased

harvesting of caribou."

Rationale: The monitoring of the winter access road to Mackay Lake notes that concerns related to the road are focused on the increased harvest of caribou. LKDFN believes that the current Tibbitt to Contwoyto Winter Road (TCWR) has been a source of various issues with the movement of caribou, and not strictly related to caribou harvest. The banks on the sides of these roads are a cause for concern with the community members, as they become too high and too deep for the caribou to cross, forcing them in a direction they do not necessarily want to travel. The roads interrupt migration routes and fragment habitat, and further, in the winter months when caribou are present on the roads, this is a source of mortality of caribou from collisions with vehicles. Understandably, caribou migration routes vary year to year, but over the planned 11 year mine life, and even greater, the life of the winter access road, it is reasonable to assume that the caribou will make at least one appearance on the road, or try to cross over it in some capacity.

**Request**: LKDFN requests that DBC provide more information on the potential impacts of the road, including impacts on migration routes, fragmentation of habitat, and mortality from collisions.

IR#: LK 06

Source: Lutsel K'e Dene First Nation

**To**: De Beers Canada Inc.

**Subject**: Environmental Monitoring and Management Framework

**Reference:** 3.1, 3.3.2

**Concern:** "The primary influences to the terrestrial ecosystem from the Project are related to vegetation and habitat loss, and changes to habitat quality (from factors such as dust)."

"In terrestrial areas, dust deposition and air emissions may alter soil properties by deposition of metals and other airborne contaminants, which could influence vegetation and terrestrial wildlife."

**Rationale:** DBC acknowledges that vegetation and wildlife will be impacted inside and outside of the project footprint. However, in section 3.2.6 on caribou monitoring, there is nothing that addresses the potential loss of habitat or potential health risks posed to caribou through dust deposition in soils and vegetation. This concern is raised repeatedly in the communities and none of the operational mines in the NWT have taken on the task of determining impacts to caribou from consumption of vegetation subject to dust-fall.

Instead DBC plans to contribute to the population monitoring of the Bathurst herd. LKDFN believes this is an easy way out of determining real impacts to caribou. The end of the caribou section states, "...the details of this contribution have not yet been defined, discussions between ENR and De Beers continue." We do not want this contribution to simply be the reporting of caribou sightings or incidents at the mine, instead we request an approach that would be more valued to the communities and more useful for continual improvement of mines in the long term.

**Request:** LKDFN requests that DBC provides information on the effects of dust deposition on caribou health, and that DBC considers the impacts of dust deposition on caribou presence and caribou health throughout the life of the mine.