

# Memo

To: Carolanne Inglis-McQuay

From: Allison Rippin Armstrong

CC: Pamela Strand, Denise Lockett, Kevin Buck, Stephanie Briscoe

Date: March 7, 2007

Re: Shear Minerals Ltd. - Churchill Diamond Project Amendment Application Update

#### Carolanne:

I wanted to provide you with an update on Shear Minerals activities since the submission of the amendment applications to INAC and KIA. Before I do this though, let me provide you with a brief background of the Churchill Diamond Project. In the past, applications were made in the name 4579 Nunavut Ltd., which is a wholly owned subsidiary of Shear Minerals Ltd.

#### **Background**

Shear Minerals applied to INAC and KIA for land use permits in 2003. At that time, the project was based out of Rankin and Chesterfield Inlet. Crews were flown to the field each day returning to the communities in the evening.

During the 2004 field season Shear Minerals worked with community members to establish potential locations for an exploration camp. The location that was selected was on Josephine Lake which is on IOL.

In late 2004, early 2005, Shear Minerals applied to the KIA for a land use permit that included the construction of a temporary exploration camp on Josephine Lake. Community members from Chesterfield Inlet expressed concern at this site location as Josephine Lake is a Char lake that has been traditionally fished and is still fished today. Shear Minerals worked with the Chesterfield Inlet HTO to conduct a survey of lakes in the area. The ice was drilled on a number of lakes to search for alternatives with deep enough water to support a camp under ice conditions. Josephine Lake was found to be the only lake capable of providing clean water to a camp.

Shear Minerals traveled to Chesterfield Inlet to hold community information and community consultation meetings. Through these discussions the community agreed to allow Shear Minerals to establish a camp on Josephine Lake and worked with the company to indicate sensitive areas to be avoided and to design a water quality monitoring program.

In addition, Shear Minerals has been working with the community to collect oral traditional history on the Josephine Lake area. This information is being collected for the communities of Rankin and Chesterfield Inlet.

The camp was constructed in 2005 and field crews have been based there since. Each year Shear Minerals brings people from the communities to the camp for tours.

#### Wildlife and Water

Shear Minerals worked with Gartner Lee to design a "regional" water quality monitoring program. Two years of water quality data have been collected with additional monitoring planned for the upcoming 2007 field season.

As mentioned previously, Shear Minerals also monitors water quality in Josephine Lake to ensure that the exploration camp has no effects on the lake. There is absolutely no discharge to the lake and the camp is situated such that any run-off from snow melt and/or rain does not enter Josephine Lake.

Shear Minerals has a strict no fishing policy. The communities of Rankin and Chesterfield Inlet still rely on the char in Josephine Lake. During the community consultation meetings Shear committed to community members that employees and contractors would not be allowed to fish. Hunting is also strictly forbidden.

As with most exploration programs, low-level airborne geophysical surveys are sometimes required. Shear Minerals has committed to working with the communities, the HTO's and the KIA to communicate prior to any airborne geophysics programs, the locations and the dates of the surveys ensuring that everyone is aware of when and where the surveys are taking place and that no hunting or other land activities are disturbed. Shear Minerals Ltd. has also committed to inform the communities on the name and type of helicopter that we are using during our activities.

Shear has also committed to hiring local wildlife monitors who will survey the area prior to any airborne geophysics to be sure that no wildlife are present. The wildlife monitors will continue to monitor the area during the surveys.

Shear Minerals has worked with the KIA to develop wildlife sighting recording sheets for field personnel, helicopter pilots and camp personnel. Shear also met with NTI to discuss the wildlife sighting sheets. Shear Minerals will provide the KIA, NTI and the HTO's with the wildlife sighting information each month.

## **Community Consultation**

Shear Minerals traveled to Rankin Inlet on February 14, 2007 to hold a community information/consultation meeting. On February 15, 2007 Shear Minerals traveled to Chesterfield Inlet to hold an information session for students in the high-school and then a community information/consultation meeting in the evening. On February 16, 2007 Shear Minerals met with the CLARC's in the morning and the Rankin Hamlet in the afternoon. At each of these meetings Shear provided an update on the Churchill Diamond Project and presented the 2007 field program plans. The amendment to the KIA and INAC land use permits to include bulk sampling at four locations was discussed in great detail.

The community consultation meetings were both well attended. There was a lot of very good discussion with regard to the reclamation of the bulk sampling sites. Shear Minerals is working with both Rankin and Chesterfield Inlet on reclamation projects. Youth sports teams/groups will collect local seed with elders who will teach the young people the traditional names of plants and their traditional uses. Shear Minerals will sponsor these youth sports teams/groups.

Shear Minerals will be traveling back to the communities in the near future to hold job interviews for positions at camp.

### **Bulk Sampling**

The amendment applications submitted to KIA and INAC this year are to include bulk sampling at four locations. These locations are described in detail in the Work Plan that was submitted as part of the application. Ideally Shear Minerals will be able to complete the bulk sampling under snow conditions. The information provided in the work plan describes how the bulk sampling will be conducted. Although bulk sampling could be conducted in the summer, it is Shear's preference to complete the work prior to spring thaw.

Basically described, the bulk sampling will involve the stripping off of the topsoil/humus layer, and the removal of any sand, gravel and rocks to get to the kimberlite dyke. Each of these layers will be segregated and stockpiled on the snow. Once the kimberlite sample has been extracted, it will be transported overland in the winter with acceptable snow conditions to Rankin Inlet to await shipping by barge. The excavated area will be immediately backfilled. The topsoil/humus layer will be placed back on top and will be re-contoured. Reclamation of these sites will continue throughout the field season as weather permits. The advantage of conducting the bulk sampling on the snow is:

- o Footprint is minimized.
- o Reclaiming the segregated material is more successful as you can scrape down to the snow.

The excavator will not be walked across the tundra unless sufficient snow cover is present. The unit that Shear has chosen can be broken down and slung by helicopter. This is described in more detail in the Work Plan.

As described, Shear Minerals would prefer to conduct the bulk sampling under snow conditions to keep the footprint to a minimum and to have a greater recovery of segregated material for reclamation of the sites. The bulk sampling would take 7-10 days per site under ideal winter conditions.

I hope that this summary and update has been helpful. If there is any further information that you require, or any questions that you have, please do not hesitate to contact me at (780) 929-8344 or (780) 995-2499.

Regards,

Allison Rippin Armstrong Environmental Manager