DE BEERS
A DIAMOND IS FOREVER

11 April 2003

Mackenzie Valley Environmental Impact Review Board (MVEIRB)
Box 938, 5102 – 50th Avenue
Yellowknife, NT X1A 2N7

Attention: Vern Christensen, Executive Director

Dear: Vern

SUBJECT: De Beers Canada Mining Inc. Hearing Presentation Submission

Please find attached De Beers' outline of the hearing presentations. We trust that it meets the Board's requirements.

Should you require any further information, please feel free to contact the undersigned.

Sincerely,
SNAP LAKE DIAMOND PROJECT

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DE BEERS CANADA MINING INC. HEARING PRESENTATION SUBMISSION

General Approach to Presentation of Issues

De Beers' approach to presentations at the hearing will be to provide the Board with an overview of the issues associated with the development of the Snap Lake Diamond Project. The discussion will be focused on outstanding issues that were identified at the Pre-Hearing Conference. The following provides some more detailed information on how these outstanding issues will be presented at the Hearing.

Day 1, AM – De Beers' Opening Remarks

Project Overview

A description of the Snap Lake Diamond Project including: project description, mining method, continuing work since the EA submission, update on other agreements (Socio-economic Agreement, Impact Benefit Agreements), and commitments made by De Beers to date.

Issues Overview

A description of the issues that have been associated with the Snap Lake Diamond Project and the progress that has been made in resolving these issues to date will be provided. This presentation will also include an overview of the proposed mitigation and monitoring measures, the Environmental Management System and the critical remaining issues that we will work toward resolving during the Public Hearings.

Day 1, PM – Geotechnical/Geochemistry

The broad geotechnical issues have been resolved and only a few issues remain, all of which are related to the North Pile. The presentation will provide an overview of the North Pile, and will provide background and rationale for the use of paste deposition.

Thermal Model

Models allow us to ask "what if" questions to test the behaviour of the system and help to identify what we should monitor to determine performance in the field, where we can best monitor and when action should be taken. The temperature (or thermal) model was set up using the laboratory-measured characteristics of the paste PK (processed kimberlite) and the actual site weather data. This model will be discussed in the presentation.

Cryo-concentration

Cryo-concentration (or freezing concentration) occurs during freezing and will be discussed in the presentation. As ice forms, chemicals in the water are expelled from the ice and remain in the water. This results in a smaller amount of water remaining with a higher concentration of chemicals. This is an issue with respect to the quality of the water seeping from the paste and leads to the ultimate issue, which is the seepage from the pile.

Seepage from the North Pile

The issue was that water would seep from the ditch into the lake. To resolve the issue, we have reversed the direction of that flow so that it is now from the lake to the ditch. This was done by putting the bottom of the ditch slightly lower than the lake level. This

also means that the ditch bottom will be in granite bedrock. As an additional control for seepage, we will build an embankment beside the ditch to raise the permafrost level above the ditch bottom, which creates a barrier to flow. As will be discussed, with these modifications, we are confident that we have broken the pathway between the North Pile and Snap Lake.

Board consultants grouped the remaining geochemistry issues into one generic issue referred to as prediction of mine water discharge quality.

Mine Water Discharge Quality
The mine water is the largest component of the discharge and has the largest effect on the discharge water quality. The key factors contributing to the mine water quality are the amount and concentrations of the connate water entering the mine. The approach used to predict the mine water discharge quality and the rationale for selection of appropriate values for use in the assessment will be discussed. This will include discussion of results from several different scenarios that were proposed by the intervenors.

Day 2, AM/PM - Hydrogeology

De Beers will only be making a brief statement surrounding Air Quality Monitoring.

Most of the hydrogeology issues have been resolved or are no longer issues; the Board consultants grouped the few remaining hydrogeology issues into one generic issue referred to as prediction of mine water discharge quantity.

Mine Water Discharge Quantity
Snap Lake is at a higher elevation than all of the surrounding large lakes. This means that under baseline conditions and at closure, water will flow downward and outward from Snap Lake, below the permafrost to large lakes at lower elevations. During operations, pumping from the mine will cause downward flow from the lake to the mine and will draw in groundwater from the fractures in the rock.

How much water enters the mine, and from where, will affect water management, the size of equipment on site and predicted discharge concentrations. The approach used to predict how much water will enter the mine and the rationale for selection of appropriate values for use in the assessment will be discussed. The possibility of upward diffusion will also be addressed.

Day 3, AM/PM – Water Quality and Aquatics

Water Treatment
The proposed water treatment plant will provide best available treatment of site water prior to release to Snap Lake. The treatment process is based on proven technology that is practical for a remote northern project. An overview will be provided of the selection and capabilities of the treatment process.

Under-Ice Mixing
The treated water from the Snap Lake Project will be discharged to Snap Lake through a diffuser outfall. The diffuser provides initial mixing of the treated water discharge with lake water. During ice-covered conditions, currents are very small and mixing in Snap Lake will be governed by density differences between the treated discharge and water in Snap Lake. The approach used to account for under-ice mixing and predict conservative estimates of under-ice water quality in Snap Lake will be discussed.

Total Dissolved Solids (TDS)
The amount of TDS is expected to increase gradually in Snap Lake over the life of the Project, and then eventually drop. The concern is that the increase in TDS levels will affect aquatic life in Snap Lake. The predicted changes in TDS concentrations and the potential impact on the aquatic ecosystem of Snap Lake will be discussed.

Nutrient Enrichment
The amount of phosphorus is expected to increase in Snap Lake over the life of the Project. The concern is that the resulting increase in algal productivity will change the nature of the aquatic communities of the lake (including the presence of keystone species). The range of potential increases in phosphorus and the consequences on the aquatic ecosystem of Snap Lake will be discussed.

Dissolved Oxygen Concentrations
Dissolved oxygen may decrease in deeper portions of the lake in late winter. This phenomenon would be associated with increased productivity. The concern is that this would affect habitat quality in Snap Lake. The potential changes in winter dissolved oxygen concentrations and the consequence of changes in habitat quality on fish and other aquatic life in Snap Lake will be examined.

Metal Concentrations
There is a potential for a minor chronic toxicity effect in the immediate vicinity of the diffuser due to the levels of cadmium and chromium in the treated effluent released into Snap Lake. There was a concern that this would have a direct effect on aquatic life and an indirect effect on fish food availability. The potential impact of the discharge of these metals on the aquatic ecosystem of Snap Lake will be discussed.

Multiple Stressors
There is a concern about the combined effects of the changes listed above to act as "multiple stressors" on the aquatic ecosystem of Snap Lake. The potential combined effects of these changes on the aquatic ecosystem of Snap Lake will be discussed.

Keystone Species
The potential for loss of keystone species in relation to the changes listed above will be examined both in the context of individual changes and overall effects.

Adequacy of Baseline Data
There was a concern regarding the adequacy of baseline data collected. The adequacy of the baseline data in relation to the level of information required to conduct the impact assessment will be discussed.

Day 4, AM – Wildlife, Wildlife Habitat and Vegetation (The Land)

The Land

In the assessment process, a broad range of land-based components (e.g., wildlife, vegetation) were examined to predict project effects. As most of the issues were centered around reclamation, caribou, wolverine and grizzly bear, the presentation will focus on these components. The main concerns with the impact predictions involve the adequacy of baseline data, project effects, and the details of mitigation and management plans.

Adequacy of Baseline Data

The adequacy of baseline data collected for land and wildlife will be discussed. The various sources of baseline data will be presented and discussed as will the adequacy of the baseline data in relation to the level of information required to conduct the impact assessment.

Analysis of Baseline Data

There is a concern regarding the analysis of baseline data, and why additional modelling tools were not applied. The methods used to analyze the baseline date will be discussed.

Impact Analysis

There is a concern regarding the analysis of impacts in the assessment. Specifically, the concerns centre around the issue of uncertainty in impact predictions. Key results of the impact analysis will be presented, and factors that provide confidence in the analysis discussed.

Reducing Uncertainty

There is a concern regarding the uncertainty of predictions, relating to impacts of the Project to wildlife and the land. Methods used to reduce uncertainty will be discussed, including the use of conservatism in the assessment, the importance of information from existing operations, and the value of adaptive management and monitoring programs.

Day 4, PM and Day 5, AM – Social/Cultural/Economic

De Beers' approach to presentations at the hearing will be to provide the Board with an overview of the issues associated with the development of the Snap Lake Diamond Project. The discussion will be focused on outstanding socio-economic issues that were identified at the Pre-Hearing Conference. The following provides some more detailed information on how the socio-economic outstanding issues will be presented at the Hearing.

Ensuring Maximum Employment

One of the most important socio-economic concerns for Aboriginal and Northerners is the attainment of meaningful and long-term employment in every sector of the economy. Increased employment will occur through direct jobs at the Snap Lake site and through the implementation of impact management measures that focus on Aboriginal and northern hiring priorities, recruitment and employment strategies.

Ensuring Maximum Benefits to individuals, families and communities
The development and implementation of the impact management measures will help to ensure the maximum benefits to individuals, families and communities. With the implementation of the impact management measures benefits will include: increased opportunities for economic diversification, long-term community economic sustainability, the provision of social support services, and opportunities for cultural and traditional activities.

Ensuring the appropriate socio-economic support systems are developed and effectively implemented.

Full and effective implementation of the 14 impact management measures will require adaptive implementation, based on continuous and ongoing monitoring of impacts as they unfold and the ability to meet the needs of individual communities. De Beers recognizes that partnerships between Territorial and Federal governments, industry, communities, and learning institutions are a proven approach to implement many of the IMM.

Ensuring that an effective monitoring program is established and properly implemented
There are some uncertainties in predicting social and economic changes. Developing a monitoring program within the context of constant change requires SEIA to be ongoing, continuous and adaptive. Adaptive management is required as socio-economic impact assessment effects will change over time and adjustments will be necessary.

Addressing Cumulative Socio-Economic Effects
Socio-economic cumulative impacts analysis is an area of interest to many stakeholders. Cumulative effects analysis is a complex undertaking because of the many factors and linkages and the dynamic nature of the inter-relationships of factors over-time. The analysis undertaken is based on responding to community issues and concerns, through recent grounded experiences and professional judgment.