BDY.TXT

Louie: Attached are the GNWT's IR's for Round 3. Some of the information requests are re-written IR's from Round 2, the rest are new.

If you have any questions about the IR's please give me a call.

Yours sincerely,

Steve Matthews GNWT Coordinator, DeBeers Snap Lake Project 2.2.1 Source:

Government of the Northwest Territories (GNWT)

Reference:

EAR Section 10.4.1

ToR Line:

223

To:

De Beers Canada Mining Inc

Preamble:

There are several limitations in using snow track counts to index relative abundance of wolverines. BHP and Diavik have recognized some of these limitations, which include: a) problems in identifying tracks under windy conditions, b) inability to conduct both fall and spring surveys consistently on an annual basis, and c) interpreting the significance of the derived tracks/km values. For example, simply counting tracks encountered along a single transect provides a limited indication of how many individual wolverines generated these tracks. In order to compare survey results with BHP (page 171), clarification is required as to when surveys these surveys were conducted. A number of the BHP surveys were conducted in November and December, when wolverine densities are believed to be higher. Since the Snap Lake surveys were only conducted in April (in 1999 and in 2000) a direct comparison may be inappropriate.

Using snow track survey data to simply detect or confirm that wolverines still use or travel through the 3,000 km² RSA may be of limited significance biologically. The potential use of scent stations or snagging of hair samples may provide a minimum estimate of the number of wolverines active in a particular area, which could provide a more meaningful and objective measure of abundance. It's unclear how sensitive or reliable the track densities are in detecting a significant change in wolverine abundance or in assessing what impact the project is having on the local wolverine population.

The De Beers report indicates that there is limited information on how development affects wolverine movement and behavior (page 171). However, BHP (2001 Wildlife Effects Monitoring Program) has recently acknowledged that with the removal or destruction of 16 wolverines from the Lac de Gras area since 1998, this impact does in fact constitute a cumulative effect on the local wolverine population. As well, EMAB has flagged wolverine as a species requiring additional monitoring and research attention on the central barrens.

Since data on wolverine ecology is difficult to obtain, the authors of the EA report may wish to also consider the final report to WKSS dealing with wolverine research on the central barrens (Mulders, 2000).

Request:

There is mounting evidence (BHP's 2001 Wildlife Effects Monitoring Program) that mining activity in the Lac de Gras region may be having a significant cumulative effect on the wolverine population.

Why does DeBeers believe that the Snap Lake diamond mine development will not contribute to cumulative impacts on

wolverines?

2.2.2 Source:

Government of the Northwest Territories (GNWT)

Reference:

EAR Executive Summary, 7.4, 8.4

ToR Line:

311-312, 314

To:

DeBeers Canada Mining Inc.

Preamble:

DeBeers indicates that the effects of air quality and noise will be minimal and the level of air/noise emissions are within the recommended guideline. The influence of these emissions at the Snap Lake Mine, on a continuous basis, will have an impact on water, air, vegetation, wildlife and people in the region for the life of the mine.

Request:

RWED requests details of the air and noise monitoring and mitigation programs for Snap Lake. Specifically,

- (a) What air emissions and noise monitoring programs will be implemented?
- (b) What are the methods, including frequency and sampling protocols to be used?
- (c) What mitigation will DeBeers implement to reduce or manage air emissions and noise?

Also in this section the proponent indicates greenhouse gas emissions will result in a increase of 2.3 to 5.0 percent in the NWT.

(d) Why is this range so broad and what is planned to reduce these discharge emissions?

2.2.3 Source:

Government of the Northwest Territories (GNWT)

Reference:

EAR Executive Summary

ToR Line:

222

To:

DeBeers Canada Mining Inc.

Preamble:

DeBeers indicates in the Executive Summary numerous components of insignificant impact for the project in their cumulative effects assessment strategy.

Request:

(a) Will DeBeers be developing programs to monitor and assess the cumulative impacts of their project on the environment

(construction through abandonment)?

(b) What mitigation will be employed to reduce the cumulative

impacts to the environment?

2.2.4 Source:

Government of the Northwest Territories (GNWT)

Reference:

EAR Section Executive Summary

ToR Line:

195

To:

DeBeers Canada Mining Inc.

Preamble:

DeBeers indicates in the Executive Summary that the only event of low environmental consequences to the site is the failure of Dam 1. This is not the case. One event that is not considered is the flooding of the underground mine and or failure of the rock interface between Snap Lake and the mine workings.

Request:

(a) Does DeBeers have a contingency plan to deal with a major

flooding of the underground mine?

(b) What are the economic and environmental implications of this

type of major event?

2.2.5 Source:

Government of the Northwest Territories (GNWT)

Reference:

EAR Section 2.2

ToR Line:

222

To:

DeBeers Canada Mining Inc.

Preamble:

The site and footprint section indicates that no roads are planned for the north shore of Snap Lake for maintenance of mine exhaust ventilation facilities #1 & #2. It states that helicopters will be providing access to the ventilation raises.

Request:

(a) Does DeBeers plan on staging a helicopter at the mine site 365

days a year for maintenance of the ventilation facilities?

(b) What is the maintenance program for the ventilation facilities including frequency of maintenance, duration, logistics, planned daily operational checks and arrangements for fuel supply to these

two isolated sites?

2.2.6 Source:

Government of the Northwest Territories (GNWT)

Reference:

EAR Section 2.5

ToR Line:

225-226

To:

DeBeers Canada Mining Inc.

Preamble:

DeBeers indicates in the Water Management Plan that filtered backwash water from the water treatment filters will be returned to the North Pile from the effluent discharge and the sewage treatment plant.

This initiative by the proponent to return all contaminants to one location the North Pile is the preferred option by RWED, and as a result, should minimize additional contamination along the discharge networks.

Request:

(a) What monitoring, including parameters and sampling protocols is planned by DeBeers to manage the dispersion of these

contaminants throughout the North Pile?

(b) What total loading is forecasted to be discharged into the North Pile location, and the Water Management Pond?

2.2.7 Source:

Government of the Northwest Territories (GNWT)

Reference:

EAR Section 3.5.3

ToR Line:

114

To:

DeBeers Canada Mining Inc.

Preamble:

The Landfill site has been identified as a mobile location within the North Pile for all inert solid wastes that will be regularly buried by processed kimberlite. Also in the EA report, during closure of the underground mine, an alternative for the disposal of nonsalvageable materials is the underground mine which will eventually be flooded.

Request:

Has DeBeers examined the possibility of establishing a dedicated landfill site for the life of the mine, such as Quarry #3, outside the North Pile area? Such a site could hold waste materials that could be recycled at a later date. Hazardous wastes would be transported to the hazardous waste disposal facility on site.

2.2.8 Source:

Government of the Northwest Territories (GNWT)

Reference:

EAR Section 3.5.3.4

ToR Line:

84-90

To:

DeBeers Canada Mining Inc.

Preamble:

The location selected for the landfarm at Snap Lake for the treatment of hydrocarbon contaminated soils from spills is unacceptable to RWED. The location must be separate from other facilities so that the landfarm can be managed to determine the effectiveness of the planned bioremediation. The EA report contradicts itself because it states that reclaimed soil from the landfarm will be transferred to the landfill site, which is a location only for inert solid wastes.

omj tot mor

Request:

What alternatives has the proponent examined for the establishment and management of the landfarm and landfill

locations?

2.2.9 Source:

Government of the Northwest Territories (GNWT)

Reference:

EAR Section 3.10

ToR Line:

165-170

To:

DeBeers Canada Mining Inc.

Preamble:

The summary indicates that the best practical northern mine closure techniques will be used during closure of the mine. This general statement provides little assurance that reclamation of the mine site will be acceptable.

Request:

The proponent is requested to provide details to address the following questions pertaining to decommissioning and closure?

- (a) What is the plan for progressive reclamation of the mine site?
- (b) What are the long-term remediation plans for water treatment?
- (c) What are the plans to ensure long-term sustainability of reclaimed footprint areas?
- (d) What are the contingency plans for long-term monitoring and mitigation of the mine site?

Wage Economy
Direct Employment

2.2.10 Source:

Re-statement of deleted portion of GLL IR 1.20

Reference:

EAR, Sections 5.2.3.4.7, 5.2.3.5.7, 5.3.1.1.1, 5.3.1.3.3, 5.3.3.3,

5.3.3.5.1, 5.3.3.4, 5.3.4.1, 5.3.4.3.1, 5.3.4.2, 12.2.3

ToR Line:

466, 467, 468

To:

De Beers Canada Mining Inc.

Preamble:

In 5.3.3.3, De Beers reiterates its recognition, in Section 3 "Project Description", that Aboriginal people and northerners will be sought out and given priority for employment. However, it argues that social conditions such as gender limit the capacity of an individual to initially make use of the work opportunities with the project.

De Beers points out that most people working in the mining industry are male. Across Canada, 85% of workers in the mining, quarrying, and oil well industries are male. Aggregate data for the

NWT and Nunavut show that 88% of workers in these industries are male (Appendix V.2). Historically, the potential for women to benefit from work opportunities in mining has been lower than for men.

Request:

Please provide the following:

(a) Steps De Beers will take to ensure that women are equitably represented in its workforce and in the workforce of its contractors.

Cultural Well-being, Traditional Activities and the Traditional Economy, Land and Resource Use

2.2.11 Source:

Government of the Northwest Territories (GNWT)

References:

EAR, Section 5.3.3.2

ToR Line:

439-441

To:

De Beers Canada Mining Inc.

Preamble:

The Terms of Reference directed De Beers to assess potential impacts of the proposed development on the cultural well being of the impacted communities. This was to include, for example, anticipated or possible changes in social cohesiveness. However, the long-term impacts noted in the above EAR section fail to look at how the mine will affect culture.

There are many aspects of community life that could be seen as aspects of cultural health. A partial list might include the following:

- sharing and resource use consumption and sharing of traditional food and other resources or forms of wealth
- participation in traditional activities including, for example, activities such as hunting, trapping, gathering, production of traditional items (clothing, arts and crafts)
- the prevalence of traditional spirituality
- maintenance of traditional skills
- social cohesiveness

- introduction of social classes ('haves and have-nots') and its effect on northern Aboriginal social dynamics
- interaction of elders with other generations, and the passing down of traditional knowledge, skills and stories
- participation in community events such as hand games, drum dances, feasts, and other community gatherings
- family activities and cohesiveness, authority structures and relationships

Request:

(a) Using the above list for guidance, assess the long-term impacts of the mine on cultural well being and social cohesiveness in impacted communities.

2.1.12 Source:

Government of the Northwest Territories (GNWT)

Reference:

EAR, Section 5.

TOR Line:

468-469, 473, 478

To:

De Beers Canada Mining Inc.

Preamble:

The Environmental Assessment Report refers several times to the idea that "the increase in employment levels will create collective purchasing power among community members. The impact on the community as a whole is the potential for developing a more favourable climate for local economic development. 1"

It is true that Aboriginal organizations in the Slave Geologic Province are pursuing business interests. The most evident of these interests are industrial business applications providing direct goods and services for the existing mines. However, the introduction of these new business interests does not affect the quality of personal goods offered in the community or the diversification of the community economy.

An analysis of the development of a diversified economic base—particularly in the context of development related to large industrial projects—needs to consider three types of business development:

1. Industry-driven demand
This is the demand created by large industrial projects. It
is highly vulnerable to the boom-bust cycle, unless export

¹ Snap Lake Diamond Project Environmental Assessment Report, February 2002, page 5-141.

markets can be developed or industrial demand can be guaranteed through the development of new projects.

2. Import replacement

This the diversification of the community economy referred to in the EAR reference above. The community economy is also vulnerable to the boom-bust cycle of shrinking and expanding sources of personal income.

3. Export opportunities

Import replacement and industry-driven demand can be buffered from the boom-bust cycle if export markets can be developed. These can be markets outside the community or outside the NWT.

The EAR seems to assume

- 1. that economic diversification through import replacement will take place, and
- 2. it will be sustainable.

For example, Table 5.3-7 page 5-126 predicts the following small-community impacts:

- potential for locating / stimulating economic activities in small communities;
- increase ... economic activity will help retain population in small communities
- economically ... sustainable small communities.

Pages 5-128 to 5-129 of the EAR note,

- "Where opportunities for the development of a diverse local economic base ... are captured and acted upon, communities as a whole may become increasingly sustainable."
- "... the experiences and case studies of communities in Canada that have been subject to similar projects can be used to predict the kinds of broad community development patterns that may result."

Pages 5-141 to 5-142 note that one of the positive impacts of the transition to a wage economy is:

"Local economic development, by which community residents rely on a range of different businesses and activities to generate income, will lessen communities' dependency on a single industry (mining), and strengthen their resistance against economic downturns and fluctuations." De Beers notes the 'enabling conditions' required for this to occur are skill, counselling services, and financial support / programs for economic development.

Request:

The GNWT questions the ability of small, off-road local communities to decrease their economic dependency and protect themselves against industry downturns. To assist the GNWT in its technical review of the De Beers prediction of economic diversification, please provide the following:

- (a) Give the details of all citations, case studies, professional opinion or other source, supporting the EAR predictions of economic diversification.
- (b) For those citations / sources used, identify
 - the community size and its access to road infrastructure;
 - the extent of economic diversification and benefit.
- (c) For those citations / sources used, identify the examples where off-road communities similar in size to those in the Slave Geologic Province were able to establish sustainable post-closure businesses independent of export markets.

Sustainable Economic Development

2.1.13 Source:

Government of the Northwest Territories (GNWT)

Reference:

EAR, Sections 2, 4 and 5.

ToR Line:

201-207

To:

De Beers Canada Mining Inc.

Preamble:

The Terms of Reference directed that where alternatives that would mitigate impacts on the environment and, or, enhance the socio-economic performance of the proposed mine are deemed not economically feasible, the economic analysis to determine feasibility should also be summarized and made available to the public. De Beers was to discuss the option of sorting and marketing the diamonds mined at the proposed mine. This discussion was to include a clear explanation of the options considered and the reason for selecting the preferred option.

In the De Beers Environmental Assessment Report, recognition is given to the importance of economic sustainability for

communities. De Beers states in section 5.3.4.1.2.1 that it will seek ways to optimize social and economic benefit to individuals, families, and communities from this development, so that benefits will last long after the mine has closed.

Further, in its discussion of impact management measures, De Beers stated the importance of support for economic diversity in communities and its role in facilitating economic stability. De Beers also states, in Appendix IV, that its commitment to South Africa, its people and its economy is demonstrated by the fact that more than 50% of the diamonds produced by their mines in South Africa are cut in that jurisdiction. A figure, they state, that is unmatched by any other mining company in that jurisdiction.

Although the report recognizes the need to optimize social and economic benefits in the Northwest Territories and the importance of working with communities and Governments in partnership to achieve positive effects, there has been no examination of what may be done regarding secondary diamond industry.

Although the EAR refers to De Beers' commitment to South Africa and its diamond cutting industry through supplying diamonds to that industry, and therefore establishes this scenario as a possible option, this was not one of the options discussed in Section 2 of the Environmental Assessment Report.

Request: Please provide the following:

(a) Analyse how secondary diamond industry processing (sorting, cutting, polishing) from any of the company's other diamond mining projects has impacted the economies of the jurisdictions in which those projects are sited, in terms of diversification and community benefits.

2.1.14 Source: Government of the Northwest Territories (GNWT)

Reference: EAR, Sections 2, 4 and 5.

ToR Line: 201-207, 468-469, 473, 478

To: De Beers Canada Mining Inc.

Preamble: The Terms of Reference (ToR) direct the Proponent to discuss the option of sorting and marketing the diamonds mined at the

proposed mine. This should include a clear explanation of the options considered and the reason for selecting the preferred option.

In several places, the ToR also directs De Beers to consider opportunities to diversify the northern economic base to produce and to supply new goods and services, and to consider the contribution of the Project to sustainable economic development.

Request:

- (a) The GNWT understanding is that in the past, De Beers sold rough diamonds mined in South Africa directly in South Africa. Please verify whether this was the case.
- (b) Explain how making rough available in the NWT from the Snap Lake Diamond Project would impact this mining operation.

2.1.15 Source:

Government of the Northwest Territories (GNWT)

Reference:

EAR, Sections 2, 4 and 5.

ToR Line:

480-481, 485-486

To:

De Beers Canada Mining Inc.

Preamble:

The Terms of Reference stated that De Beers shall, for the diamond resource included within the scope of the environmental assessment, report the impact of planned extraction rates and total resource extraction over the life of the proposed diamond mine on

- opportunities to diversify the northern economic base to produce and to supply new goods and services (item V, ToR lines 468-469), and
- economic diversification and sustainable economic development (item XIV, ToR line 473).

The GNWT wishes to ensure that opportunities for economic benefits to the Northwest Territories, specifically with respect to economic diversification and increased benefits to northern communities, are provided by the project's development.

Given the negative impacts outlined in the report, uncertainty regarding impacts in general, uncertainty regarding the ability to mitigate impacts and the realization of positive socio-economic

benefits only assuming effective impact management measures are used, careful examination of potential mitigative measures will be required in the technical review.

To conduct an adequate technical review of this aspect of the Project will require an understanding of the production breakdown of the mine. This is required to properly assess value-added opportunities and their long-term viability.

Rough diamonds are all unique and different assortments and types (size, colour, clarity, shape) of rough diamonds sell at different prices. While in general the market for rough diamonds is very stable, segments of the market can go up and down. For example, certain sizes and ranges of rough diamonds had a 20% decrease in price over the past year.

The average-value-per-carat figure often quoted to indicate viability is not adequate, as an average can be distorted by a few very large values. A production breakdown will help demonstrate that a specific deposit is not being highgraded. Average value per carat also varies considerably over time as the mining progresses, because of the price instability described above.

Because of the economics of manufacturing and the changing consumer-driven demand for certain types of polished diamonds, certain types of rough diamonds are in demand in different cutting centres. Information regarding the expected range of production and the cutting centres with which NWT manufacturers will compete is necessary for a technical review of the Project's possible contribution to economic diversification through secondary industry.

Request:

- (a) Provide the production breakdown for the mine, in size and in broad bands of colour/quality/shape. Describe how this profile will change over time.
- (b) Based on analysis of the production and the characteristics of the rough, explain in what cutting centres the various broad categories would likely be cut.

2.1.16 Source:

GNWT Health & Social Services

Reference:

E.A.R. Section 5.3.4 Impact Management Measures Subsection 5.3.4.3 Health and Wellness

ToR Line:

256-260

To:

De Beers Canada Mining Inc.

Preamble:

Terms of Reference lines 256-260 instructed De Beers to describe each impact identified and the proposed mitigation measure(s) for all phases of the proposed development (i.e., construction, operation, closure and post-closure). De Beers was to describe planned mitigation measures.

In Section 5.3.3 Socio-Economic Impact Assessment, De Beers lays out the predicted direct, indirect and induced social impacts on individuals, families and communities. These are summarized in Table 5.3.7. Increased risks of community dysfunction, family problems and personal stress. Increased rates of alcohol problems, gambling, family violence, marital problems and child neglect are among the potential impacts noted.

In section 5.3.4.1 De Beers notes that "Many of the mitigation measures cannot be done by the proponent acting alone. While De Beers is committed to doing its utmost to develop and implement these mitigation measures, success will depend on government and community partnerships." In the pages that follow there are numerous references to De Beers "acting as a catalyst...", "playing a substantial role in facilitating..." "work closely with communities..." "support initiatives and resources...", "seek collaboration with..." While these expressions provide a good general sense of De Beers' intentions for supporting mitigating measures, they are lacking in specific detail.

Request:

Describe what specific contributions, in material terms (dollars, workers, resources, etc.) De Beers proposes to bring to the partnerships and collaborative efforts that will be necessary to enact the mitigating measures outlined in sections 5.3.4.3.1 through 5.3.4.3.7.

2.1.17 Source:

Government of the Northwest Territories (GNWT)

Reference:

EAR, Executive Summary, and Sections 3.9.3 and 14.6

ToR Line:

574-577

To:

De Beers Canada Mining Inc.

Preamble:

The Terms of Reference require De Beers to describe reporting (feedback) procedures, including any proposed monitoring programs. The intent was to ensure remedial actions are taken if the results of a monitoring program deviate from any established operational standards on environmental performance, or from predicted environmental impacts. De Beers was to describe the approach, objectives and proposed methodologies that will be used in any proposed monitoring program(s).

De Beers states in its EAR that it will develop a formal environmental management system (EMS) as part of its environmental policy. It states this will include a comprehensive monitoring system that identifies, measures and reports on all aspects of environmental performance. Section 3.9.3 states the EMS will identify circumstances under which additional mitigation should be undertaken if the results of measures are uncertain or if they fail. Section 14.6 also sates the EMS will identify procedures for taking corrective action to achieve improvement. Lastly, Section 14.6 states that where mitigation measures produce an effect that differs from the predicted effect, monitoring will provide a basis for changing the mitigation measures.

The GNWT supports the development of an adaptive management program, and wishes to emphasis the importance of processes that trigger adaptive mitigation where actual results deviate from predicted effects.

While identifying that the EMS will be compliant with the ISO-14001 standard and provides some information about information flow in the EMS, it does not provide adequate information about the adaptive management aspects of the EMS. Additional information is required for a technical review.

Request:

- (a) The Environmental Assessment Report has identified several possible negative and positive effects. Identify which of these De Beers proposes to incorporate in the EMS.
- (b) If a draft of the EMS is available, please provide a copy.
- (c) De Beers recognizes the EMS will provide a basis for changing mitigation measures (page 14-17). For predicted effects, identify those thresholds at which De Beers commits to triggering a change in its mitigative measures.
- (d) Describe the decision process for triggering adaptive mitigation and the length of time that will pass between exceeding a threshold in (c) above and triggering an adaptive response.