

FAX MESSAGE



Prairie and Northern Region
Environmental Protection Branch
Suite 301, 5204 - 50th Avenue
Yellowknife, NT X1A 1E2

DATE: 2001-08-03

FROM: Mark Dahl

TO: Mr. L. Azzolini

Contaminants Biologist

MVEIRB, Yellowknife

Suite 301, 5204 50th Ave.,

Yellowknife, NT, X1A 1E2

PHONE: (867) 873 9189

PHONE: (867) 669-4734

FAX: (867) 920 4761

FAX: (867) 873-8185

Number of pages including cover: 4

Subject: Comments on Liard East EA Terms of Reference and Work Plan

MESSAGE:

Louis,

Please find the Environment Canada's comments on the DeBeers Terms of Reference and work Plan. EC will be submitting comments on the EIRB Rules of Procedures under a different cover.

Sincerely,


Mark Dahl

867 669 4734

mark.dahl@ec.gc.ca

82

Please contact (867) 669-4710 if this facsimile is not complete.



Environment Canada
Environnement Canada

Environmental Protection Branch,
#301 5204 50th Ave.,
Yellowknife, NT
X1A 1E2

Fax: (867) 873-8185

August 3, 2001

Our file: 4704-000

Mackenzie Valley Environmental Impact Review Board
Box 938, Yellowknife,
NT. X1A 2N7

Fax: (867) 920-4761

Attn. Mr. L. Azzolini,

**Re: Terms of Reference for EA 01 004 De Beers Mining Inc. Snap Lake
Environmental Assessment**

GENERAL COMMENTS

Terms of Reference

It would be better to list general portions of the project that require assessment rather than detailing out every item. Detailing out everything will likely result in some portion of the project being missed and as a result not assessed. The onus of completeness should be left on the proponent. The detailed approach also results in a great deal of repetition within the document.

The board requires that the proponent predict the frequency, magnitude and duration of project environmental impacts but has instructed the proponent NOT to draw any conclusions about the significance of those impacts. This approach puts unnecessary pressure on reviewers to not only assess the environmental impacts but to ascertain the significance of those impacts. In previous EA's proponents have provided estimates of the significance of project environmental impacts. Reviewers could then test those conclusions and agree or disagree as they saw fit. This approach ensured that the question of significance was addressed by those most familiar with project specific impacts and then their conclusions were assessed by objective reviewers.

Time Lines and Work Plan

The timelines as presented appear to be realistic as presented and it is certainly a noble aim to keep the process as time efficient as possible. However, it is unrealistic to assume that everything will go as planned and to limit/eliminate the slippage necessary to allow for inevitable delays. To be realistic it would be better to set up the review time line to allow space for items like hearings which have to be set up well in advance to allow for the required public notification period. It is far more realistic to cancel an unnecessary hearing than to delay the whole review process to allow for public notification of an unforeseen one.

SPECIFIC COMMENTS



Environment Canada
Environnement Canada

Lines 62-76 As discussed in the General Comments section of this letter it is not necessary to include the assessment of the Advanced Exploration Camp. This activity was already reviewed and approved. The exploratory activities should, however, be included in the assessment of the cumulative effects of the project.

Lines 62-114 In order to ensure that the onus of completeness is left on the proponent the board should avoid listing the individual items requiring inclusion in the review. If items are missed on the list it is likely that they will not get assessed. However, if the board wishes to stay with format as presented Lines 92 and 106 are the duplicates.

Line 218 Climate should include not only the average or mean values but also the extremes that can be expected. The full range of weather conditions should be investigated.

Line 223-224 Specific reference should also be made to structural geology since the distribution of faults and fractures will largely control ground water flow at the site and will be important to the geotechnical stability of the underground openings and the safety of the mine personnel

Line 244 As discussed in the General Comments section of this letter it would seem that the proponent is the one in the best situation to suggest impacts and to draw conclusions of significance. The conclusions on significance could be accepted or rejected by reviewers.

Line 271 The words "and climate" should be added to the first sentence. As well a bullet should be added to indicate how this project contribute to greenhouse gas (GHG) emissions.

Line 275 This statement is misleading NO_x and SO_x are not greenhouse gasses. Replace NO_x and SO_x with CO₂ and CH₄. All green house gas accounting should be done in CO₂ equivalent values. A separate point dealing with project contributions to acid deposition should be added. This point would include assessment of the impact of the acidic precipitation resulting from release of gasses such as NO_x and SO_x.

Line 288 Why?

Line 293 Listing should include frost heave.

Line 294 This line is not clear where the rock is from.

Line 295 This line should include seepage problems.

Line 314 Include downstream waters.

Line 316 Bullet VIII should read "effects of nutrients in fish and non-fish bearing water sources, including possible trophic status changes of Snap Lake."

Additional bullets XI and XII should be added as follows:

"XI effects of PK and other tailing stored at the North Pile" and

"XII water chemistry impacts of groundwater from underground mine workings on Snap Lake".



Environment Canada
Environnement Canada

- Line 317 This point is unclear, does it include berm materials, berm construction leaching from berm itself, seepage through the berm?
- Line 320 "under a range of climatic conditions." Should be added to this sentence.
- Line 405 This may not require a stand alone section... It might fit better under another category such as wildlife or human health.
- Line 413 This sentence should read "De Beers should consider the full range of climate conditions (including extreme weather events, wet, dry and normal precipitation and extreme temperature spells) and climate change (e.g. global warming scenarios)."
- Line 414-5 Discussion should also assess extremes in the current climate.
- Line 417 This sentence should also reference the winter road.
- Line 418 This section should include the effects of tourism.
- Line 421 This sentence should refer to active developments.
- Line 540 Add that the scope of the assessment should include a determination of the environmental effects to be addressed, the scope of the environmental effects to be assessed and the effects to be considered in making decisions regarding the project.

SUGGESTED ADDITIONS TO THE ToR'S

The North Pile will be disposal location for a variety of materials. Information on the interaction of these materials should be provided, including long term management plans for ensuring the stability of the material.

A description of the management of waste rock and kimberlite paste, outlying disposal areas and methods, runoff containment and predicted water quality should be included.

A detailed description of the hydrology of the Snap Lake water shed including and overview of the Lockhart River Drainage Basin should be added.

The ToR's should also request a description of the predicted mine inflows and underground hydrogeology, water handling procedures, water balance predictions and contingencies for potential higher than expected flows, impacts of discharges on the hydrology of the lake and water balances for waste water containment facilities including contingencies and excess holding capacities.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

Mark Dahl
Contaminants Biologist