Mackenzie Valley Environmental Impact Review Board

Box 938 200 Scotia Centre, (5102-50th Avenue)

Our File EA01-004

July 4, 2001

Robin Johnstone Senior Environmental Manager De Beers Canada Mining Inc. 702 - 5201 50th Avenue Yellowknife, NT S1A 3S9

Tel: (867) 873-3066 Fax: (867) 873-3967

RE: DRAFT Terms of Reference and Work Plan - Snap Lake Diamond Project Environmental Assessment

Attached is the draft Terms of Reference (ToR) and work plan for the Snap Lake Diamond Project Environmental Assessment. The Review Board will consider all the comments received before preparing the FINAL Terms of Reference and work plan. De Beers is responsible for ensuring broad public and stakeholder knowledge of the development proposal concurrent with the Review Board soliciting comments and input on its draft Terms of Reference and work plan.

The last day for providing input on the draft documents is Friday, August 3, 2001. Please consider that day when undertaking your stakeholder communications. The Review Board's staff will chair a general overview of the ToR on Friday July 20, 2001 and a working session on July 27, 2001 to ensure an integrated and focused expert and regulatory submissions. De Beers can make a presentation at both sessions. All sessions are open to the public.

If you have any questions, require additional information, or want to discuss your communications planning please contact either Roland Semjanovs or myself.

Sincerely,

Luciano Azzolini

Environmental Assessment Officer

c.c. Distribution List

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Terms of Reference and Work Plan

for the

Environmental Assessment

of the

De Beers Canada Mining Inc. Snap Lake Diamond Project

June 21, 2001

Issued By:

Mackenzie Valley Environmental Impact Review Board 200 Scotia Centre P.O. Box 938 Yellowknife, NT X1A 2N7

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1 INTRODUCTION

On February 2, 2001, De Beers Canada Mining Inc. (De Beers) submitted applications for a Class 'A' Land Use Permit and a Class 'A' Water Licence for the proposed Snap Lake Diamond Project to the Mackenzie Valley Land and Water Board (MVLWB) for the following developments:

- Development of a 3,000 tonnes per day underground diamond mine with an operating life of 22 years;
- Construction of support facilities, including a camp complex for up to 350 people, process plant, paste
 plant, cement plant, processed kimberlite containment area, explosives factory, storage buildings,
 waste disposal systems, stockpile, power plant;
- Expansion of existing facilities, including tank farm, airstrip, explosive storage;
- Establishment of annual winter access and esker access roads along existing routes;
- Quarry of esker material as required for construction and operational purposes.

On May 23, 2001, the MVLWB referred the development applications to the Mackenzie Valley Environmental Impact Review Board (Review Board or Board) for an environmental assessment (EA), in accordance with ss.125(1) of the Mackenzie Valley Resource Management Act (MVRMA), citing the following reasons for the referral:

- Significant concern expressed by government experts reviewing the application about the potential environmental impacts of the proposed development.
- Significant concern expressed by the Lutsel K'e First Nation about possible development impacts on the watershed used traditionally used by the Dene.
- Concerns expressed by the Canadian Arctic Resources Committee (CARC) regarding De Beers's current Class 'B' Water Licence regulatory conformance record.
- Need for technical information to supplement the De Beers Snap Lake Project Scoping Document.

The Review Board is required by s.126 of the MVRMA to conduct an EA of the developments in accordance with Part 5 of the MVRMA.

On June 25, 2001 the Review Board issued, draft Terms of Reference and a draft Work Plan for the De Beers environmental assessment for consultation. The final Work Plan and Terms of Reference incorporate the results of the consultation. This document contains:

- A description of the development;
- A description of the roles and responsibilities of those parties involved in the EA;
- An outline of the general approach to completing the EA, including milestones and a schedule;
- The scope of the development;
- The scope of the assessment;
- Directions to the developer; and
- Directions to other parties involved in the EA.

Attached in Appendix 1 are legal premises and definitions relevant to completing an environmental assessment.

2 DEVELOPMENT DESCRIPTION

This section provides a generalized description of the proposed development based on the project description submitted by De Beers support of their land use permit application.

The development includes the underground mining of kimberlite ore using the room and pillar method. Associated and supportive developments and undertakings include:

Snap Lake Advanced Exploration

- 1. Temporary explosive storage;
- 2. Portable crusher and a rock/esker material stockpile;
- Airstrip;
- 4. Temporary underground contractor facilities;
- 5. Bulk sample process plant;
- 6. Underground bulk sample;
- 7. Mine portal;
- 8. Processed kimberlite containment area;
- 9. Dams to contain the kimberlite containment area;
- 10. Potable water intake and pump house;
- 11. Fuel tanks;
- 12. Pilot plant facilities;
- 13. Cold storage; and
- 14. Camp and office complex.

Snap Lake Diamond Project

- 1. Explosive storage;
- 2. Landfill for non-hazardous solid waste;
- 3. Portable crusher and a rock/esker material stockpile;
- 4. Mine water clarification pond;
- 5. Mine water clarification pond, discharge point into Snap Lake;
- 6. Dams to contain mine water clarification pond;
- 7. Sewage treatment plant;
- 8. Power plant;
- 9. Permanent camp complex;
- 10. Service complex;
- 11. Unheated storage building;
- 12. Process and paste plant;
- 13. Crushed kimberlite ore storage;
- 14. Cement storage;
- 15. Aggregate crushing and batch plant;
- 16. Underground crusher;
- 17. Conveyor used to transport diluted kimberlite ore to surface;
- 18. Kimberlite ore stockpile area;
- 19. Ventilation points;
- 20. Underground mining;
- 21. Mine portal;
- 22. Fuel tanks:
- 23. Potable water intake and pump house;

- 24. Mine waste rock haul road;
- 25. Propane storage area;
- 26. Pilot plan facilities;
- 27. Container storage;
- 28. Cement storage;
- 29. Winter road;
- 30. Seepage and collection ponds;
- 31. Sumps;
- 32. Berms;
- 33. Quarry and esker excavation areas;
- 34. Acid generating rock disposal area;
- 35. Non-acid generating rock disposal area; and
- 36. Processed kimberlite disposal area.

3 ROLES AND RESPONSIBILITIES

The roles and responsibilities of the Review Board, Review Board's staff and other parties involved in the EA process are explained in the following sections.

3.1 Review Board

The Review Board is required to undertake the following in relation to this EA:

- conduct the EA in accordance with ss.126(1) of the MVRMA;
- take into account any previous screening or assessment report made in relation to the development, in accordance with s.127 of the MVRMA;
- determine the scope of the development, in accordance with ss.117(1) of the MVRMA;
- consider environmental assessment factors in accordance with ss.117(2) of the MVRMA:
- make a determination regarding the environmental impacts and public concern of the development, in accordance with ss.128(1) of the MVRMA;
- report to the Federal Minister in accordance with ss.128(2) of the MVRMA; and,
- identify areas and extent of effects, within or outside the Mackenzie Valley in which the development is likely to have a significant adverse impact or be a cause of significant public concern, in accordance with ss.128(4) of the MVRMA.

3.2 Review Board Staff

The Review Board's Executive Director and staff are the primary contacts for De Beers, government bodies (federal, territorial and municipal), non-government organizations (NGOs), First Nations, expert advisors (experts contracted directly by the Review Board), the public, and other interested parties. This does not limit or preclude De Beers from contacting other parties during in the EA process.

The staff member coordinating and facilitating the EA is Mr. Louie Azzolini.

3.3 Other Parties

Government bodies may be involved in the EA process as:

- a Regulatory Authority (RA) to provide advice on regulatory matters;
- a pool of experts to assist the Review Board and provide advice related to environmental and socio-economic impacts; or
- both roles simultaneously.

Regulatory Authorities are those government bodies, such the Department of Natural Resources Canada, Indian and Northern Affairs Canada (INAC) or Fisheries and Oceans Canada (DFO) that provide licenses or permits that are required by a development. INAC and DFO would likely provide both regulatory advice in their roles as RAs and they would also provide technical expertise on specific aspects of a development. Other government bodies such as Environment Canada (EC) or Resources, Wildlife and Economic Development (RWED) would limit themselves to providing technical expertise because the proposed development would not require any licence, permit, or other authorization from them in their regulatory capacity.

In addition to the pool of experts available within government, the Review Board may choose to hire expert advisors to provide high quality technical expertise on specific aspects of the EA.

First Nations, NGOs, the public and other interested parties may provide the Review Board with information relevant to the EA of their own volition, or they may be asked by the Review Board to provide any relevant information they may have.

De Beers may present additional information to the Review Board during any portion of the EA before the closure of the public registry. The Review Board encourages De Beers to continue its discussions with potentially affected communities and organizations. The Review Board will request De Beers to provide a written record verifying consultations, including how the consultations may have influenced the design of any part of the development. De Beers is expected to respond in a suitable and timely course to the EA Terms of Reference that will be issued by the Review Board.

All submissions to the Review Board are considered during the Review Board's decision-making process on the environmental assessment. These submissions will be public documents and will be posted on the Review Board's Public Registry. Submissions should be in a format that is easily available to all stakeholders.

4 EA PROCESS

This section summarizes the process for the completion of an EA, in general, and this EA specifically.

4.1 Milestones and Responsibilities

Once a proposed development is referred to the Review Board for environmental assessment the following milestones are established:

- 1. Referral Confirmation and Starting the Environmental Assessment
 - Start-up of the EA; and,
 - Advance consultation.
- 2. Preparing Work Plan and Environmental Assessment Terms of Reference
 - Work Plan; and,
 - EA Terms of Reference.
- 3. Undertake the Environmental Assessment
 - Developer's EA Report;
 - · Conformity Check;
 - Deficiency Statement;
 - Technical Analysis;
 - · Information Requests; and,
 - Technical and public hearings.
- 4. Review Board Decision and Report of Environmental Assessment
 - EA Decision and Report prepared by the Review Board.

The time allocations and the information requirements for each milestone will vary with each EA, and will depend upon the complexity, location and duration of the development. These will also vary depending upon the reasons for decision provided by the preliminary screener(s), and upon the information provided by the developer.

The EA process is outlined in Table 1, showing appropriate milestones and responsibility assignments.

Table 1 - Milestones

MILESTONE DATES	ENVIRONMENTAL ASSESSMENT ACTIVITIES AND MILESTONES
	Referral Confirmation and Starting the Environmental Assessment
May 14, 2001	Referring body notifies the RB in writing of the EA with reasons for the referral
	The RB formally notifies RA's and experts of the referral and request them to
	indicate if they are regulatory contributors, expert contributors, in a position to report to the Minister of DIAND at the end of the EA, or non-contributors
	Developer's First Meeting with Staff on the EA (developer's debrief)
May 28, 2001	Development Description broadly distributed
	Preparing Environmental Assessment Terms of Reference

MILESTONE DATES	ENVIRONMENTAL ASSESSMENT ACTIVITIES AND MILESTONES
May 29, 2001	Public Information and Communications
141dy 27, 2001	Staff contact First Nations and Local Government to inform them of the referral to
	EA
	Review Board may choose to conduct a Public Hearing on the Proposed
	Development to solicit peoples' Views on what Should be included in Draft Scope
	of Development and Draft Scope of Assessment
	Staff may conduct public information sessions to inform the public and First
	Nations about the RB and the EA
	Staff prepares Draft Work Plan for Consultation Purposes
	Initial Meeting with RA's and experts (one can be both and RA and an expert) to
	review draft work plan
	Preliminary Technical Analysis by RA's and Experts Conducted of Submitted
	Documents
	Preliminary Gap Analysis Prepared by RA's, Experts, other Interested Parties
	Preliminary Technical Analysis by the Review Board's independent Consultants
	Complete and Distribute the draft ToR and Work Plan
	Site Visit by the Review Board (optional)
	Review Board considers list of EA issues
	Regulatory, developer, expert, stakeholder, and public input on the draft Terms of
	Reference and Work Plan.
	Review Board considers those potentially affected parties and transboundary
	effects/issues, if any
	Review Board determines if a public hearing is warranted on Terms of Reference.
	Review Board Considers draft Terms of Reference Submissions
	RB's submission of final Terms of Reference and Work Plan to the Developer and
	Government
	RB's wide distribution and advertising of the Approved EA Terms of Reference
July 31, 2001	and Work Plan
	Undertaking the Environmental Assessment
	Undertaking the Environmental Assessment Einel Environmental Assessment Papert (EAR) propored and submitted to the
October 23, 2001	Final Environmental Assessment Report (EAR) prepared and submitted to the Review Board
	Public notification of Final EAR submission
	Conformity Analysis and comment by RA's, Experts, other Interested Parties
	Final Day for Conformity Submission to the Review Board
	RB determination on EA conformity
	Independent Consultants Conduct Technical Analysis
	Technical Analysis Conducted by experts and RA's
	Round One of IR's sent out and Answered
	Round Two of IR's sent out and Answered
	Experts Submit Technical Reports
	Summary of public and technical input prepared for the Review Board
	Key EA issues requiring additional input identified
	Public notified of Public Hearings, if needed, on the key EA issues
	Technical Meeting and Public Hearing

MILESTONE DATES	ENVIRONMENTAL ASSESSMENT ACTIVITIES AND MILESTONES
April 30, 2002	Review Board Site Visit
	Review Board Prepares Its Report of Environmental Assessment
May 1, 2002	Review Board's consideration of the Public Registry Evidence
	Prepare Report or Environmental Assessment
	Notify the Federal Minister of the Department of Indian Affairs and Northern
August 1, 2002	Development of the MVEIRB's completed Report of Environmental Assessment.

Table 1 - Milestones and Responsibility Assignments for Steps in the EA

table 1 - Winestones and Responsibility Assignments for Steps in the LA					
Milestone	Developer	Government Bodies	Other Parties	Staff	Board
Start-up of the EA				•	
Advance consultation	•			•	
Prepare draft Work Plan				•	
Review draft Work Plan	9	•	•	•	
Approve final Work Plan					•
Prepare Draft Terms of		_			
Reference		•			
Review draft ToR	•	•	•	•	
ToR approved and issued					•
Preparation and					
submission of EA Report					
Conformity Statement		•	•	•	
Deficiency statement					•
EA analysis		•	•	•	
EA decision					•
Consultation - throughout / as required	•	•	•	•	•

Note: The Work Plan and Terms of Reference have been combined into a single document for this EA.

4.1.1 Start-up of the EA

At the start of the EA, De Beers, government bodies, NGOs, First Nations, expert advisors, the public and other interested parties are informed of the referral. The notification lets people know that while the development is in the EA process, no licence, permit or other authorization can be issued by government. As part of the referral, staff starts a public registry on the development and start tracking development issues.

Notification of the referral is done by:

- Written notification;
- News release; and
- Newspaper advertising.

Tasks involved in starting the environmental assessment are:

- Open case file;
- Open public registry and registry log;
- Public notification of referral;
- Notify regulatory authorities of the referral; and
- Review Board notifies the developer of the referral.

Deliverable:

Public registry, public notification, government notification, developer notification, issue tracking, expert advisor identification, responsible authority self-identification.

4.1.2 Advance Consultation

Advance consultation helps to identify and inform stakeholders about the EA process and to identify potential environmental, socio-economic, and cultural impacts that may need examination. Staff may conduct public information sessions. De Beers would participate in these sessions to provide information about its development proposal. A stakeholder notification list is prepared and can include any of the following:

- Communities;
- NGOs;
- First Nations;
- Government;
- Developer; and
- Other interested parties such as businesses or members of the public.

Meetings and discussions with government may be held to review the *Snap Lake Project Scoping report* and the *Snap Lake Diamond Project Technical Support Report*.

The Review Board may choose to participate in a site visit. The Snap Lake site visit would be arranged with De Beers and notification of the site visit will broadly advertised.

Deliverable:

Raise awareness of the EA process and the development proposal. Any relevant issues identified by the public and government stakeholders during advance consultation are brought to the attention of the Review Board for possible inclusion in the EA Terms of Reference.

4.1.3 Work Planning and Time Frames

The Review Board, in consultation with stakeholders, prepares a work plan for completing the EA. Each work plan is unique as is every development proposal referred to EA. For example, as De Beers has submitted a Snap Lake Project Scoping Document and the Snap Lake Diamond Project Technical Support Document. with its application(s) that triggered the EA, that information could affect the length of time and level of effort spent on a particular step in the EA process. The draft Work Plan is developed during the advance consultation phase.

Once the Review Board issues its draft Work Plan any comments received about it from interested stakeholders are considered before preparing the final Work Plan.

Deliverable:

An approved Work Plan, including an estimate of resource requirements, for completing the EA.

4.1.4 EA Terms of Reference and Scope of Development Determination

The EA Terms of Reference are the Review Board's instructions to De Beers and are designed to ensure that the appropriate information is provided to understand the environmental consequences and the benefits of the proposed development. The ToR is prepared based on the development description provided by De Beers and any other relevant information. The ToR also provide the scope of the development and scope of assessment determination of the Review Board.

Defined in Appendix 1.

Staff will coordinate the preparation and consultation of the draft ToR with other parties. After the Review Board's consideration and approval of the final ToR, they to De Beers and others as required.

Deliverable:

Draft and final Terms of Reference, direction to the developer including confirmed scope of development and associated scope of assessment, identification of key issues, effects, baseline data requirements, and desired results of research, and suggested environmental assessment report table of contents.

4.1.5 Preparation and Submission of the EA Report

De Beers will use the EA Terms of Reference to complete its EA report. That is, De Beers will provide additional information besides the information it has already provided in its *Snap Lake Project Scoping Report* and the *Snap Lake Diamond Project Technical Support Report*. All together, the information provided will tell the story of how people and the natural world could be changed by the proposed development and what is to be done about these changes.

To properly execute its duties under the MVRMA, the Review Board should have the following information on the proposed development:

- Title (of the development proposal);
- Executive summary (translated into appropriate aboriginal languages, if requested);
- Corporate and development information including an environmental record;
- Description of the development (e.g., phases, timetables, location, maps, photos, technology used, alternatives to the development, development design details taking into account the environment);
- Description of the existing environment, including environmental interactions (e.g., natural and human setting);
- Impact of the development on the environment, including those caused by accidents or malfunctions, and any cumulative impact(s);
- List of potential impacts and the proposed mitigation or remedial measures;
- Identification and description of the residual impacts after mitigation or remedial measures;
- Results and summary of issues from public and community consultation, including any concerns and mitigation;
- Plans for any environmental management plan, follow-up and monitoring;
- List of supporting evidence and information sources, including previous environmental assessments;
 and
- List of the required licences, permits and other authorizations, if relevant.

Deliverable:

An EA report from De Beers that addresses the requirements of the EA Terms of Reference, and additional information from other sources as directed by the Review Board.

4.1.6 Conformity Analysis

After receiving the completed EA report from De Beers, the Review Board will ensure that De Beers has provided all the information requested in the Terms of Reference.²

² **Note:** This conformity check determines whether or not De Beers has responded to what was asked for in the EA Terms of Reference; it does not reflect the technical adequacy of the information provided De Beers. Any additional technical information, or further explanation, required would be requested through information requests (IR's). IR's would facilitate the technical analysis of the development.

The Review Board will decide conformity and, where required, issue a deficiency statement if needed.

Deliverable: Review Board issues deficiency statement on the developer's EA report.

4.1.7 Technical Analysis

The Review Board's staff will coordinate the analysis of the EA. The aim is to provide opportunities for RA's, federal and territorial governments, First Nations, the public and other interested parties to participate in the EA and express their ideas, and present their information (e.g., traditional knowledge holders and scientific experts) to the Review Board. The more complete the analysis, the better the EA. This is a critical stage in the EA because key issues and impacts are identified, and it is important that people have opportunities for input before any final decisions are made.

The analysis identifies unresolved issues and environmental impacts, and provides possible suggestions for addressing the issues and impacts. Where unresolved or unclear issues or impacts are identified, De Beers, and other appropriate parties (e.g., RAs, experts) will have the opportunity of responding. De Beers can formally provide and present its views on any information brought to the Review Board's attention after submission of its environmental assessment report including any proposed amendments, additions or refinements to the development or the environmental assessment.

The Review Board will coordinate the technical analysis and may conduct technical hearings and public hearings.

Deliverable:

Technical reports from participants that clearly state the reviewer's conclusions, recommendations, and supporting rationales, technical hearings to discuss technical and issues and public hearings.

4.1.8 Information Requests

Throughout the review the EA, the Review Board and stakeholders may have additional information needs for technical analysis of the developer's environmental assessment report. This information can be requested by submitting IR's to the Review Board. These IRs and responses form part of the public registry.

The IRs represent very specific and focused requests for clarification or additional information, required in order for the party or parties requesting the information to complete its analysis and reach a conclusion about the developers EA report and proposed development.

The Review identifies milestone dates for the submission of IR's and responses to the IR's. Depending on the technical adequacy of the information submitted there could be two rounds of IRs during an EA. If a third round is required, then the Work Plan would be revised after De Beers and other interested participants were informed and provided an opportunity to comment on the proposed work plan amendment.

Deliverable:

Responses to Information Requests are placed on the public registry and circulated to all stakeholders to assist in their analysis of the environmental assessment report.

4.1.9 Public and Technical Hearings

The Review Board intends to conduct technical and public hearings on the De Beers' environmental assessment report, expert responses to the report and any outstanding issues.

Deliverable:

Technical hearings and Public hearing(s) for the Review Board to obtain additional information about the issues regarding the proposed development and the conclusions reached by stakeholders in filed documents.

4.1.10 EA Decision and Written Reasons

The Review Board will prepare its Report of Environmental Assessment, its decision and reasons for decision after considering everything in the public registry. The Review Board will then prepare its written reasons. The Review Board will give the Minister of DIAND. The Minister of DIAND will distribute them to every responsible minister. The Mackenzie Valley Land and Water Board and to De Beers.

Staff would work with the Review Board in the preparation of its Report of EA and written reasons.

Deliverable:

Report of the Review Board on the EA, with decision and written reasons.

4.2 EA Work Plan Schedule

Table 2 provides an estimated timeline for completing each indicated milestone in the EA process. The Review Board may amend the milestone dates at its discretion.

MILESTONE	
DATES	ENVIRONMENTAL ASSESSMENT ACTIVITIES AND MILESTONES
	Referral of Development Proposal to the Review Board and Project Initiation
May 14, 2001	Referring body notifies the RB in writing of the EA with reasons for the referral
Wiay 14, 2001	The RB formally notifies RA's and experts of the referral and request them to indicate if
	they are regulatory contributors, expert contributors, in a position to report to the
	Minister of DIAND at the end of the EA, or non-contributors
	Developer's First Meeting with Staff on the EA (developer's debrief)
May 28, 2001	Development Description broadly distributed
	-
	Preparing Environmental Assessment Terms of Reference
May 29, 2001	Public Information and Communications
	Staff contact First Nations and Local Government to inform them of the referral to EA
	Review Board may choose to conduct a Public Hearing on the Proposed Development to
	solicit peoples' Views on what Should be included in Draft Scope of Development and
	Draft Scope of Assessment
	Staff may conduct public information sessions to inform the public and First Nations
	about the RB and the EA
	Staff prepares Draft Work Plan for Consultation Purposes
	Initial Meeting with RA's and experts (one can be both and RA and an expert) to review
	draft work plan
	Preliminary Technical Analysis by RA's and Experts Submitted
	Preliminary Gap Analysis Prepared by RA's, Experts, other Interested Parties
	Option of Preliminary Technical Analysis by the Review Board's independent
	Consultants
	Complete and Distribute the draft ToR and Work Plan
<u> </u>	Site Visit by the Review Board (optional)

MILESTONE	
DATES	ENVIRONMENTAL ASSESSMENT ACTIVITIES AND MILESTONES
	Review Board considers list of EA issues
	Regulatory, developer, expert, stakeholder, and public input on the draft Terms of Reference and Work Plan.
	Review Board considers those potentially affected parties and transboundary effects/issues, if any
	Review Board determines if a public hearing is warranted on Terms of Reference.
	Review Board Considers draft Terms of Reference Submissions
	RB's submission of final Terms of Reference and Work Plan to the Developer and Government
July 13, 2001	Distribution and advertising of the Approved EA Terms of Reference and Work Plan
	The Environmental Assessment
	Final Environmental Assessment Report (EAR) prepared and submitted to the Review
October 23, 2001	
	Public notification of Final EAR submission
	Conformity Analysis and comment by RA's, Experts, other Interested Parties
	Final Day for Conformity Submissions to the Review Board
	Review Board determination on EA conformity
	Independent Consultants Conduct Technical Analysis
	Technical Analysis Conducted by experts and RA's
	Round One of IR's sent out and Answered
	Round Two of IR's sent out and Answered
	Experts Submit Technical Reports
	Summary of public and technical input prepared for the Review Board
	Key EA issues requiring additional input identified
	Public and Technical Hearing notification if Review Board has Hearings
	Technical Meeting and Public Hearing if Necessary
April 30, 2002	Review Board Site Visit
	Review Board Prepares Its Report of Environmental Assessment
May 1, 2002	Review Board's consideration of the Public Registry Evidence
	Prepare Report or Environmental Assessment
	Notify the Federal Minister of the Department of Indian Affairs and Northern
August 1, 2002	Development of the MVEIRB's completed Report of Environmental Assessment.

De Beers Canada Mining Inc., Snap Lake Diamond Project DRAFT Environmental Assessment Work Plan and Terms of Reference

5 Draft Terms of Reference - De Beers Canada Mining Inc. Snap Lake Diamond Project

5.1 Purpose of the Proposed Terms of Reference

The Environmental Assessment Report will address the following Terms of Reference. The EAR will assist the Review Board in understanding the environmental consequences of the proposed development.

The ToR describes the Review Board's expectations of De Beers for the use and integration of public consultation and traditional knowledge in the EAR and throughout the EA process. The Review Board has determined what it considers to be the development, and to what extent the interactions between components of the proposed development and the environment will be looked at in the EA. The Review Board also requests De Beers to demonstrate its capacity, ability, and commitment to undertake the proposed development in an environmentally safe and sustainable manner.

All public documentation related to this proposed development is available on a public registry file that is maintained by the Review Board. The EAR and all other submissions to the public registry will be used by the Review Board in its determination, reasons for decision and report of environmental assessment.

- 18 This EA will be conducted according to Part V of the Mackenzie Valley Resource Management Act (Act). De
- 19 Beers shall refrain from making any conclusions regarding the significance of impacts on the environment.
- The Review Board shall make the final determination of significance.

21 5.2 Public Consultation and Traditional Knowledge

22 5.2.1 Public Consultation

The purpose of public consultation is to provide those who could be affected by the proposed development the opportunity to participate in the environmental assessment. As a minimum, the residents, First Nations and Metis, in Lutsel K'e, Dettah, N'dilo, Fort Resolution, Wekweti, Rae-Edzo, and Yellowknife, shall be included. This does not prevent De Beers or the Review Board from including industrial, recreational, environmental, and other individuals, groups and organizations who have an interest in the proposed development. De Beers shall provide regular public notification that it is preparing an EAR and advise the public of opportunities to provide input so that they may be involved in the environmental assessment process.

De Beers shall describe its public consultation policies, objectives, programs and activities undertaken and committed to regarding:

- I. methods used to identify, inform and solicit input from potentially interested parties;
- II. those who provided comments and input;
- III. outcomes of consultation including any additional information provided by those consulted;
- IV. concerns identified;
- V. differences in views between those consulted;
- VI. agreements or commitment to agreements with interested participants and/or communities;
- VII. issues tracking; and
- VIII. verifiable, documentation of how consultation affected impact prediction and mitigation, and affected the design of the proposed development.

43 5.2.2 Traditional Knowledge

- 44 De Beers shall make all reasonable effort to collect and facilitate the collection of traditional knowledge
- 45 relative to the proposed development, for integration into the environmental assessment report in collaboration
- with Aboriginal communities and organizations. De Beers shall describe where and how traditional knowledge
- 47 was used and the effect that it had on predicting impacts and determining mitigation. Where traditional
- 48 knowledge is not available, or not made provided to De Beers in a timely manner despite appropriate diligence,
- 49 De Beers shall describe efforts taken to obtain it.

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- De Beers shall describe where and how traditional knowledge was used, and the effect that it had on predicting
- 52 impacts and determining mitigation.

53 5.3 SCOPE OF THE DEVELOPMENT

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- The Review Board is required to provide a scope of development determination according to ss.117(1) of the
- 56 MVRMA. This section describes what the Review Board considers the scope of the drilling development.

57 5.3.1 Principle Development

The Principle development is the underground mining of kimberlite ore using the room and pillar method.

59 5.3.2 Accessory Development

The accessory undertakings and developments associated with the principle development include:

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The decommission and, or, modification of the Snap Lake advanced exploration camp including:

- 1. Temporary explosive storage building(s) and access roads
- 2. Portable crusher and a rock/esker material stockpile
- 65 3. Airstrip
 - 4. Temporary underground contractor facilities
- 5. Bulk sample process plant
- 6. Underground bulk sample
- 69 7. Mine portal
 - 8. Processed kimberlite containment area
 - 9. Dams to contain the kimberlite containment area
 - 10. Potable water intake and pump house
- 73 11. Fuel tanks
 - 12. Pilot plant facilities
 - 13. Cold storage
 - 14. Camp and office complex

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The development of the Snap Lake Diamond Project

- 1. Explosive storage with associated roads
- 2. Landfill for non-hazardous solid waste
- 3. Portable crusher and a rock/esker material stockpile
- 4. Mine water clarification pond
- 5. Mine water clarification pond discharge point into Snap Lake
- 6. Dams to contain mine water clarification pond
- 7. Sewage treatment plant
- 86 8. Power plant
 - 9. Permanent camp complex
- 88 10. Service complex

89		Unheated storage building
90		Process and paste plant
91	13.	Crushed kimberlite ore storage
92		Cement storage
93		Aggregate crushing and batch plant
94		Underground crusher
95		Conveyor used to transport diluted kimberlite ore to surface
96		Kimberlite ore stockpile area
97		Ventilation points
98		Underground mining
99		Mine portal
100	22.	Fuel tanks
101		Potable water intake and pump house
102	24.	Mine waste rock haul road
103	25.	Propane storage area
104		Pilot plan facilities
105	27.	Container storage
106		Cement storage
107		Lupin and mine access winter road
108		Seepage and collection ponds
109		Sumps
110		Berms
111		Quarry and esker excavation areas
112		Acid generating rock disposal area
113		Non-acid generating rock disposal area
114	36.	Processed kimberlite disposal area
115	5.4	Related Considerations
116	5.4.1	Hazardous Materials
117	The ris	k and potential impacts associated with handling, storing, using, and disposing of hazardous
118		ils forming part of the proposed development.
110	# 4 2	A * I 4 I B II - I C
119	5.4.2	Accidents and Malfunctions
120		obability and potential magnitude of an accident and/or malfunction occurring and the resulting
121	impacts	
122		I. the proposed development, including underground workings, and the resulting impacts to
123		the environment.
124	5.4.3	Closure and Reclamation
125	Based of	on proposed closure and reclamation intentions report the present day Canadian dollar value of
126	reclama	ation costs associated with the closure and reclamation of the following development components:
127		ake Advanced Exploration
128		Temporary explosive storage
129	2.	Portable crusher and a rock/esker material stockpile
130	3.	Airstrip
131	4.	Temporary underground contractor facilities
132	5.	Bulk sample process plant
133	6.	Underground bulk sample

134 7. Mine portal 135 8. Processed kimberlite containment area 136 9. Dams to contain the kimberlite containment area 137 10. Potable water intake and pump house 138 11. Fuel tanks 139 12. Pilot plant facilities 140 13. Cold storage 141 14. Camp and office complex 142 143 Snap Lake Diamond Project 144 1. Explosive storage 145 2. Underground workings 146 3. Landfill for non-hazardous solid waste 4. Portable crusher and a rock/esker material stockpile 147 148 5. Mine water clarification pond 149 6. Mine water clarification pond, discharge point into Snap Lake 150 7. Dams to contain mine water clarification pond 151 8. Sewage treatment plant 9. Power plant 152 153 10. Permanent camp complex 154 11. Service complex 155 12. Unheated storage building 13. Process and paste plant 156 157 14. Crushed kimberlite ore storage 158 15. Cement storage 159 16. Aggregate crushing and batch plant 160 17. Underground crusher 161 18. Conveyor used to transport diluted kimberlite ore to surface 162 19. Kimberlite ore stockpile area 163 20. Ventilation points 164 21. Underground mining 165 22. Mine portal 166 23. Fuel tanks 167 24. Potable water intake and pump house 168 25. Mine waste rock haul road 169 26. Propane storage area 170 27. Pilot plan facilities 171 28. Container storage 172 29. Cement storage 173 30. Winter road 174 31. Seepage and collection ponds 175 32. Sumps 176 33. Berms 177 34. Quarry and esker excavation areas 178 35. Acid generating rock disposal area 179 36. Non-acid generating rock disposal area 180 37. Processed kimberlite disposal area

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38. Airstrip

182 5.5 Environmental Assessment Methodology

183 De Beers shall provide information on the environment and how it could be affected by the proposed 184 development. De Beers should also provide a sufficient base for the prediction of positive and negative 185 impacts, and the extent to which negative impacts may be mitigated by planning, development design, 186 construction techniques, operational practices, and reclamation techniques. De Beers will refrain from 187 providing significance conclusions in the EAR report. De Beers shall provide quantitative information to 188 the extent possible regarding the nature of predicted environmental impacts. Where professional or traditional 189 knowledge expertise is applied, an explanation of the soundness of those views shall be provided. The Review 190 Board has the final say on significance.

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Explicit documentation of the assumptions, models, information sources used, as well as information limitations and associated levels of uncertainty should support all steps of the environmental assessment report. The analysis should be quantitative where data are available, but where data or models are lacking, best professional and, or, traditional knowledge judgment may be used. The approach and methodologies used to identify and assess cumulative effects should be explained.

5.5.1 Alternatives to Carrying out the Development

Include a description of the main development/production/technical alternatives, in particular, those associated with the following:

I. mining methods;

II. waste rock and tailings management;

III. mine water management;

IV. energy production (i.e., diesel generation);

V. decommissioning and reclamation;

VI. mine production rates;

VII. employee work schedules; and

VIII. mine development scheduling.

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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 Review Board may request that De Beers provide, in confidence, evidence in support of its conclusions.

5.5.2 Description of the Existing Environment

- De Beers shall provide sufficient information on the existing environment, as it pertains to the potential impacts of the proposed development, to give a brief but clear picture of the existing environment and its use. Baseline data in existing reports and documents should be appropriately referenced. De Beers will be expected to clearly and succinctly describe the following environmental components, as they relate to the proposed
- 217 development:
 - I. air and climate;
 - II. surface and ground water quality and quantity;
 - III. aquatic organisms and habitat;
- 221 IV. wildlife and wildlife habitat, including migratory birds;
- V. vegetation and plant communities;
- VI. terrain, surficial geology, bedrock geology, seismicity, geological hazards, permafrost, soils, and lake sediments;
- VII. human health;
- VIII. economy;
- 227 IX. employment, education and training;
- 228 X. infrastructure;

- 229 XI. government revenues, cost; and 230 XII. social and cultural resources.
- 231 5.5.3 Spatial Boundaries
- 232 Spatial boundaries should be scoped based on the maximum zone of influence of the proposed development for
- 233 each valued ecosystem component that De Beers is monitoring. The developer is not required to provide a
- 234 comprehensive baseline description of the environment, but should provide sufficient detail to address the
- relevant impact issues.
- 236 5.5.4 Temporal Boundaries
- 237 In assessing the impact of the proposed development, De Beers should consider, describe and evaluate the
- 238 environmental impacts of the proposed development for all phases of the proposed development including
- 239 construction, operation, closure and post-closure.
- 240 5.5.5 Impact Description and Predicted Outcomes after Mitigation
- Describe the impacts resulting from the proposed development, after mitigation. Present those in sufficient
- detail, including the method used in the analysis and prediction of impacts to ensure reviewers can easily
- 243 understand how the direct and indirect impacts were analyzed, and how residual impacts were determined. **Do**
- 244 not provide any conclusions regarding the significance of the impacts.
- Information gaps should be identified along with reasonable and suggestions to remedy them. De Beers will be expected 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 will be expected to describe planned mitigation measures and consequences (environmental impacts) of potential failure. The residual impacts should be described at least in terms of the following parameters.
- 251 I. magnitude;
- 252 II. geographic extent;
- 253 III. timing;

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- 254 IV. duration;
- V. frequency;
- VI. irreversibility of impacts;
- VII. ecological resilience; and
- VIII. probability of occurrence and confidence level.
- 260 Distinguish between ecological parameters and social / cultural parameters.
- 261 5.5.6 Environmental Optimization
- 262 The EAR should report the comparative present day Canadian dollar costs of proposed development
- 263 alternatives and the corresponding environmental benefits. Any assumptions or uncertainty surrounding
- 264 implementation of mitigation measures, such as untested technology, will be reported. The reporting of
- development impacts should provide readers with an easy to understand summary of present day Canadian
- value costs of alternatives and their corresponding future environmental benefits.
- 267 5.6 Environmental Impacts
- 268 The environmental assessment report should report impacts resulting from the proposed development on the
- 269 physical, biological and social, economic and cultural components of the environment.

- 270 Air Quality and Climate 5.6.1 271 Report the impacts of the proposed development on air quality. The analysis should include a discussion of 272 measures considered to minimize the release of air contaminants (dust, particulate exhaust fumes and other air 273 contaminants). The analysis should also include: 274 atmospheric dispersion of emissions on a local and regional scale; I. 275 greenhouse gas emissions including, but not limited to, NOx and SOx; II. 276 Ш. impact on biological receptors such as vegetation and wildlife; 277 5.6.2 Terrain 278 Report the impacts on the environment when surficial geology, bedrock or soils are disturbed, or used for 279 construction purposes. The environmental assessment should report impacts resulting from, or on, the terrain 280 and geological components. impacts on the North Pile processed kimberlite containment area related to 281 tailings disposal management (including impacts on existing dams, or changes to capacity); 282 the proposed development's impact on the thermal milieu, including: 283 impact on permafrost physical conditions (including physical strength 284 characteristics) and thermal regime; 285 b. potential for thermal erosion in relation to altered drainage; 286 permafrost temperatures and ground ice conditions underground in the mine and 287 above ground on roadway, waste rock piles, etc..; 288 sensitivity of boggy / wetland terrain to drainage and thermal alterations (notably in II. 289 relation to sewage treatment plant); 290 III. with respect to aggregate use, limitations on volumes of resource material and 291 minimization of terrain disturbance associated with ground ice thaw; 292 IV. rock types, including the chemistry and stability of kimberlite by-products; 293 seismicity and potential for rock heave; V. 294 amount of rock to be removed: VI. 295 acid rock drainage potential and associated mitigation; and VII. 296 VIII. impact of remedial actions at the mine site (waste dumps, tailings). 297 **Vegetation and Plant Communities** 5.6.3 298 The EAR should analyze impacts of the proposed development on: 299 Ĩ. local plant communities (classified as vegetation cover types); 300 II. rare or highly valued species; 301 long-term, direct and indirect, habitat loss or alteration; and III. 302 IV. vegetation productivity. 303 5.6.4 Water Quality and Quantity 304 The environmental assessment report should provide an analysis of proposed development impacts on surface 305 and ground waters. This analysis should include the impacts on water quality and quantity, catchment areas 306 and permafrost in relation to: 307 impacts of underground blasting and its associated residues, in particular, nitrogen; I. 308
 - II. water from underground mine workings and site runoff;
 - III. impact of development on the water shed;

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- IV. dewatering of underground workings and resulting impacts on the water balance, Snap Lake water level, outflow rates, etc.;
- 312 V. impact on water quantity, including changes in timing, volume and deviation of peak and 313 minimum flows due to project development:
 - VI. impact of treated sewage flows to associated wetlands;
- 315 VII. siltation effects (e.g., runoff along roadways and drainage channels);

316		VIII.	effects of nutrients in fish and non-fish bearing water courses;
317		IX.	use of berms for waste water containment; and
318		X.	water chemistry impacts of surface runoff.
319	5.6.4.1	Wate	er Balance
320	A wate	er baland	ce should be prepared that incorporates all components of the proposed development.
321	5.6.4.2	? Gen	eral Water
322	The as	sessmer	at of proposed development impacts on water quality should also consider:
323		I.	contaminant loading and dispersion (including surface runoff and airborne contaminants);
324		II.	acid rock drainage, metal leaching and geochemistry; and
325		III.	kimberlite toxicity and implications for aquatic wildlife.
326	5.6.5	Aqua	tic Habitat
327	The in	pacts of	n aquatic organisms and their habitat should be considered taking into account predicted water
328			antity impacts and their associated effects on fish, fish habitat, and local drainage patterns. The
329			/elopment impacts should include:
330	•	I.	productive capacity of aquatic systems during construction, operations, closure and post-
331			closure;
332		II.	impact on all lakes that may experience changes to fisheries resources including, but not
333			limited to Snap Lake and streams associated with these lakes;
334		III.	habitat loss or alteration;
335		IV.	rare and/or sensitive fish species and habitat; and
336		V.	mortality (includes fishing).
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338	The en	vironm	ental assessment report should include an overview of how the DFO, 1986 principle of No Net
339	Loss v	will be a	achieved during the construction, operation, care and maintenance and closure stages of the
340	propos	sed deve	elopment.
341	5.6.6	Wildl	ife and Wildlife Habitat
342	The en	vironm	ental assessment report should provide an analysis of the proposed development's impacts, (both
343	direct.	and indi	irect), on wildlife and wildlife habitats, including migratory birds, giving consideration to and
344		_	linkages between predicted physical and biological changes resulting from the proposed
345			Special consideration should be given to species listed as vulnerable or endangered on the
346			the Status of Endangered Wildlife in Canada (COSEWIC) list. The analysis of development
347	should	l include	
348		I.	impact of loss of terrestrial habitat, and the quality of lost habitat for relevant species;
349		II.	disturbance of feeding, nesting, denning or breeding habitats;
350		III.	wet-land habitat alteration, loss;
351		IV.	physical barriers to wildlife;
352		V.	disruption, blockage, impediment and sensory disturbance, of daily or seasonal wildlife
353			movements (e.g., migration, home ranges, etc.);
354		VI.	rare, vulnerable, threatened or endangered species as outlined in the Canadian
355			Organization of the Status of Endangered Wildlife in Canada (COSEWIC), as well as,
356		* 7**	species of international significance;
357		VII.	direct wildlife mortality;
358		VIII.	indirect wildlife mortality;
359		IX.	reduction in wildlife productivity; and
360		X.	implications of the proposed development acting as an attractant for particular species.

361 5.7 Social, Economic and Cultural Components

362 5.7.1 Cultural and Heritage Resources

Describe potential impacts of the proposed development on cultural and heritage resources.

364 5.7.2 Land and Resources Use

- Analyse and describe the proposed development's impact on land and resource uses potentially impacted by the proposed development. Include maps and, or, verbal descriptions of existing and past land and resources uses in relation to the proposed development. For additional clarity, include at least the following land and resource uses:
- 369 I. rare or ecologically significant areas;
- 370 II. traditionally significant areas;
- 371 III. seasonal camp areas;
- 372 IV. permanent camp areas;
- V. hunting, trapping, outfitting, recreational, tourism, commercial and sport fishing areas;

374 5.7.3 Economy

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- The impact of the proposed development on the economy, having regard to direct, indirect and induced impacts on income and employment. Consideration must be given to:
 - I. wage and salary employment by skills category over the life of the proposed development, including estimates of local and Aboriginal participation;
 - II. availability and use of skilled workers in the NWT to meet job requirements;
 - III. opportunities for local, regional and territorial businesses to supply goods and services both directly to the proposed development and to meet the demand created by the expenditure of contractors and new employees;
 - IV. opportunities to diversify the northern economic base to produce and to supply new goods and services;
 - V. barriers to employment;
 - VI. the impacts on the subsistence economy;
- 387 VII. federal and territorial revenues and costs:
- 388 VIII. local government finances;
- 389 IX. inflation and the cost of living impacts; and
- 390 X. economic diversification.

391 5.7.4 Human Health

- The environmental assessment report shall analyze the potential development impacts on human physical and mental health, as they relate to the proposed development, its employees and their families.
- 394 5.7.5 Government
- Assess the impacts of the proposed development on revenues, costs and net income accruing to federal and territorial governments. Report the net non-economic incremental benefits or costs to these governments
- 397 arising from the proposed development. De Beers should also report other fee structures/costs it will incur
- 398 such as quarry royalties, security deposits, and abandonment and restoration costs resulting from the proposed
- development. For clarity, provide a balance sheet or other appropriate reporting means the total federal and
- 400 total territorial financial positions resulting from the proposed development.

- 401 5.7.6 Infrastructure
- 402 Assess the impacts of the proposed development on existing social, institutional and community services,
- 403 transportation facilities, services, infrastructure (e.g., transportation safety), and permanent changes to the
- infrastructure and services arising from the proposed development.
- 405 **5.7.7** Noise
- 406 Assess the impact of the proposed development on the environment resulting from changes to ambient noise
- 407 levels, and the effect of these changes on humans and wildlife.
- 408 5.7.8 Visual and Aesthetic Resources
- 409 Assess the visual and aesthetic impact of the proposed development. Report design components that mitigate
- 410 visual and aesthetic impacts.
- 411 5.8 The Effect(s) of the Environment on the Proposed Development
- De Beers should assess the effect(s) of the environment on the proposed development, and activities forming
- part of the proposed development. De Beers should consider such things as severe weather, climate change,
- 414 (e.g., global warming) precipitation and temperature. The discussion must specifically describe and assess how
- 415 the potential for climate change could affect permafrost and soils with high ice content in relation to the
- 416 integrity of the proposed development infrastructure, particularly the tailings (processed kimberlite)
- 417 containment impoundment, water retention dikes and waste rock piles.
- 418 5.9 Cumulative Impact
- 419 For the purposes of this development, the environmental assessment should include an evaluation of
- 420 cumulative effects that are likely to result from the proposed development in combination with other
- developments; and developments within the regulatory process on the day these Terms of Reference are issued.
- De Beers should include, as a minimum, the BHP EkatiTM Diamond Mine (including the expansion), Diavik
- Diamond project, and the Echo Bay Mines Ltd. Winter Road, Lupin mine and the proposed Tahara diamond
- 425 mine. De Beers should also report and describe developments considered but not included in the cumulative
- 426 effects assessment, and rationale for the decision.
- De Beers should provide confirmation that all existing facilities, infrastructure, etc., De Beers plans to use can adequately handle the demands generated by the proposed development. Include cumulative impacts in
- 430 relation to:

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- 431 I. The bio-physical environment;
- 432 II. social environment;
 - III. economic environment:
 - IV. cultural environment;
 - V. heritage resources; and
- VI. visual and aesthetic resources.
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 438 Explicit documentation of the assumptions, models, information sources used as well as information limitations
- and associated levels of uncertainty should support all steps of the CEA in the environmental assessment
- report. The analysis should be quantitative where data are available but where data or models are lacking, best
- professional judgment may be used. The approach and methodologies used to identify and assess cumulative
- 442 effects should be explained.

443 5.10 Abandonment and Restoration

- De Beers should provide a description of regulations (regulatory framework), industry standards and
- government agreements that are needed with respect to the closure phase of the proposed development. Where
- regulatory requirements, industry standards or government agreements exist, their minimum standards, criteria,
- etc. should be reported De Beers should provide a clear (visual and textual) description of the proposed
- development site at closure, and after restoration.

449 5.11 Follow-up Programs

- Describe reporting (feedback) procedures including any proposed monitoring programs. The intent is to
- ensure that remedial actions are taken if the results of a monitoring program deviate from any established
- operational standards on environmental performance, or predictions on environmental impacts.

453 5.12 Compensation

- De Beers should provide key elements of its policy on individual compensation and on compensation
- agreements, contracts or other forms of compensation they have or will negotiate as it relates to mitigating
- adverse environmental impacts, within the confines of confidentiality.

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6 PRESENTATION

- 459 *6.1 Conformity*
- The environmental assessment report should include a conformity table outlining to reviewers the areas in the
- report (including appendices and technical reports) that address the specific sections, and where appropriate
- 462 line items, of the Terms of Reference.
- 463 6.2 Format
- The format of the environmental assessment report is largely left to the discretion of De Beers although
- reviewers must be able to clearly identify where specific issues have been addressed and directions followed.
- 466 6.3 Appendices
- Detailed data should be contained in appendices and technical reports submitted in support of the primary
- 468 environmental assessment report.
- 469 6.4 Data Presentation
- 470 De Beers should present the environmental assessment report in the clearest language possible. Where
- 471 technical language is used a glossary defining technical words and acronyms should be included. De Beers
- should provide charts, diagrams and maps wherever useful to clarify the text. Where possible, maps should be
- of common scale and orientation to allow for comparison and overlap of mapped features. De Beers should
- also provide the EAR report in electronic format (e.g., CD-ROM). Please submit PDF formatted digital files of
- all documents in sizes suitable for downloading from the Internet.

476 477		APPENDIX 1
478 479	1.0	Review Board Legal Context for Environmental Assessment
480 481 482 483 484	purpose require	eview Board, in exercising its authority is guided by the following legal principles and by definitions, es and factors found in the MVRMA. This context provides the developer, RA's, the DRA (NEB) as d, federal and territorial governments, First Nations, expert advisors, and other affected or interested the framework within which the EA will be conducted.
485 486	1.1	Legal Principles
487 488 489		eview Board is governed by the rules of natural justice and procedural fairness. This essentially means r play is required when exercising decision making functions. Three of the basic elements are:
490 491 492		right to be heard - means providing fair opportunity for parties to prepare and state their case, and to or contradict relevant statements prejudicial to their position;
493 494 495		rule against bias - is a rule against prejudging a case; addressing not only actual bias but also any able apprehension of bias; and,
496 497 498 499 500	evideno decisio	Fettering of discretion - means the Review Board is governed by the common law principle which as that As/he who hears must decide. This means that the Board members who hear or review the ce in an EA must be the decision makers. Members who did not participate can play no role in the con. The law also requires that the Board and its members must be free to exercise their full authorities the statute. The Board must decide each case on its own merits.
501 502 503	1.2	Definitions
504 505 506		ntext within which the Review Board conducts an EA is based on following definitions and indicated s from the MVRMA.
507 508 509 510	except carried	opment - means any undertaking, or any part of an undertaking, that is carried out on land or water and, where the context otherwise indicates, wholly within the Mackenzie Valley, and includes measures out by a department or agency of government leading to the establishment of a national park subject to tional Parks Act and an acquisition of lands pursuant to the Historic Sites and Monuments Act.
512	Enviro	onment - means the components of the Earth and includes
513 514 515 516 517	# #	Land, water and air, including all layers of the atmosphere; All organic and inorganic matter and living organisms; and The interacting natural systems that include components referred to in paragraphs (a) and (b).
518 519	Follow	-up program - means a program for evaluating
520	•	the soundness of an environmental assessment or environmental impact review of a proposal for a

521 522 523 524	development; and the effectiveness of the mitigative or remedial measures imposed as conditions of approval of the proposal.
525 526 527 528	Harvesting - in relation to wildlife, means hunting, trapping or fishing activities carried on in conformity with a land claim agreement or, in respect of persons and places not subject to a land claim agreement, carried on pursuant to aboriginal or treaty rights.
529 530 531	Heritage resources - means archaeological or historic sites, burial sites, artifacts and other objects of historical, cultural or religious significance, and historical or cultural records.
532 533 534	Impact on the environment - means any effect on land, water, air or any other component of the environment, as well as on wildlife harvesting, and includes any effect on the social and cultural environment or on heritage resources.
535 536 537 538	Mitigative or remedial measure - means a measure for the control, reduction or elimination of an adverse impact of a development on the environment, including a restorative measure.
539 540 541	Scope of assessment - the components of the environment that will be evaluated for impacts from the proposed development.
542 543 544	Scope of development - a description of the development and associated parts as determined by the Review Board.
545 546 547	s.114 The purpose of this Part is to establish a process comprising a preliminary screening, an environmental assessment and an environmental impact review in relation to proposals for developments, and
548 549 550 551 552 553 554	 to establish the Review Board as the main instrument in the Mackenzie Valley for the environmental assessment and environmental impact review of developments; to ensure that the impact on the environment of proposed developments receives careful consideration before actions are taken in connection with them; and to ensure that the concerns of aboriginal people and the general public are taken into account in that process.
555 556 557	s.115 The process established by this Part shall be carried out in a timely and expeditious manner and shall have regard to
558 559 560 561	 the protection of the environment from the significant adverse impacts of proposed developments; and the protection of the social, cultural and economic well-being of residents and communities in the Mackenzie Valley.
562	ss.117(1) Every environmental assessment of a proposal for a development shall include a determination by

the Review Board of the scope of the development, subject to any guidelines made under section 120.

ss.117(2) Every environmental assessment and environmental impact review of a proposal for a development

shall include a consideration of:

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- 568 569
- The impact of the development on the environment, including the impact of malfunctions or accidents that may occur in connection with the development and any cumulative impact that is likely to result from the development in combination with other developments;
- 570 571
- The significance of any such impact;
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- Any comments submitted by members of the public in accordance with the regulations or the rules of practice and procedure of the Review Board;

574 575 Where the development is likely to have a significant adverse impact on the environment, the imposition of mitigative or remedial measures; and

576 577 Any other matter, such as the need for the development and any available alternatives to it, that the Review Board or any responsible minister, after consulting with the Review Board, determines to be relevant.