



Mackenzie Valley Environmental Impact Review Board

Box 938, 5102-50th Avenue, Yellowknife, NT X1A 2N7



Date: Thursday, Dec. 19th, 2002
From: Alan Ehrlich, A/ Manager of Environmental Impact Assessment
Pages: 21 (including these 3 cover pages)
File: EA02-002 WesternGeco Mackenzie River 2D Seismic Program

Subject: Environmental Assessment Re-Activation, Draft Terms of Reference

Please see the attached letter from the Review Board to WesternGeco and the distribution list.

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Mackenzie Valley Environmental Impact Review Board

Our File EA02-002

Dec. 19th, 2002

To: Marty Swagar, WesternGeco
Distribution List

Dear Sirs/ Ma'ams,

Re: Environmental Assessment Re-Activation, Draft terms of Reference and Workplan

In response to a request from WesternGeco, the Mackenzie Valley Environmental Impact Review Board has re-activated the environmental assessment of the WesternGeco Mackenzie River 2D Seismic Development. This was adjourned on August 23rd, 2003 to allow the company to conduct field research and testing. The company is now finalizing the results of its test program.

Please see that attached *Draft Terms of Reference and Workplan for the Environmental Assessment of the WesternGeco Ltd. Mackenzie and Liard Rivers Seismic Survey*. Comments or suggested changes or additions will be welcomed up to and including January 9th, 2003.

If you have any questions, please call me at (867) 766-7056.

Sincerely,

A handwritten signature in blue ink, appearing to read 'A. Ehrlich', written over a horizontal line.

Alan Ehrlich

A/ Manager of Environmental Impact Assessment
Mackenzie Valley Environmental Impact Assessment Board

Draft Terms of Reference

and

Work Plan

for the

Environmental Assessment

of the

WesternGeco Ltd.

Mackenzie And Liard Rivers Seismic Survey

Dec. 17th, 2002

By:

Mackenzie Valley Environmental Impact Review Board

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1 INTRODUCTION

1.1 National Energy Board Application

The National Energy Board (NEB) received a WesternGeco (WG) application on 23 April 2002 for an authorization pursuant to paragraph 5(1)(b) of the Canada Oil and Gas Operations Act (COGOA) to conduct a 2-D, 1,800 linear km seismic acquisition program along the Mackenzie River from the north of the Gwich'in Settlement Area (GSA), through the Sahtu to Fort Simpson in the Deh Cho, and up the Liard River to the British Columbia border (the Development).

A Geophysical Operation Authorization would be required from the NEB to carry out the Development. No permits are required that would trigger a screening under MVRMA, however the staff of those boards have been consulted with. As the only regulator for the Development, the NEB initiated a preliminary screening pursuant to subsection 124 of the Mackenzie Valley Resource Management Act (MVRMA) and Schedule 1, Part 1 of the MVRMA Preliminary Screening Requirements Regulations.

The NEB distributed the application and supporting information to federal and territorial departments, local First Nation governments, the Review Board and the MVLWB. A review of the comments resulted in the NEB issuing Information Request (IR) No. 1 on 31 May 2002. WG provided responses to IR No. 1 on 10 June 2002.

On 25 June 2002, the NEB completed a preliminary screening and, along with Fisheries and Oceans Canada (DFO), referred the development to the Review Board for an environmental assessment (EA).

1.2 Mackenzie Valley Environmental Impact Review Board – Environmental Assessment Referral

On 28 June 2002, the Review Board circulated a memo noting that it had received notice of referral from the NEB. On 23 August 2002, Review Board circulated a memo informing regulators, local First Nation governments, and stakeholders that the EA would be adjourned to allow results of a WG field test study concerning acoustics, fish effects, and wildlife monitoring to be analyzed and reports written.

On 19 November 2002, the Review Board received a letter from WG, requesting that the EA process be reactivated. The draft terms of reference and work plan have been produced in accordance with that request.

2 SCOPE OF THE DEVELOPMENT

This section outlines the scope of the development. Additional information on development components may be requested by the Review Board to complete the EA.

2.1 *Principle Development*

The development is a 2D seismic acquisition program along the Mackenzie River from the ISR/GSA border upstream to Fort Simpson, and up the Liard River to the British Columbia boarder. The development is planned for start-up on June 10, 2003 (mobilizing equipment) and completion by August 10, 2003. Activities to be undertaken as part of the principle development include:

- Operations on land will be limited to existing docks and refueling stations;
- Two push-boats will be used as the source and source/recording vessels;
- Both push-boats will be pushing barges to house equipment and crew;
- The source vessel will travel approximately 2 km ahead of the source/recording vessel;
- A 1,500 in³ sleevegun array will be towed behind each vessel at a depth of 2.5 m;
- Each sleevegun array consists of two 750 in³ subarrays that operate at an air pressure of 2,000 PSI;
- Each subarray is comprised of two two-gun clusters and four single guns;
- Each subarray is separated by 12 m;
- A computer based system will be used to control firing of the airguns;
- Airguns will be fired at linear intervals of 15 to 20 m, alternating from the source vessel to the source/recording vessel, or approximately every 8 seconds;
- A solid, 600 to 2,000 m long streamer that houses hydrophones for measuring acoustic pressure will be towed behind the source/recording vessel;
- There will be up to 160 hydrophone groups (14 hydrophones per group) placed at 12.5 m long intervals along the streamer;
- The streamer will be used in water that is 2 m or deeper;
- Surveying will occur in an upstream direction; and
- Surveying speed is approximately 4.5 to 5 knots in the water or 0.5 to 2 knots over river bottom.

2.2 *Accessory Developments and Activities*

The completion of the principle development would require the following additional developments and activities to be constructed, operated and/or used:

- Marine services (provided by contractor Northern Transportation Company Limited (NTCL))
- Collection and disposal of domestic waste (source/recorder vessel is equipped with crew accommodation, a galley, and a mess hall)
- Sewage and grey water (handled as per regulations for other NTCL vessels)
- Fuel supply and refueling procedures

This will also include any other undertakings in support of, or in conjunction with, the principal developments or accessory developments and activities.

3 SCOPE OF THE ASSESSMENT

The scope of the assessment is the determination of which issues/items will be examined in the environmental assessment. In determining the scope of the assessment, the Review Board is conscious of its obligation to consider the factors listed in ss. 117(2) of the *MVRMA*. Typically, the Review Board's scope of the assessment includes the following components:

Physical and Biological Environment

Air Quality and Climate
Terrain and Soils
Vegetation and Plant Communities
Water Quality
Aquatic Resources and Habitat
Wildlife and Wildlife Habitat
Noise

Human Environment

Cultural and Heritage Resources
Social and Economic Matters
Land and Resource Use
Visual and Aesthetic Resources

Cumulative Impacts

Natural Environment
Social, Economic and Cultural Environment

Other Relevant Matters

Description of the Development
Developer Identification and Performance Record
Tenure
Regulatory Regime
Environmental Assessment Methodology
Public Consultation
Effects of the Environment on the Development
Accidents and Malfunctions
Alternatives to Parts of the Development
Abandonment and Restoration
Environmental Protection Plan

Upon reviewing the information provided by the developer to the NEB and the comments submitted by various parties to the NEB during the preliminary screening, the Review Board has decided that requiring the developer to address the typical scope of the assessment is not justified for this particular development. The Review Board has decided that the EA report will not need to include the following components for the reasons provided:

<i>Air Quality and Climate</i>	– no large scale air emissions are part of the development
<i>Terrain and Soils</i>	– very limited land based activities with no excavations
<i>Vegetation and Plant Communities</i>	– very limited land based activities with no clearing of vegetation
<i>Tenure</i>	– no land tenure will be acquired for this development
<i>Visual and Aesthetic Resources</i>	– no permanent structures or physical modifications to the environment

4 DIRECTION TO WESTERNGECO

WG shall provide the Review Board with an EA report that provides the information requested in Sections 4.1 to 4.16. When discussing development impacts, WG shall, where appropriate:

- Identify the development activity;
- Identify the stresses this activity produces in the environment;
- Identify the potential impacts of these stresses (with supporting evidence if possible);
- Propose mitigative measures with evidence and/or reasoning that the mitigation will work; and
- Predict the residual impacts that cannot be mitigated.

When describing impacts, WG will be expected to define and explain the following items that characterize the impacts:

- Direction;
- Magnitude;
- Duration;
- Frequency;
- Likelihood / Probability of Occurrence;
- Reversibility;
- Spatial boundaries; and
- Environmental consequence¹.

All uncertainties in impact predictions and mitigation should be clearly stated.

4.1 *Executive Summary and a Non-technical Summary*

WG shall include an Executive Summary and a Non-technical Summary in its environmental assessment report. If requested by the Review Board, WG will have the Summaries translated into the appropriate aboriginal language.

4.2 *Developer Identification and Performance Record*

WG shall provide the following information:

- company incorporation and structure information;
- the company's corporate history in Canada and the northwest territories, and that of its partners, if any;
- the proposed development ownership;
- an organizational structure identifying corporate and individual responsibilities for the development and operations; and
- an environmental performance record of the company and its contractors in conducting this type of development in this region, in a similar setting and in other settings.

¹ Although the Board will determine significance, the developer's views of the importance of a predicted impact are described here as "environmental consequence".

4.3 Development Description

WG shall include a thorough development description that includes, but is not limited to, the following:

- development timing and routing;
- expected channel depths;
- cable lengths for deployment of the airguns;
- operational details for the use of the airguns;
- method of deployment and recovery for the hydrophones and any other equipment;
- types and amounts of hazardous materials stored on the barge;
- description of secondary containment systems; and
- outline of the refueling protocols from the barge to other vessels.

4.4 Effects of the Environment on the Development

WG shall describe potential impacts of the environment on the development and any changes to the development that may be caused and/or required by the environment.

4.5 Alternatives

WG shall provide an explanation of alternatives (e.g., marine vibrator) to the principal and accessory parts of the development where appropriate alternatives are possible. This discussion shall include, but not be limited to, development timing and a description of potential environmental impacts that were considered when evaluating and selecting alternatives.

4.6 Regulatory Regime

WG shall provide a table and map summarizing relevant licenses, permits and other authorizations that are required to allow the proposed development to occur.

4.7 Public Consultations

WG shall summarize consultations undertaken with federal and territorial government departments, municipal governments, aboriginal groups and non-governmental organizations, listing and describing any concerns that were raised and detailing how these concerns were addressed. Any unresolved concerns shall be highlighted along with a description of the intended course of action to resolve the concerns.

4.8 Noise

WG to report results from acoustic field studies undertaken during 2002, including:

- objectives and methods;
- sound levels necessary for the development;
- attenuation of noise over distance; and
- ambient noise levels in the Mackenzie River.

This discussion should also evaluate the importance of substrate type, water depth, and channel width to the impacts of reflected energy in the water column.

4.9 Aquatic Resources

WG shall provide information on aquatic resources, mitigation measures and predicted residual impacts. To facilitate this discussion, WG shall provide details of methods and results of fieldwork during 2002 that evaluated effects of airguns on fish. This section shall include, but not be limited to, a discussion of the following:

- general environmental setting of the Mackenzie and Liard Rivers;
- species of fish present at the time of the seismic survey and their life stages, movement, migration patterns and habitat use;
- potential impacts of airguns on fish, including physical and behavioral effects;
- details of mitigation measures to prevent mortality to fish, including ramping up procedures;
- details of work timing in relation to fish species' distributions and movements; and
- details of proposed monitoring programs related to aquatic resources.

This discussion is also to include a description of all uncertainties related to the above.

4.10 Wildlife and Wildlife Habitat

WG shall describe potential impacts on wildlife and wildlife habitat, and discuss mitigation methods and predicted residual impacts. To facilitate this discussion, WG shall provide details of methods and results of wildlife monitoring during 2002 field studies.

This section should include, but not be limited to, a discussion of the following:

- temporary and permanent impacts, both physical and behavioral, of the airgun array on semi-aquatic furbearers and water birds;
- impacts on any threatened or endangered wildlife species including migratory populations that might be present; and
- waste handling procedures to minimize and/or avoid wildlife attraction or damage to wildlife habitat.

4.11 Land and Resource Use

WG shall discuss the potential impacts of the proposed development on land and resource use along with potential mitigation methods and residual impacts. This discussion shall include, but not be limited to, the following:

- traditional land use and occupation;
- existing land use and occupation;
- wilderness outfitting including commercial and sport fishing;
- availability, abundance and quality of wildlife and fish for subsistence, recreational and/or commercial harvesting;
- other recreational activities; and
- protected and/or proposed protected areas.

4.12 Cultural and Heritage Resources

WG shall discuss the potential impacts of the proposed development on cultural and heritage resources along with potential mitigation methods and residual impacts. This discussion is to include, but not be limited to,

a discussion of the significant areas of the Mackenzie River as designated by the Gwich'in, Sahtu and Deh Cho organizations, as well as the mitigation required to maintain the values that resulted in the identification of these areas.

4.13 *Water Quality*

WG shall describe potential impacts on water quality, including details on proposed mitigation measures, predicted residual impacts and any uncertainties.

4.14 *Social and Economic Matters*

WG shall provide details on the existing socio-economic environment and discuss potential development impacts. This should include information such as identifying the local businesses that will be involved in the development, the likely increase in local employment, implications for community quality of life impacts as well as the documentation and details related to any other predicted social and economic impacts and mitigation measures.

WG shall provide a copy of the Benefits Plan that has been submitted to and/or approved by Indian and Northern Affairs Canada (INAC). If the Benefits Plan has not yet been submitted and/or approved, describe the anticipated schedule until the Plans' approval. WG shall describe any consultations that occurred specific to the Benefits Plans with INAC, the Government of the Northwest Territories (GNWT) and/or the local communities.

4.15 *Cumulative Impacts*

WG shall analyze and report on the cumulative impacts that might result from the development impacts in combination with those from other past, present or reasonably foreseeable developments or activities. In preparing its submission, WG should consult the document *Addressing Cumulative Environmental Effects in Environmental Assessment under the Mackenzie Valley Resource Management Act* (Interim Guide, September 2000) which was prepared by the Review Board.

4.16 *Accidents and Malfunctions*

WG shall report on the probability, potential magnitude and potential environmental impacts of possible development accidents and malfunctions. The accidents and malfunctions that are discussed are to include, but not be limited to, those related to fuel storage, handling and transfers. This section shall include a discussion of the spill contingency and/or emergency response plans that will be employed to deal with accidents and malfunctions.

4.17 *Environmental Protection Plan*

WG shall describe the Environmental Protection Plan (EPP) that is intended for use with this development. The EPP should include the environmental management system that will be in place during operations as well as what, how and when follow-up programs will be used to assess the accuracy of predicted impacts and determine if additional mitigation is necessary.

5 ROLES AND RESPONSIBILITIES

The roles and responsibilities of the Review Board and its staff, government bodies, the developer and other parties in the EA are explained in this section. Further information regarding the structure of the EA process is available in the Review Board's Environmental Impact Assessment Guidelines and the Rules of Procedure. Both documents are available from the Review Board.

All submissions received from all sources will be considered during the Review Board's decision-making processes on the environmental assessment. Usually these submissions will be public documents and will be posted on the Public Registry. However, the Review Board can and will accept documents on a confidential basis if required. Submissions should be in a format that is easily available to all stakeholders and should follow any templates provided by the Review Board.

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

5.1 *Review Board and Review Board Staff*

The Review Board and its staff are 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*;
- identify areas and extent of impacts 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*;
- report to the designated regulatory agency (the NEB) in accordance with ss.128(2) of the *MVRMA*; and
- report to the Federal Minister in accordance with ss.128(2) of the *MVRMA*.

The Review Board's Environmental Assessment Officer (EAO) is the primary contact for the developer, government bodies (federal, territorial and municipal), non-government organizations (NGOs), First Nations, expert advisors (expert consultants contracted directly by the Review Board), the public and other interested parties. This does not limit or preclude the developer's contact with other parties during the EA process.

The EAO coordinating and facilitating this EA is Alan Ehrlich.

5.2 *Government Bodies*

Government bodies may be involved in the EA process as:

- a Regulatory Authority as defined in the *MVRMA*;
- a Responsible Minister as defined in the *MVRMA*;
- a Federal Minister as defined in the *MVRMA*;
- a Designated Regulatory Agency (DRA) as defined in the *MVRMA*;
- advisors to the Review Board; or

-
- multiple roles simultaneously.

5.3 Developer

The developer is expected to respond in a suitable and timely manner to directions and requests issued by the Review Board. The developer may present additional information at any time to the Review Board beyond what was requested during the EA process. The Review Board encourages the developer to continue consulting all potentially affected communities and organizations during the EA process.

5.4 Other Parties

In addition to the pool of advisors available within government, the Review Board may choose to hire expert advisors to provide 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.

6 EA PROCESS

This section summarizes the phases in the EA process to be used for this particular EA. The actual process may deviate from this intended process as there may need to be some allowance for process modifications based upon events that occur during the EA.

6.1 Milestones and Responsibilities

Having considered the information available regarding this development, the Review Board has established milestones and responsibilities for this EA process. These milestones and responsibility assignments are outlined in Table 1.

Table 1 - Milestones and Responsibility Assignments for Phases in the EA Process

Milestone	Developer	Government Bodies	Other Parties	Review Board and Staff
Re-start the EA process				✓
Prepare draft Terms of Reference and Work Plan				✓
Review and comment on draft ToR and WP	✓	✓	✓	
Revise and approve final ToR and WP				✓
Submit EA Report	✓			
Conformity Check and Deficiency Statement (if required)				✓
Deficiency Statement Response	✓			
Information Requests		✓	✓	✓
Information Request Responses	✓	✓	✓	
Technical Analysis		✓	✓	✓
Review Board Report of EA and Reasons for Decision				✓
Response from the National Energy Board (and possibly Minister of Indian Affairs and Northern Development if required)		✓		
Consultation - throughout / as required	✓	✓	✓	✓

6.1.1 Reactivate the EA

The Review Board has initiated the notification measures required by the *MVRMA*. The Review Board has opened the Public Registry on the EA. The Public Registry will be updated regularly.

Deliverable: Public Registry, public notification, government notification, developer notification, expert advisor identification, identification of EA roles.

6.1.2 Terms of Reference and Work Plan

This Draft Terms of Reference and Work Plan for the EA was completed by the Review Board based on development information received from WG. This document contains the scope of the development, the scope of the assessment, directions to the developer, a description of the EA process and an EA schedule.

Deliverable: An approved Terms of Reference and Work Plan.

6.1.3 Preparation and Submission of the EA Report

WG will use the final terms of reference to guide the preparation of its EA report. Although the format of the EAR is largely left to the discretion of the developer, the developer should consider the use of appendices for providing some information, the use of a glossary for technical or uncommon terms and the clarity and accuracy of the information presented in the EAR. Diagram charts and maps are useful for clarifying information presented in text.

Deliverable: EA Report.

6.1.4 Conformity Check and Deficiency Statement

The Review Board will review the developer's EA Report to ensure that the developer has provided the information that it was instructed to provide.² If required, the Review Board will issue a deficiency statement identifying those areas in which the developer has not provided information to address an item listed in the scope of the assessment. The developer will be asked to submit information to the Review Board to fill the information gaps identified by the deficiency statement.

Deliverable: Review Board Deficiency Statement and the developers' response.

6.1.5 Information Requests

The IRs are very specific and focused requests for clarification or additional information. They are required in order for the Review Board to complete its analysis and reach a conclusion about the information provided by the developer. The first round of IRs that are issued will be developed by the Review Board. The second round will be open to all EA participants.

IRs can be submitted by any parties in the EA and can be directed to any other party. However, all IRs must be submitted to the Review Board for its approval and they must also be submitted using the template that will be provided by the Review Board. If approved, the Review Board will then issue the IR under its authority to the intended IR recipient.

The IRs and the responses will be included in the Public Registry and be used as evidence for the consideration of the Review Board.

Deliverable: Information Requests and Responses to Information Requests that are placed on the Public Registry and circulated to all parties to assist in their analysis of the environmental assessment report.

6.1.6 Technical Analysis

The Review Board staff will undertake the analysis of the EA with the assistance of federal and territorial governments, First Nations, the public and other interested parties. A thorough analysis of the development

² This conformity check determines whether or not the developer has provided information to address a requirement of the scope of the assessment. It does not reflect the technical adequacy of the information provided by the developer. Any additional technical information or further explanation would be requested through Information Requests (IRs). IRs facilitate the technical analysis of the development.

is the intention of the Review Board to enable it to make the best EA decisions. This is a critical stage in the EA process where the key issues and impacts are identified and evaluated.

The developer can formally provide and present its views on the information brought to the Review Board's attention including any proposed amendments, additions or refinements to the development or the environmental assessment documents.

Deliverable: Technical reports from EA parties that clearly state the reviewer's conclusions, recommendations and supporting rationales.

6.1.7 EA Decision

The Review Board will provide the Minister of Indian and Northern Affairs Canada (INAC) and the National Energy Board with its Report of Environmental Assessment as per Section 128(2) of the MVRMA. The Minister of INAC will distribute the report to every responsible minister as per 128(2)(a) of the MVRMA. The developer and the other EA parties will also receive copies of the Review Board's Report of EA.

Deliverable: The Review Board's Report of Environmental Assessment.

6.2 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. The development was initially referred to the Review Board on June 25th, 2002, and was adjourned for field test studies on Aug. 23rd, 2002. ("Days" below refer to working days.)

Table 2 - Milestone Completion Timetable

MILESTONE	Days to Completion
EA reactivated, Draft Terms of Reference and Work Plan issued	Restart: 19 Dec., 2002
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WG response to the Deficiency Statement	6-10 days
Open IRs to WG	10 days
WG response to IRs	10-15 days
Submission of technical analysis reports	8-12 days
Closure of Public Registry	4 days
Review Board EA decision	10-20 days
Review Board's Report of EA to the NEB and the Minister of INAC	5 days
Federal Minister's response to the Review Board's Report of EA (if required)	-
Consultation – throughout / as required	-

APPENDIX

Review Board Legal Context for Environmental Assessment

The Review Board, in exercising its authority is guided by the following legal principles and by definitions, purposes and factors found in the MVRMA. This context provides the developer, RA's, the DRA (NEB) as required, federal and territorial governments, First Nations, expert advisors, and other affected or interested parties the framework within which the EA will be conducted. (Note: The NEB will undertake its responsibilities for the environmental assessment as described in the Work Plan and in accordance with the CEAA.)

Legal Principles

The Review Board is governed by the rules of natural justice and procedural fairness. This essentially means that fair play is required when exercising decision making functions. Three of the basic elements are:

- (i) The right to be heard - means providing fair opportunity for parties to prepare and state their case, and to correct or contradict relevant statements prejudicial to their position;
- (ii) The rule against bias - is a rule against prejudging a case; addressing not only actual bias but also any reasonable apprehension of bias; and,
- (iii) Fettering of discretion - means the Review Board is governed by the common law principle which requires that she/he who hears must decide. This means that the Board members who hear or review the evidence in an EA must be the decision makers. Members who did not participate can play no role in the decision. The law also requires that the Board and its members must be free to exercise their full authorities under the statute. The Board must decide each case on its own merits.

Definitions

The context within which the Review Board conducts an EA is based on following definitions and indicated sections from the MVRMA.

Development - means any undertaking, or any part of an undertaking, that is carried out on land or water and, except where the context otherwise indicates, wholly within the Mackenzie Valley, and includes measures carried out by a department or agency of government leading to the establishment of a national park subject to the National Parks Act and an acquisition of lands pursuant to the Historic Sites and Monuments Act.

Environment - means the components of the Earth and includes

- (a) Land, water and air, including all layers of the atmosphere;
- (b) All organic and inorganic matter and living organisms; and
- (c) The interacting natural systems that include components referred to in paragraphs (a) and (b).

Follow-up program - means a program for evaluating

- the soundness of an environmental assessment or environmental impact review of a proposal for a development; and

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- the effectiveness of the mitigative or remedial measures imposed as conditions of approval of the proposal.

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.

Heritage resources - means archaeological or historic sites, burial sites, artifacts and other objects of historical, cultural or religious significance, and historical or cultural records.

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.

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.

Scope of the assessment - the components of the environment that will be evaluated for impacts from the proposed development.

Scope of the development - a description of the development and associated parts as determined by the Review Board.

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

- 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.

s.115 The process established by this Part shall be carried out in a timely and expeditious manner and shall have regard to

- 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.

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:

- 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;

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- The significance of any such impact;
 - Any comments submitted by members of the public in accordance with the regulations or the rules of practice and procedure of the Review Board;
 - Where the development is likely to have a significant adverse impact on the environment, the imposition of mitigative or remedial measures; and
 - 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.

6 EA PROCESS

This section summarizes the phases in the EA process to be used for this particular EA. The actual process may deviate from this intended process as there may need to be some allowance for process modifications based upon events that occur during the EA.

6.1 Milestones and Responsibilities

Having considered the information available regarding this development, the Review Board has established milestones and responsibilities for this EA process. These milestones and responsibility assignments are outlined in Table 1.

Table 1 - Milestones and Responsibility Assignments for Phases in the EA Process

Milestone	Developer	Government Bodies	Other Parties	Review Board and Staff
Re-start the EA process				✓
Prepare draft Terms of Reference and Work Plan				✓
Review and comment on draft ToR and WP	✓	✓	✓	
Revise and approve final ToR and WP				✓
Submit EA Report	✓			
Conformity Check and Deficiency Statement (if required)				✓
Deficiency Statement Response	✓			
Information Requests		✓	✓	✓
Information Request Responses	✓	✓	✓	
Technical Analysis		✓	✓	✓
Review Board Report of EA and Reasons for Decision				✓
Response from the National Energy Board (and possibly Minister of Indian Affairs and Northern Development if required)		✓		
Consultation - throughout / as required	✓	✓	✓	✓

6.1.1 Reactivate the EA

The Review Board has initiated the notification measures required by the *MVRMA*. The Review Board has opened the Public Registry on the EA. The Public Registry will be updated regularly.

Deliverable: Public Registry, public notification, government notification, developer notification, expert advisor identification, identification of EA roles.

6.1.2 Terms of Reference and Work Plan

This Draft Terms of Reference and Work Plan for the EA was completed by the Review Board based on development information received from WG. This document contains the scope of the development, the scope of the assessment, directions to the developer, a description of the EA process and an EA schedule.

Deliverable: An approved Terms of Reference and Work Plan.

6.1.3 Preparation and Submission of the EA Report

WG will use the final terms of reference to guide the preparation of its EA report. Although the format of the EAR is largely left to the discretion of the developer, the developer should consider the use of appendices for providing some information, the use of a glossary for technical or uncommon terms and the clarity and accuracy of the information presented in the EAR. Diagram charts and maps are useful for clarifying information presented in text.

Deliverable: EA Report.

6.1.4 Conformity Check and Deficiency Statement

The Review Board will review the developer's EA Report to ensure that the developer has provided the information that it was instructed to provide.² If required, the Review Board will issue a deficiency statement identifying those areas in which the developer has not provided information to address an item listed in the scope of the assessment. The developer will be asked to submit information to the Review Board to fill the information gaps identified by the deficiency statement.

Deliverable: Review Board Deficiency Statement and the developers' response.

6.1.5 Information Requests

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