

ENVIRONMENTAL ASSESSMENT TRACK REPORT

BEPCO CANADA COMPANY'S PROPOSED EXPLORATORY DRILLING PROJECT

SUBMITTED TO THE
MINISTER OF THE ENVIRONMENT

BY

THE CANADA - NOVA SCOTIA OFFSHORE PETROLEUM BOARD

JULY 7TH, 2004

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INTRODUCTION

The Canada - Nova Scotia Offshore Petroleum Board (the Board) is the responsible authority for exploratory drilling projects in the Nova Scotia Offshore Area as defined in the *Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act (Accord Act)*. In accordance with the *Canadian Environmental Assessment Act (the CEA Act)*, BEPCo Canada Company (BEPCo) submitted a project description to the Board on April 28, 2004. The project described is an exploratory drilling program within Exploration Licence 2407. The Project as proposed is described in Item 15 of the *Comprehensive Study List Regulations* of the CEA Act.

Upon receipt of the project description the Board declared itself a responsible authority because the project cannot proceed without an authorization under sub-section 142(1)(b) of the Accord Act. Issuance of the authorization is described in the *Law List Regulations* of the CEA Act and therefore an environmental assessment is required under sub-section 5(1)(d) of the CEA Act.

Following the requirements of the *Regulations Respecting the Coordination by Federal Authorities of Environmental Assessment Procedures and Requirements*, the project description was distributed to other federal authorities to determine their role in the assessment, if any. The other federal authorities determined they were not likely to require an environmental assessment of the project under section 5 of the CEA Act. Environment Canada (EC) and the Department of Fisheries and Oceans (DFO) both indicated they possess specialist knowledge and information which should be considered in the assessment of the proposed undertaking. Also, in accordance with section 12.4 of the Act, the Canadian Environmental Assessment Agency (the Agency) is the Federal Environmental Assessment Coordinator for the project, as the project is described in the *Comprehensive Study List Regulations*.

The Agency established a federal environmental assessment committee for the BEPCo project. Committee members include a representative from the Agency (chair), the Board, EC and the DFO. The proposed activities for the review process have been established by the committee members, and are presented in Appendix 1.

This report is prepared by the Board for the Minister of the Environment under section 21 of the CEA Act, in consultation with the Agency, EC and the DFO. The report describes and discusses:

- the scope of the project;
- the factors to be considered in its assessment and the scope of those factors;
- public concerns in relation to the project;
- the potential of the project to cause adverse environmental effects; and
- the ability of the comprehensive study to address issues relating to the project.

The Minister of the Environment will take into account this report when determining whether to refer the project to the Board to continue the comprehensive study, or refer the project to a mediator or review panel.

PROJECT OVERVIEW

The proposed exploratory drilling activity will occur in the waters under the jurisdiction of the Board on EL2407, located approximately 190 km from Halifax, on the Scotian Slope. BEPCo, the Proponent, is proposing a multi-year, multi-well drilling program. It is anticipated that one exploration well will be drilled per year between 2005 and 2007. If significant hydrocarbons are discovered, this may be followed by drilling delineation/appraisal wells and/or pre-development drilling to determine the extent of the reservoir. Two appraisal wells may be drilled in 2008 and a third well may be drilled in 2009. Also, the proponent may conduct two Vertical Seismic Profiles during the drilling of each well.

Specific well locations have not been determined; however, the areas of interest are located in the deep water portion of the exploration licence, in water depths greater than 1,200 metres. BEPCo initially proposes to drill the first well in a water depth of approximately 1,450 metres. The approximate location of this well is 42 39'19.974"N and 63 04' 33.726"W.

In summary, the proposed project could consist of drilling a maximum of six wells over a five year period.

SCOPE

The scoping document for BEPCo's proposed exploratory drilling project has been prepared by the Board, as the responsible authority, in consultation with the Agency, the DFO and EC. The scoping document provides a description of the scope of the project, the factors to be considered and the scope of the factors related to the environmental assessment for BEPCo's proposed exploratory drilling project.

Following public consultation the scoping document was revised and is presented as Appendix 2.

PUBLIC CONSULTATION AND CONCERN

The Comprehensive Study process requires that the public be given an opportunity to participate in the review of the environmental assessment. Consultation with the public is required during three distinct stages of the Comprehensive Study process: during the preparation of the scope of the environmental assessment, during the preparation of the Comprehensive Study and during the comment period administered by the Agency on the completed comprehensive study report. This section describes the public consultation during the preparation of the proposed scope of the environmental assessment, the factors proposed to be considered in its assessment, the proposed

scope of those factors and the ability of the comprehensive study to address issues relating to the project.

A public registry has been established for the project and the project is listed on the Canadian Environmental Assessment Registry (reference number 04-03-2712). Also, documents related to the environmental assessment of BEPCo's project have been listed, and some published electronically, in the Board's own Public Registry which is located on its website, www.cnsopb.ns.ca, under the environment section / public registry.

The Board advertised in provincial and community newspapers, during the week of May 26th, to provide notice of the Public Consultation period for the draft scoping document. The notice appeared in The Halifax Daily News, The Chronicle-Herald, The Cape Breton Post, The Bridgewater Bulletin, The Inverness Oran, Le Courrier de la Nouvelle Ecosse, The Yarmouth Vanguard, and The Shelburne Coast Guard. In addition, a notice was posted to the Board's website under "What's New" and electronic notification sent to the Board's subscriber list. A copy of the newspaper notice is provided in Appendix 3 and a copy of the website notice is provided in Appendix 4. The draft scoping document was provided electronically on the Board's website along with the proponent's Project Description. The public was invited to contact the Board's offices for a printed copy if they did not have access to an electronic one. The public was provided with a 21-day review period to provide written comment on the draft scoping document.

All public comments received by the Board on the scoping document were distributed to the expert Federal Authorities and the Agency.

There were three written comments received on the scope of the environmental assessment of the project. Comments were received from the South West Nova Environmental Protection Group, the Native Council of Nova Scotia, and a concerned member of the public. In addition to requesting public comments, the Board requested comments from its Fisheries Advisory Committee (FAC). The committee is comprised of representatives of the fisheries sector from across Nova Scotia (including the aboriginal groups), as well as federal and provincial government fishery department representatives. One written and oral comments were received from the committee. The Board responded in writing to acknowledge the receipt of all comments. The Board has considered all comments and the following table summarizes the comments and the Board's response.

Written Public Comments (summary)	Board's Response
<p>The review should follow whichever process is larger, enabling greater public input, assuming that would be the “comprehensive study” rather than the “panel review”.</p>	<p>Both the comprehensive study and panel review process allow for public participation in the environmental assessment.</p>
<p>Panels may be created with a bias.</p>	<p>Under the Canadian Environmental Assessment Act, the Minister of the Environment will only appoint members to a review panel who are unbiased and free from any conflict of interest relative to the project</p>
<p>Early and direct consultation between the proponent and aboriginal peoples is important.</p>	<p>Agree, early and direct consultation is important. BEPCo has been attempting to gather information from aboriginal peoples on the current use of the project area and resources to prepare the environmental assessment and assess any environmental effects.</p>
<p>Comments related to the projects 'benefits plan' and socio-economic issues.</p>	<p>This is outside the scope of the environmental assessment.</p>
<p>Questions regarding how the proponents Environmental Management System will be developed and how it will engage the interests of others.</p>	<p>BEPCo's Environmental Management System will only engage companies, industrial sectors and sub-contractors which are directly affected. There is no anticipated engagement of other stakeholders.</p>
<p>Question regarding the determination of the factors to be assessed to develop a 'fisheries compensation plan'.</p>	<p>A fisheries compensation program for damage to equipment is a regulatory requirement by the Board. The Board has Guidelines on these programs – “Compensation Guidelines Respecting Damage Relating to Offshore Petroleum Activity” (March 2002).</p>

<p>The scope of the Comprehensive Study is comprehensive for BEPCo's project.</p>	<p>Agree.</p>
<p>There is no consideration or planning for development of reserves if a significant discovery of oil or gas is made, therefore more information is required on the project and its effects to be able to comment on whether the environmental assessment should proceed by way of a comprehensive study or panel review.</p>	<p>This is outside of the scope of BEPCo's proposed exploratory drilling project.</p>
<p>The 'vital and lucrative' lobster fishing area deserves special mention in the Socio-economic section of the 'Project Description' document.</p>	<p>At the proposed water depth of the project, it is very unlikely there would be a lobster fishery. However, all fisheries in the area will be considered in the environmental assessment.</p>
<p>'Climate Change' is only mentioned as two words in the scoping document, but in the past years there have been unusual events and future environmental assessments need to include the consideration for more damaging weather patterns, in particular the immediate threat of a season of greatly increased hurricane activity in Nova Scotia.</p>	<p>Agree. There will be appropriate consideration given in the assessment. The overall time frame of the project is relatively short in comparison to that of climate change.</p>
<p>The scope should include forward looking practical considerations, such as: the end use of the gas; the alternatives to the project; the need for the project generally.</p>	<p>Pursuant to section 16(1)(e) of the CEA Act, the CNCOPB will include "need for" and "alternatives to" the project as part of the environmental assessment. Gas production, transportation and end use are not part of the project as proposed by BEPCo and will not be included in the environmental assessment.</p>

<p>There were several comments submitted regarding a proposed gas transmission pipeline to the United States which another company may pursue.</p>	<p>The proposed pipeline project by El Paso is a separate project outside of the scope of BEPCo’s exploratory drilling program.</p>
<p>More in-depth information is essential before making a decision of this magnitude and consequence.</p>	<p>This context of the comment appears to relate to the larger issue of the impact due to development of oil and gas resources, if the proposed exploration project is successful. If the proponent is successful and wishes to pursue development of resources, it would have to submit a Development Plan Application which would trigger a new environmental assessment under CEEA, based on the proposed development project.</p> <p>In the Board’s opinion sufficient information was submitted by the proponent to develop the requirements for the scope of a comprehensive study.</p>

The Board has considered all comments submitted by the public. After considering the comments from the public, the Board has modified the scoping document to include “need for” and “alternatives to” the project. In addition a few editorial changes were made to the scope.

FUTURE CONSULTATION

If the decision of the Minister is to refer the project to the Board, under paragraph 21.1(1)(a) of the CEA Act, the Board will ensure that the public is provided with an opportunity, in addition to those provided under subsection 21(1) and section 22, to participate in the comprehensive study.

It is planned that the consultation will include a period of up to four weeks for the public to submit written comments to the Board on the environmental assessment report provided by BEPCo, and a period, to be determined by the Agency, to examine the CSR, following its submission the Agency. The Board will advertise, in provincial and community newspapers, the public consultation periods for the environmental assessment report

All public comments received by the Board on the environmental assessment report will be distributed to the expert federal authorities and the Agency. The Comprehensive

Study Report will demonstrate how such comments were considered, and note any changes made as a result of that consideration.

POTENTIAL OF THE PROJECT TO CAUSE ADVERSE ENVIRONMENTAL EFFECTS

This section on the potential of the project to cause adverse environmental effects is based on the expertise gained by the Board through its many years regulating exploratory drilling offshore Nova Scotia, including the same activities as described in BEPCo's Project Description. An overview of the environmental setting for BEPCo's proposed exploration program is described in the Project Description, submitted on April 28, 2004, and may be obtained electronically on the Board's website.

Oil and gas exploration drilling activity offshore Nova Scotia began in 1967. Since that time, 155 exploration and delineation wells have been drilled. There has been no evidence of significant environmental effect from this drilling activity.

There have been environmental assessments prepared for the wells drilled in the last decade or more. This was done under Board Policy, and the assessments adhered to the factors described in section 16 (1) of the CEA Act. Many of these EAs were also reviewed by EC and the DFO. Since July 28, 2003, all EAs must meet the requirements of the CEA Act. All of these project-specific assessments concluded that exploratory drilling projects will not likely cause significant adverse environmental effects.

In addition to the project-specific assessments conducted for each work authorization application, the Board has conducted several Strategic Environmental Assessments for exploratory activities in specific areas in the Nova Scotia offshore. The assessments provide an ecological overview, a preliminary analysis of the potential effects to the environment due to petroleum exploration activities, and suggested area-specific, special mitigation. Although there was limited focus on BEPCo's specific project area, these assessments concluded that, with appropriate mitigation, there are no anticipated significant adverse environmental effects. However, project specific assessments are required to do a detailed analysis of potential effects.

The Board has developed a generic "Environmental Assessment of Exploration Drilling off Nova Scotia" (August 2000), which is available on the Board's website. The generic environmental assessment provides detailed descriptions of the procedures and equipment used, summarizes the current state of knowledge based on the available literature, and offers expert opinion about the typical probable effects of exploratory drilling. Although, the generic assessment did not specifically study a project in BEPCo's area of interest, it studied two sites on the Slope at water depths of 789 and 3000m, which are in proximity to BEPCo's Exploration Licence. Also, the generic assessment does not reflect the recent *Species at Risk Act* and does not address air issues. However, it was concluded that, with appropriate mitigation, exploratory drilling is not likely to cause significant adverse environmental effects.

There have been two development projects on the Scotian Shelf which have detailed effects monitoring programs, including effects from drilling discharges. These development projects present a worst case scenario when compared to an exploration program. The processes and discharges from drilling development wells is the same as drilling of exploration wells. Development drilling, however, involves drilling multiple wells within a very concentrated area over a longer time period. Results from the environmental effects monitoring programs for these two developments have shown very localized, and relatively short term, minor effects.

The Board also depends upon the expert advice of EC and the DFO on potential effects on valued ecosystem components under their mandates. There have been gaps identified in information and data, but considering the use of a precautionary approach and with appropriate mitigation there is low risk of significant effects due to exploratory drilling.

POTENTIAL EFFECTS

The table in Appendix 5 summarizes the potential effects of the project and is based on the generic assessment for exploratory drilling published by the Board in 2000.

ABILITY OF THE COMPREHENSIVE STUDY TO ADDRESS ISSUES RELATING TO THE PROJECT

The regulators and expert federal authorities have gained much expertise on the environmental effects of exploration drilling on the Scotian Shelf and Slope over the past few decades. Given the nature of this environmental assessment, and the local short term effects anticipated from the proposed project, it is the opinion of the Board, in consultation with the expert federal authorities, that the Comprehensive Study will fully address issues related to the project.

APPENDIX 1:

PROPOSED REVIEW ACTIVITIES
Activity
Submit Project Description
Federal Coordination
Public comment period for Draft Scope (21 day public comment period)
Submit Track report
Minister's track decision
Forward Scope to proponent
Complete Environmental Assessment
Review of EA by RAs, expert FAs, Public (28 day public comment period)
Consider and compile comments to forward to Proponent
Board completes CSR
Review of CSR by RAs and expert FAs
Complete CSR/Translate/Submit to Federal Minister of Environment for Agency-coordinated public comment period
CSR s.22 public comment period
Agency Reviews CSRs - 22 public comments received and submits recommendation to the Minister of the Environment regarding environmental assessment decision statement.
Minister of the Environment issues environmental assessment decision statement.

APPENDIX 2:

**SCOPE OF COMPREHENSIVE STUDY –
BEPCo CANADA COMPANY
EXPLORATORY DRILLING PROGRAM
ON
EXPLORATION LICENCE 2407**

BEPCo Canada Company
Exploratory Drilling Program on Exploration Licence 2407
Scope of Comprehensive Study

1.0 Purpose

This document provides a description of the scope of the project, the factors to be considered and the scope of the factors related to the Comprehensive Study (CS) for BEPCo Canada Company's (BEPCo) proposed exploratory drilling project in Exploration Licence 2407. This document has been developed by the Canada-Nova Scotia Offshore Petroleum Board (CNSOPB), as a Responsible Authority (RA), in consultation with the Canadian Environmental Assessment Agency (CEA Agency) as the Federal Environmental Assessment Coordinator (FEAC), and with the Department of Fisheries and Oceans (DFO), and Environment Canada (EC), which have been identified as expert Federal Authorities.

2.0 Scope of Project

The proposed exploratory drilling activity will occur in the marine waters under the jurisdiction of the CNSOPB in EL2407, located approximately 190 km from Halifax, on the Scotian Slope. BEPCo, the Proponent, is proposing a multi-year, multi-well drilling program. It is anticipated that one exploration well will be drilled per year between 2005 and 2007. If significant hydrocarbons are discovered, this may be followed by drilling delineation/appraisal wells and/or pre-development drilling to determine the extent of the reservoir. Two appraisal wells may be drilled in 2008 and a third well may be drilled in 2009. Also, the proponent may conduct two Vertical Seismic Profiles (VSPs) during the drilling of each well.

Specific well locations have not been determined; however, the areas of interest are located in the deep water portion of their exploration licence, in water depths greater than 1,200 m. BEPCo initially proposes to drill the first well in a water depth of approximately 1,450 meters. The approximate location of this well is 42 39'19.974"N and 63 04' 33.726"W.

In summary, the proposed project could consist of drilling a maximum of six wells over a five year period. For additional details, refer to the Project Description submitted by BEPCo to the Canada-Nova Scotia Offshore Petroleum Board on April 28, 2004.

3.0 Regulatory Considerations

The Project will require authorizations pursuant to Section 142 (1)(b) of the Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act (S.C. 1988, c. 28) (Accord Act). Issuance of this authorization is described in the

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Law List Regulations of the Canadian Environmental Assessment Act (CEA Act) and therefore constitutes a power as described in sub-section 5(1)(d) of the CEA Act.

The CNSOPB, as the Responsible Authority (RA) must ensure that an environmental assessment of the Project is conducted. The Project as proposed is described in Item 15 of the Comprehensive Study List Regulations of the CEA Act.

Pursuant to Section 17(1) of the CEA Act, the CNSOPB will delegate the conduct of the comprehensive study to BEPCo. The BEPCo will prepare and submit to the Board an EA report. Following the review of the information provided by BEPCo, the CNSOPB, in consultation with the CEA Agency, DFO and EC will prepare the Comprehensive Study Report, which will be submitted to the Minister of Environment.

The CEA Agency will be the FEAC respecting the assessment. In this role it will be responsible for coordinating the review activities of the CNSOPB, EC and DFO, in accordance with Section 12 of the CEA Act.

4.0 Public Participation

The Comprehensive Study process requires that the public be given ample opportunity to participate in the review of the environmental assessment. Public participation is actively sought while the Comprehensive Study Report is being prepared and while it is being reviewed. There are three distinct stages for public consultation. The first is during the preparation of the scope of the environmental assessment and while deciding which assessment process should be used, the second is during the preparation of the Comprehensive Study, and the third is during the comment period administered by the Agency on the completed comprehensive study report.

The public will have 21 days to provide written comment to the Board on the draft Scoping Document, up to four weeks to submit written comments to the Board on the EA Report provided by BEPCo, and a period, to be determined by the Canadian Environmental Assessment Agency, to examine the CSR, while it is being reviewed by the Minister. This final public review period is typically 30 days. The Board will advertise, in provincial and community newspapers, the public consultation periods for the Scoping Document and EA Report, as well as, issuing news releases to encourage public participation.

The Board will receive all public comments on the Scoping Document and EA Report and distribute these to the expert federal authorities and the Agency. The CSR

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must demonstrate how such comments were considered, and note any changes made as a result of that consideration.

A public registry has been established for the project and the project is listed on the Canadian Environmental Assessment Registry (reference number 04-03-2712).

5.0 Factors to be Considered

The Comprehensive Study shall include a consideration of the following factors as described in Subsections 16(1) and (2) of the CEA Act:

Factors to be considered in accordance with subsection 16(1) are:

- The environmental effects of the project, including the environmental effects of malfunctions or accidents that may occur in connection with the project and any cumulative environmental effects that are likely to result from the project in combination with other projects or activities that have been or will be carried out;
- The significance of the environmental effects;
- Comments from the public that are received in accordance with the Canadian Environmental Assessment Act and its regulations; and
- Measures that are technically and economically feasible and that would mitigate any significant adverse environmental effects of the project.
- The need for and alternatives to the project

Factors to be considered in accordance with subsection 16(2) are:

- The purpose of the project;
- Alternative means of carrying out the project that are technically and economically feasible and the environmental effects of any such alternative means;
- The need for, and the requirements of, any follow-up program in respect of the project; and
- The capacity of renewable resources that are likely to be significantly affected by the project to meet the needs of the present and those of the future.

It is recognized that environmental assessment is conducted at the early phases of project planning when alternative means of carrying out the project are under study and project details have yet to be finalized. As set out in this scoping

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Scope of Comprehensive Study

document, alternative means of carrying out the project must be considered in the comprehensive study.

6.0 Scope of the Factors to be Considered

The CS will address the factors listed above, and document any issues and concerns that may be identified by the proponent through regulatory, stakeholder, and public consultation.

BEPCo intends to use the “valued ecosystem component” (VEC) approach to focus the analysis in the environmental assessment. A definition of each VEC (including components or subsets thereof) identified for the purposes of environmental assessment, and the rationale for its selection, shall be provided.

The environmental assessment will consider the potential effects of the proposed physical activity within spatial and temporal boundaries that encompass the periods and areas during and within which the Project may potentially interact with, and have an effect on, one or more VEC. These boundaries may vary with each VEC and the factors considered, and should reflect a consideration of:

- the proposed schedule/timing of the drilling program;
- the natural variation of a VEC or subset thereof;
- interrelationships/interactions between and within VECs;
- the time required for recovery from an effect and/or return to a pre-effect condition, including the estimated proportion, level, or amount of recovery;
- the area within which a VEC functions and within which a Project effect may be felt,
- the assessment of cumulative environmental effects should be consistent with the principles described in the February 1999 CEAA *Cumulative Effects Assessment Practitioners Guide* and in the March 1999 CEAA operational policy statement *Addressing Cumulative Environmental Effects under the Canadian Environmental Assessment Act*, and will include a consideration of environmental effects that are likely to result from the proposed Project in combination with other projects or activities that have been or will be carried out. These include, but are not limited to: other oil and gas activities and fishing activities.

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7.0 Spatial and Temporal Boundaries

The proponent shall clearly define, and provide the rationale for the spatial and temporal boundaries that are used in its environmental assessment. All VECs must be given adequate attention throughout the core study area. Any VEC-specific variation from the core study area should be identified and the rationale provided. Boundaries should be flexible and adaptive to enable adjustment or alteration based on field data.

The selection of spatial boundaries for the study area shall be consistent with the CEA Agency’s Operational Policy “The Process for Defining the Spatial Boundary of a Study Area During an Environmental Assessment of Offshore Exploratory Drilling Projects”.

The temporal scope should describe the timing of Project activities.

8.0 Summary of Potential Issues

The following table is a list of environments, ecosystem components, project activities and environmental influences that, as a minimum, the comprehensive study must consider. **The list is not intended to be exhaustive and is provided solely to guide the proponent as to the type of content expected in the environmental assessment.** The proponent should carefully examine this list and expand upon it where necessary. In general, all applicable interactions should be considered.

The selection criteria for VECs must be described, with explanations of why a particular VEC was or was not chosen from the list below. The environmental protection objectives for each VEC should be identified, based on applicable legislation, policies and site-specific considerations. These objectives can be helpful in analyzing the significance of effects and in determining appropriate mitigation and follow-up measures.

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Table: Summary of Environment Assessment Considerations

Description of Major Environments	<ul style="list-style-type: none"> • Marine Physical, Biological and chemical • Atmospheric • Geologic (geomorphology, marine sediments, sediment quality)
Ecosystem Components (candidate Valued Ecosystem Components, to be considered in all relevant environments for all relevant seasons)	<ul style="list-style-type: none"> • Air quality • Water quality • Fish and fish habitat • Marine Mammals • Archaeological and heritage resources • Benthos • Vegetation • Plankton • Birds and bird habitat
Species at Risk (SAR):	<ul style="list-style-type: none"> • description to the extent possible of SAR in the project and affected areas • environmental effects due to the project, including cumulative effects, on those SAR identified • means by which adverse effects upon SAR and their critical habitat may be mitigated through design and/or operational procedures
Special Areas	<ul style="list-style-type: none"> • provide a description of any ‘sensitive areas’ in the project area, such as important or critical habitat • environmental effects due to the Project, including cumulative effects, on those sensitive areas identified • means by which adverse effects upon “sensitive areas” may be mitigated through design and/or operational procedures
Potential Effects upon other Ocean Users	<ul style="list-style-type: none"> • Interactions with commercial fisheries • Interactions with scientific research surveys • Aboriginal interests (traditional knowledge and fishing, current use activities, cultural sites)
Project Activities (possible causes of environmental effects)	<ul style="list-style-type: none"> • Description of physical project components (drilling platform, support vessels, aircraft, infrastructure) • Normal and fugitive air emissions (e.g. greenhouse gases (CO₂, methane), H₂S, SO₂, NO_x, VOCs, CO, particulate matter, toxics; from activities such as well testing, venting, incineration)

	<ul style="list-style-type: none"> • Potential release of toxic and priority substances listed under the authority of the Canadian Environmental Protection Act • Marine discharges (drill fluids and cuttings, biocides, grey water, black water, chlorinated waste water, galley waste) • Noise • Onshore waste disposal • Vessel traffic • Aircraft activity • Malfunctions and accidental events (e.g. spills or leaks of hydrocarbons or chemicals, blowouts)
Environmental Influences (conditions acting on the project that could have consequences for the environment; factors which could affect the project design or operation)	<ul style="list-style-type: none"> • Meteorology and oceanography (e.g. extreme winds, waves, currents and precipitation, fog, freezing spray) • Seismic activity • Ice regime • Corrosion • Climate change
Environmental management system and its components	<ul style="list-style-type: none"> • Pollution prevention policies and procedures • Program(s) for compensation of affected parties, including fisheries interests, for accidental damage resulting from project activities • Emergency response plan(s)
Follow-up Monitoring	<ul style="list-style-type: none"> • Discuss the need for and requirements of a follow-up program

9.0 Significance of Adverse Environmental Effects

The Proponent shall clearly describe the criteria by which it proposes to define the “significance” of any adverse effects (i.e., following the employment of mitigative measures) that are predicted by the environmental assessment. This definition should be consistent with the November 1994 CEA Agency reference guide *Determining Whether a Project is Likely to Cause Significant Adverse Environmental Effects*, and be relevant to consideration of each VEC (including components or subsets thereof) that is identified.

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References

Canadian Environmental Assessment Act, November 2003.
<http://www.ceaa.gc.ca/013/ceaa-2003.pdf>

Law List Regulations, 1999. http://www.ceaa.gc.ca/013/lawlist_e.htm

Comprehensive Study List Regulations, November 4, 1999.
http://www.ceaa.gc.ca/013/complislist_e.htm

Cumulative Effects Assessment Practitioners Guide, February 1999.
http://www.ceaa.gc.ca/013/0001/0004/index_e.htm

Operational Policy Statement, *Addressing Cumulative Environmental Effects under the Canadian Environmental Assessment Act*, March 1999.
http://www.ceaa.gc.ca/013/0002/cea_ops_e.htm

CEAA Operational Policy *The Process for Defining the Spatial Boundary of a Study Area During an Environmental Assessment of Offshore Exploratory Drilling Projects*, October 28, 2003. http://www.ceaa.gc.ca/013/0002/drilling_ops_e.htm

APPENDIX 3:

NOTICE REQUESTING PUBLIC COMMENT



**CANADA – NOVA SCOTIA
OFFSHORE PETROLEUM BOARD**

BEPCO EXPLORATORY DRILLING PROGRAM

The Canada – Nova Scotia Offshore Petroleum Board (the Board) has received a project description from BEPCo Canada to conduct an exploratory drilling program on its Exploration Licence 2407. These wells are proposed to be drilled outside a previously assessed area and will be reviewed through the Comprehensive Study process under the *Canadian Environmental Assessment Act*.

The first step of this process is the issuance of a Scoping Document which provides guidance to what must be included in the Environmental Assessment. The Board has released a copy of the Scoping Document for written public comments. The deadline for submissions is **noon on June 18th, 2004**.

Copies of the Project Description and Scoping Document are available on the Board's website at www.cnsopb.ns.ca, under Public Registry, or by contacting the Board's office:

CNSOPB,
6th Floor-TD Centre,
1791 Barrington Street,
Halifax, NS B3J 3K9
Tel: 902-422-5588

Following finalization of the Scoping Document, the Minister of Environment will determine if the review process will be a comprehensive study or panel review. An announcement will be made at that time providing information on the process for further opportunity for public input on the environmental assessment.

APPENDIX 4:

ELECTRONIC NOTICE REQUESTING PUBLIC COMMENT

BEPCo Exploratory Drilling Program

May 26, 2004

Halifax, NS – The Canada – Nova Scotia Offshore Petroleum Board (the Board) has received a project description from BEPCo for an exploratory drilling program on Exploration Licence 2407.

The Board requires environmental assessments for all work authorization applications. However, this well is being drilled in an area not previously reviewed under the *Canadian Environmental Assessment Act* by a Comprehensive Study, or Panel Review, and the Environmental Assessment must be reviewed using the Comprehensive Study process.

The first public consultation step in this process is the Scoping Document, which the Board has released for written public comment. Interested parties have until noon on June 18th, 2004 to submit written comments to the Board on the Scope for the Environmental Assessment.

Following finalization of the Scoping Document, the Minister of Environment will determine if the review process will be a comprehensive study or panel review. An announcement will be made at that time providing information on the process for further opportunity for public input on the environmental assessment.

The Project Description and Scoping Document are available on the Board's website, www.cnsopb.ns.ca under Environment's Public Registry or by contacting the Board's office at CNSOPB, 6th Floor – TD Centre, 1791 Barrington Street, Halifax, NS, B3J 3K9.

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Click [here](#) for the Project Description.
Click [here](#) for the draft Scoping Document.

For further information, contact:

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APPENDIX 5:

POTENTIAL EFFECTS OF EXPLORATORY DRILLING

Activity/VEC	Interaction
Presence of Structures	
Migrating Birds	Attraction
Seabirds	Attraction
Fish	Attraction
Fisheries	Exclusion
Lights and Flares	
Seabirds	Attraction/Mortality
Underwater Noise - Boats	
Fish Behaviour	Disturbance
Fish	Effects on health
Fisheries	Reduction in catch
Baleen Whales	Disturbance
Toothed Whales	Disturbance
Seals	Disturbance
Sea-associated Birds	Disturbance
Seabird Colonies	Disturbance/Mortality
Sea Turtles	Disturbance
Disturbance/Noise - Aircraft	
Baleen Whales	Disturbance
Toothed Whales	Disturbance
Seals in the water	Disturbance
Seals on land	Disturbance
Sea Associated Birds	Disturbance
Seabird Colonies	Disturbance/Mortality
Sea Turtles	Disturbance
Underwater Noise - Stationary Source	
Fish Behaviour	Disturbance
Fish	Effects on health
Fisheries	Reduction in catch

Activity/VEC	Interaction
Baleen Whales	Disturbance
Toothed Whales	Disturbance
Seals in the water	Disturbance
Sea-associated and Terrestrial Birds	Disturbance
Sea Turtles	Disturbance
Routine Discharges	
Grey and Black Water	
Marine Animals	Effects on health
Cooling Water	
Fish	Effects on health
Sea-associated birds	Effects on health
Marine Mammals	Effects on health
Waste Materials and Garbage	No Interaction
Oily Wastes	
Fish	Injury/Mortality
Fisheries	Injury/Mortality
Baleen Whales	Injury/Mortality
Toothed Whales	Injury/Mortality
Seals in the water	Injury/Mortality
Sea-associated Birds	Injury/Mortality
Sea turtles	Injury/Mortality
Bilge and Displacement Water	No Interaction
Drilling Muds and Cuttings	
Scallop Populations	Sub lethal effects

Activity/VEC	Interaction
Scallop Fishery	Reduction in catch
Deep-sea corals	Mortality
Benthic Communities	Injury/Mortality
Invertebrate Fisheries	Reduction in catch
Hydrocarbon Spills	
Benthic Communities	Injury/Mortality
Commercially Important Benthic Species	Injury/Mortality
Invertebrate Fisheries	Reduction in catch
Bottom Dwelling fish	Injury/Mortality
Eggs and Larvae	Effects on the Fishery
Fish Populations	Injury/Mortality
Fisheries	Tainting-reduced catch
Marine Mammals	Injury/Mortality
Sea-associated Birds	Mortality
Air Emissions	
Species at Risk	