

A Guide to Preparing Terms of Reference

for an Application for an
Environmental Assessment Certificate



Environmental Assessment Office

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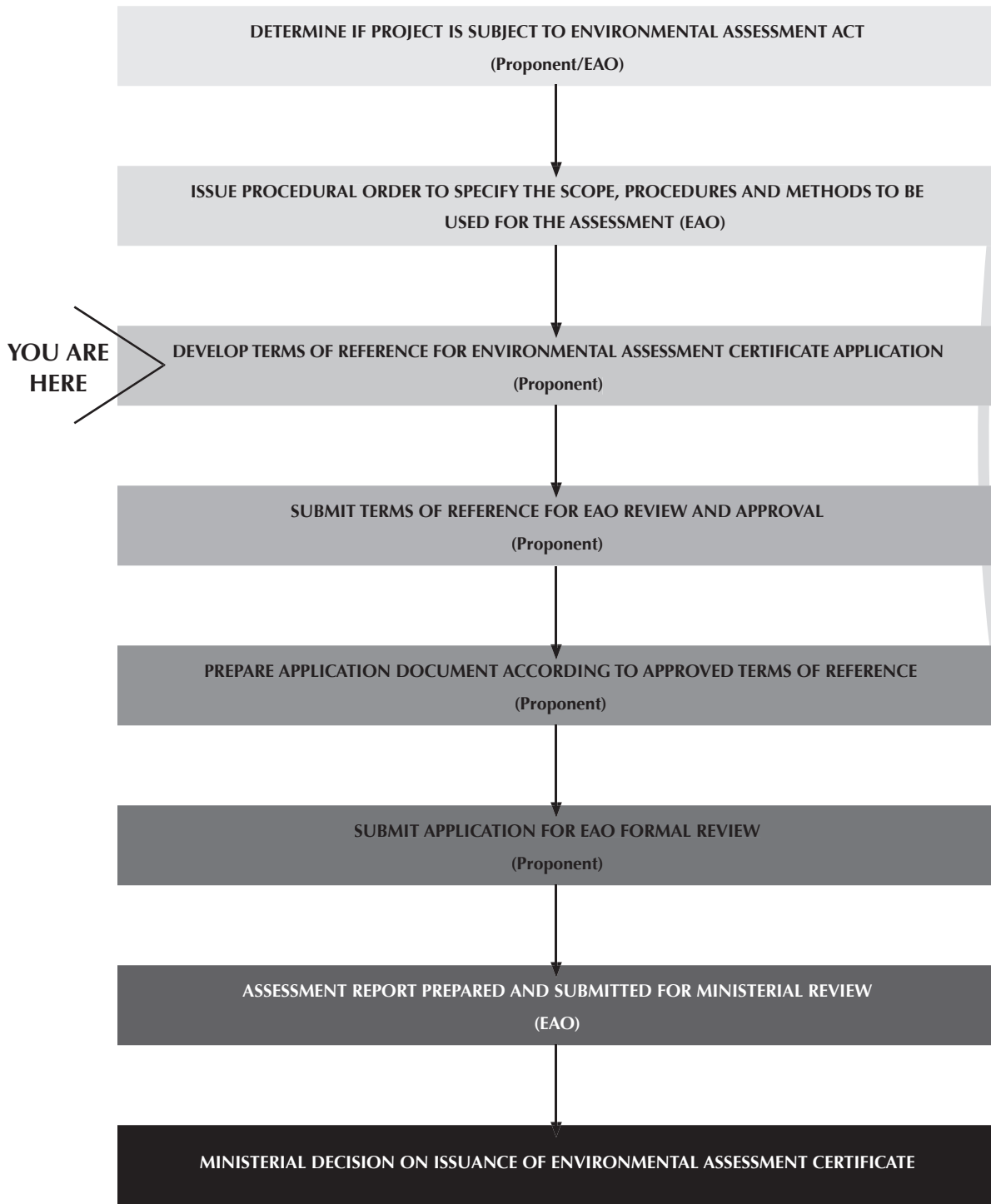
Intent of This Guide

- In British Columbia, certain projects are required to obtain an **Environmental Assessment Certificate** from the provincial government, in accordance with British Columbia's *Environmental Assessment Act 2002* (BCEAA).
- An **Application** for an Environmental Assessment Certificate (an Application) must be made by the project proponent to the Environmental Assessment Office (EAO), and must comply with the **Terms of Reference** formally approved by the EAO.
- The EAO will require proponents to prepare their own draft Terms of Reference for review, comment and sign-off by the EAO.
- This Guide is intended to provide project proponents with a recommended approach to the preparation, content and format expected for the Terms of Reference for an Application.
- A simplified flowchart of the environmental assessment process is shown in Chart 1 on page 2. More detailed information on the BC environmental assessment process and the BCEAA can be found on the EAO website at <http://www.eao.gov.bc.ca>.

Who Should Read This Guide

- The Guide should be used by project proponents who are engaged in developing Terms of Reference for an Application.
- The Guide will also serve as a useful reference source for the general public, interest groups and various stakeholders, local governments, First Nations and federal and provincial government agencies in their issue-scoping discussions with the project proponent at the preliminary (or "pre-application") stage of project review.

Chart 1: Summary of the Provincial Assessment Process



Process Considerations

- Prior to developing Terms of Reference, the project proponent should meet with EAO staff to determine if the project is reviewable under the BCEAA.
- The proponent is strongly encouraged to undertake early pre-application stage consultations with potentially affected parties to better ensure complete scoping of project issues and to help define project-specific Terms of Reference content. Interested parties typically include the public and stakeholder groups, First Nations, and federal, provincial and local government review agencies.
- Meeting with government agencies identified by the EAO provides the proponent with an opportunity to find out what specific information and methodologies may be required, and to take this into account in preparation for the project Application.
- The proponent is encouraged to develop a good understanding of First Nations' issues and expectations respecting participation in the development of both the Terms of Reference and the Application. A reference guide to First Nations consultation can be found at:

<http://www.eao.gov.bc.ca/publicat/guide-2003/guide-sections/sup-guide-fn.pdf>
- The proponent is encouraged to undertake preliminary investigations to identify current conditions at the project site and in the surrounding, potentially affected area. This information serves as "baseline" or "benchmark" information, and collecting it may entail preliminary resource inventory work.
- The proponent may choose to develop issue-specific workplans with key approval agencies to address the primary issues of those agencies. These workplans may provide the proponent with greater certainty over what baseline information and assessment will be required. Workplans may be of assistance in developing the Terms of Reference. In some cases, workplans for specific studies may be formally incorporated into the approved Terms of Reference, either when the EAO ratifies them, or at a later date.
- When a project is subject to the *Canadian Environmental Assessment Act* (CEAA) as well as the BCEAA, the EAO works closely with the Canadian Environment Assessment Agency to coordinate project review under an Environmental Assessment (EA) cooperation agreement. Under CEAA, the proponent may be required to provide information in the Application in addition to that ordinarily required by the EAO for provincial review purposes.

Importance of the Terms of Reference

- The Terms of Reference identify the issues to be addressed and the information to be provided by the proponent in its Application.
- The Terms of Reference should report on required project consultations, as well as on the issues raised by the project – the project’s environmental, social, economic, heritage and health impacts, and the measures proposed to reduce, avoid or otherwise manage these impacts.
- Having the proponent prepare the Terms of Reference is an effective means of ensuring that the Application will reflect any consultations, studies and scoping of issues that the proponent has already undertaken on the project.
- Once the initial draft of the Terms of Reference has been refined and approved in final form by the EAO, it becomes a public document and is posted on the EAO website. It may also be released as a draft to allow for public review and comment, prior to EAO approval.
- The government decision to accept an Application will be based on whether or not the Application document provides the information required by the approved Terms of Reference.
- The government decision to issue an Environmental Assessment Certificate will be based on how effectively the Application addresses the issues identified in the Terms of Reference.

Content Considerations

- This Guide indicates key information content, while providing for flexibility to develop Terms of Reference tailored to the specific circumstances surrounding individual projects.
- An Application should follow the approved Terms of Reference outline. This will ease and accelerate the Application screening process to ensure completeness, and facilitate acceptance of the Application for formal, detailed review.
- In general, the Terms of Reference must ensure that the content of a proponent's **Application** document contains key information on the following topics:
 - *project description;*
 - *proponent's information distribution and consultation measures/activities;*
 - *existing project setting;*
 - *issue identification and potential project impacts; and*
 - *proposed mitigation measures and monitoring.*
- A proponent wishing to propose variations in the suggested content or structure of the Terms of Reference outlined in this Guide should contact EAO staff to develop a more specific approach that still satisfies both project needs and EAO requirements.
- Once Terms of Reference have been approved by the EAO, any proposal to change the order of presentation of material in the Application from that in the approved Terms of Reference should be discussed with the EAO.
- For an example of Terms of Reference developed in accordance with this Guide, proponents are encouraged to view the Approved Terms of Reference for the Whistler Nordic Centre Project (2004), located on the EAO website at:
http://www.eao.gov.bc.ca/epic/output/html/deploy/epic_project_home_234.html

The suggested basic outline for Terms of Reference that will guide the development of an Application for an Environmental Assessment Certificate is shown in Chart 2 (page 6). More specific information on the topics is provided in the "Terms of Reference Content Requirements" section of this Guide beginning on page 7.

Chart 2: Suggested Outline for Terms of Reference

TERMS OF REFERENCE CONTENT REQUIREMENTS	
	Preface
	Executive Summary
	Table of Contents
	List of Abbreviations
1.	Introduction
2.	Information Distribution and Consultation
3.	<i>Project Description and Scope of Project*</i>
4.	<i>Scope of Assessment and Study Areas*</i>
5.	Project Setting and Characteristics
6.	Assessment of Project Impacts, Mitigation Requirements and Residual Effects
7.	Environmental Management Program
8.	Conclusions
9.	List of References and Supporting Documentation

* For some project Terms of Reference, it may be more appropriate to organize information under sections 3 and 4 by project component.

In the above outline, First Nations information and issues are included as a sub-section in sections 2 to 7. In some cases it may be desirable and necessary to place all such information in a single section dedicated to "First Nations Considerations", prior to section 8.

Terms of Reference Content Requirements

PREFACE

The Preface indicates in general terms why the document is being prepared and how it has been developed.

Content Requirement

In the Terms of Reference, the proponent should commit to providing the following in the Application:

- An indication that the project is subject to review under the BCEAA pursuant to an Order issued under section 10 of the BCEAA;
- A notation that the Application has been developed pursuant to Terms of Reference approved by EAO, and complies with any other relevant instructions provided in the Section 11 Order;
- Identification of the agencies, First Nations and other parties involved in the development of the Application; and
- A Table of Concordance which cross-references the information presented in the Application with the information requirements identified in the Terms of Reference.

EXECUTIVE SUMMARY

The Executive Summary concisely presents sufficient information to provide the reader with an overview understanding of the project. It briefly describes the project (include location and site maps) and the proponent, and summarizes the consultations undertaken, issues and impact concerns identified, recommended mitigation measures, and the proponent's conclusions from the assessment.

Content Requirement

In the Terms of Reference, the proponent should commit to providing the following in the Application:

- A concise description of all key facets of the project (facilities and associated activities);
- A succinct description of information distribution activities and First Nations, public and government agency consultation measures undertaken, and a summary of the issues raised, and solutions suggested, during these consultations;
- A general overview of key impact issues and proposed impact management measures; and
- The proponent's conclusions from the assessment.

TABLE OF CONTENTS

The Table of Contents provides the intended organization of information to be presented in the Terms of Reference and the Application.

Content Requirement

The Terms of Reference Table of Contents is the outline that should be followed in the Application. If the proponent wishes to adopt different structures for the two documents, this should be discussed with the EAO.

In the Terms of Reference, the proponent should commit to providing in the Application all document components, including volumes, sections, sub-sections, lists of references, appendices, figures, tables and photographs.

LIST OF ABBREVIATIONS

Abbreviations and acronyms are in common usage in impact assessment reports, and a List of Abbreviations will be helpful to readers. It may be appropriate to include a List of Abbreviations in the Terms of Reference; the Application should include this List, with any required additions.

Content Requirement

In the Terms of Reference, the proponent should commit to providing in the Application a list of all acronyms and abbreviations used in the document.

1. INTRODUCTION

The Introduction provides contextual background information on the project and the proponent, on the preparation and filing of the Application, and on the regulatory regime which applies to the project.

Content Requirement

In the Terms of Reference, the proponent should commit to providing the following in the Application:

1. *Proponent Identification*

- Proponent history, description and contact information (i.e. name, address, phone, fax, email).
- Name of the firm/individual managing the project.

2. *General Application Background*

- Structural components of the Application.
- Summary of project planning and project review history to date.
- Summary of any legal orders or agreements applying to the review of the project.

3. *Project Overview*

- Brief description of the project and its purpose.
- Description of the project's location, size and main features.
- Clear identification and listing of project elements included in the "Project Scope".
- Whether or not the project requires use of Crown land or is located on private land.
- Maps (showing both regional context and site-specific setting).
- Estimation of the total labour force required (direct jobs only) during construction and operation.
- Estimated capital cost of the project.
- Project benefits.

4. *Regulatory Framework*

- Summary of relevant provincial and federal legislative and policy requirements governing the project, and any applicable local government official community plan and zoning requirements.
- Licences and permits required for project construction and operation.
- Advise if a request for concurrent EA certification and permitting is being requested under the BCEAA.

2. INFORMATION DISTRIBUTION AND CONSULTATION

This section summarizes the proponent's past and proposed public consultation initiatives, in accordance with the consultation provisions of the Section 11 Order. First Nations consultations are included in this section, as well as documentation of consultations with federal, provincial and local government agencies.

Wide distribution of project information and consultations with the public and First Nations are key expectations of the EA processes, and are required under the BCEAA (and also under CEAA, when triggered). The public consultation measures must be in compliance with the "Public Consultation Policy Regulation", BC Reg 373/2002, and with requirements defined in the Section 11 Order issued for the project. Some relevant guidance may also be obtained from the "Provincial Policy for Consultation with First Nations" (October 2002). The cited documents are found on the EAO website at http://www.qp.gov.bc.ca/statreg/reg/E/EnvAssess/373_2002.htm and <http://www.eao.gov.bc.ca/publicat/guide-2003/guide-sections/append2.pdf> respectively.

Information distribution and consultation may take place by a variety of means – at public meetings and open houses, at one-on-one meetings with interested parties, through publication of articles on a project in the written media, through enclosures in community newspapers, through interviews on local radio and television, and by means of participation in community events/fairs, etc.

Under the "Public Consultation Policy Regulation", the EAO will assess the adequacy of past and proposed public consultation, as reported in the Application, prior to accepting the Application for formal detailed review. The EAO will also undertake a similar assessment of past and proposed First Nations consultation. The procedure to be followed for these assessments will be indicated in the Section 11 Order.

The EAO Supplementary Guide to Proponents (available on the EAO website) provides further guidance on effective methods that can be used to consult with the public and First Nations.

Content Requirement

In the Terms of Reference, the proponent should commit to provide the following in the Application:

1. Consultation Overview

- Brief description of the consultation efforts undertaken with the public, First Nations and government agencies at the pre-application stage, both before and after entering the EA process.
- Description of any consultation agreements reached with First Nations potentially affected by the project (exclude confidential information).
- List of any significant events and measures, and summary of the results.

2. Pre-application Consultation

- Outline of consultation undertaken during the pre-application stage, covering both the preparation of the Terms of Reference and the Application, and including:

- Consultations with the public and other key stakeholders;
- Consultations with federal, provincial, and local government representatives;
- Consultations with First Nations;
- Summary of responses provided regarding issues raised by the public, First Nations and government agencies; and
- Indication of the degree to which issues are considered resolved or addressed by the proponent and other parties.

3. Consultation Planned During Application Review

- Description of the public and First Nations consultation programs proposed for the application review stage, following screening and acceptance of the Application for formal detailed review.
- Documentation of the proposed process for attempting to resolve outstanding issues.
- Proposed program for consultation with government agencies.

3. PROJECT DESCRIPTION AND SCOPE OF PROJECT

Project Description

This section describes both the project facilities and the activities associated with them for all relevant stages of project development – construction, operation/maintenance and (where required) decommissioning/reclamation – in sufficient detail to allow a meaningful assessment of potential project effects.

A clear project description assists reviewers in assessing the project and its impacts, and reduces the risk that reviewers will require additional information during the application review stage to understand the project and its interactions with its surroundings. All key project components and activities should be identified and clearly explained. The level of detail needed for different project components may vary, but is usually conceptual rather than detailed. The required level of detail typically reflects the degree of challenge posed in managing any adverse effects. Detailed design information is not normally required for EA review purposes, but will be needed at the post-EA permitting stage.

Scope of Project

The EAO (and, if CEAA is triggered, federal agencies) determine the scope of a project for which approval is to be considered. Project scoping is based on the project description provided by the proponent during the pre-application stage, and the scope of the project for EA review purposes is confirmed in the Section 11 Order. The Order is subject to revision if the proponent amends the project description later in the EA process.

The scope of the project comprises those components of the project (facilities and activities) for which an Environmental Assessment Certificate is being sought by the proponent, and should be defined in the Introduction to the Terms of Reference for clarity. Typically, a proponent applies for an Environmental Assessment Certificate which approves:

- proposed on-site and off-site facilities which are exclusively dedicated to, and intrinsically form part of, the project; and
- proposed project-related activities, whether linked to use of dedicated or non-dedicated facilities.

For project approval purposes, use of non-dedicated facilities may be included in the scope of assessment (see section 4 on page 15), even though the non-dedicated facilities are independently operated, and are not included in the scope of project. For example, proposed use of an existing public highway for construction traffic may raise impact concerns which need to be addressed during the EA process. However, the highway already exists, is operated by another party as a general purpose facility, and is not included within the scope of project for project approval purposes.

The construction and operation/maintenance phases of project development always form part of the scope of a project for review and decision-making purposes. The decommissioning (dismantling and abandonment) phase is also examined in cases where projects, or components of projects, have a finite operating life. For example, the decommissioning phase is scoped into

the review of mine projects, and also the review of temporary facilities attached to permanent projects (e.g. construction facilities), but is not addressed for permanent projects and permanent project components, where the intended life is of an indefinite, long-term nature (e.g. a tourism resort).

Content Requirement

In the Terms of Reference, the proponent should commit to provide the following in the Application:

1. Project Background and Rationale

- Project history.
- Rationale for the project, and description of the project's objectives.
- Description of any sustainability principles which have guided project planning.

2. Location of Project and Mapping

- Location of the project and the longitude and latitude of the site.
- Maps at appropriate scales that indicate both the regional setting and the layout of project components and activities. Please contact the EAO for confirmation of scale.
- Site plans/sketches/photographs with project location, site features and activities identified on maps.
- Proximity to designated environmentally sensitive areas or cultural sites, such as national/provincial/regional parks, ecological reserves, heritage sites and other sensitive areas.

3. Project Facilities

- Description of proposed on-site project components and associated on-site and off-site infrastructure and other facilities to be developed for the project.
- Summary of results of studies leading to selection of sites for on-site and off-site facilities.
- Summary of any consideration of alternative locations for the project or project components, identifying factors which led to selection of preferred option(s).

4. Construction-Phase Activities

- Description of construction activities, such as site-clearing and preparation, foundations, utilities and building structures – estimate construction scheduling, using best available information.
- Description of intended approaches for delivery of services required for the construction phase and associated logistics. Depending on the project, this may include such items as water supply, waste disposal, material requirements, energy supply, construction-

stage transportation/traffic, construction workers' accommodation and/or food services, emergency procedures and maintenance procedures.

5. Operations-Phase Activities

- Description of operations-phase activities (e.g. resource extraction or manufacturing operations), including maintenance activities – estimate scheduling, using best available information.
- Description of intended approaches for delivery of services required for the operations phase and associated logistics. Depending on the project, this may include water supply, waste disposal, energy supply, operations-stage transportation/traffic, operating workforce services, emergency procedures and maintenance procedures.

6. Decommissioning Activities (where applicable – see *Project Description*, page 12)

- Expected lifetime of the project or of temporary project components.
- Conceptual decommissioning or reclamation plan(s), removal of structure(s) and ancillary equipment, site remediation, etc.

CEAA Content

If a project is subject to a joint review under both BCEAA and CEAA, the Application will include the following additional information:

7. Alternative Means of Carrying Out the Project

- Where alternative economically feasible means of undertaking a project have been considered, description of the alternatives, the general environmental effects associated with the alternatives, and the rationale for selection of preferred alternatives.

4. SCOPE OF ASSESSMENT AND STUDY AREAS

Scope of Assessment

The scope of the assessment focuses on effects for which a reasonably direct causal link can be demonstrated between some aspect of the project and the resulting effect. Relevant effects are usually (but not always) those for which the proponent has the ability to implement impact management measures to mitigate the concern.

Where a reasonably direct causal link cannot be established between a project and some aspect of the receiving environment, the EA process will not address the issue. For example, land use planning processes are better suited to addressing the perceived potential for changes in patterns of land use where the cause/effect linkage to the project is, at most, speculative, and where other parties, such as federal, provincial or local government agencies, manage the land or resource base and therefore control decisions.

Defining Study Areas for Assessment Purposes

In the Terms of Reference and in the Application, study area boundaries are defined in time and space. The Terms of Reference and the Application should clearly indicate the study area boundaries used for each component of the impact assessment, and include an explanation of the rationale adopted for establishing study area boundaries.

Studies within the defined study areas should take into account the timeframes over which the effects originating from the construction, operation, maintenance and, where relevant, decommissioning of project components are anticipated to occur.

Spatial boundaries are based on the zones of influence and timeframes outside of which the effects of the project are expected to be non-detectable. Multiple study area boundaries may be employed, if necessary, reflecting the range of geographic areas and timeframes within which specific effects may be experienced. The proponent may be able to simplify the process of study area definition by identifying a limited number of primary study areas – for example, separate study areas for biophysical/environmental impacts, for socio-economic/community effects and for First Nations issues.

Content Requirement

In the Terms of Reference, the proponent should commit to provide the following in the Application:

1. Scope of Assessment

- Within the general framework of the scope of assessment, as outlined above, discussion of the influence of consultations with the public, First Nations and government agencies on the scoping of issues to be addressed in sections 5 through 7 (pages 17-29) of the Application.

2. Study Area Boundaries

- Description and/or identification on maps of appropriate scale of the geographical areas and timeframes that will be used for documenting the baseline setting and assessing potential project impacts.
- Identification of study area(s) used for baseline characterization and assessment of First Nations issues.

5. PROJECT SETTING AND CHARACTERISTICS

This section presents a general description of the existing biophysical environment and the socio-economic/community, cultural and public health settings of the project, including surrounding areas within the zone of potential influence of the project – see discussion of study areas under section 4 (page 15).

Content Requirement

In the Terms of Reference, the proponent should commit to provide the following in the Application:

1. Geophysical Environment

- **Physiography and Topography:** description of regional/area setting and identification of key terrain features, including mountains, rivers, lakes, etc.
- **Soils and Geology:** general geotechnical/soils/stability information for the project area, including soil classification and information on erosion potential, as required.
- **Hydrogeology and Groundwater:** overview of hydrogeology, groundwater flow regimes and groundwater quality, including quantified estimates of baseline flow regimes and proposed extraction volumes to supply groundwater to the project, if planned.
- **Natural Hazards:** background information on seismology and earthquake potential, avalanche potential, landslide and debris flow potential, flood potential and other possible natural hazards.

2. Atmospheric Environment

- **Climate:** description of the prevailing climate, and identification of data sources, including recording stations, used for characterizing baseline conditions.
- **Wind:** description of predominant wind conditions, including direction, velocity and seasonal variations; present wind roses, if possible.
- **Precipitation:** data on area precipitation, including volume and frequency.
- **Air Quality:** if possible, definition of airshed boundaries; background on existing ambient conditions and emission loadings at the project site (if available); any baseline monitoring data required for project assessment.

3. Aquatic Environment and Surface Hydrology

- **Aquatic Habitats:** documentation of wetlands, ponds, streams, lakes, rivers and/or marine environments within the zone of influence of the project.
- **Aquatic Fauna:** description of existing fisheries and fish habitat in the area; description of other aquatic life, such as benthic invertebrates and periphyton; identification of data sources, including data collection methods.
- **Aquatic Vegetation:** baseline information on aquatic vegetation; identification of data sources, including data collection methods.

- **Surface Hydrology:** information on surface hydrological regimes, including quantified estimates of baseline flow regimes and proposed extraction volumes to supply surface water to the project, if planned.
- **Surface Water Quality:** baseline information on surface water quality (e.g. for dissolved metals, suspended solids, etc.); identification of data sources, including data collection methods.

Note: The above baseline information is to be used as a basis for analysis under section 6.0, where potential impacts on fish values and proposed fish habitat mitigation and compensation measures are presented and discussed.

4. Terrestrial Environment and Wildlife

- **Biophysical Information:** Terrestrial Ecosystem Mapping or other acceptable biophysical/vegetation mapping to form framework for assessment of ecosystem impacts; other available ecosystem information; identification of data sources, including data collection methods.
- **Wildlife:** description of existing terrestrial wildlife populations and wildlife habitat in the area; documentation of inventories and wildlife capability ratings based on habitat mapping (e.g. for mammals, amphibians, reptiles, birds, etc.); identification of data sources, including data collection methods.
- **Threatened and Endangered Species:** identification of red-listed and blue-listed wildlife or vegetation species which may be present in the zone of project influence; identification of any COSEWIC-listed species and documentation of the associated requirements under the federal *Species at Risk Act (SARA)*.

Note: The above baseline information is to be used as a basis for analysis under section 6.0, where potential impacts on wildlife species and proposed mitigation and compensation are presented and discussed, and any relevant requirements under SARA are addressed.

5. Land Use Context

- **Land Use Regime:** description of the current land use context, the prevailing land use regime, all federal, provincial and local government land use designations, and identification of any current or proposed planning initiatives.
- **Current Land Status/Use:** documentation of land status in the area; identification and description of current land uses (e.g. hunting, trapping, logging, preservation, urban, etc.); identification of any historic sites or special landscape features.
- **Aesthetics:** where key aesthetic landscape values may be affected, baseline visual quality data may be required.
- **Proposed Land Use:** clear indication of the spatial relationship between the proposed project and existing land status and use, including on-site and off-site facilities, and activities associated with the proposed facilities.
- **Land Acquisition:** Crown land requirements for the project (if any), and any private land acquisition needs, noting if any Crown land is to be converted to fee simple.

6. *Socio-Community Conditions*

- **Socio-Community Profile and Population Demographics:** documentation of existing population distribution, demographics and social profile in the zone of project influence.
- **Housing:** description of the existing housing and accommodation supply – level of detail depends on project’s need for accommodation.
- **Transportation:** description of existing transportation infrastructure and traffic patterns/volumes; identification of relevant existing pedestrian use/safety issues – level of detail depends on demands that the project will place on transportation systems.
- **Services:** brief description of existing services, such as education, justice, policing, fire protection and social support services (children/family, counselling, etc.) and emergency services in the zone of influence of the proposed project – level of detail depends on demands that the project will place on services.

7. *Socio-Economic Conditions*

- **Local and Regional Economy:** description of the local and regional economy, including economic profile; description of conditions in communities likely to be impacted by the project; summary of key economic indicators and trends in the region in the absence of the project.
- **Labour Supply:** labour market information (unemployment, labour supply, skills/training needs, etc.).
- **Businesses:** documentation of existing economic undertakings in the area which could be affected by project development.

8. *Public Health*

- **Health Profile:** description of the public health setting; identification of existing hospitals, clinics, ambulance stations, other emergency services, etc. – level of detail depends on demands that the project will place on services.
- **Public Health Parameters:** description of baseline factors affecting public health setting of the project, including existing noise levels, local landscape aesthetics, existing water quality and air quality (from a human health perspective), and existing services (e.g. water supply, waste disposal, health and emergency services).

9. *Navigable Waters Issues*

- Identification of waterways to be affected by the project, waterway dimensions at the points of crossing, and identification and relative position of any man-made or natural obstructions that block a waterway.
- Photographs of any proposed crossing sites – giving the dates that photographs were taken.
- Indication of GPS position of proposed crossing points or fill locations (if any).
- The design flood level for structures crossing a waterway, including telephone wires, power transmission lines and bridges etc. needs to be discussed with Navigable Waters, Protection Division, Transport Canada.

- Any known current or past usage of waterways.

10. First Nations Setting

- Identification of First Nations potentially affected by the proposed project, and their asserted traditional territories.
- Local and regional socio-community, socio-economic and public health profile, as required above, but focussed on the communities of First Nations whose traditional territory contains, or is in the vicinity of, the project.
- Non-confidential overview of traditional use of the project area lands and resources, and the associated traditional and contemporary First Nations economy.
- Other considerations, such as culturally modified trees, rock paintings, trails, legendary land features and wildlife and vegetation species of special significance to First Nations.
- Identification of any First Nations land use plans or planning objectives proposed for areas in the vicinity of the project.
- Documentation of known First Nations views on the existence of Aboriginal rights and title in the vicinity of the project.
- Non-confidential summary of identified archaeological resources in the project area.

6. ASSESSMENT OF PROJECT IMPACTS, MITIGATION REQUIREMENTS AND RESIDUAL EFFECTS

This section addresses potential effects of the project, proposed mitigation measures for potential effects, and proposed impact management measures where effects cannot be mitigated. This section: (i) describes how the project EA was performed; (ii) notes which indicators and data sources were used to consider project effects; and (iii) discusses any identified residual effects of the project. Supporting documents are referenced and, where practicable, attached as appendices to the Application.

In this section, the proponent describes the potential environmental, social, economic, health and heritage effects of the project. If a CEEA review is triggered, the proponent should also describe the cumulative environmental effects, the potential for accidents and malfunctions which could affect the natural environment, and the effects of the environment on the project, including climatic fluctuations and extreme (e.g. natural hazard) events.

Content Requirement

1. Impact Assessment Methodology

The six-step process outlined below is suggested as a useful way of assessing project impacts. It ensures that the interactions between the project components and the project setting are adequately described, that the likely effects are identified and properly assessed, that mitigation measures are applied, and that the significance of any residual effect is determined.

- Step 1:** Describe the project facilities and activities.
- Step 2:** Identify and describe those components of the project setting (environmental, socio-economic, heritage, etc.) that will be or could be affected by project development – see sections 5 (page 17) and 8 (page 30) for itemization of components of project setting.
- Step 3:** Describe the nature and extent of the impact of any interaction between the project and the existing project setting.
- Step 4:** Describe proposed measure(s) available to manage the impacts identified above.
- Step 5:** Identify the magnitude, frequency, duration, extent (geographic or otherwise) and reversibility of any residual effects of the project after mitigation measures are applied.
- Step 6:** Assess the significance of any residual effects.

With respect to Step 6, the proponent should rate the significance of residual effects, taking into account mitigation measures. The proponent may wish to use the definitions shown in Table 1, included at the end of this section, or another rating system acceptable to the EAO.

This section of the Terms of Reference and the Application should include the following, unless not applicable:

2. Effects Assessment – Project Construction

- For each project component, the six-step process previously listed should be used to describe and assess the effects of construction activities on relevant components of the project setting, as itemized in section 5 (page 17).
- For impact assessment purposes, relevant construction-phase activities, depending on the project, could be wide-ranging. Examples include:
 - surveying and siting operations;
 - site clearing and grubbing;
 - construction/modification of access roads and internal on-site roads;
 - delivery of heavy equipment;
 - temporary storage of construction equipment and materials;
 - camps for construction workforce;
 - construction of permanent and temporary buildings/structures/facilities;
 - installation of temporary and/or permanent power/gas/water/waste treatment systems;
 - temporary construction traffic arrangements;
 - construction of parking lots; and
 - pilot testing of facilities.

3. Effects Assessment – Project Operations and Maintenance

- For each project component, the six-step process previously listed should be used to describe and assess the effects of operations/maintenance activities on relevant components of the project setting, as itemized in section 5 (page 17).
- For impact assessment purposes, relevant operations/maintenance phase activities could also be wide-ranging. Examples include:
 - commercial-scale resource extraction or operation of manufacturing/processing facilities;
 - on-site or off-site operation of operations-phase utilities (e.g. water supply, waste disposal, electricity supply, etc.);
 - operation of operating workforce facilities and services (e.g. accommodation, food and health/safety services, etc.);
 - maintenance activities linked to operations; and
 - any planned or expected improvements to the project.

4. Effects Assessment – Project Decommissioning (not always required)

- Where a project is not permanent, but has a finite life, or where some components of a permanent project are temporary, effects of decommissioning activities must be assessed.
- The six-step process previously listed should be used to describe and assess the effects of decommissioning activities (e.g. dismantling of structures, site reclamation, etc.) on relevant components of the project setting.

5. Potential Project Effects on First Nations Issues

- Identification of the specific areas where the project could directly affect First Nations at any phase of project development – during construction, operations or, where relevant, decommissioning. More specifically:
 - identification and description of those First Nations components of the project setting that will be, or could be, affected by project development;
 - summary of impact assessment findings, indicating the potential impacts identified; as part of this summary, address all potential First Nations effects of the project, and indicate how the proponent proposes to manage these effects to reduce them to acceptable levels; and
 - documentation of any non-confidential relevant agreements with First Nations with respect to impact concerns (e.g. any benefits agreement).

CEAA Content

If a project is subject to a joint review under both BCEAA and CEAA, the Terms of Reference should indicate that the Application will include the following additional information required under CEAA:

6. Accidents and Malfunctions

- Identification of the potential for accidents or malfunctions which could lead to environmental impacts, and their likely potential effects on the environment or local community settings.
- Documentation of any proposed mitigation measures or contingency plans.
- Commitment to having an Environmental Management Plan (EMP) in place in time for project start-up that would address potential accidents and malfunctions; the EMP should be described at a conceptual level, indicating general approaches – see section 7 (page 28).

7. Effects of the Environment on the Project

- If climatic factors are relevant to project success, assessment of the potential for short-term and/or long-term climatic fluctuations at the project site, estimation of the significance of those fluctuations for the project, and indication of any measures proposed to mitigate these effects.
- Description of the potential effects of extreme events such as avalanches, landslides, debris flows, ice storms, fires, floods and earthquakes directly on the project, and indication of any measures proposed to mitigate these effects.

8. Cumulative Environment Effects

- Cumulative effects assessment pursuant to federal requirements under CEAA.¹

9. Effects on Navigable Waters

- Identification of the impact of the project on use of navigable waters in accordance with CEAA guidelines.

10. Summary of Project Impacts and Mitigation Measures

- Summary of impact assessment findings – the potential impacts identified and mitigation proposed (preferably organized as above) – which addresses all potential environmental, socio-economic, public health, heritage and First Nations effects of the project, and summarizes how these effects are to be managed to reduce them to acceptable levels.
- The summary should also include the results of the cumulative effects assessment conducted in respect of any identified residual effects.
- The significance levels of residual impacts (Table 1, page 25) will be estimated after impact management measures have been applied. Table 2 (page 26) is a suggested format for summarizing identified impacts and proposed mitigation measures. Table 3 (page 27) is a suggested format for summarizing cumulative effects for each selected valued ecosystem component (VEC). Simple examples are provided for purposes of illustration.

11. Summary of Commitments

- Include a summary “table of proposed commitments” stated elsewhere in the Terms of Reference and the Application, including timing of action and the responsible party for addressing each of the actions for which a commitment has been made.
- The summary should include all of the significant impact management commitments in the Application, including commitments to any standard as well as special management practices and design features, organized by impact topic.

¹ See, for example, *Cumulative Effects Assessment Practitioners Guide*, prepared for the Canadian Environmental Assessment Agency by the Cumulative Effects Assessment Working Group and AXYS Environmental Consulting Ltd., Ottawa, February, 1999. Consultations with the CEA Agency and responsible authorities are also recommended.

Table 1: Level of Impact After Mitigation Measures²

LEVEL	DEFINITION
HIGH	Potential impact could threaten sustainability of the resource and should be considered a management concern. Research, monitoring and/or recovery initiatives should be considered.
MEDIUM	Potential impact could result in a decline in resource to lower-than-baseline, but stable, levels in a study area after project closure and into the foreseeable future. Regional management actions such as research, monitoring and/or recovery initiatives may be required.
LOW	Potential impact may result in slight decline in resource in study area during the life of the project. Research, monitoring and/or recovery initiatives would not normally be required.
MINIMAL	Potential impact may result in a slight decline in resource in study area during the construction phase, but the resource should return to baseline levels.

²Taken from *Wind Power Production Incentive – Environmental Impact Statement Guidelines for Screenings of Inland Wind Farms under the Canadian Environmental Assessment Act, 2003*, published by Natural Resources Canada.

TABLE 2: SAMPLE SUMMARY TABLE OF MITIGATION MEASURES AND RESIDUAL IMPACTS

Table 2: Sample Summary Table of Mitigation Measures and Residual Impacts (showing one example)

PROJECT ACTIVITIES	SETTING COMPONENTS SUBJECT TO IMPACTS	IMPACTS – SHORT DESCRIPTION	MITIGATION MEASURES	RESIDUAL EFFECTS	LEVEL OF RESIDUAL IMPACTS
Construction Activities – Access Road to Project	Soils and Geology	Soil Erosion	Restrict Slopes	None anticipated	Minimal
	Local residents	Creation of noise Dust	Vehicles properly serviced Drivers to obey speed limits Roads to be watered down during dust-prone conditions	Some impact, but of short duration	Minimal
	Wildlife	Increased mortality Disruption Relocation of wildlife	Use of crew cabs to limit traffic Vehicle speed limited to 30 kph Wildlife corridor route adopted as part of the management plan Monitoring survey before, during and post construction	Some short-term impact during construction	Low

TABLE 3: SAMPLE SUMMARY TABLE OF CUMULATIVE ENVIRONMENTAL EFFECTS (CEE)

**Table 3: Sample Summary Table of Cumulative Environmental Effects (CEE)
(showing one example)**

COMPONENT OF THE ENVIRONMENT (VEC)	DESCRIPTION OF PROJECT ACTIVITY	OTHER ACTIVITIES CONSIDERED FOR CEE	ASSESSMENT OF CUMULATIVE ENVIRONMENTAL IMPACTS	LEVEL OF CEE
Bird Habitat	Project Construction	Logging	Logging has already affected bird habitat, and the project may add marginally to this disturbance near the project site.	Low

7. ENVIRONMENTAL MANAGEMENT PROGRAM

Environmental Management Programs are general documents that describe the environmental practices and procedures which are to be systematically applied by the proponent during planning, construction, operation/maintenance and, if relevant, decommissioning of the project, in order to manage potential environmental and other effects. If the project is granted an Environmental Assessment Certificate, detailed EMPs will need to be developed for approval by relevant agencies and authorities. EMP commitments and obligations need to be transferable from the proponent to contractors and other parties acting for the proponent.

EMPs should address all task areas which, if not effectively managed, may adversely affect the environment. Task areas typically cover such matters as agency reporting procedures, various post-construction monitoring program requirements, operations and maintenance facilities, waste management, energy management, emergency spill response, containment and management, storm water runoff, surface water runoff, noise attenuation measures and vegetation management. Providing for EMPs in this section of the Terms of Reference and the Application does not replace the need to present the required impact assessments under each component of section 6.0.

This section of the Terms of Reference and the Application provides a conceptual overview of the various EMPs that may be required to be developed for the project, with the details to be finalized in discussions with the relevant permitting agencies and First Nations before start of construction.

Content Requirement

In the Terms of Reference, the proponent should commit to provide the following in the Application:

- Overview of EMPs proposed for the construction, operations/maintenance and, if relevant, decommissioning phases of project. For example, provide for the following EMPs, as/where required:
 - Surface Water Quality and Sediment Control Plan;
 - Construction Waste Management Plan;
 - Air Quality and Dust Control Plan;
 - Water Quality/Quantity Monitoring Plan;
 - Contaminated Sites Management Plan;
 - Hazardous Waste Management and Spill Plan;
 - Accidents and Malfunctions Plan;
 - Landscape Design and Restoration Plan;
 - Wildlife/Vegetation Monitoring Plan;
 - Outdoor Recreation Use Management Plan; and
 - Other, if need identified with regulatory agencies.

- Identification of any EMPs or other mitigation tools that can be used to minimize potential effects on First Nations.
- EMPs specific to First Nations concerns could include:
 - Archaeological Resources Monitoring Plan;
 - Traditional Use Monitoring Plan; and
 - Other, if need identified.
- Description of how archaeological and other First Nations issues will be monitored during project construction, and outline of any process for handling issues that may arise (e.g. stop work plans, modification of design).

8. CONCLUSION

This section presents a clear conclusion from the project impact assessment, cross-referencing the findings from section 6.

Content Requirement

In the Terms of Reference, the proponent should commit to identifying in the Application one of the following conclusions, based on the analysis under section 6:

1. The project is not likely to cause significant adverse environmental, socio-economic/ community, First Nations or other effects, taking into account the implementation of appropriate impact management measures, as identified in the Application's "table of proposed commitments"; or
2. The project is likely to cause significant adverse environmental, socio-economic/ community, First Nations or other effects, even taking into account the implementation of appropriate impact management measures, as identified in the Application's "table of proposed commitments"; or
3. It is uncertain at the time of the review whether or not the project is likely to cause significant adverse environmental, socio-economic/community, First Nations or other effects, taking into account the implementation of appropriate impact management measures, as identified in the Application's "table of proposed commitments".

9. REFERENCES AND SUPPORTING DOCUMENTATION

This section should itemize reference documents cited in the Terms of Reference and the Application.

Content Requirement

In the Terms of Reference, the proponent should commit to provide the following in the Application:

- Documentation with respect to referenced consultations with the public, First Nations and government agencies.
- Records of meetings and discussion topics, including any relevant agreements with government review agencies prior to filing the Application.
- List of all enclosures (such as appendices) included with the Application.

FIRST NATIONS CONSIDERATIONS

It may be considered necessary or important for some project applications to consolidate all information relative to First Nations into one section, instead of identifying First Nations information as a sub-section of each major section of the Application. In such cases, the separate section would draw together the First Nations information that was identified in previous sections of the Application. For completeness elsewhere in the Application, and where it makes sense to do so, the proponent may also wish to discuss First Nations' issues and perspectives as part of other broader discussions.

Content Requirement

Where the proponent consolidates all First Nations information into one section, that section of the Application should include the following:

1. Identification of local First Nations potentially affected by the proposed project;
2. Consultation with First Nations;
3. First Nations Considerations – Study Area(s);
4. Project Setting – Traditional Use and Aboriginal Rights/Title Issues in Vicinity of Project;
5. Project Setting – Archaeological Resources;
6. Project Setting – Socio and Economic Considerations;
7. Potential Project Effects on First Nations Interests;
8. Environmental Management Plans related to First Nations Issues; and
9. Commitments to First Nations.

Note: The proponent is not required to provide information that, by arrangement with First Nations, is to be treated as confidential.

GLOSSARY OF ACRONYMS

BCEAA	B ritish C olumbia's E nvironmental A ssessment A ct 2002
CEAA	C anadian E nvironmental A ssessment A ct
CEE	C umulative E nvironmental E ffects
COSEWIC	C ommittee O n the S tatus of E ndangered W ildlife I n C anada
EA	E nvironmental A ssessment
EAO	E nvironmental A ssessment O ffice
EMP	E nvironmental M anagement P lan
SARA	S pecies A t R isk A ct
VEC	V alued E cosystem C omponent

Contact Us

For more information and assistance in developing a Terms of Reference, please contact the British Columbia Environmental Assessment Office at:

2nd Floor - 836 Yates Street, Victoria, BC V8W 1L8

PO Box 9426 Stn Prov Govt, Victoria, BC V8W 9V1 (Mail)

250.356.7479 (Victoria)

250.356.7440 (Fax)

eaoinfo@gems5.gov.bc.ca

<http://www.eao.gov.bc.ca>



Environmental Assessment Office