

**APPROVED APPLICATION TERMS OF REFERENCE  
FOR  
the MACKENZIE GREEN ENERGY CENTRE (MGEC)**

**With Respect To**

**An Application for an Environmental Assessment Certificate under  
the *Environmental Assessment Act*, S.B.C. 2002, c. 43  
and requirements pursuant to  
the *Canadian Environmental Assessment Act*, S.C 1992, c. 37**

**January 31, 2007**

# INTRODUCTION

## BACKGROUND

The Mackenzie Green Energy Centre cogeneration project (MGEC or Project), which is proposed by Mackenzie Green Energy Inc. (the Proponent), is subject to review under the British Columbia *Environmental Assessment Act*, SBC 2002, c.43 (BCEAA) and the *Canadian Environmental Assessment Act*, SC 1992, c.37 (CEAA) (if federal funding is secured)<sup>1</sup>.

The contents of this document constitute the Application Terms of Reference (ATOR) for the Proponent's Application for an environmental assessment certificate (Application) for the Mackenzie Green Energy Centre. The ATOR identifies the issues to be addressed and the information that must be provided by the Proponent in its Application for an Environmental Assessment Certificate for the proposed MGEC.

An initial Draft TOR was developed by the Proponent to meet the requirements of both the BCEAA and CEAA. The Initial Draft TOR was reviewed by the Environmental Assessment Office (EAO) and the MGEC Working Group, and comments arising from this review were provided to the Proponent. A revised Draft TOR was then prepared by the Proponent and issued by the EAO for a 30 day public review and comment period from June 22 to July 21, 2006. The ATOR incorporates changes to address the comments received by the EAO during the public comment period.

The ATOR are based on input from the Proponent and the early results from consultations with First Nations, federal and provincial government agencies, local governments, local interest groups, and the public. The ATOR also addresses issues raised with the Proponent during the Proponent's initial public consultation activities. These public consultations were initiated by the Proponent prior to the EAO Office having deemed the project as reviewable under the provincial EA legislation. Consultation activities are ongoing.

The process for developing the ATOR, as well as the process and procedures for conducting the review pursuant to the BCEAA and CEAA, were recognized and confirmed in an order issued by the EAO under section 11 of the BCEAA (Section 11 Order), stipulating the scope, procedures and methods for the assessment of the Project.

The ATOR have been developed in accordance with the general procedures set out in the "*Guide to the British Columbia Environmental Assessment Process*", EAO, March 2003 and the "*Guide to Preparing Terms of Reference*", EAO, July 2004.

## PROPONENT

The Project proponent is Mackenzie Green Energy Inc., which maintains offices at:

### **Calgary Office:**

Suite 1450, 645- 7<sup>th</sup> Avenue SW,  
Calgary, Alberta, T2P 4G8

### **Vancouver Office:**

5640 Keith Road  
West Vancouver, BC V7W 2N5

The project contact is Julia Ciccaglione, Vice-President, Environment.

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<sup>1</sup> CEAA may be triggered as a result of Mackenzie Green Energy Inc. applying for federal incentive funding for renewable energy projects. .

## PROJECT LOCATION, DESCRIPTION AND SCOPE

The Mackenzie Green Energy Centre (MGEC) is a proposed biomass cogeneration energy facility to be located in Mackenzie, British Columbia approximately 2 hours north of Prince George as shown in Figure 1. The Project is within the boundaries of the Treaty 8 lands.

The MGEC will produce on average 55 MW of electrical power and 335 GJ of cogenerated steam. Steam from the MGEC will be provided to the adjacent Pope & Talbot pulp mill and potentially to the Canfor sawmill, thereby offsetting their consumption of natural gas and wood residues. In the event that cogenerated steam is no longer required, the plant is capable of producing up to 75 MW of electricity.

The MGEC will be fuelled predominantly by wood residues and beetle-killed wood from the surrounding area. A small percentage of the annual average energy input to MGEC will also be from biomass derived fuels, with approximately 2% from Kraft soap, a by-product of the pulping process, and 1% from primary clarifier sludge, which is composed largely of wood fibre and mineral solids. MGEC will result in the permanent shut down of the existing high emission wood- and gas-fired power boiler at Pope & Talbot's Mackenzie Pulp Operations. The use of biomass from nearby sources also has the potential to result in a substantial reduction in the quantity of wood residues currently being burned in beehive burners. Such a reduction has the potential to result in the permanent shut-down of local beehive burners.

Electricity from the MGEC will be sold to BC Hydro under an Electricity Supply Contract (ESC), as awarded under BC Hydro's 2006 Open Call for Tenders. The MGEC ESC was approved by the BC Utilities Commission on September 21, 2006 (Order E-7-06).



**Figure 1** Location of MGEC in Northeastern British Columbia

The MGEC will be constructed adjacent to Pope & Talbot's Mackenzie Pulp Operations mill, located approximately 5 kilometres southwest of the town of Mackenzie.

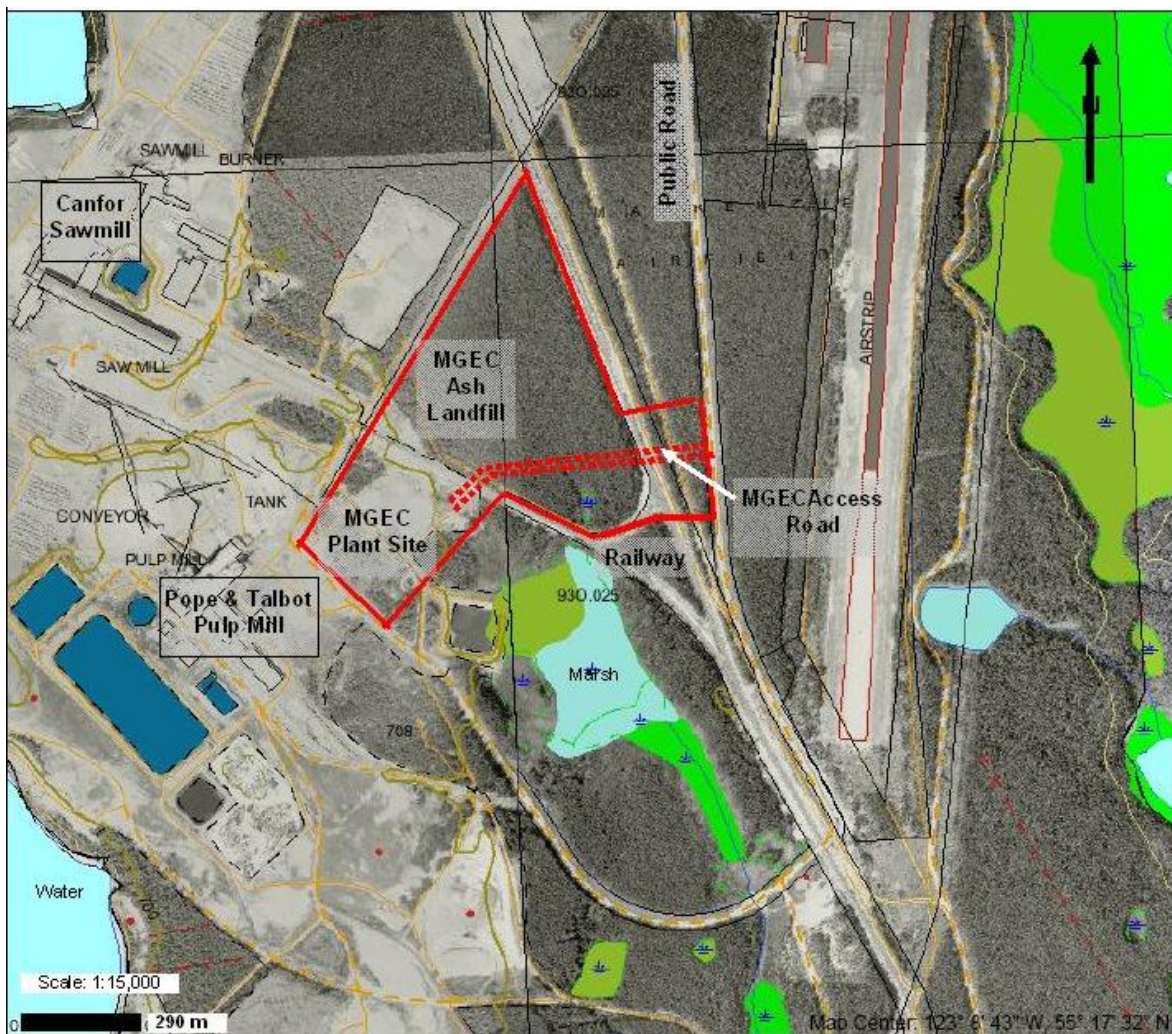
Two candidate sites, Site A and Site B (Figure 2) were originally considered for the MGEC (note that aerial photography for the NE portion of Site A is currently unavailable but is nonetheless delineated by the hatched lines). To ensure the efficient delivery of steam, minimal transportation distances from the Project site to the Pope & Talbot mill are required. Based on this requirement, Site A was selected for the Project and will be the basis for the Application for an Environmental Assessment Certificate. Site A is approximately 53 hectares in size and is situated closest to Pope & Talbot's Mackenzie Pulp Operations mill. A portion of Site A is owned by Pope & Talbot Inc, with the remaining portion owned by BCR Properties Ltd.

The portion of Site A owned by Pope & Talbot is zoned M3 heavy industrial under the District of Mackenzie Official Community Plan. M3 zoning allows development of heavy industry and electricity generation. This portion of Site A is approximately 23 hectares in area and described as Parcel Identifier: 024-184-489, Lot B, District Lot 12478 Cariboo District Plan PGP42628. The remaining portion of Site A is presently owned by BCR Properties Ltd. and measures approximately 30 hectares in area. This land is described as Parcel Identifier: 024-252-255, Lot A of District Lot 12478 and 12479 Cariboo District Plan PGP42967. Independent of the MGEC project, BCR Properties Ltd. is currently in the process of seeking an M3 zoning of their lands. BCR Properties have confirmed that they will be proceeding with the rezoning regardless of whether or not the MGEC project proceeds.

Figure 3 provides an aerial overhead view of the MGEC site in proximity to the Pope & Talbot and Canfor sites.



**Figure 2**      **Candidate Sites for MGEC in Relation to the Pope & Talbot Pulp Mill and the Canfor Sawmill in Mackenzie, BC**



**Figure 3 Aerial Photograph of the MGE Site and Surrounding Area**

Wood residues from the surrounding area will be used as a fuel source for the MGEC. Independent contractors will deliver wood residues to the MGEC by truck from surrounding fuel supply areas. The anticipated truck traffic between Mackenzie and each fuel supply area is as follows:

Supply Area	Daily Truck Traffic (in each direction)	Dominant Truck Route
Bear Lake	15, week days only	Highways 97 & 39
Chetwynd <sup>1</sup>	14, week days only	Highway 97
Fort St. James	30, six days per week.	Resource roads

<sup>1</sup> These trips are back-haul trips, meaning that the trucks would be travelling empty in any event, back to Mackenzie.

Primary clarifier sludge produced at the Pope & Talbot pulp mill, and now landfilled, will be utilized by MGEC for its fuel value and contribute approximately 1-2% of the energy input to the MGEC, depending on the fuel mix. Kraft soap will also be obtained from Pope & Talbot and may contribute 2% of the energy input, on average, and up to 10% of the energy input at times.

### Scope of Project

For the purposes of the BCEAA and CEAA, the scope of the Project, as specified in the section 11 order, includes the following facilities, and the activities associated with construction, operation, maintenance, dismantling and abandonment:

- A wood residue-fired boiler with supplemental natural gas firing capability;
- A steam turbine generator capable of producing up to 75 MW (gross) of power;
- A small natural gas-fired package boiler for backup steam supply;
- Steam and condensate pipelines to provide steam to local mills and return condensate to MGEC for re-use in the boiler;
- Wood residue and primary clarifier sludge unloading equipment, storage area, and reclamation, conveying, and feeding equipment;
- Kraft soap storage, handling and feeding equipment;
- Particulate matter emission control equipment;
- Stack for discharge of flue gases to the atmosphere;
- Cooling tower;
- On-site electrical substation and switch gear, and a short power transmission line to connect to the BC Hydro power grid;
- Short natural gas feeder pipeline to provide fuel needed for plant startups and in case of upsets in wood firing;
- Water supply and associated pipeline from Pope & Talbot Inc. under its existing water license;
- Wastewater effluent discharge to the advanced effluent treatment system at Pope & Talbot's Mackenzie Pulp Operations mill;
- Sanitary sewer discharge to Pope & Talbot's sanitary waste treatment system;
- Landfill for disposal of wood ash;
- Truck and vehicle access to the MGEC from existing industrial roads, including any proposed upgrading of roads.

## **MGEC APPLICATION TERMS OF REFERENCE CONTENT REQUIREMENTS FOR APPLICATION DOCUMENT**

*The information outlined in the following pages identifies the information required in, as well as a suggested structure for, the Proponent's Application for an Environmental Assessment Certificate for the Mackenzie Green Energy Centre Project.*

## CONTENT REQUIREMENTS FOR APPLICATION DOCUMENT:

### Preface

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#### Preamble

*This section will provide a general statement of context and purpose for the development of the Application document.*

#### Subsections

#### Coverage

N/A

- Reference to purpose and intent of conducting an EA for the Project.
- Indication that the Project is subject to review under the BCEAA pursuant to a request by the Proponent and an Order issued under Section 10 of BCEAA.
- Indication that the Project is subject to review under CEAA if Federal incentive funding is available, applied for, and received.
- Indication that the Application has been developed pursuant to the Terms of Reference approved by the EAO, and any other relevant instructions provided in the Order under the Section 11 Order.
- General indication of the government agencies, First Nations, and other parties that have been involved in the development of the Application.

## CONTENT REQUIREMENTS OF APPLICATION DOCUMENT:

### Executive Summary

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#### Preamble

*This section will concisely identify issues, impacts, consultations, recommended mitigation measures and conclusions in a succinct and summary manner.*

Subsections	Coverage
N/A	<ul style="list-style-type: none"> <li>• A concise description of all key facets of the Project suitable for use as a stand-alone document.</li> <li>• A general outline of key impacts and proposed mitigation strategies and measures.</li> <li>• A succinct description of information distribution activities, including consultation with First Nations, government agencies, the public and stakeholder groups.</li> <li>• A summary of issues raised and solutions suggested during these consultations, including potential project impacts and benefits.</li> <li>• A tabular summary of residual effects of the Project and their significance.</li> <li>• A summary of commitments made by the Proponent in the Application and/or during its review.</li> <li>• A summary of conclusions from the assessment.</li> </ul>

## CONTENT REQUIREMENTS OF APPLICATION DOCUMENT:

### Application Table of Contents

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#### Preamble

*A Table of Contents will be provided for the Application, following the outline provided below.*

#### PREFACE

#### EXECUTIVE SUMMARY

#### TABLE OF CONTENTS

#### LIST OF ABBREVIATIONS

#### GLOSSARY

### 1. INTRODUCTION

- 1.1. Proponent Identification
- 1.2. General Application Background
- 1.3. Project Overview
- 1.4. Regulatory Framework

### 2. INFORMATION DISTRIBUTION AND CONSULTATION

- 2.1. Overview of Public, First Nations and Government Consultation
- 2.2. Pre-Application Consultation
- 2.3. Planned Future Consultation Activities

### 3. PROJECT DESCRIPTION AND SCOPE OF PROJECT

- 3.1. Project Background and Rationale
- 3.2. Project Location, Alternatives and Site Selection
- 3.3. Review of Emission Control Technologies and Emission Limits
- 3.4. Project Facilities and Design
- 3.5. Detailed Project Phases and Activities
- 3.6. Labour Force
- 3.7. Project Construction and Operations Cost
- 3.8. Alternative Means of Carrying out the Project
- 3.9. Scope of Project for EA Purposes

### 4. SCOPE OF ASSESSMENT AND STUDY AREA(S)

- 4.1. Scope of Assessment and Identification of Valued Ecosystem Components
- 4.2. Study Areas
- 4.3. Temporal Boundaries

### 5. ENVIRONMENTAL EFFECTS: BASELINE CONDITIONS, EFFECTS ASSESSMENT, MITIGATION AND MONITORING

- 5.1. General Approach and Methods
- 5.2. Overview of the Current Environment in the Project Area
- 5.3. Geophysical Environment
  - 5.3.1. Baseline Conditions
  - 5.3.2. Potential Project Effects
  - 5.3.3. Enhancement, Mitigation and Monitoring
- 5.4. Air Quality
  - 5.4.1. Baseline Conditions
  - 5.4.2. Potential Project Effects

- 5.4.3 Enhancement, Mitigation and Monitoring
- 5.5. Climate Change and Greenhouse Gas Emissions
  - 5.5.1. Baseline Conditions
  - 5.5.2. Potential Project Effects
  - 5.5.3. Enhancement, Mitigation and Monitoring
- 5.6. Noise
  - 5.6.1. Baseline Conditions
  - 5.6.2. Potential Project Effects
  - 5.6.3. Enhancement, Mitigation and Monitoring
- 5.7. Surface Water and Groundwater Quality
  - 5.7.1. Baseline Conditions
  - 5.7.2. Potential Project Effects
  - 5.7.3. Enhancement, Mitigation and Monitoring
- 5.8. Aquatic Habitat and Fauna
  - 5.8.1 Baseline Conditions
  - 5.8.2 Potential Project Effects
  - 5.8.3 Enhancement, Mitigation and Monitoring
- 5.9. Vegetation
  - 5.9.1 Baseline Conditions
  - 5.9.2 Potential Project Effects
  - 5.9.3 Enhancement, Mitigation and Monitoring
- 5.10. Wildlife Habitat and Species
  - 5.10.1. Baseline Conditions
  - 5.10.2. Potential Project Effects
  - 5.10.3. Enhancement, Mitigation and Monitoring
- 5.11. Archaeology, Culture and Heritage Resources
  - 5.11.1. Overview
  - 5.11.2. Potential Project Effects
  - 5.11.3. Enhancement, Mitigation and Monitoring
- 5.12. Land Use Context
- 5.13. Water Supply
- 5.14. Waste Management
- 5.15. Accidents and Malfunctions (CEAA Requirement)
- 5.16. Natural Hazards and Effects of the Environment on the Project
- 5.17. Summary

## **6. FIRST NATIONS**

- 6.1. First Nations Setting
- 6.2. Socio-economic Baseline
- 6.3. Traditional Land Use and Knowledge
  - 6.3.1. Baseline Conditions
  - 6.3.2. Potential Project Effects
  - 6.3.3. Enhancement and Mitigation
- 6.4. Treaty Rights
  - 6.4.1. Baseline Conditions
  - 6.4.2. Potential Project Effects
  - 6.4.3. Enhancement and Mitigation
- 6.5. Employment and Income
  - 6.5.1. Baseline Conditions
  - 6.5.2. Potential Project Effects
  - 6.5.3. Enhancement and Mitigation

- 6.6. Business Opportunities
  - 6.6.1. Baseline Conditions
  - 6.6.2. Potential Project Effects
  - 6.6.3. Enhancement and Mitigation
- 6.7. Transportation and Traffic
  - 6.7.1. Baseline Conditions
  - 6.7.2. Potential Project Effects
  - 6.7.3. Enhancement and Mitigation

## **7. SOCIO-ECONOMIC EFFECTS: BASELINE CONDITIONS, IMPACT ASSESSMENT, MITIGATION REQUIREMENTS AND RESIDUAL EFFECTS**

- 7.1. General Approach and Methods
- 7.2. Overview of Local and Regional Setting
- 7.3. Employment, Income and Government Revenues
  - 7.3.1. Baseline Conditions
  - 7.3.2. Potential Project Effects
  - 7.3.3. Enhancement and Mitigation
- 7.4. Population
  - 7.4.1. Baseline Conditions
  - 7.4.2. Potential Project Effects
  - 7.4.3. Enhancement and Mitigation
- 7.5. Business Opportunities
  - 7.5.1. Baseline Conditions
  - 7.5.2. Potential Project Effects
  - 7.5.3. Enhancement and Mitigation
- 7.6. Housing
  - 7.6.1. Baseline Conditions
  - 7.6.2. Potential Project Effects
  - 7.6.3. Enhancement and Mitigation
- 7.7. Transportation and Traffic
  - 7.7.1. Baseline Conditions
  - 7.7.2. Potential Project Effects
  - 7.7.3. Enhancement and Mitigation
- 7.8. Emergency Services
  - 7.8.1. Baseline Conditions
  - 7.8.2. Potential Project Effects
  - 7.8.3. Enhancement and Mitigation
- 7.9. Public Health
  - 7.9.1. Baseline Conditions
  - 7.9.2. Potential Project Effects
  - 7.9.3. Enhancement and Mitigation
- 7.10. Utility Services
  - 7.10.1. Baseline Conditions
  - 7.10.2. Potential Project Effects
  - 7.10.3. Enhancement and Mitigation
- 7.11. Summary

**8. CUMULATIVE ENVIRONMENTAL EFFECTS ASSESSMENT (CEAA Requirement)**

- 8.1. Methods and Scoping of Potential Cumulative Effects
- 8.2. Existing and Future Projects Included in the Assessment
- 8.3. Assessment of Impacts, Mitigation and Residual Effects
  - 8.3.1. Air Quality
  - 8.3.2. Noise
  - 8.3.3. Wildlife
  - 8.3.4. Other Impacts (as determined from studies)
- 8.4. Summary

**9. ENVIRONMENTAL MANAGEMENT PROGRAM**

- 9.1. Component Environmental Management Plans

**10. SUMMARY OF COMMITMENTS****11. SUMMARY AND CONCLUSIONS****12. LIST OF REFERENCES****13. APPENDICES**

## CONTENT REQUIREMENTS OF APPLICATION DOCUMENT:

### List of Abbreviations

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#### Preamble

*A List of Abbreviations will be provided for the Application. It will take a form similar to the following list, developed for the Terms of Reference document.*

#### LIST OF ABBREVIATIONS

Application	Application for an Environmental Assessment Certificate under BCEAA
ATOR	Application Terms of Reference
BCEAA	British Columbia <i>Environmental Assessment Act</i>
BC MOE	British Columbia's Ministry of Environment
CEAA	<i>Canadian Environmental Assessment Act</i>
CEA Agency	Canadian Environmental Assessment Agency
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
EA	Environmental Assessment
EAO	British Columbia's Environmental Assessment Office
EMP	Environmental Management Plan
lb/hr	Pounds per hour
MGEC	Mackenzie Green Energy Centre
MGEI	Mackenzie Green Energy Inc.
MW	Megawatt of electricity.
RA(s)	Responsible Authority(ies) under CEAA
Section 11 Order	Procedural Order issued under section 11 of BCEAA
Study Area	Geographic area specific to each issue, as defined in Section 4.0
VEC	Valued Ecosystem Component

## CONTENT REQUIREMENTS OF APPLICATION DOCUMENT:

### Glossary

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#### Preamble

*A Glossary will be provided for the Application. It will take a form similar to the following list, developed for the Terms of Reference document.*

#### GLOSSARY

Cogeneration	The simultaneous production of two forms of useful energy, in this case steam heat and electrical power.
Common Air Contaminants	Carbon monoxide (CO), nitrogen oxides (NO <sub>x</sub> ), sulphur oxides (SO <sub>x</sub> ), volatile organic compounds (VOC), particulate matter less than 10 microns in diameter (PM <sub>10</sub> ) and particulate matter less than 2.5 microns in diameter (PM <sub>2.5</sub> ).
Dominant truck routes	The primary road corridors that will be used for transportation of wood residues to the MGEC plant site.
Hog fuel	Mixed wood and bark mill residues shredded typically to minus 75 mm in maximum dimension using a hog.
Kraft soap	A by-product of the pulping process. Kraft soap is derived from the separation of the pulping liquor. Kraft soap in its native form has a high heating value and can be a premium fuel source.
Primary clarifier sludge	Pulp mill effluent composed mainly of wood fibre with smaller amounts of dregs and lime mud that is removed by gravity in the primary clarifier. The water content of the sludge from the clarifier at Pope & Talbot is reduced by compaction in a press, producing a waste containing typically 34% combustibles, 65% water and 1% ash.
Project Disturbed Area	The area within the boundaries of the property that will be purchased for the MGEC and on which the power plant and ash landfill will be located, as well as the right-of-ways for off-site pipelines and power line.
Project Study Area	Geographic areas specific to each VEC, as specified in Section 4.2, to be included in the scope of the environmental assessment.
Valued Ecosystem Components	Any part of the environment that is considered important by the Proponent, members of the public, scientists, government and First Nations involved in the assessment process. Importance may be determined on the basis of cultural value or scientific concern.
Wood Residue	Wood wastes from sawmills and comminuted wood fuels produced from unmerchantable beetle-kill trees and forest slash.

## CONTENT REQUIREMENTS FOR APPLICATION DOCUMENT:

### Section 1.0 - Introduction

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#### Preamble

*This section will provide contextual background information on the Project and the Proponent, and on the regulatory regime which applies to the Project.*

#### Subsections

#### Coverage

- |                              |   |
|------------------------------|---|
| 1.1 Proponent Identification | <ul style="list-style-type: none"> <li>• Proponent information (i.e., name, address, phone, fax, email). Include name of company representative managing the Project.</li> <li>• List of consultants used to prepare the Application.</li> </ul>  |
| 1.2 Background               | <ul style="list-style-type: none"> <li>• Introduction to Application and its structure.</li> <li>• Summary of Project planning and review history to date.</li> <li>• Summary of the BC Hydro 2006 Call for Tenders process and time schedule, the regulatory status of the electricity supply contract applicable to the Project.</li> <li>• A summary of any legal orders applying to the review, including any agreements with First Nations.</li> </ul>   |
| 1.3 Project Overview         | <ul style="list-style-type: none"> <li>• A brief description of the Project, its rationale and key components, including location and setting, generating capacity in megawatts, annual energy production in gigawatt-hours (and equivalent number of households), operating life, regional context, existing access, fuel supply and proximity to any environmentally sensitive areas or cultural sites.</li> <li>• A clear listing of project infrastructure.</li> <li>• A listing of Treaty 8 First Nations having an interest in the Project and an indication that the project is within the bounds of Treaty 8.</li> <li>• An indication of whether the project is located on crown and/or private land and a description of crown and private land zoning and use implications including how the project is envisioned in the context of existing land use plans.</li> <li>• Maps and aerial photograph showing both regional context and site specific environmental setting and proximity to environmental receptors.</li> <li>• An estimate of Project construction costs, the number of construction jobs and the construction schedule.</li> <li>• An estimate of total annual operating expenses, economic benefits to the area and the number of jobs created during plant operation.</li> <li>• An estimate of reclamation costs.</li> </ul> |
| 1.4 Regulatory Framework     | <ul style="list-style-type: none"> <li>• An overview of key federal, provincial and local government requirements that affect the Project.</li> <li>• Outline of future licenses/permits/authorizations needed.</li> <li>• Statement of intent to obtain permits under the BC Environmental Management Act following receipt of an Environmental Assessment Certificate.</li> </ul>   |

## CONTENT REQUIREMENTS FOR APPLICATION DOCUMENT:

### Section 2.0 - Information Distribution and Consultation

#### Preamble

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*This section will summarize the Proponent's past and proposed consultation (approach and associated activities), in accordance with the consultation provisions of the Section 11 Order, once issued. The public consultation measures will also be in compliance with the "Public Consultation Policy Regulation". BC Reg 373/2002.*

*Relevant guidance will be obtained from EAO on consultation with the public and First Nations.*

<b>Subsections</b>	<b>Coverage</b>
2.1 Overview of Consultation with First Nations, government agencies, stakeholders and the public	<ul style="list-style-type: none"> <li>• Brief description of the consultation activities undertaken with First Nations, government agencies, stakeholders and the public.</li> </ul>
2.2 First Nations Consultation	<ul style="list-style-type: none"> <li>• List of consultation events held, actions taken and summary of results.</li> </ul>
2.2.1 Pre-Application Consultation	<ul style="list-style-type: none"> <li>• Description of efforts undertaken to distribute Project material to the First Nations.</li> <li>• Documentation of relevant understandings regarding consultation with First Nations (excluding confidential information).</li> <li>• Record and reporting of consultation responses and issues.</li> <li>• Detailed record of consultation with First Nations, and the issues raised.</li> <li>• Documentation of how issues raised have been addressed and the respective views of the Proponent and other parties on those issues (e.g. resolved or unresolved), including an issue tracking summary table.</li> </ul>
2.2.2 Planned Future Consultation Activities	<ul style="list-style-type: none"> <li>• Outline of Proponent's proposed First Nations consultation program during the Application review stage.</li> <li>• Documentation of the proposed process for attempting to resolve outstanding issues identified under Section 2.2.1.</li> </ul>
2.3 Consultation with Agencies	<ul style="list-style-type: none"> <li>• List of consultation events held, actions taken and summary of results.</li> </ul>
2.3.1 Pre-Application Consultation	<ul style="list-style-type: none"> <li>• Description of efforts undertaken to distribute Project material to federal, provincial, regional and local government agencies.</li> <li>• Record and reporting of consultation responses and issues.</li> <li>• Detailed record of consultation with agencies, and the issues raised.</li> <li>• Documentation of how issues raised have been addressed and the respective views of the Proponent and other parties on those issues (e.g. resolved or unresolved), including an issue tracking summary table.</li> </ul>

- 2.3.2 Planned Future Consultation Activities
  - Outline of Proponent's proposed program for consultation with government agencies during the Application review stage.
  - Documentation of the proposed process for attempting to resolve outstanding issues identified under Section 2.3.1.
- 2.4 Consultation with Public and Stakeholders
  - List of consultation events held, actions taken and summary of results.
- 2.4.1 Pre-Application Consultation
  - Description of efforts undertaken to distribute Project material to the public and stakeholders.
  - Record and reporting of consultation responses and issues.
  - Detailed record of consultation with the public and stakeholders, and the issues raised.
  - Documentation of how issues raised have been addressed and the respective views of the Proponent and other parties on those issues (e.g. resolved or unresolved), including an issue tracking summary table.
- 2.4.2 Planned Future Consultation Activities
  - Outline of Proponent's proposed program for consultation with stakeholders during the Application review stage.
  - Documentation of the proposed process for attempting to resolve outstanding issues identified under Section 2.4.1.

## CONTENT REQUIREMENTS FOR APPLICATION DOCUMENT:

### Section 3.0 - Project Description and Scope of Project

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#### Preamble

##### *Project Description:*

*This section will describe 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 an assessment of potential Project effects to be conducted.*

*All key Project components and activities will be identified and clearly explained. The level of detail may vary, reflecting the varying challenges posed in managing their effects, if adverse.*

##### *Project Scope:*

*The EAO and federal agencies will determine the scope of the Project, based on the Project description provided by the Proponent, and subject to revision if the Project description is amended.*

*The scope of the Project for EA review purposes has been defined in the Introduction to the ATOR, and comprises those components of the Project for which an Environmental Assessment Certificate is being sought. These components will be documented in Section 3.0 of the Application. Relevant Project components comprise those on-site and off-site facilities and associated activities at the construction, operation and, where relevant, the decommissioning stage.*

Subsections	Coverage
3.1 Project Background and Rationale	<ul style="list-style-type: none"> <li>Information on the Project history.</li> <li>Rationale for the Project and project objectives and an indication of any sustainability principles guiding the project.</li> <li>General information regarding the electricity purchase agreement with BC Hydro and general market for power (as stated by BC Hydro).</li> </ul>
3.2 Project Location, Alternatives and Site Selection	<ul style="list-style-type: none"> <li>A description of location and maps/plans/aerial photographs showing location of the Project and surrounding development in the Region.</li> <li>A description of the Project's proximity to water bodies, designated environmentally sensitive areas, cultural areas, and heritage sites (e.g., parks, ecological reserves, etc).</li> <li>A summary of results of studies leading to selection of the Project site, including development constraints, fuel supplies and connection to existing infrastructure that affected the design plan.</li> <li>A summary of any consideration of alternative locations for the Project.</li> </ul>
3.3 Review of Emission Control Technologies and Emission Limits	<ul style="list-style-type: none"> <li>Review of regulatory emission limits and best available emission reduction technologies economically achievable for wood-fired boilers relevant to the proposed Project.</li> <li>Proposed emission limits for the Project.</li> </ul>

3.4 Project Facilities and Design Information:	
3.4.1 Power Plant	<ul style="list-style-type: none"> <li>• Description, supported by plans and diagrams, of the essential components of the proposed facilities: <ul style="list-style-type: none"> <li>– wood residue fired boiler, steam system and power generation equipment;</li> <li>– types of fuel supplies (e.g., wood residues, beetle-kill wood, Kraft soap, primary clarifier sludge and chipped forest slash)</li> <li>– fuel characteristics and the unloading, storage, and reclamation systems;</li> <li>– natural gas startup/backup fuel system;</li> <li>– particulate matter emission control equipment;</li> <li>– electrical substation and switch gear;</li> <li>– makeup water treatment system;</li> <li>– process effluent and stormwater systems;</li> <li>– sanitary sewer system;</li> <li>– cooling tower and associated equipment;</li> <li>– ash handling, storage, and disposal;</li> <li>– ash characteristics and the ash landfill;</li> <li>– on-site roads and landscaping; and</li> <li>– buildings and discharge stack.</li> </ul> </li> <li>• <b>Note</b> – the description will be as detailed as practicable, given the state of Project planning, but a final design level of detail is not required for EA review purposes but will be available to support permitting activities following Project certification.</li> <li>• Statement of generating capacity in megawatts (MW), annual energy production in gigawatt hours (GWh), and the energy equivalent by number of households.</li> <li>• An outline of the disturbed areas of the Project including the plant site and planned layout of equipment and roads on the site.</li> <li>• Description of preliminary design and engineering concepts, outlining appropriate design codes and results of any on-site investigations intended to establish site parameters.</li> <li>• Provision of information on proposed emission and effluent control technologies.</li> <li>• Identification and characterization of predicted air emissions and water discharges – to assist in assessment of any direct, indirect and cumulative effects.</li> </ul>
3.4.2 Off-site Facilities	<ul style="list-style-type: none"> <li>• Provision of similar information for off-site facilities/structures/installations required for the Project, namely the power transmission connection to grid, steam and condensate pipelines, effluent pipeline, water supply pipeline, natural gas feeder pipeline, and access roads.</li> </ul>
3.5 Detailed Project Activities	
3.5.1 Summary	<ul style="list-style-type: none"> <li>• Summary of the activities to be undertaken in the construction, operation and decommissioning phases of the Project, and the estimated scheduling of each phase.</li> </ul>

	<ul style="list-style-type: none"> <li>• Summary of the operational activities of the Project as they involve agreements with others for wood residue supply, effluent treatment, water supply and ash disposal</li> </ul>
3.5.2 Construction Phase	<ul style="list-style-type: none"> <li>• Identification of proposed schedules and activities related to Project construction, including, but not limited to, access road, site-clearing and preparation, foundations, substation/utilities, plant/facilities and special structures, tie-ins/metering, testing and start-up.</li> <li>• Description of the intended approaches for delivery of the various required services for the construction phase and associated logistics – including, but not limited to, water supply, storm water runoff management, waste recycling and disposal (non-hazardous and hazardous wastes), material requirements, energy supply, construction-stage transportation/traffic, construction workers' accommodation and/or food services (if any), sanitary waste, etc.</li> <li>• Statement of information on general sources of construction materials.</li> <li>• Commitment to implement specific environmental management and spill response plans during the Construction Phase (Component plans included in Application), including, but not limited to, fugitive dust, construction noise, non-hazardous and hazardous wastes, scrap metal from construction, surface water runoff, etc (also see Section 9).</li> </ul>
3.5.3 Operations / Maintenance Phase	<ul style="list-style-type: none"> <li>• Identification of proposed facilities and associated activities for long-term use of MGEC as listed in 3.4.1 above.</li> <li>• Identification of proposed scheduling of these activities and Project operating life.</li> <li>• Description of the intended approaches for delivery of required services for the operations/ maintenance phase and associated logistics – including water supply, storm water runoff management, effluent treatment, non-hazardous and hazardous waste and wood ash disposal, fuel supply, and truck traffic.</li> <li>• Commitment to implement specific environmental management and spill response plans during the Operations/Maintenance Phase, including, but not limited to, process and cooling tower effluents, surface runoff, groundwater, air quality and emissions, and spill response (also see Section 9).</li> </ul>
3.5.4 Dismantling and Abandonment	<ul style="list-style-type: none"> <li>• Discussion of expected lifetime of the Project.</li> <li>• A brief description of dismantling and site reclamation plans, including a closure plan for the ash landfill.</li> </ul>
3.6 Labour Force	<ul style="list-style-type: none"> <li>• Estimate of total labour force requirement (direct jobs only), with categories and number of jobs, and person-years of employment for the construction and operations phases.</li> </ul>
3.7 Project Construction and Operations Costs	<ul style="list-style-type: none"> <li>• Description of Project construction cost, broken down by major cost category, including taxes and fees paid to local, regional and provincial governments.</li> <li>• Description of Project operating expenses, broken down by major expense category and including taxes and fees paid to local, regional and provincial governments.</li> </ul>

3.8 Alternative Means of Carrying out the Project (CEAA Requirement)	<ul style="list-style-type: none"><li>• In accordance with CEAA requirements, if alternative means of carrying out the Project were considered as economically feasible options in developing the current form of the Project proposal, an overview of these alternatives.</li></ul>
3.9 Scope of Project for EA Purposes	<ul style="list-style-type: none"><li>• See Introduction and Preamble to Section 3.0.</li></ul>

## CONTENT REQUIREMENTS FOR APPLICATION DOCUMENT:

### SECTION 4.0 - Scope of Assessment and Study Area(s)

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#### Preamble

*This section will describe the scope of the potential direct, indirect and cumulative effects of the Project, and the geographic and temporal boundaries used as the basis for the assessment.*

#### Scope of the Assessment

*Sections 4.0 through 11.0 of the ATOR constitute the Scope of Assessment for the purposes of the CEAA and BCEAA reviews of the Project. The assessment will focus on effects for which a reasonably direct link can be demonstrated between the Project's scoped components and the Project setting. The Application will primarily focus on effects for which the Proponent has the ability to directly implement impact management measures to mitigate the concern.*

#### Defining Study Areas for Assessment Purposes

*In the Application, Study Area boundaries will be defined in time and space. The Application will clearly indicate the Study Area boundaries used for each component of the impact assessment, and will include an explanation of the rationale adopted for establishing Study Area boundaries.*

*Studies within the defined Study Areas will take into account the timeframes over which the effects originating from the construction, operation, maintenance and, in the case of temporary facilities, decommissioning of Project components are anticipated to occur. Spatial (space) boundaries will be based on the zone of Project influence beyond which the effects of the Project are expected to be non-detectable. Multiple Study Area boundaries will be employed, if necessary, reflecting the range of geographic areas within which specific effects may be experienced.*

*Since the Application is to address effects for which a reasonably direct link to the scoped Project components can be established, the Study Area(s) for most of the anticipated biophysical environmental issues are expected to be limited to the Project Disturbed Area, which is comprised of the proposed Project plant site and off-site linear developments for steam, condensate and effluent pipelines, a connection to the BC Hydro power line and connection to the natural gas supply. For the environmental impact assessment, most of the effort will focus on characterizing the land areas disturbed by the Project and the near vicinity where environmental effects may be detectable. Spatial boundaries for the socio-economic/community and First Nations assessments may extend beyond the Project Disturbed Area.*

Subsections	Coverage
4.1 Scope of Assessment	<ul style="list-style-type: none"> <li>• Within the general framework of the scope of assessment, as outlined above, a discussion of the influence of consultations with First Nations, government agencies, stakeholders and the public on the scoping of issues being addressed in the Application.</li> </ul>

	<ul style="list-style-type: none"> <li>• An itemization of issues and impact concerns (i.e., potential environmental, social, economic, heritage, health and First Nation effects) identified during the pre-application issue scoping phase.</li> </ul>
4.2 Study Area Geographic Boundaries	<ul style="list-style-type: none"> <li>• Identification of the Study Area(s) to be employed for impact assessment purposes in the EA application.</li> <li>• Discussion of the influence of consultations with First Nations, government agencies, stakeholders and the public on Study Area definition.</li> <li>• A description, and/or identification on maps of appropriate scale, of the geographical areas used for documenting the baseline project impacts, including the potential effects on First Nation interests.</li> <li>• The planned extent of the geographic Study Areas for VECs as determined through consultation input are: <ul style="list-style-type: none"> <li>– Geophysical (physiography, topography, geology, geotechnical conditions, soils and stability): Project Disturbed Area.</li> <li>– Air quality: 25 km radius from MGEC plant stack for modeling of meteorology and 10 km radius from MGEC plant stack for modeling of effects of emissions on air quality.</li> <li>– Visibility/fogging effects from cooling tower: 3 km radius from MGEC cooling tower;</li> <li>– Noise: 2 km radius from the plant site.</li> <li>– Vegetation, aquatic life and wildlife: Project Disturbed Area plus, for aquatic life and wildlife, the marsh/wetland located within 200 metres to the southeast of the Project Disturbed Area.</li> <li>– Water quality: Stormwater, process effluent and groundwater receiving areas.</li> <li>– Wood residue truck traffic: Dominant truck routes from planned wood residue supply areas (Bear Lake, Chetwynd and Fort St. James) to MGEC.</li> <li>– Archaeology, culture and heritage: Project Disturbed Area.</li> <li>– Socio-economic: District of Mackenzie and, for First Nations specific impacts, First Nations Communities.</li> <li>– First Nations traditional use and traditional knowledge studies: Project Disturbed Area plus a 250 meter wide buffer area.</li> </ul> </li> </ul> <p>Note: The Project Disturbed Area includes the area within the boundaries of the property that will be purchased for MGEC and on which the power plant and ash landfill will be located, as well as the right-of-ways for off-site pipelines and power lines.</p>
4.3 Study Temporal Boundaries	<ul style="list-style-type: none"> <li>• Description of the time frames for assessments of the effects of Project construction, operation, dismantling and abandonment within specified Study Area boundaries, adhering to the general principles outlined in the Preamble above.</li> </ul>

## CONTENT REQUIREMENTS FOR APPLICATION DOCUMENT:

### Section 5.0 - Environmental Effects: Baseline Conditions, Impact Assessment, Mitigation Requirements and Residual Effects

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#### Preamble

*This section will present a description of the existing baseline environmental conditions for the issues included in the scope of the Assessment, assess the impacts of the Project on Valued Ecosystem Components (VECs<sup>2</sup>), and identify mitigation requirements and residual effects after mitigation. The Assessment will focus on the VECs that may be affected by the Project. A rationale will be provided for considering certain environmental components and not others in the EA review.*

*This section will (i) describe how the Project EA was performed; (ii) note which indicators and data sources were used to consider Project effects; (iii) identify potential effects of the project and discuss mitigation measures to avoid, mitigate or compensate for those effects; and (iv) discuss any identified residual effects. Supporting documents, when available, will be referenced and attached as appendices.*

*The methodology to be used for assessing Project impacts and definition of appropriate mitigation measures and establishing any residual Project effects is outlined below.*

Subsections	Coverage
5.1 General Approach and Methods	<ul style="list-style-type: none"> <li>• The following process will be used for each VEC to ensure that the actual or potential effects of the Project activities are adequately described and assessed, and that mitigation requirements and residual effects are determined:               <ol style="list-style-type: none"> <li>1. Describe the Project facilities and activities.</li> <li>2. Identify and describe baseline conditions for the VECs that would be affected by Project development within the boundaries of the study areas for each VEC defined in Section 4.2.</li> <li>3. Describe the nature and extent of the direct and indirect effects of interaction between the Project and the existing VECs.</li> <li>4. Describe measures proposed to manage the impacts identified above.</li> <li>5. Identify the magnitude, duration and frequency, reversibility and extent (geographic or otherwise) of any residual effects of the Project after mitigation measures are applied and indicate the basis for each estimate.</li> <li>6. Provide an estimate of the significance of any residual effects, considering the effects of the project on VECs. (<b>Note</b> – For CEAA purposes, the final determination of significance will</li> </ol> </li> </ul>

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<sup>2</sup> Valued Ecosystem Components (VECs) are any part of the environment that is considered important by the Proponent, scientists, government, First Nations, or members of the public involved in the assessment process. Importance may be determined on the basis of cultural value or scientific concern.

	<p>be made by the federal RAs).</p> <ul style="list-style-type: none"> <li>• The planned timeframes for baseline studies as determined through consultation input are: <ul style="list-style-type: none"> <li>– Geophysical (physiography, topography, geology, geotechnical conditions, soils and stability): Summer and Fall, 2006 and published information from government surveys.</li> <li>– Air quality: Pope &amp; Talbot ambient monitoring for PM<sub>10</sub> (2002-2006) and PM<sub>2.5</sub> (2006, starting in March).</li> <li>– Meteorology required for air quality modelling: 1995 for ground station data, upper air data and Mesoscale Model version 5 (MM5) prognostic data.</li> <li>– Noise: Tests at multiple sites within a typical 24-hour test period in 2006 when the Pope &amp; Talbot mill is operating under typical conditions.</li> <li>– Vegetation, aquatic life and wildlife (including migratory birds): Field studies May/June and September/October 2006. A Fall sampling period of 5 days duration will be conducted in September/October, with guidance from government agencies on the use of the local wetland by migratory birds.</li> <li>– Water quality for stormwater, process effluent and groundwater receiving areas: Pope &amp; Talbot environmental monitoring program results for 2004-2006.</li> <li>– Archaeology, culture and heritage: Fall, 2006</li> <li>– Socio-economic: Recent data available from government agencies.</li> </ul> </li> <li>• Assess the level of impact of the Project on VECs after mitigation with reference to the definitions shown in Table 1, included at the end of this section.</li> <li>• State whether the residual effects are concluded to be significant or not significant.</li> <li>• Some review agencies will also make their own assessment of significance, notably federal RAs which, for CEAA review purposes, will make the final determination of significance of residual environmental effects.</li> </ul>
5.1.1 Project Construction	<ul style="list-style-type: none"> <li>• For the construction of each Project component, the approach outlined in Section 5.1 will be used to describe and assess the effects of construction activities on relevant VECs.</li> </ul> <p>Relevant construction activities include, but are not limited to:</p> <ul style="list-style-type: none"> <li>– land clearing for facilities.</li> <li>– delivery of heavy equipment.</li> <li>– temporary storage of equipment and materials.</li> <li>– construction of permanent and temporary buildings/structures/facilities.</li> <li>– installation of mechanical equipment.</li> <li>– commissioning of facilities.</li> </ul>
5.1.2 Project Operations	<ul style="list-style-type: none"> <li>• For the operation of each project component, the approach outlined in Section 5.1 will be used to describe and assess the effects of operations activities on relevant VECs.</li> </ul>

5.1.3 Project Decommissioning	<ul style="list-style-type: none"> <li>• State the Proponent's commitments to decommission the project facilities to meet then existing requirements.</li> </ul>
5.2 Overview of the Current Environment of the Project Area	<ul style="list-style-type: none"> <li>• Provide an overview of the environmental setting in the vicinity of the Project Disturbed Area.</li> </ul>
5.3 Geophysical Environment:	
5.3.1 Baseline Conditions	<ul style="list-style-type: none"> <li>• Describe the baseline conditions for physiography, topography, geology, geotechnical conditions, soils, and stability, including: <ul style="list-style-type: none"> <li>– key terrain features, including mountains, rivers, lakes, etc, with an illustrative map showing these features;</li> <li>– description of geotechnical/soils/stability information for the Project Study Area.</li> <li>– map of soil classifications for the Project site and immediate surrounding areas.</li> <li>– description of previous disturbance, land use and soil contamination.</li> </ul> </li> </ul>
5.3.2 Potential Project Effects	<ul style="list-style-type: none"> <li>• Assess the effects of the Project on soils.</li> </ul>
5.3.3 Enhancement, Mitigation and Monitoring	<ul style="list-style-type: none"> <li>• State if the proposed enhancement or mitigation is adequate to mitigate project effects and commit to additional mitigation, if appropriate, based on the assessment.</li> <li>• Describe proposed monitoring activities concluded to be necessary based on the assessment.</li> </ul>
5.4 Air Quality	
5.4.1 Baseline Conditions	<ul style="list-style-type: none"> <li>• Describe prevailing climate conditions and identification of recording stations used for the Project impact assessment.</li> <li>• Provide data for precipitation (snow, rain, fog, etc.) including seasonal variations and frequency of events from existing monitoring stations.</li> <li>• Describe wind speed and direction, seasonal variations, and wind roses from representative monitoring stations.</li> <li>• Describe baseline ambient air quality from long-term PM<sub>10</sub> and Total Reduced Sulphur monitoring, and PM<sub>2.5</sub> monitoring since March 2006 conducted by Pope &amp; Talbot in Mackenzie, in conjunction with a two-year PM<sub>2.5</sub> baseline transplanted from Fort St. John.</li> <li>• Estimate baseline emissions of common air contaminants (PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, CO, and SO<sub>x</sub>) from permitted sources at the Pope &amp; Talbot pulp mill based on average of emission testing results for 2004-2005 reported to the BC Ministry of Environment.</li> <li>• Describe baseline PM<sub>10</sub> particulate matter concentrations in areas where MGEC expects the Project to reduce or eliminate the amount of wood incinerated in beehive burners using local monitoring data, as available from the BC Ministry of Environment.</li> </ul>
5.4.2 Potential Project Effects	<ul style="list-style-type: none"> <li>• Estimate emissions from the Project's wood-fired boiler and the backup natural gas boiler at maximum continuous rated power output (Scenario 1) and a worst-case upset condition, including effects of the proposed blend of Wood Residue, Kraft soap and clarifier sludge (Scenario 2).</li> <li>• Predict using dispersion modelling, the effects of emissions from the Project's wood-fired boiler on ambient concentrations</li> </ul>

	<p>of PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, CO and SO<sub>x</sub> for:</p> <ul style="list-style-type: none"> <li>– The main permitted sources at the Pope &amp; Talbot mill (at average emission rates) before MGEC is in operation;</li> <li>– MGEC (Scenario 1) and the main permitted sources at the Pope &amp; Talbot mill (at average emission rates) together, after MGEC is in operation; and</li> <li>– MGEC alone for Scenarios 1 and 2.</li> </ul> <ul style="list-style-type: none"> <li>• Predict and tabulate the increase or decrease in the frequency of exceeding concentrations of 50 and 25 µg/m<sup>3</sup> PM<sub>10</sub> and 30 and 15 µg/m<sup>3</sup> PM<sub>2.5</sub> for the scenario with combined emissions from the mill and MGEC (with MGEC operational), as compared to current mill emissions alone.</li> <li>• Assess the effects of the Project on air quality using existing information on baseline air quality, predicted effects of emissions on air quality, and regulatory objectives and standards.</li> <li>• Assess the effects of fugitive dust from the wood residue storage pile on air quality qualitatively based on planned operational practices.</li> <li>• Predict the effects of water vapour emissions from the cooling tower on the seasonal frequency of ground-level fog.</li> <li>• Estimate the change in PM<sub>10</sub> particulate matter emissions and qualitatively estimate the effects on air quality where MGEC expects the Project to reduce emissions from beehive burners.</li> </ul>
5.4.3 Enhancement, Mitigation and Monitoring	<ul style="list-style-type: none"> <li>• State if the proposed enhancement or mitigation is adequate to mitigate project effects on air quality from MGEC's boiler and fugitive dust emissions and commit to additional mitigation, if appropriate, based on the assessment.</li> <li>• Describe proposed compliance assurance monitoring.</li> </ul>
5.5 Climate Change and Greenhouse Gas Emissions	
5.5.1 Baseline Conditions	<ul style="list-style-type: none"> <li>• Quantify current annual provincial GHG emissions, relying on data published by Environment Canada.</li> </ul>
5.5.2 Potential Project Effects	<ul style="list-style-type: none"> <li>• Estimate the annual greenhouse gas emissions from the project at maximum continuous power output assuming the wood residues are produced from sustainable forestry operations.</li> <li>• Describe MGEC in regards to the definitions of BC Clean Power and BC Green Power.</li> <li>• Compare GHG emissions from MGEC to GHG emissions that would be produced by traditional coal- and natural gas- fuelled generating equipment producing an equal amount of power.</li> <li>• Estimate the GHG emission reduction that MGEC may provide, on the assumption that it is displacing coal-fired generation.</li> <li>• Assess the impact of the Project greenhouse gas emissions on Provincial emissions.</li> </ul>
5.5.3 Enhancement, Mitigation and Monitoring	<ul style="list-style-type: none"> <li>• State if the proposed enhancement or mitigation is adequate to mitigate project effects.</li> <li>• Describe proposed monitoring activities concluded to be necessary based on the assessment.</li> </ul>
5.6 Noise	
5.6.1 Baseline Conditions	<ul style="list-style-type: none"> <li>• Provide results of the baseline noise survey.</li> </ul>

5.6.2 Potential Project Effects	<ul style="list-style-type: none"> <li>• Provide estimates of noise emissions from the Project and model predictions of the effects of these emissions.</li> <li>• Assess the potential impacts of Project noise emissions based on local government, WCB and best practices guidelines.</li> </ul>
5.6.3 Enhancement, Mitigation and Monitoring	<ul style="list-style-type: none"> <li>• State if the proposed enhancement or mitigation is adequate to mitigate project effects and commit to additional mitigation, if appropriate, based on the assessment.</li> <li>• Describe proposed monitoring activities concluded to be necessary based on the assessment.</li> </ul>
5.7 Water Quality	
5.7.1 Baseline Conditions	<ul style="list-style-type: none"> <li>• Provide baseline information on the water quality in the effluent, stormwater and groundwater receiving areas, as available from Pope &amp; Talbot monitoring programs.</li> <li>• Describe surface hydrology for the Project Study Area, including quantified estimates of stormwater flows for the power plant site before and after the Project.</li> </ul>
5.7.2 Potential Project Effects	<ul style="list-style-type: none"> <li>• Identify sources, types, and concentrations of contaminants in effluents from the Project, including power plant process and cooling tower effluent, leachate from wood fuel and the ash landfill, and stormwater run-off.</li> <li>• Describe effect of the Project on surface hydrology, including quantified estimates of stormwater flows.</li> <li>• Assess the potential impacts of Project effluent and stormwater and the Project ash landfill site on surface water and groundwater quality.</li> </ul>
5.7.3 Enhancement, Mitigation and Monitoring	<ul style="list-style-type: none"> <li>• State if the proposed enhancement or mitigation is adequate to mitigate project effects and commit to additional mitigation, if appropriate, based on the assessment.</li> <li>• Describe proposed monitoring activities concluded to be necessary based on the assessment.</li> </ul>
5.8 Aquatic Habitat and Fauna	
5.8.1 Baseline Conditions	<ul style="list-style-type: none"> <li>• Describe aquatic systems within the aquatic life Project Disturbed Area, plus marsh/wetlands and bird species located within 200 metres to the southeast of the Project Disturbed Area.</li> <li>• As no aspects of the Project are likely to affect aquatic life based on the present Project design, provide an overview description based on a field survey by the Project biologist.</li> <li>• Describe sources of information for aquatic life.</li> <li>• Classify the marsh/wetland using the provincial classification system.</li> </ul>
5.8.2 Potential Project Effects	<ul style="list-style-type: none"> <li>• Assessment of the potential impacts of Project construction and operation on aquatic habitat and fauna.</li> </ul>
5.8.3 Enhancement, Mitigation and Monitoring	<ul style="list-style-type: none"> <li>• State if the proposed enhancement or mitigation is adequate to mitigate project effects and commit to additional mitigation, if appropriate, based on the assessment.</li> <li>• Describe proposed monitoring activities concluded to be necessary based on the assessment.</li> </ul>
5.9 Vegetation	
5.9.1 Baseline Conditions	<ul style="list-style-type: none"> <li>• Provide information and an ecosystem map from a baseline</li> </ul>

	<p>survey of the terrestrial and wetland associations in the Project Vegetation Study Area.</p> <ul style="list-style-type: none"> <li>Assess the potential for rare plant species and rare ecosystems to occur in the Study Area.</li> </ul>
5.9.2 Potential Project Effects	<ul style="list-style-type: none"> <li>Assess impacts to vegetation and rare plant species</li> </ul>
5.9.3 Enhancement, Mitigation and Monitoring	<ul style="list-style-type: none"> <li>State if the proposed enhancement or mitigation is adequate to mitigate project effects and commit to additional mitigation, if appropriate, based on the assessment.</li> <li>Describe proposed monitoring activities concluded to be necessary based on the assessment.</li> </ul>
5.10 Wildlife Habitat and Species	
5.10.1 Baseline Conditions	<ul style="list-style-type: none"> <li>Provide a summary of biophysical information and mapping to assist in identifying and assessing ecosystem impacts (<b>Note:</b> Most of the Project Disturbed Area has been affected by past development and is industrial land slated for development).</li> <li>Document wildlife inventories, including regionally important mammalian fauna, amphibians, reptiles and birds.</li> <li>Confirm wildlife suitability ratings based on a habitat mapping exercise.</li> <li>Identify red-, blue- and COSEWIC-listed organisms found in the vegetation and wildlife Study Area. (<b>Note</b> - This information will be used to analyze potential impacts on the species and present proposed mitigation measures, as well as any relevant requirements under the <i>Species at Risk Act</i> (SARA).</li> <li>Identify wildlife species of interest to First Nations.</li> <li>Determine baseline annual statistics on the number of vehicles and the frequency of traffic accidents involving wildlife for the Dominant Truck Routes to be used for truck transport of wood fuel to the MGEC plant site, as available from provincial agencies.</li> </ul>
5.10.2 Potential Project Effects	<ul style="list-style-type: none"> <li>Assess the potential effects of the Project on wildlife, with reference to the provisions of the Migratory Birds Convention Act (1994) and its Regulations for the assessment of impacts to migratory birds.</li> <li>Estimate the increase in the number of vehicle accidents involving wildlife that could potentially occur from the increase in the wood fuel truck traffic along Dominant Truck Routes used to transport fuel to MGEC, based on historic accident frequency statistics.</li> <li>Use appropriate agency guidelines, where identified by government agencies.</li> </ul>
5.10.3 Enhancement, Mitigation and Monitoring	<ul style="list-style-type: none"> <li>State if the proposed enhancement or mitigation is adequate to mitigate project effects and commit to additional mitigation, if appropriate, based on the assessment.</li> <li>Describe proposed monitoring activities concluded to be necessary based on the assessment.</li> </ul>
5.11 Archaeology, Culture and Heritage	
5.11.1 Baseline conditions	<ul style="list-style-type: none"> <li>Describe the ethnographic and historic context.</li> <li>Conduct an archaeological overview assessment (AOA) in</li> </ul>

	accordance with the guidelines and requirements of the Archaeology Branch.
5.11.2 Potential Project Effects	<ul style="list-style-type: none"> <li>• Conduct an archaeological impact assessment (AIA) in accordance with permit requirements of the Archaeology Branch and in consultation with First Nations.</li> </ul>
5.11.3 Enhancement, Mitigation and Monitoring	<ul style="list-style-type: none"> <li>• State if the proposed enhancement or mitigation is adequate to mitigate project effects and commit to additional mitigation, if appropriate, based on the assessment.</li> <li>• Describe proposed monitoring activities concluded to be necessary based on the assessment.</li> </ul>
5.12 Land Use Context	<ul style="list-style-type: none"> <li>• Describe the zoning and land use planning context for the Project including land use designations.</li> <li>• Discuss current land uses and nearby lands, including trapping, hunting, angling, guiding, other recreational uses, and water uses.</li> <li>• Describe previous site-disturbances.</li> <li>• Describe current visual aesthetic conditions in the Project Study Area.</li> </ul>
5.13 Water Supply	<ul style="list-style-type: none"> <li>• Describe the proposed water supply (Note: water will be purchased from Pope &amp; Talbot under an amended existing water license.)</li> <li>• Estimate the summer, winter and annual average water use of the Project.</li> <li>• Describe water conservation plans.</li> <li>• Assess the adequacy of the Pope &amp; Talbot water license to provide water to the Project over the Project lifetime.</li> </ul>
5.14 Waste Management	<ul style="list-style-type: none"> <li>• Identify the types of wastes that will be generated during construction and operation.</li> <li>• Describe the plan for management of nonhazardous and hazardous solid and liquid wastes generated during construction of the Project such as scrap metal handling and recycling, domestic waste, scrap wood, paper/cardboard, and domestic sewage effluent.</li> <li>• Describe the plan for management of nonhazardous and hazardous solid and liquid wastes during operation such as domestic waste, used oils and filters, spent chemicals, sludges, maintenance wastes, and domestic sewage effluent.</li> <li>• Describe design and management plans for onsite wood residue handling and storage during operation to mitigate environmental concerns associated with fugitive dust, leachate and surface runoff.</li> <li>• Boiler wood ash handing, storage and onsite landfill disposal: <ul style="list-style-type: none"> <li>- Describe the wood ash composition.</li> <li>- Determine if the wood ash is nonhazardous or hazardous waste according to provincial criteria.</li> <li>- If the ash is classified as a hazardous waste, propose means for handling and off-site disposal of the wood ash.</li> <li>- If the wood ash is not a hazardous waste, then assess the environmental effects of the onsite ash landfill and provide a proposal for site management and closure. The Ministry of</li> </ul> </li> </ul>

	Environment Intentions Paper for the proposed Industrial Non-hazardous Solid Waste Code of Practice will be referenced as a guide in the development of an ash disposal plan. (Note: This code is expected to come into effect in 2007 and will require registration of landfill sites instead of the current permitting system.)
5.15 Accidents and Malfunctions (CEAA Requirement)	<ul style="list-style-type: none"> <li>Identify the potential for accidents, spills or malfunctions that could lead to environmental impacts, and the probable effects on the environment (e.g., on VECs) and/or on local community settings.</li> <li>Document any proposed mitigation measures or contingency plans.</li> <li>Commit to having an Environmental Management Plan (EMP) in place for Project start-up that would address potential accidents, spills and malfunctions during the construction and operational phases.</li> </ul>
5.16 Natural Hazards and the Effects of the Environment on the Project (CEAA Requirement)	<ul style="list-style-type: none"> <li>Provide background information on the water level in Williston Lake, seismology and earthquake potential, avalanche potential, flood hazard, and erosion hazard.</li> <li>Assess the risk to the Project from: change in Williston Lake water level, earthquake, flooding, erosion, and landslide and avalanche.</li> <li>Assess the effects of climatic fluctuations and extreme (e.g. natural hazard) events on the project.</li> </ul>
5.17 Summary of Residual Effects and Their Significance	<ul style="list-style-type: none"> <li>Summarize the impact assessment findings organized as outlined above.</li> <li>Summarize potential environmental effects, (the summaries may be presented in tabular form), and indicate how these effects are to be managed to reduce them to acceptable levels.</li> <li>Categorize the residual impacts as indicated in Table 1 and indicate if the residual effects are concluded to be significant or not significant.</li> </ul>

**Table 1: Level of Impact after Mitigation Measures**

Level	Definition
<b>High</b>	Potential impact could threaten sustainability of the resource and should be considered a management concern. Research, monitoring and/or recovery initiatives should be considered.
<b>Medium</b>	Potential impact could result in a decline in the resource to lower-than-baseline but stable levels in the Study Area after project closure and into the foreseeable future. Regional management actions such as research, monitoring and/or recovery initiatives may be required.
<b>Low</b>	Potential impact may result in a slight decline in the resource in the Study Area during the life of the project. Research, monitoring and/or recovery initiatives would not normally be required.
<b>Minimal</b>	Potential impact may result in a slight decline in the resource in the Study Area during construction phase, but the resource should return to baseline levels.

## CONTENT REQUIREMENTS FOR APPLICATION DOCUMENT:

### Section 6.0 – First Nations

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#### Preamble

*In this section, the Proponent will describe the likely effects of the Project specific to First Nations*

*This section will present a description of the existing baseline socio-economic conditions, assess the impacts of the Project, and identify enhancement opportunities/mitigation requirements and residual benefits/effects. A rationale will be provided for considering certain socio-economic issues and not others for First Nations.*

*This section will (i) describe how the socio-economic EA was performed; (ii) note which indicators and data sources were used to consider Project effects; (iii) identify potential effects of the project and discuss enhancement/mitigation; and (iv) discuss any identified residual benefits/effects.*

6.1 First Nations Setting	<ul style="list-style-type: none"> <li>Identify First Nations affected by the Project.</li> <li>Provide information on First Nations setting.</li> <li>Describe reserves and traditional territories affected by the Project.</li> <li>Treaty status (the Project is within Treaty 8).</li> <li>Description of the general land use in the Project Study Area by First Nations.</li> <li>Social, cultural and environmental values identified by First Nations as being important to them.</li> </ul>
6.2 Socio-economic Baseline	<ul style="list-style-type: none"> <li>Socio-economic and socio-community information on First Nations affected by the Project.</li> </ul>
6.3 Traditional Land Use and Knowledge	
6.3.1 Baseline Conditions	<ul style="list-style-type: none"> <li>MGEC will support preparation of a baseline traditional land use and traditional knowledge study for the Project Disturbed Area (defined in List of Abbreviations), and provision of a non-confidential summary of this information by First Nations. It is understood that the non-confidential summary will be subject to an information sharing agreement with First Nations. The scope of the traditional land use and traditional knowledge study will be determined in consultation with First Nations.</li> </ul>
6.3.2 Potential Project Effects	<ul style="list-style-type: none"> <li>Consider the effects of the Project on, among other things, culturally modified trees, rock paintings, trails, and legendary land features, as well as areas or sites of significance.</li> </ul>
6.3.3 Enhancement and Mitigation	<ul style="list-style-type: none"> <li>Identify measures to avoid or mitigate potential adverse effects or to enhance positive effects.</li> </ul>
6.4 Treaty Rights	
6.4.1 Baseline Conditions	<ul style="list-style-type: none"> <li>Describe Treaty Rights.</li> </ul>
6.4.2 Potential Project Effects	<ul style="list-style-type: none"> <li>Present the views provided by First Nations on the potential for the Project to cause infringements of First Nations' treaty rights.</li> <li>Present conclusions from the environmental assessment studies pertaining to the potential for the Project to cause</li> </ul>

	infringement of First Nations' treaty rights.
6.4.3 Enhancement and Mitigation	<ul style="list-style-type: none"> <li>Identify measures to avoid or mitigate potential infringements or to enhance positive effects.</li> </ul>
6.5 Employment and Income	
6.5.1 Baseline Conditions	<ul style="list-style-type: none"> <li>Provide available baseline data on employment and income of Treaty 8 First Nations with an interest in the project.</li> </ul>
6.5.2 Potential Project Effects	<ul style="list-style-type: none"> <li>Identify the types of construction and operations jobs that will be available.</li> <li>Provide information on Project opportunities for employment of First Nations.</li> </ul>
6.5.3 Enhancement and Mitigation	<ul style="list-style-type: none"> <li>Describe plans to assist First Nations gain employment on the Project through notices of job opportunities, job training, and information on apprenticeship opportunities.</li> <li>Identify other measures to avoid or mitigate potential adverse effects or to enhance positive effects.</li> </ul>
6.6 Business Opportunities	
6.6.1 Baseline Conditions	<ul style="list-style-type: none"> <li>Provide available baseline data on businesses and/or business interests of Treaty 8 First Nations with an interest in the project.</li> </ul>
6.6.2 Potential Project Effects	<ul style="list-style-type: none"> <li>Identify and provide information on Project business opportunities accessible to First Nations.</li> </ul>
6.6.3 Enhancement and Mitigation	<ul style="list-style-type: none"> <li>Identify measures to avoid or mitigate potential adverse effects or to enhance positive effects.</li> </ul>
6.7 Transportation and Traffic	
6.7.1 Baseline Conditions	<ul style="list-style-type: none"> <li>Determine baseline annual statistics on the number of vehicles and the frequency of traffic accidents involving wildlife for the Dominant Truck Routes to be used for truck transport of wood fuel to the MGEC plant site, as available from provincial agencies.</li> </ul>
6.7.2 Potential Project Effects	<ul style="list-style-type: none"> <li>Estimate the increase in the number of vehicle accidents involving wildlife that could potentially occur from the increase in the wood fuel truck traffic along Dominant Truck Routes used to transport fuel to MGEC, based on historic accident frequency statistics.</li> <li>Assess the potential effects of Project truck traffic on First Nations communities.</li> </ul>
6.7.3 Enhancement and Mitigation	<ul style="list-style-type: none"> <li>Identify measures to avoid or mitigate potential adverse effects or to enhance positive effects.</li> </ul>

## CONTENT REQUIREMENTS FOR APPLICATION DOCUMENT:

### Section 7.0 – Socio-economic Effects: Baseline Conditions, Impact Assessment, Mitigation Requirements and Residual Effects

#### Preamble

*This section will present a description of the existing baseline socio-economic conditions for the issues included in the scope of the Assessment, assess the impacts of the Project, and identify enhancement opportunities/mitigation requirements and residual benefits/effects. A rationale will be provided for considering certain socio-economic issues and not others in the EA.*

*This section will (i) describe how the socio-economic EA was performed; (ii) note which indicators and data sources were used to consider Project effects; (iii) identify potential effects of the project and discuss enhancement/mitigation; and (iv) discuss any identified residual benefits/effects.*

7.1 General Approach and Methods	<ul style="list-style-type: none"> <li>Describe methods used and sources of information.</li> </ul>
7.2 Overview of Local and Regional Setting	<ul style="list-style-type: none"> <li>Provide social and demographic profile of the Mackenzie area.</li> <li>Describe the regional and area economy.</li> <li>Describe key economic trends projected in the area without the Project.</li> </ul>
7.3 Employment, Income and Government Revenues	
7.3.1 Baseline Conditions	<ul style="list-style-type: none"> <li>Provide information on the labour market (unemployment, labour supply, skills, training, etc.)</li> </ul>
7.3.2 Potential Project Effects	<ul style="list-style-type: none"> <li>Describe employment creation by the Project.</li> <li>Estimate the potential economic effects of Project construction and operation in Mackenzie and the surrounding region.</li> <li>Estimate the potential local, regional and provincial government benefits from the Project, including annual property tax.</li> </ul>
7.3.3 Enhancement and Mitigation	<ul style="list-style-type: none"> <li>Identify measures to avoid or mitigate potential adverse effects or to enhance positive effects.</li> </ul>
7.4 Population	
7.4.1 Baseline Conditions	<ul style="list-style-type: none"> <li>Describe the existing population.</li> </ul>
7.4.2 Potential Project Effects	<ul style="list-style-type: none"> <li>Estimate and describe potential population effects relating to the construction, operations and decommissioning phases.</li> </ul>
7.4.3 Enhancement and Mitigation	<ul style="list-style-type: none"> <li>Identify measures to avoid or mitigate potential adverse effects or to enhance positive effects.</li> </ul>
7.5 Business Opportunities	
7.5.1 Baseline Conditions	<ul style="list-style-type: none"> <li>Describe the existing business community.</li> </ul>
7.5.2 Potential Project Effects	<ul style="list-style-type: none"> <li>Estimate and describe potential business opportunities (direct and indirect) relating to the construction, operations and decommissioning phases.</li> </ul>
7.5.3 Enhancement and Mitigation	<ul style="list-style-type: none"> <li>Identify measures to avoid or mitigate potential adverse effects or to enhance positive effects.</li> </ul>
7.6 Housing	

7.6.1 Baseline Conditions	<ul style="list-style-type: none"> <li>Describe existing housing and accommodation supply where relevant to Project construction.</li> </ul>
7.6.2 Potential Project Effects	<ul style="list-style-type: none"> <li>Estimate housing needs and plans from Project construction and operation.</li> <li>Assess the potential effects of Project housing requirements on the community and the Project during construction and operation.</li> </ul>
7.6.3 Enhancement and Mitigation	<ul style="list-style-type: none"> <li>Identify measures to avoid or mitigate potential adverse effects or to enhance positive effects.</li> </ul>
7.7 Transportation and Traffic	
7.7.1 Baseline Conditions	<ul style="list-style-type: none"> <li>Describe baseline conditions for truck transportation infrastructure and truck traffic patterns/volumes at the Project plant site. (<b>NOTE:</b> The baseline conditions for truck transportation on the Dominant Truck Routes will be identified in Sections 5.10.1 and 6.7.1)</li> </ul>
7.7.2 Potential Project Effects	<ul style="list-style-type: none"> <li>Provide information on the average and peak incremental truck traffic from the Project during construction and operation. (<b>NOTE:</b> The potential effects of truck transportation on the Dominant Truck Routes will be identified in Sections 5.10.2 and 6.7.2)</li> <li>Assess the adequacy of plant site access roads in Mackenzie to handle the increased traffic from the Project.</li> <li>Assess the potential effects of traffic on the community.</li> </ul>
7.7.3 Enhancement and Mitigation	<ul style="list-style-type: none"> <li>Identify measures to avoid or mitigate potential adverse effects or to enhance positive effects.</li> </ul>
7.8 Emergency Services	
7.8.1 Baseline Conditions	<ul style="list-style-type: none"> <li>To the extent relevant to the Project, provide a brief description of existing services, such as policing and fire protection.</li> </ul>
7.8.2 Potential Project Effects	<ul style="list-style-type: none"> <li>Describe the potential effects of the project on emergency services.</li> </ul>
7.8.3 Enhancement and Mitigation	<ul style="list-style-type: none"> <li>Identify the proponent's commitments to implement emergency response plans for Project</li> <li>Identify other measures to avoid or mitigate potential adverse effects or to enhance positive effects.</li> </ul>
7.9 Public Health	
7.9.1 Baseline Conditions	<ul style="list-style-type: none"> <li>Describe the public health setting, issues, services and programs as they apply to the Project.</li> </ul>
7.9.2 Potential Project Effects	<ul style="list-style-type: none"> <li>Assess the effects of the Project on public health services and programs.</li> </ul>
7.9.3 Enhancement and Mitigation	<ul style="list-style-type: none"> <li>Identify measures to avoid or mitigate potential adverse effects or to enhance positive effects.</li> </ul>
7.10 Utility Services	
7.10.1 Baseline Conditions	<ul style="list-style-type: none"> <li>Describe the utility services available to the Project.</li> </ul>
7.10.2 Potential Project Effects	<ul style="list-style-type: none"> <li>Describe the utility requirements of the Project and the effects of these requirements on existing infrastructure.</li> </ul>
7.10.3 Enhancement and Mitigation	<ul style="list-style-type: none"> <li>Identify measures to avoid or mitigate potential adverse effects or to enhance positive effects.</li> </ul>
7.11 Summary	

## CONTENT REQUIREMENTS FOR APPLICATION DOCUMENT:

### Section 8.0 – Cumulative Environmental Effects Assessment (CEAA Requirement)

#### Preamble

*A Cumulative Effects Assessment (CEA) will be conducted for the Project.*

*The Application will describe the approach, methods and information used to identify and assess the cumulative environmental effects of the Project. Cumulative environmental effects are residual effects, after mitigation has been applied, that are likely to result from the Project in combination with the residual effects of other past, present or foreseeable projects and/or activities within the geographic scope of assessment of the Project.*

*Where it is predicted that the Project will have a residual effect on a Valued Ecosystem Component in combination with other past, present or foreseeable Projects, the residual effect will be included in the CEA. Where it is predicted that there is not likely to be a residual effect, the VEC will not require further consideration in the CEA. Assessment of cumulative effects may extend to the health and socio-economic conditions, traditional uses and heritage resources, if a biophysical effect of the Project impacts these values.*

*Methodologies used for the cumulative effects assessment will follow guidelines set out by the CEA Agency in “Addressing Cumulative Environmental Effects under the Canadian Environmental Assessment Act” (CEAA 1999).*

8.1 Methods and Scoping of Cumulative Environmental Effects <sup>3</sup>	<ul style="list-style-type: none"> <li>Describe the methods used for the CEA and provide a rationale for selection of the VECs included in the CEA.</li> <li>Provide a description of the selected Valued Ecosystem Components included in the CEA following the approach described in the Preamble.</li> </ul>
8.2 Existing and Future Projects Included in the CEA	<ul style="list-style-type: none"> <li>Review and screen Information on existing and foreseeable future projects for inclusion of their effects in combination with the effects of the Project in the CEA.</li> </ul>
8.3 Assessment of Impacts, Mitigation and Residual Effects	<ul style="list-style-type: none"> <li>Describe the combined effects of the Project and other CEA Projects for each of the VECs included in the CEA.</li> <li>Assess the Project effects for each VEC based on the predicted cumulative effects and guidelines on the impacts of these effects. The same approach will be used for this assessment as applied for direct and indirect effects. The VECs presently anticipated to be included in the CEA are air quality, noise, and wildlife, however others could be included based on the results of studies.</li> <li>Evaluate mitigation requirements and residual effects.</li> </ul>
8.4 Summary	<ul style="list-style-type: none"> <li>Provide a summary of the Cumulative Effects Assessment in the same form and content as described for direct and indirect effects.</li> </ul>

<sup>3</sup> *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 RAs are also recommended.

## CONTENT REQUIREMENTS FOR APPLICATION DOCUMENT:

### Section 9.0 - Environmental Management Program

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#### Preamble

*Environmental Management Plans (EMPs) are the documents that describe the environmental practices and procedures to be applied by the Proponent during construction, operation and, in relation to temporary facilities, decommissioning of the Project, in order to manage potential environmental and other effects. The EMPs also indicate the qualifications and training required of staff and contractors that are involved in construction and monitoring activities. Detailed EMPs will be developed for approval by relevant agencies and authorities during the permitting stage, following certification. EMP commitments and obligations will be transferable from the Proponent to contractors and other parties acting for the Proponent.*

*This section of the Application will provide a description in a preliminary level of detail of the various EMPs that may be appropriate for the Project, with the details to be finalized in discussions with the relevant permitting agencies and First Nations.*

Subsections	Coverage
9.1 Component Environmental Management Plans	<ul style="list-style-type: none"> <li>• Overview of EMPs proposed for the construction, operations and (for temporary facilities) decommissioning phases of Project.</li> <li>• Provision for the following individual or integrated EMPs in preliminary or conceptual form:               <ul style="list-style-type: none"> <li>– Surface Water Quality and Sediment Control Plan</li> <li>– Construction Waste Management Plan</li> <li>– Air Quality and Dust Control Plan</li> <li>– Water Quality/Quantity Monitoring Plan</li> <li>– Hazardous Waste Management Plan</li> <li>– Spill Prevention and Contingency Plan</li> <li>– Landscape Design and Restoration Plan</li> <li>– Archaeological Resources Monitoring Plan</li> <li>– Others, if the need is identified with regulatory agencies</li> </ul> </li> </ul>

**CONTENT REQUIREMENTS FOR APPLICATION DOCUMENT:****Section 10.0 – Summary of Commitments**

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**Preamble**

*In the Application, the Proponent will present a summary of commitments.*

<b>Subsections</b>	<b>Coverage</b>
N/A	Provide a stand-alone summary table of all significant proposed impact management measures found in the Application, organized by type of environmental or socio-economic effect.

## CONTENT REQUIREMENTS FOR APPLICATION DOCUMENT:

### Section 11.0 –Summary and Conclusions

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#### Preamble

*In the Application, the Proponent will present a clear conclusion from the Project impact assessment, cross-referencing the findings in each section of the Application.*

Subsections	Coverage
N/A	<p>Based on the assessment of impacts of the Project, determine one of the following conclusions:</p> <ol style="list-style-type: none"> <li>1. The Project is not likely to cause significant adverse environmental, socio-economic/community or other effects, taking into account the implementation of appropriate impact management measures as identified in the Application's "table of proposed commitments"; or</li> <li>2. The Project is likely to cause significant adverse environmental, socio-economic/community 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</li> <li>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 or other effects, taking into account the implementation of appropriate impact management measures as identified in the Application's "table of proposed commitments".</li> </ol>

## CONTENT REQUIREMENTS FOR APPLICATION DOCUMENT:

### Section 12.0 - List of References and Supporting Documents

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#### Preamble

*This section will itemize reference documents cited in the Application.*

Subsections	Coverage
N/A	<p>Documentation with respect to referenced consultation meetings with First Nations, government agencies, the general public and stakeholders.</p> <p>Records of meetings and discussion topics/agreements with review agencies prior to filing Application.</p> <p>A list of all enclosures (such as appendices) included with the Application.</p>