

# CEAA

## Environmental Assessment Report

### Preferred Table of Contents

#### 1. INTRODUCTION

##### 1.1 PROJECT IDENTIFICATION

*1.1.1 Applicant:*

*1.1.2 Name of Project:*

*1.1.3 Project EA Contact (name, address, phone, fax and email)*

##### 1.2 PURPOSE OF AND THE NEED FOR THE PROJECT

Provide a description of the need for the project and an outline of the benefits of the project from a social/environmental perspective. Benefits might include:

- meet social/community needs
- address environmental concerns
- meet permit requirements
- increase service reliability
- decrease structural failures
- provide an example for other communities

##### 1.3 PROJECT OVERVIEW AND SCOPE

Include a clear and concise definition of the scope and location of the proposed project.

A map showing the locations of all project components must be included. The map should be detailed enough to show significant geographic features as well as major infrastructure (i.e. roads, bridges etc.) in the vicinity.

A site address (i.e., legal lot description) must be provided, if available. Alternatively, the site location must be described in terms of adjacent landmarks.

##### 1.4 BACKGROUND

Any pertinent information that would assist in evaluating the proposed project from an environmental/social impact perspective, including:

- findings of previous studies
- public/governmental agency interest in the project
- a description of the surrounding community (i.e., is it growing?)

#### 2. THE PROPOSED PROJECT

##### 2.1 EXISTING INFRASTRUCTURE

Describe the current site conditions, including the infrastructure present on the site.

A separate drawing showing the current site layout must be included, if both the existing and proposed works cannot be accommodated on a single drawing.

## **2.2 THE PROPOSED DEVELOPMENT**

Include a detailed description of all aspects of the proposed project (construction, operation and maintenance) and provide a drawing that clearly shows all proposed project components. A scale of 1:5000 or smaller is preferred. If there are several components associated with the proposed project, each component of the physical works must be included in the project description.

### **2.2.1 Component 1**

Include a physical description of the proposed project when it is completed:

- function
- dimensions
- plan areas, footprints and heights of structures

Include construction details:

- land clearing
- demolition of existing works
- excavation or drilling
- transportation of construction material
- management of construction/demolition wastes
- use of concrete in construction

Include operational details where applicable:

- wastes generated (e.g. municipal waste through waste management companies/ sewage through the municipal system or septic field/ stormwater run-off to municipal storm sewers?)
- maintenance

Include decommissioning/demolition or closure plans if any component of the proposed project involves site works with a definite life span.

## **2.3 PROJECT DEVELOPMENT SCHEDULE**

Provide a tentative schedule for the development of the proposed project. For developments near environmentally sensitive areas, such as fish habitats, the timing of construction/maintenance activities in terms of seasonal aspects may be relevant.

## **3. DESCRIPTION OF THE ENVIRONMENT**

Include a description of the environmental setting of the proposed development. The depth of detail required will depend on the nature and magnitude of the proposed project. It would be preferable to include a recent aerial photograph of the subject site and surroundings.

### **3.1 WATER RESOURCES**

Description of surface water bodies in the vicinity of the proposed development (if any) including:

- distances from physical components of the project
- nature and seasonality of flows for ditches/creeks/rivers or surface areas
- depths for lakes and foreshore/riparian conditions, if any of the physical works proposed involve disturbance of the shoreline or adjacent areas.

Photographs of surface water bodies and shorelines adjacent to the proposed physical works must be included in cases where construction is proposed within 30 meters of any surface water bodies.

Please indicate the locations of all surface water bodies in the vicinity of the proposed development on the drawing showing the site layout.

### **3.2 FISHERIES HABITAT**

Provide a description of fisheries habitat in the vicinity of the proposed development (if applicable) including:

- distance to water body
- identification of species and information on abundance if available
- seasonal presence and habitat use (i.e., spawning, rearing habitat etc.).

### **3.3 GEOLOGY**

Include a brief description of the soil conditions of the proposed site area. This is important if the proposed project involves lagoons or infiltration ditches for storage/treatment of liquid waste, or pipelines for the transfer of liquid waste or other fluids that could potentially impact soil/groundwater quality.

### **3.4 LAND USE**

Present land use and activities on the site and on adjacent sites (i.e. industrial, commercial, residential, parkland, forested, undeveloped)

### **3.5 VEGETATION**

Include a description of the vegetative cover on and adjacent to the proposed project site. In cases where the project is limited to construction activities on lands that have been developed for similar purposes, the description can be very brief, or an indication of the fact that all proposed works would be located within lands that have been already been developed for similar purposes.

### **3.6 WILDLIFE**

Include a description of wildlife present in and adjacent to the proposed project site. As with vegetation, the depth of detail should be based on the site setting (i.e. undeveloped vs. developed lands and proximity to parklands/protected areas or forest zones).

Ensure that the recently enacted Species At Risk Act (SARA) is considered while compiling information on wildlife that may be present in and around the project area. Details and supporting documentation, as relevant, on the presence/absence of species at risk and habitat that may support such species within and adjacent to the project area should be provided, if applicable.

### 3.7 HERITAGE RESOURCES

Identify any archaeological/heritage resources, including First Nations lands, in the vicinity of the proposed development. If none are present, please indicate that.

## 4 CONSIDERATION OF POTENTIAL ENVIRONMENTAL IMPACTS AND PROPOSED PREVENTATIVE OR MITIGATIVE MEASURES

### 4.1 CONSTRUCTION

Include a description on the following aspects, as relevant.

#### 4.1.1 Excavation

Potential effects could include:

- soil erosion
- transport of silt-laden storm/groundwater off-site
- sediment transportation into adjacent surface water bodies
- impact on vegetation and wildlife

Potential mitigative measures could include:

- limit the removal of vegetation/ground cover to the minimum to reduce the potential for soil erosion
- have proper measures in place to manage storm/groundwater encountered during excavation
- if sediment transport to surface water bodies is a concern, employ specific practices for addressing potential environmental impacts associated with the siltation as outlined in Fisheries and Ocean Canada's *Land Development Guidelines for the Protection of Aquatic Habitat*.

#### 4.1.2 Construction

Potential effects could include:

- fuel/lubricant leaks from construction vehicles/equipment
- fuel/lubricant spills during equipment refuelling and servicing
- fumes from construction equipment
- dust and noise associated with construction
- uncured concrete or concrete sediment entering waterbody
- specific environmental impacts related to works in and around waterbodies
- generation of demolition waste, including potentially hazardous material like PCBs and asbestos, if the project involves removal of existing infrastructure

Potential mitigative measures could include:

- equipment should be checked routinely for leaks and kept in good repair
- no refuelling or servicing should be undertaken within 15 metres of a surface water body
- turn off machines when not in use
- keep construction time to a minimum in residential areas
- work should only be conducted during municipal bylaw hours
- employ dust control measures to minimize off-site migration of dust during construction
- store all equipment and materials in a manner that is consistent with WHMIS regulations
- ensure that all demolition debris and any associated waste that is potentially hazardous are disposed of in an appropriate manner

#### ***4.1.4 Spills and accidents***

In a typical construction project this would be associated with construction equipment and activities. Potential effects could include:

- release of a deleterious substance onto the ground surface with seepage to a waterbody

Potential mitigative measures could include:

- a spill contingency plan should be in place to address spills and accident
- a spill containment kit should be readily accessible on-site
- spills should be immediately reported to the Provincial Emergency Program
- the storage of fuel and paints should not be within 15 meters of any ditch, watercourse, ravine or storm drain

## **4.2 OPERATION**

### ***4.2.1 Routine Operation***

Include any aspect of operation that might have implications with regards to environmental quality, if applicable.

### ***4.2.2 Maintenance***

Include any aspect of regular maintenance or necessary upkeep of the facility that might have an impact on the environment, if applicable.

### ***4.2.3 Waste Management***

Include details on the management of all solid, liquid and gaseous waste generated by the proposed development.

## **4.3 ENVIRONMENTAL EFFECTS OF ACCIDENTS AND MALFUNCTIONS**

Identify the potential effects of accidents and malfunctions that may occur during the operation of the proposed development, including fluid leaks or spills, and measures proposed to minimize those effects.

## **4.4 RESIDUAL ENVIRONMENTAL EFFECTS**

Identify those environmental effects, if any, that cannot be addressed through mitigative measures.

## **4.5 CUMULATIVE ENVIRONMENTAL EFFECTS**

Include a consideration of any cumulative environmental effects that are likely to result from the proposed project in combination with other projects or activities that have been or will be carried out in the region within the foreseeable future. The cumulative effects assessment should consider the adverse residual effects of the proposed development on the environment and assess how those effects may interact with effects resulting from other developments in the region.

## **4.6 DECOMMISSIONING**

Include a discussion on long-term plans for the proposed project, the potential effects of closure/decommissioning activities, if applicable, and methods proposed for mitigating these effects.

## 5. SOCIO-ECONOMIC CONSIDERATIONS

Discuss the potential effects (both positive and negative) of the proposed project on the socio-economic structure of the region. This could include (as applicable):

- Job creation;
- Recreation & tourism impacts;
- Right-of-way issues; and
- Human health concerns.

## 6. PUBLIC/GOVERNMENT DEPARTMENT CONSULTATION

Describe any consultation regarding the proposed project with the general public, special interest groups and government agencies/departments. If no public consultation has been undertaken, please state that and provide some rationale for that (i.e. relatively limited project scope, no significant socio-economic impacts, discussed in council etc.).

## 7. FIRST NATIONS CONSULTATION

Describe any consultation with First Nations communities in the area regarding the proposed project. (We suggest that you contact any First Nations that may have an interest in this project and/or are in the area where the project is located).

This section should consider '*the current use of lands and resources for traditional purpose by aboriginal persons*' as specified under the Canadian Environmental Assessment Act (the Act), Section 2(1) and Section 16(1)(a) of the Act.

Please ensure that adequate consultation with First Nations communities is undertaken and demonstrate that the project will not have any significant adverse impact on the current traditional use of land and resources in the area, either directly or indirectly.

## 8. CONCLUSIONS

## 9. REFERENCES

### LIST OF FIGURES

- Figure 1:** Project Area/Site Location  
**Figure 2:** Site Layout– Existing Infrastructure, Proposed Works and Significant Environmental Features.

### LIST OF PHOTOGRAPHS