

1.0 INTRODUCTION

1.1 THE PROJECT

Keltic Petrochemicals Inc. (Keltic) proposes to construct and operate a Petrochemical and Liquefied Natural Gas (LNG) Facility in Goldboro, Nova Scotia (the Project). The Project components include a liquefied natural gas regasification facility, a petrochemical complex, a marginal wharf, a marine LNG terminal, LNG storage and an electric co-generation facility. The Project will be located adjacent to the existing Sable Island natural gas plant and the Maritimes and Northeast Pipeline (M&NP) in the Goldboro Industrial Park. The processing facilities in Goldboro will require approximately 300 hectares (ha) of land zoned for industrial use.

The marine terminal will allow the delivery of LNG and export of product. The co-generation plant will be fuelled by spent LNG with any remaining spent LNG injected into the existing M&NP pipeline in Goldboro. A freshwater supply system is required for the Project. This includes the construction of a reservoir at Meadow Lake, a wastewater collection and treatment system as well as other site infrastructure and maintenance facilities.

The petrochemical complex will convert liquids extracted from the Sable Offshore Energy Project (SOEP) at Goldboro combined with the liquids extracted from imported LNG to produce ethylene and propylene in order to manufacture polyethylene and polypropylene pellets. These pellets will be used to manufacture plastic products elsewhere in Canada and the United States of America (USA). The Project location and basic layout are shown in Figures 1.1-1A and 1.1-1B.

The purpose of the Project is to increase petrochemical production in North America. This will help to meet rising demand for polyethylene and polypropylene pellets and provide additional sources of natural gas to the Canadian and Northeastern USA markets in an effort to meet the growing demands for natural gas.

The Project will require an investment of approximately \$5 billion which will be raised through private-sector investors.

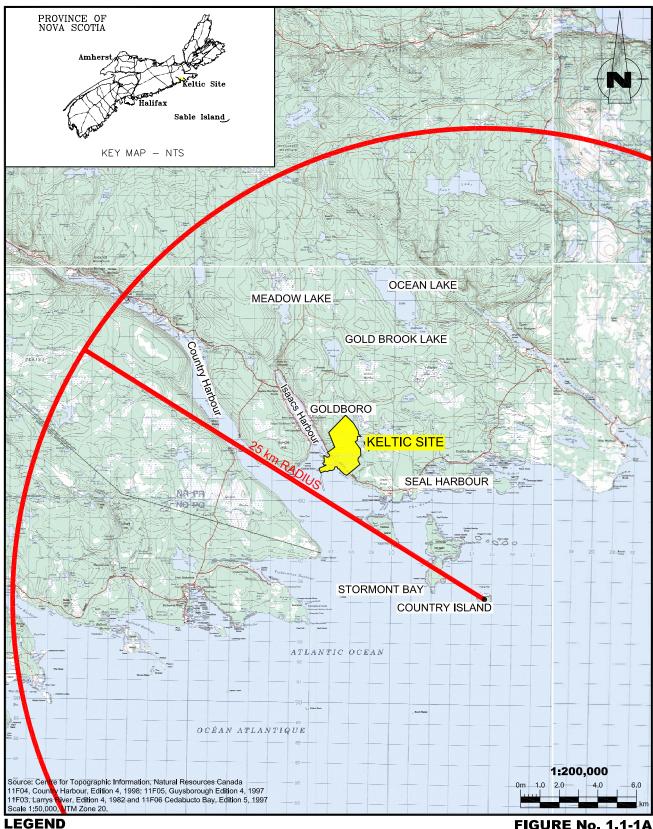
The Keltic Project is located in proximity to the Sable Offshore Energy Inc. (SOEI) gas plant and M&NP metering station, which are situated in the northeast of the Industrial Park. The M&NP also runs along the north boundary of the Industrial Park.

1.2 THE ENVIRONMENTAL ASSESSMENT REPORT

The environmental assessment (EA) Report has been compiled in accordance with the Nova Scotia Environmental Assessment Regulations, the Project Terms of Reference (TOR), and Scoping Document (Appendix 1).



FIGURE 1.1-1A Project Location and Regional Setting

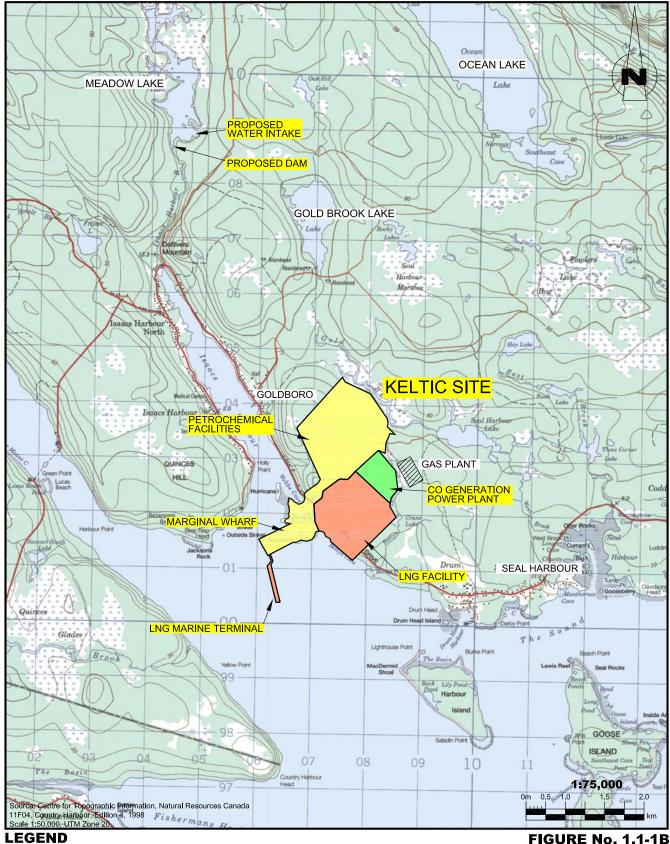


Project Location

FIGURE No. 1.1-1A KELTIC PETROCHEMICALS INC. **PROJECT LOCATION AND** REGIONAL SETTING JULY 2006



FIGURE 1.1-1B Project Location and Basic Layout



Petrochemical
Co-Generation Power Plant
LNG Facility

FIGURE No. 1.1-1B
KELTIC PETROCHEMICALS INC.
PROJECT LOCATION AND
BASIC LAYOUT
JULY 2006



The EA Report has been coordinated by AMEC Earth & Environmental, a Division of AMEC Americas Limited (AMEC), with input from the technical specialists listed below.

- 4Gas;
- Atlantic Road & Traffic Management;
- CEF Consultants Limited;
- Davis Archaeological Consultants Ltd;
- D. Besner & Associates Inc;
- Dillon Consulting;
- Duncan Cameron;
- earth-water Concepts inc;
- Jozsa Management and Economics;
- MacDonnell Group;
- McInnes Cooper;
- Membertou Geomatics;
- Royal Haskoning, Netherlands;
- Shaw Environmental;
- Stone & Webster (S&W);
- Straight Engineering; and
- Tarandus Associates Limited.

1.2.1 Purpose of the EA Report

The purpose of this document in the context of Part IV of the *Nova Scotia Environment Act* and Environmental Assessment Regulations is to describe the effects of the Project on the environment whether positive or negative, on:

- air, water, and land;
- the layers of the atmosphere;
- organic and inorganic matter and living organisms;
- interacting systems that include components described above;
- socio-economic conditions, environmental health, physical and cultural heritage sites and related structures; and
- any change to the undertaking that may be caused by the environment.

The EA also identifies and proposes measures to mitigate these effects and predict the significance of the remaining residual environmental effects.



1.2.2 Bounds of the EA

Identification of the temporal and spatial (geographic) boundaries of the Study Area is an important aspect of the EA. This task establishes a frame of reference for assessing the environmental effects of the Project. In principle, Project boundaries encompass the entire area where the effects may be detectable, and the time period for which those effects are expected to last. Project boundaries must be defined to allow consideration of interactions that may occur at distances beyond the defined corridor boundaries, or over the long term. The temporal extent of the Project impact may cover the Project life.

The spatial bounds of this EA are indicated in Figures 1.1-1A and 1.1-1B, and the temporal bounds include the entire Project life. Spatial and temporal bounds for the EA are further discussed in Section 7.0.

1.2.3 Scope of the EA

The provincial Terms of Reference and federal Scoping Document for this EA are provided in Appendix 1 of this report.

1.2.4 Report Organization

The EA Report is organized to follow the requirements of the Nova Scotia Environmental Assessment Regulations, the Project Terms of Reference and Scoping Document (Appendix 1), and includes the following information:

- Executive Summary;
- Section 1 an introduction to the Project and organization of the EA document;
- Section 2 a description of the proposed undertaking;
- Section 3 a description of the legislation, permits, licenses and by- laws applicable to the proposed undertaking;
- Section 4 the reason for the undertaking;
- Section 5 a description of alternatives to the undertaking:
- Section 6 other methods of carrying out the undertaking;
- Section 7 a description of the methodology, boundaries and prediction/evaluation strategies used to complete the EA Report;
- Section 8 a description of the environment that might reasonably be affected by the undertaking;
- Section 9 the environmental effects of the undertaking;
- Section 10 measures that may be taken to prevent, mitigate or remedy negative environmental effects and maximize the positive environmental effects on the environment;



- Section 11 a discussion of adverse effects or significant environmental effects which cannot or will not be avoided or mitigated through the application of environmental control technology;
- Section 12 an evaluation of advantages and disadvantages to the environment of the undertaking;
- Section 13 a program to monitor environmental effects produced by the undertaking during its construction, operation, and abandonment stages;
- Section 14 a program of public information to explain the undertaking; and
- Section 15 summary and conclusions of the EA Report.