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Montréal, le 2 juillet 2004 NEB / ONE

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331431

**Objet : Projet Rabaska, implantation d'un terminal méthanier : Déclenchement de la Loi canadienne sur l'évaluation environnementale (LCEE)**

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Monsieur,

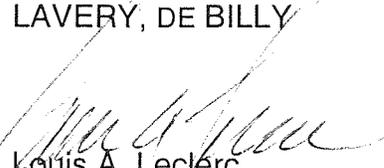
Tel que convenu, veuillez trouver ci-joint un exemplaire de la version anglaise du document que nous vous avons expédié mercredi de cette semaine en réponse à votre lettre du 15 juin dernier, ainsi qu'à celle de l'Office national de l'énergie portant la date du 17 mai 2004.

Un exemplaire de ce document est également expédié par courriel et par la poste à chacune des personnes mentionnées ci-dessous.

Veuillez agréer, Monsieur, l'expression de nos sentiments les meilleurs.

LAL/ls

LAVERY, DE BILLY

  
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Mme Louise Alarie, Transports Canada  
M. Michel Demers, Transports Canada – LPEN  
M. Claude Brassard, Pêches et Océans – Habitat du poisson  
M. Louis Breton, Environnement Canada  
Mme Marie-France Therrien, Agence canadienne d'évaluation  
environnementale  
M. Pierre Michon, Direction des évaluations environnementales – MENV  
M. Carey Johannesson, Directeur, Permis et Acquisitions



# **PROJECT RABASKA**

## **Implementation of an LNG Terminal**

### **Project Description**

**June 2004**



**ENBRIDGE**



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## **SCHEDULE I LIST OF STAKEHOLDERS CONSULTED**

## **SCHEDULE II SUMMARY OF PRELIMINARY COMMENTS AND ISSUES RAISED BY STAKEHOLDERS CONSULTED**

## 1.0 General Information

### 1.1 Introduction

Gaz Métro Limited Partnership (“Gaz Métro”), Gaz de France and Enbridge Inc. (“Enbridge”) jointly are sponsoring the development of the Rabaska Project aimed at constructing an LNG terminal in the Ville Guay/Beaumont area, located at the limits of the City of Lévis and of the Municipality of Beaumont.

Gaz Métro is the largest gas distributor in Québec, serving more than 150,000 customers in almost all of the regions of the province. Its annual deliveries of 200 BCF are made through a distribution system consisting of more than 9,000 kilometres of pipe. Gaz Métro relies on the experience of its 1,200 employees who have more than 35 years of experience in the operation of its LNG facilities located in the East end of Montréal.

Enbridge is one of the largest energy transmission companies in North America and operates the longest petroleum transportation pipeline system in the world. It owns and operates the largest gas distribution company in Canada. Its system is comprised of more than 40,000 kilometres of pipe that transports more than 2 million barrels of petroleum products and more than 10 billion cubic feet of gas per day. It has participated in the development of several crude oil terminals in North America and elsewhere and operates 11 crude oil terminals in addition to three petroleum storage terminals.

Gaz de France, one of the world leaders in its field, has been involved in the development and operation of LNG technologies for more than 40 years. It has acquired over that period of time state of the art technical expertise in the design, construction and operation of LNG terminals and tankers. Active in every sector of the LNG industry, Gaz de France currently charters six tankers, three of which are owned by it and three more have been ordered. It also operates two LNG terminals in France and is in the process of developing a third.

The combined resources of these three companies will allow the project to have access to considerable experience for the design, development and operation of the terminal and the pipeline.

The principal components of the project, which are more fully described in section 2 below, include a terminal comprised of two storage tanks, a marine jetty to receive the LNG tankers and a pipeline of approximately 50 kilometers to connect the terminal to the existing facilities of TQM pipeline in St. Nicolas.

### 1.2 Contact

The contact person for the environmental approvals component of the Rabaska Project is:

Mr. Carey Johannesson, Director, Permits and Lands  
Address : 1717, rue du Havre, Montréal (QC) H2K 2X0  
Telephone : (514) 598-3745  
Facsimile : (514) 598-3725  
eMail: carey.johannesson@enbridge.com

### 1.3 Federal Involvement

The Rabaska Project will not require funding from the federal government, but will require the approval of a number of federal authorities, including the National Energy Board (the “Board”), Fisheries and Oceans Canada and Transport Canada.

The land required for the project is privately held and the project sponsors are unaware of any federal land which may be affected by the project.

### 1.4 Authorizations Required

The environmental assessment processes to which the Rabaska Project is subjected are those flowing from the *Canadian Environmental Assessment Act*, the *Environment Quality Act* of Québec and the requirements of the Board under section 52 of the *National Energy Board Act*.

The sponsors intend to submit the project to the Termpol assessment process administered by Transport Canada which primarily deals with the issues of marine operations, design and safety in navigation.

The sponsors believe the federal permits and authorizations which will be necessary for the implementation of their project are:

- a certificate of public convenience and necessity delivered pursuant to Part III of the *National Energy Board Act*, R.S.C., 1985, c. N-7 (the “*NEB Act*”);
- approval by the governor in council pursuant to Part III of the *NEB Act*;
- deliverance of an import licence pursuant to Part VI of the *NEB Act*;
- approval by the minister of Fisheries and Oceans pursuant to paragraph 35(2) of the *Fisheries Act*, R.S.C., 1985, c. F-14;
- approval by the minister of Transport pursuant to paragraph 5(1) of the *Navigable Waters Protection Act*, R.S.C., 1985, c. N-22.

Certain other federal permits may become necessary depending on the results of the inventories (fauna and flora) conducted within the context of the impact study. Authorizations under the Québec *Environmental Quality Act* will also need to be obtained and the project may involve changes to municipal zoning. Approval of the Commission de protection du territoire agricole du Québec will be required for the terminal sites currently under review and for a large portion of the right of way of the pipeline.

## 1.5 Public Consultation Program

The sponsors are committed to working with local municipalities and citizens through the project application process to design a project that will be acceptable to the public. The project sponsors have initiated their public consultation program (the “Program”) to involve landowners, members of the public and other stakeholders in planning for the project. Over the coming months, project representatives will continue to meet with local groups and individuals to discuss the project concept, identify concerns and issues and develop responses to identified concerns. Project representatives will also be working to identify ways in which the project may be able to contribute positively to surrounding communities. The Program has been designed to address public involvement around the LNG terminal, jetty and the pipeline that will interconnect with the TQM pipeline system.

In general, the Program has been designed in accordance with the guidelines described in Chapters 3 and 4 of the new *Filing Manual* recently issued by the Board.

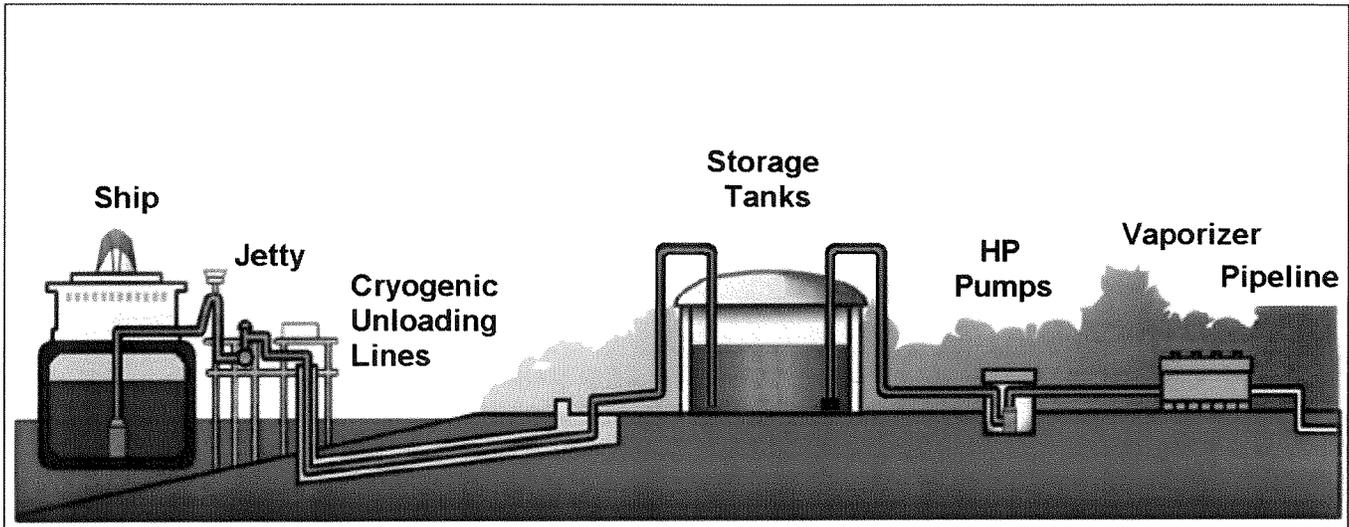
The objectives of the Rabaska Program are:

- to inform, build and maintain an in-depth dialogue with affected landowners, affected interested individuals and groups, community leaders, stakeholders and the general public of the Rabaska project, its characteristics and its development phases;
- to identify all possible impacts of the project on the community and discuss them in length in order to enhance positive impacts and mitigate negative impacts;
- to obtain and include the concerns of affected landowners and all involved stakeholders in the environmental studies conducted for the Rabaska Project;
- to document the issues raised throughout the public involvement program; how they were considered, addressed and incorporated into the project planning.

Schedule I contains a list of the stakeholders which were consulted to date and Schedule II provides a summary of the preliminary questions and issues raised by these stakeholders.

## 2.0 Project Information

Figure 1



### 2.1 Project Components/Structures

A conceptual drawing of an LNG terminal and examples of representative facilities are shown in figures 1 to 4. Detailed engineering will determine the exact details and configuration of the Rabaska Project and this project information will be presented to all stakeholders, including regulatory authorities, as soon as it becomes available. In general, the Rabaska Project will include the following components:

Figure 2

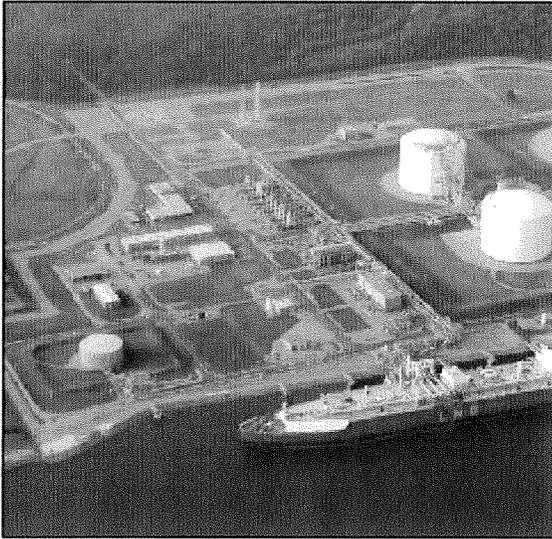


Figure 3



- A natural gas supply from the Atlantic basin taken from various places such as Algeria, Nigeria, Norway and Egypt;
- The gas supply will be delivered to the project on an annual basis by means of 60 LNG tanker deliveries. The LNG tankers used for these deliveries will have a maximum capacity of 160,000 m<sup>3</sup> and may involve one or the other of the two types of tankers currently in use (“spherical” or “membrane” reservoirs), each tanker requiring approximately 19 days for the round trip;
- Marine facilities comprised of a jetty designed to accommodate LNG tankers ranging between 138,000 m<sup>3</sup> and 160,000 m<sup>3</sup> in capacity together with all relating unloading facilities;
- Cryogenic lines to move the LNG from the jetty to the terminal;

Figure 4



- A terminal capable of delivering 500 MMcf per day of vaporised gas consisting of two storage reservoirs, the walls and roof of which will be made of concrete, pumping, compression and vaporising facilities to withdraw the liquefied gas from the reservoirs and inject it in a gaseous state into the pipeline, maintenance, control and administration buildings, a water treatment plant, a metering station together with all related facilities including gas fractioning installations and a railway spur required to connect the terminal to the railway operated by CN;

- A pipeline of approximately 50 kilometres between the Ville Guay/Beaumont zone and the existing facilities of TQM pipeline in St. Nicolas, Québec, including a metering station, cathodic protection and shutoff valves.

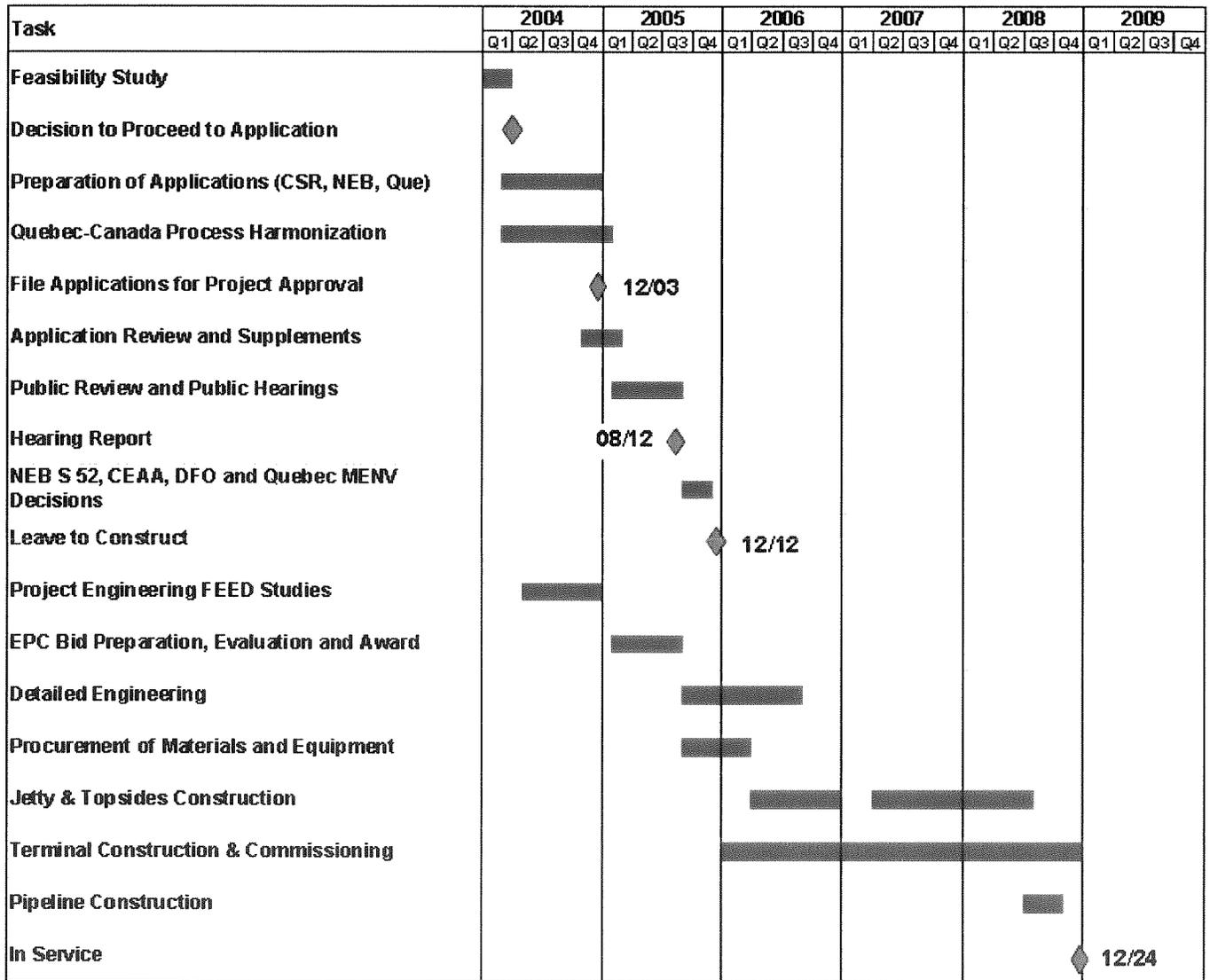
## 2.2 Project Activities

To achieve an In-Service Date by late 2008, the project sponsors require project approvals by the end of 2005. Project development for each of the three primary components will occur as follows:

- Site preparation and construction of the LNG terminal will require three years. Construction of the full containment LNG storage tanks will be the lengthiest activity, spanning all three years. Construction of the other facilities and infrastructure will be scheduled to enable completion to coincide with completion and commissioning of the LNG storage tanks;
- Site preparation and construction of the jetty will take approximately two years, with marine construction activities generally occurring outside of the winter season;
- Site preparation and construction of the interconnection pipeline is scheduled to occur over the summer of 2008, with completion coinciding with completion of the terminal.

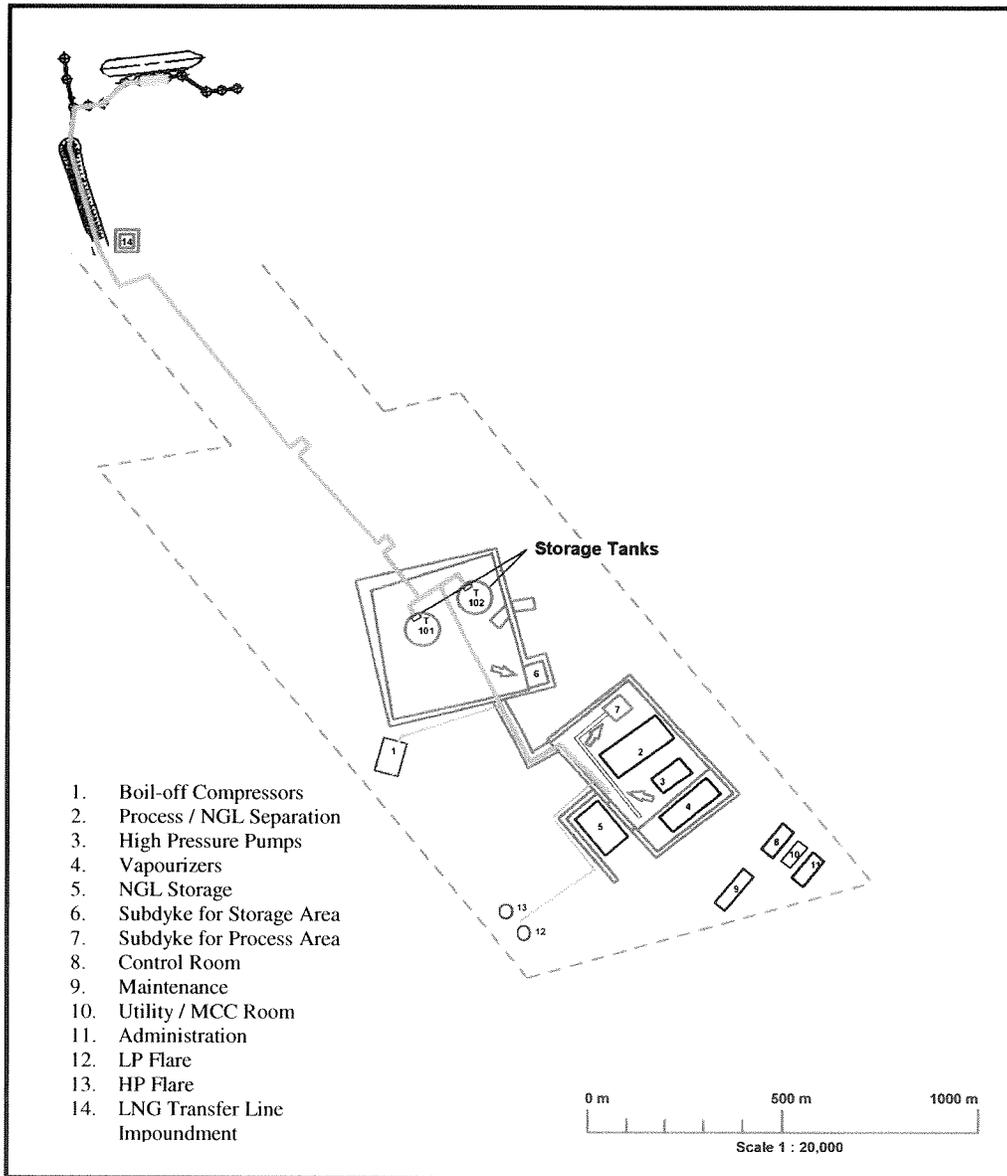
The following project schedule outlines the key project development activities and their timing and duration:

Figure 5



A conceptual site plan illustrating the relative sizes and locations for the various facilities that are expected to be required at the LNG terminal and jetty is shown in figure 6. A project specific site plan will be provided to all stakeholders once engineering studies have optimized the facility locations for the precise project site.

Figure 6



### 2.3 Resource/Material Requirements

Development of the Rabaska LNG terminal will require civil engineering activities to prepare the site for construction; acquisition, handling and storage of materials required for construction of the storage tanks (concrete, aggregate, steel); acquisition, transportation and storage of building, building materials and equipment required for the vaporizers, compressors, buildings and ancillary equipment of the terminal.

Construction of the jetty will require marine construction activities during installation of the jetty foundation, and once the jetty is constructed, the offloading facilities and pipelines will be constructed. In general, the marine construction activities would be completed outside of the winter season, while topsides construction activities could be constructed throughout the year.

The operation of the terminal will involve the docking of LNG tankers at the jetty and the unloading of the LNG into the storage tanks through the cryogenic unloading lines. On an ongoing basis, LNG will be withdrawn from storage, routed to the vapourizers where it will be heated and converted to natural gas, compressed to transmission pipeline pressures and transported to the point of interconnection with the TQM pipeline.

In general, the materials required for the project will be the steel, aggregate, water and cement as construction materials. Volumes and sources for acquisition of these materials will be identified during the preliminary engineering process occurring over the next two years. Excavation requirements for the terminal and jetty will be determined once a final site for the project is selected. Transportation of these materials will be examined as part of the studies being conducted for the Rabaska Project and a discussion of this topic will be included within the environmental assessment.

## **2.4 Waste Disposal**

Due to the nature of the conversion process of LNG into natural gas, the sponsors do not expect that the generation and disposal of waste materials will be an issue. The project will however produce Natural Gas Liquids, the transportation, handling and storage of which will be dealt with in the environmental assessment.

## **3.0 Project Site Information**

### **3.1 Project Location**

Based on preliminary engineering studies and the site evaluations which were conducted by the project sponsors over a distance of more than 250 kilometres along the St. Lawrence River down stream of Québec City, the zone comprised of the western portion of the City of Beaumont and the eastern portion of the City of Lévis turned out to be the most advantageous for the implementation of the project. The sponsors are therefore concentrating their efforts in that zone and have identified a number of potential sites in the general area adjacent to the Hydro-Québec transmission line. Additional studies are being conducted at each of these potential sites. The sponsor's ultimate choice will be based on the environmental and engineering studies which will be carried out in the course of the following months as well as on the public consultations currently underway. The project will also involve the construction of a pipeline between the terminal and the existing facilities of TQM pipeline in St. Nicolas. Although a preliminary corridor has already been identified, the ultimate location of this pipeline will also depend on environmental and engineering studies and the public consultations currently being conducted.

The general area of the sites considered by the sponsors, the proposed corridor for the construction of the pipeline and the specific locations being examined in greater detail are shown in figures 7 to 9. These figures show approximate and conceptual locations for the pipeline and terminal. The exact locations for these facilities will be determined through detailed engineering, environmental and public consultation programs which have been initiated.

Figure 7

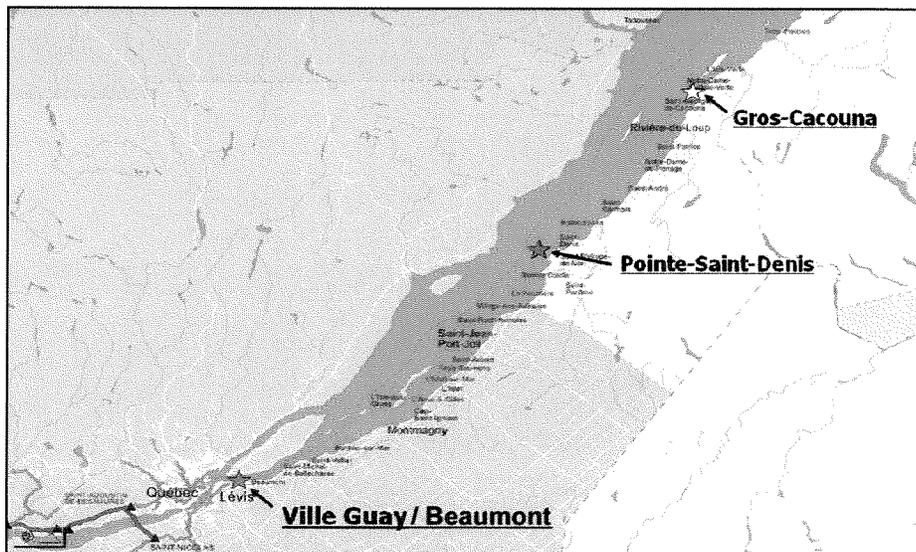


Figure 8

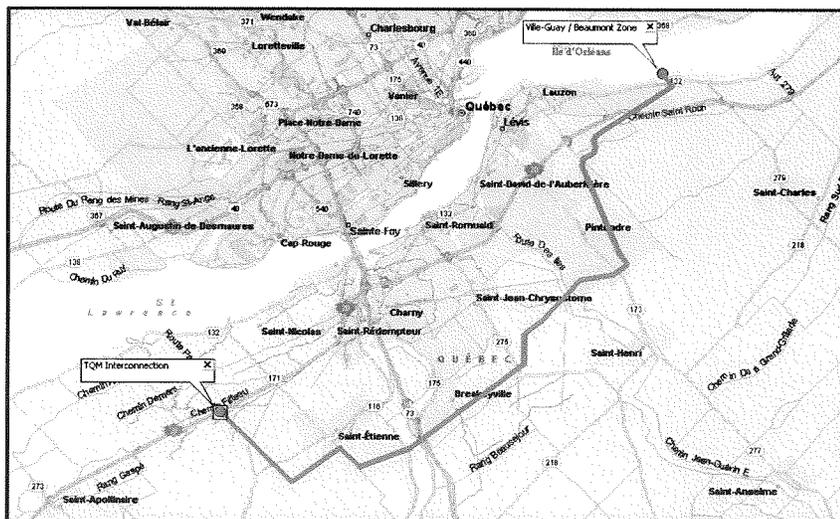
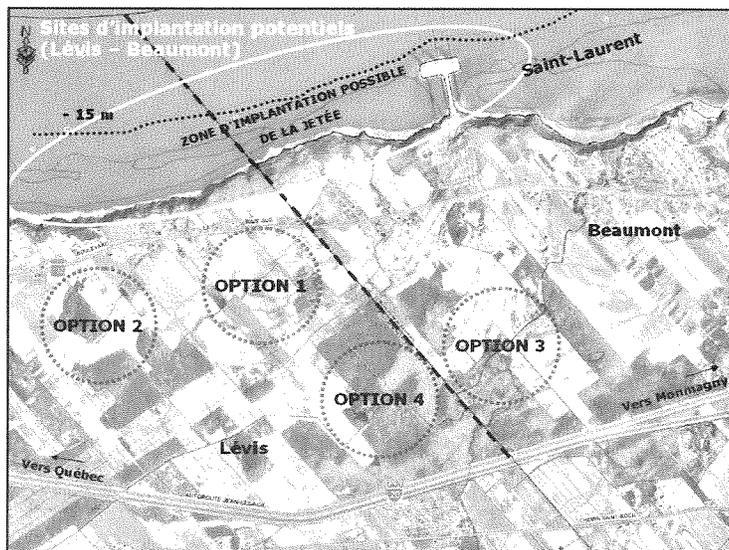


Figure 9



### **3.2 Environmental Features**

Situated close to the metropolitan region of Québec, the proposed development zone for the Rabaska Project is rural in nature, predominated by agricultural and recreational / tourism activities.

As part of the environmental assessment for the Rabaska Project, the project sponsors will be undertaking studies to characterize the different environmental features found within the study area.

The north limit of the study area is represented mainly by the St. Lawrence River while the east limit is located approximately one kilometer from the urban cores of Beaumont and Saint-Charles-de-Bellechasse.

The west limit is located more or less three kilometers from the existing facilities of TQM pipeline along the south side of autoroute 20 while the south limit of the study area is located in the vicinity of the municipalities of Saint-Lambert-de-Lévis, Saint-Henri and Saint-Charles-de-Bellechasse.

On a regional level, the study area consists of the major part of the City of Lévis with its three precincts (Desjardins, Chutes-de-la-Chaudière East and West), the northwest part of the MRC of Bellechasse and, to a lesser extent, the northern part of the territory of the MRC de la Nouvelle-Beauce.

In terms of zoning, the permanent agricultural zone occupies the major part of the territory whereas the non agricultural zone is located mainly in the northern part of the City of Lévis. Soils are covered mainly by forest of variable quality while the cultivated agricultural soils are located mostly in the southern sectors of the study area.

There are wetlands in the study area. These wetlands are however mostly concentrated in the area located between the Desjardins precinct of the City of Lévis and the township of Saint-Charles-de-Bellechasse.

The project sponsors identified a variable width corridor inside of which the preferred route for the pipeline would be selected. This corridor is located primarily outside of the non agricultural zone and therefore, outside of the important urban cores where the density of the population is the highest.

A preliminary compilation indicates that the route of the pipeline would cross three major rivers (Beaurivage, Chaudière and Etchemin), depending upon the chosen route, 30 to 40 minor watercourses (agricultural or forest), autoroutes 20 and 73, a secondary road network (approximately 15 roads) and approximately four railroad tracks. Finally, the overall pipeline route would be located equally in wooded and cultivated areas.

The project sponsors intend to study in detail the various environmental features of the project in order to identify and assess the impacts of the project, propose mitigation measures and assess, if any, the residual impacts of the project after the implementation of the mitigation measures. The main environmental features are:

- the physical environment (topography, geology, drainage, seismic activity, contaminated lands, etc.);
- the biologic environment (fauna and aquatic and terrestrial flora);
- the human environment (land use, use of the soil, agriculture, forestry, archeology, development, recreational-tourism activities, etc.);
- the technological risks;
- the emergency measures;
- the socioeconomic aspects.

Based on the initial inventories, the main environmental potential concerns for the project may include:

For the terminal facility site:

- The visual impact of facilities in a landscape highly valued by the local and regional populations;
- The risks to the public safety associated with the nature of facilities;
- The noise and other nuisances at the time of the construction and operation of facilities;
- The potential impacts on human activities will include an increase in the employment level and fiscal revenues in the area resulting from the construction and operation of the terminal, an increase in the local traffic and an impact on local infrastructures and services resulting from increased usage and possible population changes;

For the jetty:

- Possible dredging and disposal of dredge materials in water with associated sediments with the inherent consequences on fish habitat;
- Quality of the dredge material sediments;
- Loss of fish habitat at the time of the development of the jetty and the potential impact on valued fish because of the presence of vulnerable or threatened species or because they are the subject of commercial fishing;
- The destruction of sheltering aquatic vegetation, valued plant which are vulnerable or threatened as well as the loss of food habitat that will result in impacts upon valued fish;
- The topography to steep slopes which would complicate the planning of facilities and may require the deforestation of a sufficient access to the works generating a deterioration of the landscape.

For the storage facilities, fractionation and vapourization of the LNG:

- The deforestation and the site leveling work that will destroy wooded areas and potentially impact fauna habitat (birds, terrestrial or aquatic).

### **3.3 Land Use**

As indicated in section 3.2, the current land use for the Rabaska Project in the study area is primarily rural, secondary residences, agricultural and recreational-tourism activities. In general, residences are located primarily along those areas closest to the St. Lawrence River while areas further from the river are used for agriculture.

Taking into consideration current and past uses, the sponsors are unaware of any industrial use in the area and therefore expect that the probability of soil contamination due to previous industrial uses is minimal.

No First Nations reserves or traditional land use sites are known to be located in the area, however, further investigations will be completed to verify and confirm this information. In addition, no designated environmental or historic sites are known to be located within the study area, however further investigations will be undertaken to determine this.

## **4.0 Additional Requirements Related to Fish, Fish Habitat and Navigable Waters**

### **4.1 Environmental Features**

As indicated in section 3.2, the Rabaska Project is expected to affect several streams and rivers, primarily as a result of construction of the pipeline and jetty. Further investigations will be required to determine the nature of these impacts and to design mitigation programs to minimize impacts during construction of these facilities.

### **4.2 Use of Waterway**

The project sponsors have initiated meetings and discussions with Transport Canada, the Canadian Coast Guard, the St. Lawrence Pilots Association and the Port of Québec to determine the potential impacts upon vessel traffic on the St. Lawrence River and to design operating procedures, navigation facilities and jetty facilities to minimize and mitigate potential impacts.

The project sponsors intend to locate the jetty, and especially the jetty head in accordance with the results of the Termpol process, and we anticipate that the location will be in an area of the St. Lawrence where the depth is sufficient (about 15 m) to limit dredging to the immediate vicinity of the jetty and to accommodate the LNG at berth. The quantities of dredged material cannot be given until the exact location is determined in accordance with the Termpol process. However, the project sponsors do not anticipate the access channel will need to be dredged because the LNG tanker draft is less than the draft of oil tankers which currently use the channel. The sponsors also anticipate that no dredging of the turning circle will be needed for the same reason. Concerning the use of dynamite, it is not possible to determine whether blasting using dynamite will be required or what methods of excavation may be needed until the exact site is selected for the jetty, the jetty design is completed and the subsoils at the site are characterized.

**SCHEDULE I  
LIST OF STAKEHOLDERS CONSULTED**

Association des chefs de sécurité incendie du Québec  
Association des pilotes du Bas-Saint-Laurent  
Authorities and stakeholders of Gros-Cacouna  
Bureau du Premier ministre du Québec  
Conservative candidate in Charlevoix-Montmagny  
Conservative candidate in Lévis-Bellechasse  
Federal Liberal candidate in Montmagny-L'Islet-Kamouraska-Rivière-du-Loup  
CEGEP Lévis-Lauzon  
Chambre de commerce de Québec  
M.N.A. for Bellechasse  
M.N.A. for Montmagny-L'Islet  
CLD of the MRC of Bellechasse  
Comité aviseur de Beaumont  
Termpol Committee  
Comité ZIP Québec/Chaudière-Appalaches  
Commission de la Capitale nationale  
Communauté métropolitaine de Québec  
Conseil régional de l'environnement de Chaudière-Appalaches (CRECA)  
Conseil régional de l'environnement de la Capitale nationale  
Lévis municipal councilors  
Corporation économique Lévis-Chaudière-Appalaches (CELCA)  
CRE-Bas-Saint-Laurent  
Federal opposition critic on natural resources issues  
M.N.A. for de Rivière-du-Loup  
M.P. for Kamouraska-Rivière-du-Loup, Témiscouata-Les Basques  
M.P. for Lévis-Bellechasse  
Les amis de la Vallée du Saint-Laurent  
Ministère de la Sécurité publique  
Ministère des Ressources naturelles, de la Faune et des Parcs  
Ministère du Développement économique et régional  
Ministère de l'Emploi, de la Solidarité sociale et de la Famille  
MRC of Bellechasse  
MRC of Chaudière-Appalaches  
MRC Île-d'Orléans  
Municipality of Beaumont  
Pôle Québec Chaudière-Appalaches  
Port of Québec  
Société de développement économique de Lévis  
Union des producteurs agricoles  
City of Lévis  
ZIP Québec  
ZIP Sud de l'Estuaire

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**SCHEDULE II  
SUMMARY OF PRELIMINARY COMMENTS  
AND ISSUES RAISED BY STAKEHOLDERS CONSULTED**

Access to the St. Lawrence  
Acquisition process  
Cold industry opportunities  
Emergency response plan  
Employment opportunities during construction and operation  
Environmental impact  
Exclusion zone  
Expropriation  
Financial impact  
Greenhouse gases  
Impacts of the fauna  
Impacts on agricultural activity  
Impacts on navigation  
Impacts on the demand for local services, particularly fire extension services  
Impacts on the market value of lands  
Impacts on tourism and recreational activities  
Natural gas service  
Noise  
Picturesque character of the area  
Project life span and long-term supplies  
Public consultation  
Public safety  
Quality of life  
Reduction of municipal taxation burden  
Risks of accidents  
Ship building  
Visual impacts  
Zoning