

EB-2008-0002

**IN THE MATTER** OF the *Ontario Energy Board Act, 1998,* S.O. 1998, c.15, Schedule B; and in particular sections 36.1(1), 38(1), 40(1), 90(1), thereof;

AND IN THE MATTER OF an application by Market Hub Partners Management Inc. and AltaGas Ltd. for an Order designating the area known as the Sarnia Airport Gas Storage Pool, in the Geographic City of Sarnia in the County of Lambton, as a gas storage area;

AND IN THE MATTER OF an application by Market Hub Partners Management Inc. and AltaGas Ltd. for authority to inject gas into, store gas in and remove gas from the areas designated as the Sarnia Airport Gas Storage Pool, and to enter into and upon the lands in the said areas and use the said lands for such purposes;

AND IN THE MATTER OF an application by Market Hub Partners Management Inc. and AltaGas Ltd. to the Ministry of Natural Resources for licenses to drill wells in the said areas;

**AND IN THE MATTER OF** an application by Market Hub Partners Management Inc. and AltaGas Ltd. for an Order granting leave to construct natural gas pipelines in the City of Sarnia in the County of Lambton.

**BEFORE**: Paul Vlahos

**Presiding Member** 

Paul Sommerville

Member

Cathy Spoel Member

**DECISION WITH REASONS** 

July 28, 2008

#### **EXECUTIVE SUMMARY**

This Decision with Reasons (EB-2008-0002), issued on July 28, 2008, contains Ontario Energy Board approvals required for designation and operation of Sarnia Airport Gas Storage Pool in the City of Sarnia, County of Lambton, Ontario. The joint application by Market Hub Partners Management Inc. and AltaGas Ltd., to develop the Sarnia Airport Gas Storage pool was filed with the Ontario Energy Board on December 28, 2007. The applicants requested and are hereby granted the following approvals with certain conditions attached:

- An Order designating a gas storage area pursuant to section 36.1(1) of the Ontario Energy Board Act; 1998. S.O. 1998, c.15, Schedule B ("OEB Act");
- Authority to inject gas into, store gas in, and remove gas from the Sarnia Airport Pool, pursuant to subsection 38(1) of the OEB Act;
- A favourable report of the Board under subsection 40(1) of the OEB Act to the Minister of Natural Resources to whom the Applicants have applied for licences to drill three (3) injection/withdrawal (I/W) wells and to re-enter and complete one (1) existing well within the proposed Sarnia Airport Pool;
- Leave to construct transmission and gathering pipelines within the proposed Sarnia Airport Pool, pursuant to subsection 90(1) of the Act.

The Sarnia Airport Pool project is intended to develop and operate approximately 149,000 10<sup>3</sup>m<sup>3</sup> (5.26 Bcf) of natural gas working storage. The planned in-service date is April 2009.

# **TABLE OF CONTENTS**

1.	INTRODUCTI	ON	1	
1.1 1.2 1.3	PROPOSED PROJECTION THE APPLICANTS	PROCEEDING	3 4	
1.4	REGULATORY FRA	MEWORK - GAS STORAGE DEVELOPMENT AND OPERATION	5	
2.	DESIGNATION OF GAS STORAGE POOL			
2.1	EVIDENCE		6	
3.	. AUTHORIZATION TO INJECT, STORE AND WITHDRAW			
3.1 3.2		PPROVAL		
4.	APPLICATIO	N FOR WELL DRILLING LICENCES	18	
5.	LEAVE TO C	ONSTRUCT PIPELINES	20	
5.1 5.2		PPROVAL		
6.	,	RESEMPTION FROM REQUIREMENT FOR RANSFER AUTHORIZATION UNDER BOARD		
	ORDERS		24	
7.	COST AWAR	DS	25	
		PLETE LIST OF PARTIES		
		OF THE PROPOSED PROJECT		
	NDIX D - ORD	ER DESIGNATING GAS STORAGE AREA ER AUTHORIZING INJECTION, WITHDRAWAL AND OVAL OF GAS		
		RD REPORT TO MNR- WELL DRILLING LICENCES /F TO CONSTRUCT ORDER		

# 1. Introduction

## 1.1 Application and Proceeding

On December 28, 2007, Market Hub Partners Management Inc. ("MHP Management") and AltaGas Ltd. ("AltaGas"), (collectively the "Applicants") filed applications with the Ontario Energy Board (the "Board") under sections 36.1(1), 38(1), 40(1) and 90(1) of the Ontario Energy Board Act, 1998, S.O. 1998, c.15, Schedule B (the "Act") that would, if granted, allow the Applicants to develop the Sarnia Airport Gas Storage Pool in the geographic area of the City of Sarnia, County of Lambton, Ontario ("Sarnia Airport Pool Project").

The Board considered evidence which supported the Applicants' request for the following specific approvals related to the Sarnia Airport Pool Project:

- An Order designating a gas storage area known as the Sarnia Airport Gas Storage Pool (the "Sarnia Airport Pool") pursuant to section 36.1(1) of the Act;
- Authority to inject gas into, store gas in, and remove gas from the Sarnia Airport Pool, pursuant to subsection 38(1) of the Act;
- A favourable report of the Board under subsection 40(1) of the Act to the Minister of Natural Resources to whom the Applicants have applied for licences to drill three (3) injection/withdrawal (I/W) wells and to re-enter and complete one (1) existing well within the proposed Sarnia Airport Pool;
- Leave to construct transmission and gathering pipelines within the proposed Sarnia Airport Pool, pursuant to subsection 90(1) of the Act.

The Notice of Application was issued on February 14, 2008. The Applicants served and published the Notice of Application as directed by the Board.

The registered intervenors in the proceeding are:

- Mr. Ellis Manning Jr. and Mr. Robert L. Williams, each of whom hold certain royalty interests in production and natural gas leases within the proposed storage area;
- Mr. Brett King on behalf of his business, SS Greenhouses, located adjacent to the proposed transmission pipeline;
- Ms. Anna Muscedere, a landowner adjacent to the proposed transmission line;
- Mr. Peter Bernardi and Ms. Adreina Bernardi, landowners adjacent to but outside of the proposed storage area boundary.

The registered observers in the proceeding are:

- Sun-Canadian Pipe Line;
- Ms. Luisa Restivo; and
- Mr. Tom Rocca and Loretta Rocca.

A complete list of participants in the proceeding may be found in Appendix A.

The Board received written comments from:

- Ms. and Mrs. Tavares
- Mr. Roger Thurston and
- Ms. E. Sossi.

The comments form part of the record of the proceeding and have been reviewed by the Board.

In a letter dated March 19, 2008, the Applicants requested a written hearing. Mr. Manning, Mr. Williams and Mr. and Ms. Bernardi expressed preference for a written hearing while Ms. Muscedere did not state her preference regarding the type of the hearing. Mr. King, in his letter dated February 28, 2008, asked to make an oral presentation, but it was unclear as to whether that request constituted a request for an oral hearing per se. The Board decided to proceed by way of a written hearing. Mr. King, as a registered intervenor had an opportunity to provide written interrogatories and submissions. However, Mr. King did not file any interrogatories or submissions during the proceeding.

The Board issued a Procedural Order on April 4, 2008 and set the schedule for the proceeding.

Written interrogatories with respect to the Applicants' pre-filed evidence were filed by Board Staff and Ms. Muscedere by April 21, 2008. The Applicants filed responses to the interrogatories on May 5, 2008. The Applicants filed their argument-in-chief on May 14, 2008.

On May 16, 2008, Board Staff filed proposed draft conditions of approval with all the parties and the Applicants. On May 23, 2008, the Applicants filed comments with respect to Board Staff's proposed conditions of approval. No other party filed any comments or submissions on the proposed conditions or any other issue. On May 28, 2008 the Applicants filed a reply argument waiver thereby completing the record of this proceeding.

Based on the evidence and discussion summarized below, the Board approves the Applicants' requests, with certain conditions, on the basis that they are in the public interest.

### 1.2 Proposed Project

The Sarnia Airport Pool project is intended to develop and operate approximately 149,000 10<sup>3</sup>m<sup>3</sup> (5.26 Bcf) of natural gas working storage space in the Sarnia Airport Pool Designated Storage Area ("DSA"). Proposed facilities include the drilling of three new I/W wells, re-entering and completing one existing well, and the construction of approximately 18 kilometres of NPS 12 natural gas pipeline, along with associated surface facilities.

The Applicants plan to have the facilities in-service between April and June 2009, in order to inject the required cushion gas and fully utilize the working capacity in the first year of operation. Well drilling is scheduled to begin as early as September 2008 and can start no later than January 2009 in order to achieve the in-service target. Transmission pipeline construction is proposed to start in January 2009 and end in March 2009. Construction of the storage gathering pipelines, as well as any portion of the transmission pipeline that is not constructed in January through March 2009, is proposed to commence in April 2009, as soon as soil conditions allow.

A map showing the boundaries of the proposed DSA, the location of the proposed I/W wells and the routes of the proposed transmission and gathering pipelines and access roads is attached in Appendix B to this Decision.

# 1.3 The Applicants

The application has been filed by MHP Management and AltaGas on behalf of the yet to be formed Sarnia Airport Storage Pool Limited Partnership ("SASP LP"). SASP LP will be a limited partnership of MHP Management and AltaGas, formed to develop, construct, own, operate, market and maintain the Sarnia Airport Pool. To date, the formal partnership documents for SASP LP have not been executed.

The general partner of SASP LP will be Sarnia Airport Storage Pool Management Inc. ("SASP Management"), a corporation which will be owned 50% by MHP Management and 50% by AltaGas.

The limited partners of SASP LP will be Market Hub Partners Canada LP ("MHP Canada") and AltaGas Operating Partnership ("AOP"). Each limited partner will have a 49.995% limited partner interest in SASP LP while SASP Management will hold the residual 0.01% general partner interest. Development of the Sarnia Airport Pool will be funded by the limited partners of SASP LP.

MHP Management, or its affiliate, will carry on business with respect to the development and construction of the Sarnia Airport Pool Project and operation and maintenance of the Sarnia Airport Pool.

### Market Hub Partners

MHP Management and MHP Canada are indirect, wholly-owned subsidiaries of Spectra Energy Corporation ("Spectra Energy"), which is owned by Duke Energy Corporation based in Houston, Texas. Spectra Energy operates approximately 28,000 kilometres (17,000 miles) of gas transmission pipeline and approximately 265 Bcf of working gas storage in North America. Spectra Energy, through Westcoast Energy Inc. and its predecessor companies, is an experienced operator of assets that are at issue in this proceeding.

MHP Management also owns and operates the St. Clair Gas Storage Pool which brought 1.1 Bcf of natural gas storage service to the Ontario market in June 2007.

#### AltaGas

AOP, the other limited partner of SASP LP is part of AltaGas Income Trust, an unincorporated open-ended investment trust created in 2004, which indirectly holds all of the assets, liabilities and businesses formerly owned by AltaGas Services Inc.

AltaGas Services Inc. was amalgamated to form AltaGas Ltd. and conveyed its assets to AOP in exchange for a partnership interest in AOP.

#### Regulatory Framework - Gas Storage Development and 1.4 Operation

In this proceeding the Board exercises its authority under sections 36.1(1), 38(1), 40(1), 90(1) of the Act to designate a gas storage area, to issue authorization to operate the DSA, to issue a report to the Minister of Natural Resources on an application for storage well drilling licences and to grant leave to construct hydrocarbon pipelines.

The Ministry of Natural Resources ("MNR") has authority under the Oil, Salt and Gas Resources Act, R.S.O. 1990, Chapter P.12 ("OSGRA") with respect to the safety, technical and operational aspects of wells within DSAs.

The MNR is responsible for the technical and safety aspects of storage pool development and operation in accordance with the requirements of CSA Z341 "Storage of Hydrocarbons in Underground Formations" ("CSA Z341") and the Gas and Salt Resources of Ontario, Provincial Operating Standards, Version 2.0 (the "Provincial Standards"). CSA Z341 and the Provincial Standards provide a comprehensive framework for monitoring storage operations in Ontario. Section 10 of the *Provincial* Standards adopts the CSA Standard Z34. 1. 1.

The MNR is responsible for ensuring that the Provincial Standards, including those related to the operation of wells, well plugging, and the reporting and monitoring of various stages of storage operations, are implemented by storage operators.

CSA Standard Z341-98 Storage of Hydrocarbons in Underground Formations."

<sup>1</sup> Section 10 of the Provincial Standards states, "Facilities for storage of hydrocarbons in underground formations shall be designed, constructed, operated, maintained and abandoned in accordance with

# 2. Designation of Gas Storage Pool

The *Act* provides the Board with the following mandate with respect to the designation of a gas storage area:

- 36.1 (1) The Board may by order,
- (a) designate an area as a gas storage area for the purposes of this Act;or
- (b) amend or revoke a designation made under clause (a).

### 2.1 Evidence

The Board's review of a storage pool designation application typically covers two main questions:

- Is the underlying geological formation appropriate for storage operations?
- Is the tract of land to be designated appropriately sized to provide for safe operation of the storage pool?

The Board also considers possible effects of designation on directly affected landowners and whether the prospective storage developer has the necessary leases and agreements.

### Is the underlying geological formation appropriate for storage operations?

The Sarnia Airport Pool is a partly dolomitized pinnacle reef of the Guelph-Lockport Group located within the Middle Silurian Pinnacle Reef Belt on the southeastern rim of Michigan Basin. The geometry and internal characteristics of the Sarnia Airport Pool and adjacent formations was interpreted from the data for the six existing wells within or in proximity to the reservoir and the 3D and 2D seismic interpretation.

The A2 Salt, A1 Carbonate and A1 Anhydrite Units provide the lateral seal and the A2 Anhydrite, A2 Shale and A2 Carbonate Units drape over the reservoir providing an effective caprock seal 9 metres to 12.3 metres thick.

Reservoir integrity has been established from the results of the threshold pressure testing of the caprock cores, micro-fracture test results in the A2 Anhydrite, well control, 3D seismic analysis, production decline analysis, shut-in pressure data, and analysis of the discovery pressure and hydrostatic gradients. These results demonstrate that the geologic structure is a sealed container and that pressure containment exceeds the proposed maximum operating pressure. The working gas capacity of the reservoir is estimated to be 149,000 10<sup>3</sup>m<sup>3</sup> (5.26 Bcf).

A good porosity is found throughout the dolomitized portion of the reef. Results from Airport No.1 Sarnia 8-33, FLH logs, indicate that the target zone near the base of the well has excellent porosity in the range of 15% to 25%.

### Is the proposed DSA appropriately sized?

The proposed DSA for the Sarnia Airport Pool comprises of 317 hectares (784 acres) surface area.

A DSA is established to protect a storage reservoir from future third party drilling and other subsurface activities. A DSA represents a reasonable balance between the protection of the storage reservoir from other subsurface activities and the retention of as much land as possible for future oil and gas exploration and drilling.

Drilling results, well data and the 3D seismic interpretation were used to estimate the maximum probable extent of reef associated A1 Carbonate porosity. The boundary of the proposed DSA incorporates entire MNR drilling tracts to protect the DSA from third party drilling and other subsurface activities, while at the same time retaining as much land as possible for future oil and gas exploration and drilling.

As set out in the "Record of Technical Data Reviewed for a Proposed Designated Gas Storage Area" (Schedule 5-19), MNR staff is in agreement with the proposed boundary.

### Leases and Agreements and Landowner Matters

With one exception, the Applicants or their affiliates hold all Petroleum and Natural Gas ("P&NG") Leases within the production unit area and hold P&NG Leases for all properties within the proposed Sarnia Airport Pool DSA. The sole exception is the property owned by Ms. Frances Tavares. The Applicants, or their affiliates, also hold the Gas Storage Leases for all properties within the DSA, with the exception of the property owned by Ms. Frances Tavares and the City of Sarnia road allowances. The

Applicants plan to continue their efforts to secure these leases and to offer to Ms. Frances Tavares and the City of Sarnia the same compensation as to other property and mineral right owners in the Sarnia Airport Pool DSA.

The Applicants will offer a one-time payment for royalties on the remaining recoverable volume of gas reserves ("residual gas") to a reservoir pressure of 50 psia to all parties with a participating interest in the gas, including parties with overriding royalty interests in the P&NG Leases. The remaining gas-in-place will then be used as cushion gas for the storage operations. The proposed residual gas payment for each interest owner will be calculated as set out in the Gas Storage Leases. The Voluntary Unit Operating Agreements, as amended, describe the allocation of these payments to the individual interest owners within the production unit area.

An annual gas storage compensation package will be offered for P&NG Leases and Gas Storage Leases, wells, access roads and outside acreage. These annual payments will be competitive with other compensation programs currently offered by the other established storage operators in Ontario. If the Applicants do not obtain all outstanding Gas Storage Lease rights prior to designation, offers of compensation would be provided to those property and mineral interest owners on the same terms as other property and mineral right owners within the Sarnia Airport Pool DSA.

# 3. Authorization to Inject, Store and Withdraw Gas

Pursuant to section 38(1) of the Act, the Board may issue an order for authorization to inject gas into, store gas in and remove gas from a DSA. Section 38(1) of the Act reads:

38. (1) The Board by order may authorize a person to inject gas into, store gas in and remove gas from a designated gas storage area, and to enter into and upon the land in the area and use the land for that purpose.

### 3.1 Evidence

An order under section 38(1) of the Act effectively authorizes a prospective storage operator to operate the designated storage pool. This order is an authorization that will allow the Applicants to operate the storage pool once the pool is designated. The order also requires that necessary facilities such as storage wells, gathering pipelines and transmission pipelines are approved, licensed and constructed as appropriate.

When dealing with such applications the Board typically considers the following questions:

- Are appropriate safety requirements for proposed injection/withdrawal activities going to be ensured?
- Will all relevant codes and standards be followed?
- Have the proposed storage wells been appropriately designed and are construction and maintenance plans in order?
- Is the proposed maximum operating pressure safe and prudent?
- What are the potential impacts of injection/withdrawal activities?
- Are the proposed mitigation programs appropriate?
- Is the applicant a capable prospective storage operator in terms of technical and financial capabilities to develop and operate the proposed storage facilities?

 Is the applicant appropriately accountable for losses or damages occasioned by its activities?

# Are appropriate safety requirements for proposed injection/withdrawal activities going to be ensured? Will all relevant codes and standards be followed?

According to the evidence, SASP LP will be the operator of the Sarnia Airport Pool facilities under the OGSRA. The operations and maintenance services will be subcontracted to Union Gas, an experienced Ontario storage operator.

The integrity of the reservoir and safe operation of the Sarnia Airport Pool will be ensured by compliance with all applicable laws, regulations and operating standards, including the OGSRA and its regulations, the Provincial Operating Standards, Standard CAN/CSA Z341.1-06, the *Occupational Health and Safety Act*, and Ontario Regulation 210/01 for Gas Pipeline Systems as well as with the Emergency Response Plan and Operations and Maintenance Procedures.

### What are the Potential Impacts of Injection and Withdrawal Activities?

The assessment of the potential impacts of the proposed storage operation on neighbouring activities to satisfy Standard CAN/CSA Z341.1-06 (Schedule 5-20) is provided in the pre-filed evidence. The assessment concludes that: a) there is minimal risk regarding the potential migration of natural gas between the Sarnia Airport Pool and any known existing or abandoned wells within one kilometer; b) similarly, there is no risk regarding the potential migration of natural gas between the Sarnia Airport Pool and subsurface operations within a five kilometer radius; and c) all of the existing wells penetrating the storage zone, which will be used for storage pool operations, will be assessed and upgraded as necessary to ensure that the requirements of Standard CAN/CSA Z341.1-06 are met.

The assessment concludes that the Sarnia Airport Pool reservoir is a sealed container. The A2 Salt, A1 Carbonate and A1 Anhydrite Units provide the lateral seal and the A2 Anhydrite, A2 Shale and A2 Carbonate Units drape over the reservoir providing an effective caprock seal.

### Is the proposed maximum operating pressure safe and prudent?

The results of micro-fracture testing, completed on well Airport No. 1, Sarnia 8-32-FLH, indicate that the maximum operating pressure may be up to 13,165 kPa. The Applicants noted that this pressure significantly exceeds the planned maximum operating pressure of 10,685 kPaa. The Applicants concluded that the proposed maximum operating pressure satisfied the requirements of Clause 7.6.2 of Standard CAN/CSA Z341.1-06.

# Have the proposed storage wells been appropriately designed and are construction and maintenance plans in order?

A Reservoir Monitoring Program has been developed for the Sarnia Airport Pool (Schedule 7-1). The evidence demonstrated that all wells and facilities will be designed, constructed, operated, maintained and abandoned in accordance with the OGSRA, its regulations and the Provincial Operating Standards.

### Are the Proposed Mitigation Programs Appropriate?

The Environmental Report ("ER") for the Sarnia Airport Pool, prepared by Stantec Consulting Ltd. in August 2005, was updated in April 2008. The ER describes route selection and evaluation for the proposed transmission pipeline and identifies potential environmental and socio-economic impacts of pipelines and wells constructing and operating. The ER concludes that the location of the transmission pipeline minimizes the potential for environmental effects and that the proposed mitigation will ensure that the construction and operation of the Sarnia Airport Pool facilities will result in minimal impact to the natural and socio-economic environment and negligible long-term effects.

The Applicants are committed to implement the mitigation recommended in the ER and prescribed in the permit approvals and licences. In addition, site-specific mitigation measures will be developed in consultation with individual property owners. The Spectra Energy Construction Specifications, which include standard environmental mitigation measures, will be followed.

# Is the applicant appropriately accountable for losses or damages occasioned by its activities?

The Applicants indicated that MHP Canada, as a subsidiary of WEI, will have access to WEI's sources of financing, which include operating lines of credit in excess of \$600

million with commercial banks and non-convertible debt securities or preferred shares, up to an aggregate initial offering price of \$500 million. To date, MHP Canada has financed operations internally and expects that it will continue to do so with respect to its Sarnia Airport Pool obligations. AltaGas Income Trust, including AltaGas Ltd. and AltaGas Operating Partnership, has cash flow and access to numerous sources of financing, which will be available for the development of the Sarnia Airport Pool. AltaGas Income Trust has investment grade credit ratings with DBRS Limited and Standard & Poor's.

The Applicants retained an independent party with expertise in adequacy of insurance coverage for environmental and other risks related to potential impacts of gas storage operations in southwestern Ontario to prepare an Insurance Study. The Applicants submitted that the scope of the Insurance Study will reflect the terms of the conditions of approval. According to the evidence, the Insurance Study was to be completed by July 2008. The Applicants stated its intention to acquire insurance in the types and amounts recommended in the Insurance Study and to maintain that insurance in full force and effect, which will include, but not be limited to, liability and pollution coverage.

## 3.2 Conditions of Approval

In its submissions, Board Staff proposed a set of conditions to be attached to the Board's order if the approval to operate the Sarnia Airport pool is granted. These conditions are standard conditions for this type of approval and address main areas that the Board takes into account when approving applications of this kind. The conditions address the following:

- Requirements that the Applicants adhere to its evidence and comply with applicable laws including OSGRA, regulations and codes, specifically CSA Z341 regarding:
  - Subsurface assessment of neighbouring activities;
  - Operations and Maintenance Procedures ("O&M Procedures");
  - Emergency Response Plan ("ERP");
  - Schedule of pressuring the storage pool;
  - Protection of integrity of the reservoir and safety by complying to the
     Provincial Operating Standards; and
  - Maximum allowed operating pressure as per CSA Z341.

- Impacts and the mitigation of the impacts of construction, operation and maintenance of the pool on quality and supply of potable water.
- Adequate environmental insurance coverage in effect prior to construction commencement.
- Authority granted by the order to the Applicants is not transferable without approval of the Board.
- Designating Board's representative for the purpose of the conditions to be Manager, Facilities.

### **Proposed Condition 1.1.1**

Board Staff's proposed draft condition 1.1.1 reads as follows:

- 1.1.1 Prior to commencement of any injection, storage or withdrawal operations, MHP and AltaGas shall conduct and file with the Board, Ministry of Natural Resources and any party or intervenor to these proceedings, a thorough evaluation of all subsurface activities and their potential impact on the integrity of storage facility as required by Section 7.2 of the CSA Z341.1-06, including assessment of:
  - a) existing or abandoned wells within 1km of the subsurface perimeter of the storage zone, including activities within those wells, such as fracture treatments;
  - b) existing operations within 5km radius of the proposed storage scheme, including operation, and minimum and maximum operating pressures;
  - c) for any existing well bore penetrating the storage zone, the integrity of the well, including casing inspections, cement inspections, and hydraulic isolation of the storage zone from any overlying porous zones provided that, should such evaluation identify any risk and / or specify necessary remedial work, MHP and AltaGas agree to implement, complete, and maintain such works prior to commencement of any injection, storage, or withdrawal;
  - d) MHP and AltaGas shall file the Subsurface Assessment consistent with Section 7.2 of the CSA standard Z341.1-06 prior to the commencement of operation of the pool.

The Applicants submitted that the proposed conditions 1.1.1 (a), (b), (c) and (d) have been satisfied, as demonstrated by information and reports in the pre-filed evidence.

The Applicants noted that proposed Conditions 1.1.1 (a), (b) and (c) are entirely based on Section 7.2 of CSA Z341.1-06. In addition, proposed Condition 1.1.1 (c) also requires the Applicants to agree to implement, complete and maintain any work associated with any risk and/or necessary remedial work identified or specified in the evaluation prior to commencement of any injection, storage, or withdrawal.

The Applicants also noted that the information, in accordance with the requirements of Section 7.2 of CSA Z341.1-06, is contained in the Assessment of Neighbouring Activities – Sarnia Airport Pool Development which was filed with the MNR in October 2007 which satisfies requirements of the proposed Condition 1.1.1 (d).

Regarding Proposed Condition 1.1.1 (a), the Applicants submitted that existing and abandoned wells within one (1) kilometer of the storage zone have been appropriately evaluated and determined to have no impact on the integrity of the proposed Sarnia Airport Pool storage facility and that Proposed Condition 1.1.1 (a) has been satisfied.

Regarding Proposed Condition 1.1.1 (b), the Applicants submitted that subsurface operations within 5 kilometers of the storage zone have been appropriately evaluated and that Proposed Condition 1.1.1 (b) has been satisfied.

Regarding Proposed Condition 1.1.1 (c), the Applicants submitted that wells that penetrate the storage zone have been adequately assessed and that the specific portion of Proposed Condition 1.1.1 (c) related to the Section 7.2 Assessment has been satisfied.

The Board finds that the pre-filed evidence satisfies the requirements of the proposed conditions 1.1.1.

### Proposed Conditions 1.1.2, 1.1.3 and 1.1.4

Board Staff's proposed draft conditions 1.1.2, 1.1.3, and 1.1.4 read as follows:

1.1.2 Prior to commencement of any injection, storage or withdrawal operations, MHP and AltaGas shall complete and file with the Board and the Ministry of Natural Resources the following plans and procedures as required by CSA Z341-06:

- 1.1.2.1 Operations and Maintenance Procedures (s 10.1.1)
- 1.1.2.2 Emergency Response Plan (s. 10.1.2)

and thereafter comply with any and all on-going obligations as required in respect of such procedures and plans pursuant to CSA Z341.1-06 or any successor version thereto.

- 1.1.3 MHP and AltaGas shall implement and comply with the schedule for pressuring of the designated storage area facility (delta pressuring) as set out in the pre-filed evidence.
- 1.1.4 MHP and AltaGas shall comply with the Proposed Reservoir Monitoring Program for Sarnia Airport Storage Pool submitted as a Schedule 7-1 in the pre-filed evidence.

The Applicants argued that Board Staff's proposed condition 1.1.2 is not necessary. The Applicants explained that operations and maintenance services for the Sarnia Airport Pool will be subcontracted to Union Gas, which will include responsibility for providing O&M Procedures and an ERP to satisfy the requirements of CSA Z341.1-06. Aecon Utility Engineering ("AUE"), on behalf of Market Hub Partners Canada LP, conducted a due diligence review of Union's O&M Procedures and ERP in May/June 2007 and in February/April 2008. The due diligence reviews by AUE concluded that both O&M and ERP comply with CSA Z341.1-06.

The Applicants also proposed that conditions 1.1.3 and 1.1.4 be eliminated because the schedule for delta pressuring (Proposed Condition 1.1.3) and the Proposed Reservoir Monitoring Program (Proposed Condition 1.1.4) are set out in the pre-filed evidence.

The Applicants requested that the Board eliminate proposed conditions 1.1.1 to 1.1.4 and instead proposed a condition 1.1 to read as follows:

Market Hub Partners Management Inc. and AltaGas Ltd. ("MHP and AltaGas") shall adhere to the evidence filed with the Board in the EB-2008-0002 proceeding. MHP and AltaGas, on behalf of SASP LP, shall comply with all applicable laws, regulations and codes to the satisfaction of the responsible agency pertaining to the construction, operation and maintenance of the proposed project and should evaluations conducted in accordance with those applicable laws, regulations and codes identify any risk and/or specify necessary remedial work, shall implement, complete and maintain such works prior to commencement of any injections.

The Board accepts the Applicants' submissions and finds that proposed conditions 1.1.1, 1.1.2, 1.1.3 and 1.1.4 are not necessary and be replaced with the condition 1.1 as proposed by the Applicants.

### **Proposed Condition 1.6**

Board Staff's proposed condition 1.6 reads as follows:

1.6 MHP and AltaGas on behalf of SASP LP shall not operate the Sarnia Airport Storage Pool above a maximum allowed operating pressure representing a pressure gradient of 15.8 kPa/m of depth to the top of the reservoir. MHP and AltaGas on behalf of SASP LP shall operate the Sarnia Airport Storage Pool at a pressure not greater than the discovery pressure of 4,014 kPaa until the conditions of section 7.6.2. of CSA Z341.1-06 are satisfied and leave of the Board is obtained.

The Applicants noted that the requirements of Section 7.6.2 of CSA Z341.1-06 have already been satisfied as shown in the pre-filed evidence. The Applicants further suggested that the reference to the Section 7.6.2 be omitted from the text of the Proposed Condition 1.6.

The Applicants noted that the pre-filed evidence shows that the threshold pressure core testing of two samples completed in accordance with Section 5.2 of CSA Z341.1-06 demonstrate that natural gas could not penetrate the caprock at pressures in excess of 18,000 kPa. This threshold pressure is significantly greater than the proposed maximum operating pressure of 10,685 kPaa. The proposed maximum operating pressure is less than 60% of the measured threshold pressure.

According to the Applicants, this is further supported by results of micro-fracture testing conducted to measure the ability of the caprock to withstand fracturing. Based on these results, the maximum operating pressure would be 13,165 kPaa. This pressure is significantly greater than the proposed maximum operating pressure of 10,685 kPaa.

The Applicants requested that the Board revise Proposed Condition 1.6 to read as follows:

MHP and AltaGas, on behalf of SASP LP, shall not operate the Sarnia Airport Storage Pool above a maximum allowed operating pressure representing a pressure gradient of 15.8 kPa/m of depth to the top of the reservoir and shall not operate the Sarnia Airport Storage Pool at a pressure greater than the discovery pressure of 4,014 kPaa until leave of the Board is obtained.

The Board agrees with the Applicants' submissions and adopts the language as

proposed by the Applicants.

### **Proposed Condition 1.8**

Board Staff's proposed condition 1.8 reads as follows:

1.8. Should MHP and AltaGas on behalf of SASP LP fail to commence injection before June 30, 2009, MHP and AltaGas on behalf of SASP LP shall be required to apply to the Board for an extension of the authority granted under the Board's Order and will be required to submit evidence to show why such an extension shall be granted.

The Applicants suggested that the June 30, 2009 be extended to June 1, 2010 on the grounds that it would be consistent with timing granted in a similar Condition of Approval to the Authorization to Inject, Store and Remove Gas for the St. Clair Pool (EB-2006-0164). The Applicant submitted that application for extension of the authority granted under the Board's Order should only be required in the event that injections have not commenced within one year of the proposed in-service date which is planned to start no later than June 1, 2009.

The Board finds the Applicants' request reasonable and adopts the June 1, 2010 date as a deadline for commencement of injection without a requirement for an extension by the Board.

# 4. Application for Well Drilling Licences

Under section 40 of the Act, upon referral by Minister of Natural Resources of an application to drill a well in a designated storage area, the Board shall issue a report to the Minister regarding approval of the application. The report of the Board is binding on the Minister and, if it is a favorable report recommending that the application be granted, then the licence will be issued. Section 40 of the Act states:

- 40. (1) The Minister of Natural Resources shall refer to the Board every application for the granting of a licence relating to a well in a designated gas storage area, and the Board shall report to the Minister of Natural Resources on it.
  - (2) The Board may hold a hearing before reporting to the Minister if the applicant does not have authority to store gas in the area or, in the Board's opinion, the special circumstances of the case require a hearing.
  - (3) The Board shall send to each of the parties a copy of its report to the Minister made under subsection (1) within 10 days after submitting it to the Minister and such report shall be deemed to be an order of the Board within the meaning of section 34.
  - (4) The Minister of Natural Resources shall grant or refuse to grant the licence in accordance with the report.

The MNR's authority regarding well licences is set in the OSGRA as follows:

10. (1) No person shall drill, operate, deepen, alter or enter a well, or engage in any other activity on or in a well, except in accordance with a licence.

The OSGRA definition of "well" includes production wells, storage wells and other wells.

Under Ontario Regulation 245/97 "Exploration, Drilling and Production" of the OSGRA, the requirements for the well licences are specified in more detail.

Typically, the Board's review of an application for a well license includes the geological evidence related to the well location and proposed drilling program, the technical capability of an applicant to conduct the drilling in accordance with applicable standards and codes, and environmental and landowner related matters.

The Report to the Minister of Natural Resources, attached as Appendix D to this Decision, describes in more detail the evidence and submissions and provides reasons for the favorable Decision.

# 5. Leave to Construct Pipelines

### 5.1 Evidence

None of the registered intervenors provided evidence or submissions specifically related to leave to construct application in the Sarnia Airport Storage Project proceeding. Board Staff proposed draft conditions for the leave to construct order.

In considering Leave to Construct applications, the Board typically reviews:

- the need for the facilities;
- the appropriateness of design specifications;
- environmental and construction matters; and
- landowner related matters.

#### Need for the Facilities

The pipelines will provide means of transporting natural gas from the Sarnia Airport Pool to the market and vice versa. The proposed facilities have been designed to allow full utilization of the working capacity of the Sarnia Airport Pool on an annual basis.

### **Design Specifications**

The storage gathering and transmission pipelines, and associated facilities, have been designed for a maximum operating pressure of 12,065 kPag in accordance with Ontario Regulation 210/01 for Gas Pipeline Systems.

#### **Environmental and Construction Matters**

The routing of the proposed pipeline has been conducted in accordance with "OEB Environmental Guidelines for Locating, Constructing and Operating Hydrocarbon Pipelines in Ontario (May 2003)" ("OEB Guidelines").

Stantec Consulting Ltd. completed an Environmental Report ("ER") for the Sarnia Airport Pool in August 2005. The ER was updated in April 2008. The ER is completed in accordance with the OEB Guidelines and describes the process used to identify and evaluate route alternatives for the proposed transmission pipeline, identifies potential environmental and socio-economic impacts of constructing and operating a pipeline along a "preferred route", and further identifies potential environmental and socio-economic impacts of constructing and operating the proposed storage gathering pipeline system and well facilities. The ER concludes that the location of the transmission pipeline minimizes the potential for environmental effects and that the proposed environmental and socio-economic mitigation measures, in conjunction with standard construction and well drilling programs, will ensure that the construction and operation of the Sarnia Airport Pool facilities will result in minimal impact to the natural and socio-economic environment and negligible long-term effects.

Regarding the construction and operation of the pipelines, the Applicants will follow Spectra's Energy Transmission construction specifications (Schedule 6-11). The Applicants are committed to implement the mitigation measures proposed in the Stantec in the ER and to work with individual property owners to identify and apply site-specific mitigation measures. The Applicants will implement a tree replacement program for woodlot acreage removed during construction of the facilities. The ER concludes that the expected environmental disruption during construction of the proposed facilities is minimal and acceptable (Schedule 8-1). Within 12 months of the completion of construction, the Applicants will undertake a post-construction review of the areas impacted by construction and prepare and submit a report to the Ontario Pipeline Coordinating Committee ("OPCC"). This post-construction report will outline the effectiveness of the mitigation measures implemented during construction, any remaining restoration required in the construction area and a summary of landowner complaints.

The Applicants have actively worked with property owners, business owners and the broader community to develop specific mitigation measures along the proposed pipeline route as well as within the DSA to address their concerns and issues. The Applicants will continue to work with impacted parties to develop specific mitigation measures and to communicate Sarnia Airport Pool Project status and the construction schedule to all directly affected and adjacent property owners as well as appropriate government agencies.

#### Landowner Related Matters

The proposed storage gathering pipelines will be located entirely within the DSA. The Applicants have reached agreement with the directly affected landowners for the location of all storage gathering pipelines, as documented in the executed Letters of Acknowledgement (Schedule 9-8). For the storage gathering pipelines, the Gas Storage Leases grant the Applicants the right to construct, operate and maintain gathering pipelines and roadways to connect wells. In addition, the Applicants will pursue and acquire easements as further protection for its storage gathering pipeline assets following installation of the facilities. Any temporary working room required for the pipeline construction will be established in the summer/fall 2008 with negotiations to follow.

The proposed transmission pipeline will be located within road allowance of the City of Sarnia and the County of Lambton and a section of the pipeline will be located on a private land easement. All necessary easement agreements for the transmission pipeline have been acquired and the acquisition of agreements with the municipalities is in progress.

Regarding the route in road allowances, agreement-in-principle for the pipeline route has been received from the City of Sarnia and the County of Lambton (Schedule 9-10). The County of Lambton is reviewing the draft agreement that would allow that portion of the transmission pipeline to occupy the road allowance. The Applicants anticipate that a fully executed agreement with the County of Lambton will be in place by September 2008. The City of Sarnia has indicated that they would consider a form of agreement for occupation of the road allowance similar to that being negotiated with the County of Lambton. The Applicants anticipate that a fully executed agreement with the City of Sarnia will be in place by November 2008.

As required by Section 97 of the OEB Act, the Board approves the form of easement agreement the Applicants offered to the directly affected land owners. The Board is satisfied that the Applicants have effectively addressed the landowner issues associated with the project.

# 5.2 Conditions of Approval

Board Staff proposed a set of conditions that the Board would typically attach to a leave to construct order.

The proposed conditions require the Applicants to construct the facilities and restore the land in accordance with its application and evidence, to implement all the recommendations of the ER and to follow all the recommendations of the OPCC. The conditions set project communication, monitoring and reporting requirements including reporting on landowner complaints and resolving the issues. The conditions also require that all necessary approvals to construct operate and maintain the pipelines are acquired.

The Applicants and intervenors had the opportunity to comment on the Proposed Conditions. No comments were received from intervenors. The Applicants agreed with the proposed conditions.

The Board finds the conditions proposed by Board Staff acceptable.

# 6. Request For Exemption From Requirement For Leave To Transfer Authorization Under Board Orders

MHP Management and AltaGas made the Applications to the Board on behalf of SASP LP. Until SASP LP is legally formed, the Applicants requested that they hold all authorizations granted by the Board on behalf of SASP LP. The Applicants further submitted that, once SASP LP is formed, it would own and operate all facilities and interests associated with the Sarnia Airport Pool. In the event that SASP LP is not formed prior to the issuance of the Board's Decision and grant of Orders in this proceeding, MHP Management and AltaGas would hold all authorizations on behalf of SASP LP and transfer such authorizations to SASP LP when it has been duly formed.

The Applicants therefore requested that the Board acknowledge in its Decision that MHP Management and AltaGas intend to transfer the Board's authorizations in this proceeding, in their entirety, to SASP LP and that all authorizations be granted as "MHP Limited and AltaGas, on behalf of SASP LP"

MHP Management and AltaGas further requested that the Board exempt MHP and AltaGas from requiring leave or approval of the Board when such authorizations are transferred in their entirety to SASP LP.

The Board does not find it acceptable that the orders are granted as "MHP Management and AltaGas, on behalf of SASP LP."

Instead, the Board finds that the orders are to be granted to "MHP Management and AltaGas" until such time as SASP LP. has been formalized and the appropriate documentation has been filed with the Board. When that occurs, the Orders set out in this Decision will be transferred to SASP LP on the strength of that documentation, without a further process.

### 7. Cost Awards

Eligible intervenors who seek an award of costs incurred to date shall file their cost submissions in accordance with the *Practice Direction on Cost Awards* with the Board Secretary and with the Applicants 15 days of the date of this Decision. The Applicants may make submissions regarding the cost claims within 30 days of the Decision and the intervenors may reply within 45 days of the Decision. A decision and order regarding cost awards will be issued at a later date. Upon receipt of the Board's cost award decision and order, the Applicants shall pay any awarded costs with dispatch.

The Applicants shall pay the Board's costs incidental to this proceeding upon receipt of the Board's invoice.

DATED at Toronto, July 28, 2008

ONTARIO ENERGY BOARD

Original Signed By

Paul Vlahos, Presiding Member

Original Signed By

Paul Sommerville, Member

Original Signed By

Cathy Spoel, Member

# **APPENDIX A**

ТО

**DECISION WITH REASONS** 

EB-2008-0002

**COMPLETE LIST OF PARTIES** 

**Dated July 28, 2008** 

# SARNIA AIRPORT STORAGE POOL PROJECT APPLICATION BOARD FILE NO. EB-2008-0002

### APPLICANT CONTACT INFORMATION

Market Hub Partners Management Inc. Mr. Jim Redford, P. Eng.

Vice-President

Market Hub Partners Management Inc.

P.O. Box 2001 50 Keil Dr. N.

Chatham, ON N7M 5M1

Tel: 519 436-4577 Fax: 519 358-4449

e-mail: <u>iredford@spectraenergy.com</u>

### INTERVENORS CONTACT INFORMATION

Ellis W. Manning, Jr.
 Mr. Ellis W. Manning, Jr.
 116 Saint Andrews Drive
 Saint Simons Island, Georgia

31522

Tel: 912-638-0736 Fax: 912-638-0577

Email: ewnabb@bellsouth.net

2. **Anna Muscedere** Ms. Anna Muscedere

2977 Stoney Creek Dr.

P.O. Box 494

Brights Grove, ON NON 1C0

Tel: N/A

3. **SS Greenhouses** Mr. Brett King

SS Greenhouses

5663 Waterworks Road Sarnia, ON N7T 7H2

Tel: 519-542-7679 Fax: 519-542-0686

Email: <a href="mailto:ssgreenhouses@xcelco.on.ca">ssgreenhouses@xcelco.on.ca</a>

4. Robert L. Williams

Mr. Robert L. Williams Consulting Geologist 658 Mt. Panassus Drive Granville, Ohio 43023

Tel: 740-587-1409

Email: N/A

5. Peter and Andreina Bernardi

Peter and Andreina Bernardi 1586 Michigan Avenue Sarnia, ON N7T 7H4

Tel: 519-542-5013

Email: N/A

6. **Ministry of Natural Resources** 

Petroleum Resources Centre Ministry of Natural Resources

659 Exeter Road London, ON N6E 1L3

Attention: Mr. Andrew Hewitt

Manager

Tel: 519-873-4635 Fax: 519-873-4645

E-mail: andrew.hewitt@mnr.gov.on.ca

### **APPENDIX B**

TO

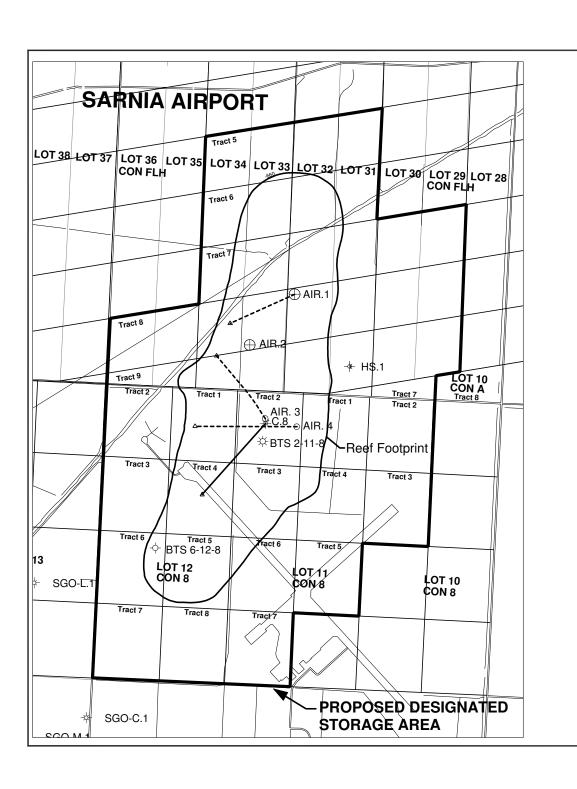
### **DECISION WITH REASONS**

EB-2008-0002

Market Hub Partners Management Inc. and AltaGas Ltd.

MAP OF THE PROPOSED PROJECT

**Dated July 28, 2008** 





### **LEGEND**

- ☆ GAS PRODUCER
- ☆ GAS PRODUCER, ABANDONED
- → OIL SHOW, GAS SHOW, SUSP/ABD
- → DRY HOLE, ABANDONED
- ⊕ STRATIGRAPHIC TEST WELL

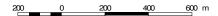
Top Hole

→ HORIZONTAL WELL

Top Hole—

PROPOSED HORIZONTAL WELL

### **SCALE**



REMARKS			
	SARNIA	AIRPO	RT POOL
	WELL LOCATION MAP		
		Dec 2007	aw.E As Shown

# **APPENDIX C**

TO

### **DECISION WITH REASONS**

EB-2008-0002

Market Hub Partners Management Inc. and AltaGas Ltd.

### ORDER DESIGNATING GAS STORAGE AREA

**Dated July 28, 2008** 



EB-2008-0002

**IN THE MATTER OF** the Ontario Energy Board Act, 1998;

AND IN THE MATTER OF an application by Market Hub Partners Management Inc. and AltaGas Ltd. for an Order designating the area known as the Sarnia Airport Gas Storage Pool, in the Geographic City of Sarnia in the County of Lambton, as a gas storage area;

**BEFORE:** Paul Vlahos

**Presiding Member** 

Paul Sommerville

Member

Cathy Spoel Member

#### ORDER DESIGNATING GAS STORAGE AREA

Market Hub Partners Management Inc. and AltaGas Ltd. (the "Applicants") have filed applications with the Ontario Energy Board, (the "Board") dated December 28, 2007, under sections 36.1(1), 38(1), 40(1) and 90(1) of the *Ontario Energy Board Act*, 1998, S.O. 1998, c.15, Schedule B that would, if granted, allow the Applicants to develop Sarnia Airport Gas Storage Pool in the geographic area of the City of Sarnia, County of Lambton, Ontario ("Sarnia Airport Pool Project"). The Board has assigned File No. EB-2008-0002 to this Application.

The Applicants applied to the Board for orders designating a gas storage area, authorizing the injection of gas into, storage of gas within, and withdrawal of gas from a storage reservoir; leave to construct natural gas pipelines; and a favorable report of the

Board to the Minister of Natural Resources with respect to the Application for licences to re-enter and complete one (1) existing well and to drill three (3) injection/withdrawal wells in the proposed Sarnia Airport Gas Storage Pool. Collectively, the orders and report sought by the Applicants will support the conversion of the existing Sarnia Airport Pool from production to storage.

The Notice of Application was issued on February 14, 2008. The Applicants served and published the Notice of Application as directed by the Board. The Board proceeded by a written hearing.

On July 28, 2008 the Board issued a Decision with Reasons approving all the applications sought under Board File No. EB-2008-0002. This Order to Designate Gas Storage Area is issued in accordance with the Board's July 28, 2008 Decision with Reasons.

#### THE BOARD ORDERS THAT:

1. Pursuant to section 36.1(1) of the *Ontario Energy Board Act*, 1998, S.O. 1998, c.15, Schedule B the area described by the Metes and Bounds description attached as Schedule 1 to this order is designated as a gas storage area.

**DATED** at Toronto July 28, 2008

**ONTARIO ENERGY BOARD** 

Original Signed By

Kirsten Walli Board Secretary

# Schedule 1

# EB-2008-0002

Market Hub Partners Management Inc. and AltaGas Ltd.

# METES AND BOUNDS DESCRIPTION OF THE BOUNDARY OF THE SARNIA AIRPORT DESIGNATED STORAGE AREA

# METES AND BOUNDS DESCRIPTION

# OF THE PROPOSED BOUNDARY OF THE SARNIA AIRPORT POOL DESIGNATED STORAGE AREA IN THE GEOGRAPHIC CITY OF SARNIA COUNTY OF LAMBTON

ALL AND SINGULAR that certain parcel or tract of land in the Geographical Township of Sarnia, now in the City of Sarnia, County of Lambton and being composed of part of Lots 10 and 11 and all of Lot 12, Concession 8, part of Lot 10, Gore Concession, part of Lots 29, 30, 31, 32, 33 and 34, Front Concession, Lots 1, 2, 3 and part of Lots 4 and 5, North Division, Registered Plan 7 and all of Lots 1, 2, 3 and 4, South Division, Registered Plan 7, part of the road allowance between Lots 1, 2, 3 and 5, North Division, Registered Plan 7 and Lots I, 2, 3 and 4, South Division, Registered Plan 7 and part of the road allowance between Lots 10 and 11, Concession 8 and Lot 10, Gore Concession all in the Geographical Township of Sarnia, now in the City of Sarnia, which said parcel may be more particularly described as follows.

COMMENCING at a point in the westerly limit of said Lot 5, North Division, Registered Plan 7 distant 925.0 feet northerly there along from the south west corner of said Lot 5;

THENCE southerly along the westerly limit of said Lot 5 a distance of 925.0 feet to the south west corner of said Lot 5;

THENCE southerly a distance of 66.0 feet to the north west corner of said Lot 4, South Division, Registered Plan 7;

THENCE southerly along the westerly limit of said Lot 4, South Division, Registered Plan 7 and the westerly limit of said Lot 12, Concession 8 a distance of 4400.0 feet more or less to the south west corner of said Lot 12:

THENCE easterly along the southerly limit of said Lots 12 and 11, Concession 8 a distance of 2970.0 feet more or less to the line between the east and west halves of said Lot 11;

THENCE northerly along the line between the east and west halves of said Lot 11, Concession 8 a distance of 1100.0 feet;

THENCE easterly and parallel to the northerly limit of said Lot 11 a distance of 960.0 feet more or less to the line between said Lots 10 and 11, Concession 8;

THENCE northerly along the line between said Lots 10 and 11 a distance of 1100.0 feet;

THENCE easterly and parallel to the northerly limit of said Lot 10 a distance of 990.0 feet more or less to the line between the east and west halves of said Lot 10, Concession 8;

THENCE northerly along the line between the east and west halves of said Lot 10, Concession 8 and the northerly production thereof a distance of 2620.0 feet more or less to a point in the northerly limit of said Lot 10, Gore Concession, being also the southerly limit of said Lot 29, Front Concession;

THENCE easterly along the southerly limit of said Lot 29, Front Concession a distance of 400.0 feet more or less to the south east corner of said Lot 29, Front Concession;

THENCE northerly along the easterly limit of said Lot 29 a distance of 2470.0 feet;

THENCE westerly and parallel to the southerly limit of said Lots 29 and 30, Front Concession a distance of 1370.0 feet more or less to a point in the line between said Lots 30 and 31, Front Concession;

THENCE northerly along the line between said Lots 30 and 31, Front Concession a distance of 1650.0 feet;

THENCE westerly and parallel to the southerly limit of said Lot 31, Front Concession, a distance of 2680.0 feet more or less to a point in the line between said Lots 34 and 35, Front Concession:

THENCE southerly along the line between said Lots 34 and 35 a distance of 2475.0 feet more or less to where the same is intersected by a line drawn easterly and parallel with the southerly limit of said Lot 31, Front Concession from the point of commencement;

THENCE westerly along the last mentioned line a distance of 1332.0 feet more or less to the point of commencement.

# **APPENDIX D**

# TO

# **DECISION WITH REASONS**

# EB-2008-0002

Market Hub Partners Management Inc. and AltaGas Ltd.

Authorization to Inject, Store and Remove Gas

**Dated July 28, 2008** 



EB-2008-0002

**IN THE MATTER OF** the Ontario Energy Board Act, 1998:

**AND IN THE MATTER OF** an application by Market Hub Partners Management Inc. and AltaGas Ltd. for an order authorizing the injection of gas into, storage of gas in, and removal of gas from a gas storage area.

**BEFORE**: Paul Vlahos

Presiding Member

Paul Sommerville

Member

Cathy Spoel Member

#### ORDER

# AUTHORIZING THE INJECTION OF GAS INTO, STORAGE OF GAS IN, AND REMOVAL OF GAS FROM A GAS STORAGE POOL

Market Hub Partners Management Inc. and AltaGas Ltd. (the "Applicants") have filed applications with the Ontario Energy Board, (the "Board") dated December 28, 2007, under sections 36.1(1), 38(1), 40(1) and 90(1) of the *Ontario Energy Board Act*, 1998, S.O. 1998, c.15, Schedule B that would, if granted, allow the Applicants to develop Sarnia Airport Gas Storage Pool in the geographic area of the City of Sarnia, County of Lambton, Ontario ("Sarnia Airport Pool Project"). The Board has assigned File No. EB-2008-0002 to this Application.

The Applicants applied to the Board for orders designating a gas storage area, authorizing the injection of gas into, storage of gas within, and withdrawal of gas from a storage reservoir; leave to construct natural gas pipelines; and a favorable report of the

Board to the Minister of Natural Resources with respect to the Application for licences to re-enter and complete one (1) existing well and to drill three (3) injection/withdrawal wells in the proposed Sarnia Airport Gas Storage Pool. Collectively, the orders and report sought by the Applicants will support the conversion of the existing Sarnia Airport Pool from production to storage.

The Notice of Application was issued on February 14, 2008. The Applicants served and published the Notice of Application as directed by the Board. The Board proceeded by a written hearing.

On July 28, 2008 the Board issued a Decision with Reasons approving all the applications sought under Board File No. EB-2008-0002. This Order authorizing the injection of gas, storage of gas in and removal of gas from the Sarnia Airport Pool is issued in accordance with the Board's July 28, 2008 Decision with Reasons.

#### THE BOARD ORDERS THAT:

Market Hub Partners Management Inc. and AltaGas Ltd., pursuant to section 38(1) of the *Ontario Energy Board Act*, 1998, are authorized to inject gas into, store gas in and remove gas from the area known as Sarnia Airport Pool in the geographic City of Sarnia, County of Lambton, Province of Ontario, which has been designated as a gas storage area, and to enter into and upon the land in the area for such purposes, subject to Conditions of Approval set forth in the Schedule 1 to this Order.

**DATED** at Toronto, July 28, 2008 **ONTARIO ENERGY BOARD** 

Original Signed By

Kirsten Walli Board Secretary

# Schedule 1

# EB-2008-0002

Market Hub Partners Management Inc. and AltaGas Ltd.

**Conditions of Approval** 

Authorization to Inject, Store and Remove Gas

# EB-2008-0002 Market Hub Partners Management Inc. and AltaGas Ltd.

# **Conditions of Approval**

# **Authorization to Inject, Store and Remove Gas**

# 1. Operation of the Sarnia Airport Storage Pool

- 1.1 Market Hub Partners Management Inc. and AltaGas Ltd. ("MHP and AltaGas) shall adhere to the evidence filed with the Board in the EB-2008-0002 proceeding. MHP and AltaGas shall comply with applicable laws, regulations and codes to the satisfaction of the responsible agency pertaining to the construction, operation and maintenance of the proposed project and should evaluations conducted in accordance with those applicable laws, regulations and codes identify any risk and/or specify any remedial work, shall implement, complete and maintain such works prior to commencement of any injection.
- 1.2. Prior to commencement of any injection, storage or withdrawal operations, MHP and AltaGas shall obtain all the necessary storage rights within the Sarnia Airport Designated Storage Area.
- 1.3. MHP and AltaGas shall design, construct, operate, maintain and abandon the wells and facilities in accordance with the CSA Z341.1-06 Storage of Hydrocarbons in Underground Formations and in accordance with the *Oil, Gas and Salt Resources Act* and its regulations and operating standards.
- 1.4. MHP and AltaGas shall protect the integrity of the reservoir and ensure the safe operation of the Sarnia Airport Storage Pool by complying with the requirements of the Provincial Operating Standard, CSA Standard Z341.1-06 and any other applicable laws, regulations and codes.
- 1.5. MHP and AltaGas shall advise the Board's designated representative of any proposed material change or abnormal events in construction or restoration procedures that are reported to authorities. In the event of an emergency, the Board shall be informed immediately after the fact.
- 1.6. MHP and AltaGas shall not operate the Sarnia Airport Storage Pool above a maximum allowed operating pressure representing a pressure gradient of 15.8 kPa/m of depth to the top of the reservoir and shall not operate the Sarnia Airport Storage Pool at a pressure greater than the discovery pressure of 4,014 kPaa until leave of the Board is obtained.
- 1.7. MHP and AltaGas shall ensure that the construction, operation and maintenance of the Sarnia Airport Storage Pool do not affect the quality or supply of potable water. MHP and AltaGas shall conduct a water well test prior to and after the first

cycle of gas storage and implement a Water Well Monitoring Program. In the event that the quality of the potable water is impacted by the construction, operation and maintenance of the Sarnia Airport Storage Pool, MHP and AltaGas shall provide adequate fresh water supplies to all affected landowners until the problem is rectified.

- 1.8. Should MHP and AltaGas fail to commence injection before June 1, 2010 MHP and AltaGas shall be required to apply to the Board for an extension of the authority granted under the Board's Order and will be required to submit evidence to show why such an extension shall be granted.
- 1.9. MHP and AltaGas shall, after the date on which the OEB grants an order pursuant to Section 38(1) of the OEB Act and before commencement of drilling operations or pipeline construction to use the DSA for storage, and thereafter while the DSA or any part thereof is being used for storage operations, obtain and maintain in full force and effect insurance coverage, including but not limited to, liability and pollution coverage, in the amount that is determined to be adequate by an independent party with expertise in adequacy of insurance coverage for environmental and other risks and potential impacts of gas storage operations in southwestern Ontario. MHP and AltaGas shall file with the Board documentation proving that the insurance coverage has been obtained as required by this condition.

## 2. **General**

- 2.1 For the purposes of these conditions conformity of the Applicant with CSA Z341.01-06, the Oil, Gas and Salt Resources Act, and the Provincial Operating Standard shall be to the satisfaction of the Ministry of Natural Resources.
- 2.2 The authority granted under this Order to MHP and AltaGas is not transferable to another party, without leave of the Board. For the purpose of this condition another party is any party except Sarnia Airport Storage Pool Limited Partnership.
- 2.3 The Board's designated representative for the purpose of these conditions shall be the Manager, Facilities Applications.

# APPENDIX E

# TO

# **DECISION WITH REASONS**

Market Hub Partners Management Inc. and AltaGas Ltd.

**Board Report to the Minister of Natural Resources -**

**Wells Licences Application** 

**Dated July 28, 2008** 



EB-2008-0002

**IN THE MATTER OF** the Ontario Energy Board Act, 1998, Schedule B;

AND IN THE MATTER OF an application by Market Hub Partners Management Inc. and AltaGas Ltd. to the Ministry of Natural Resources for licenses to drill wells in the area designated as the Sarnia Airport Pool in the City of Sarnia in the County of Lambton.

## REPORT OF THE BOARD

July 28, 2008

#### Introduction

Market Hub Partners Management Inc. and AltaGas Ltd. (the "Applicants") proposed to provide storage services upon development of approximately 5.26 Bcf of natural gas working storage space in the proposed Sarnia Airport Gas Storage Pool with the planned in-service date of April 2009.

The development of the Sarnia Airport Storage pool requires that the Applicants be granted the following orders sought under the Board File No. EB-2008-0002:

- An order designating the area containing a gas reservoir known as the Sarnia Airport Pool as a storage area pursuant to section 36.1(1) of the Act;
- An order granting authority to inject gas into, store gas in, and remove gas from the Sarnia Airport Gas Storage Pool, pursuant to subsection 38(1) of the Act;
- An order granting leave to construct about 16 kilometres of transmission and about 2 kilometres of gathering pipelines within the proposed Sarnia Airport Gas Storage Pool, pursuant to subsection 90(1) of the Act.
- A favourable report of the Board under subsection 40(1) of the Act, to the Minister of Natural Resources to whom MHP Canada has applied for licences to drill three (3) injection/withdrawal wells and re-enter and complete one (1) existing well within the proposed Sarnia Airport Gas Storage Pool.

The Notice of Application was issued on February 14, 2008. The Applicants served and published the Notice of Application as directed by the Board. Procedural Order No. 1 was issued on April 4, 2008. The Board proceeded by a written hearing.

The registered intervenors in the proceeding are: Mr. Ellis Manning Jr., Mr. Robert L. Williams each of whom hold certain royalty interests in production and natural gas leases within the proposed storage area; Mr. Brett King on behalf of his business, SS Greenhouses, located adjacent to the proposed transmission pipeline; Ms. Anna Muscedere, a landowner adjacent to the proposed transmission line; and Mr. Peter Bernardi and Ms. Adreina Bernardi, landowners adjacent to but outside of the proposed storage area boundary. The registered observers in the proceeding are: Sun-Canadian Pipe Line, Ms. Luisa Restivo and Mr. Tom Rocca and Loretta Rocca.

On July 28, 2008, the Board issued a Decision with Reasons that approved the EB-2008-002 application and granted all the orders required for pool development and operation. This Report is issued in accordance with the Board's July 28, 2008 Decision with Reasons.

# Referral of the Application to Drill Wells

By a letter, dated January 25, 2008, and received on January 31, 2008, the Ministry of Natural Resources, Petroleum Resources Centre, has referred to the Board, pursuant to section 40 of the Act an application by Market Hub Partners Canada LP for licences to re-enter and complete one (1) existing well and to drill three (3) injection/withdrawal wells in the proposed Sarnia Airport Gas Storage Pool, as noted below:

- Bluewater True, Sarnia 2-11-VIII ("Bluewater True")
- Airport No. 1 (Horizontal 1). Sarnia 8-32-FLH ("Airport 1")
- Airport No. 3 (Horizontal 1). Sarnia 2-11-VIII ("Airport 3")
- Airport No. 4 (Horizontal 1). Sarnia 2-11-VIII ("Airport 4")

Bluewater True is an existing well which will be re-entered at its existing surface location. The proposed horizontal well Airport 1 will be started at an exiting surface location while the kick-off points for horizontal wells Airport 3 and Airport 4 are proposed at new locations. A map showing locations of the proposed wells within a designated storage area is attached as Schedule 1 to this report.

In considering an application for a well drilling license the Board's review under section 40 of the Act typically includes the geological evidence related to the well location, the proposed drilling program, the technical capability of an applicant to conduct the drilling in accordance with applicable standards and codes, and environmental and landowner matters.

# Well Drilling Locations, Drilling Program and Applicable Codes and Standards

The proposed surface locations for wells Airport 3 and Airport 4 were selected based on data from all existing wells within the reservoir, discussions with the impacted property owners and the 3D seismic interpretation. The setback distances for the proposed well drilling and proposed permanent wellhead assemblies comply with MNR and Transport Canada regulations regarding proximity to airport facilities, road allowances, structures and municipal drains.

The area surrounding the Sarnia Airport Pool is largely zoned rural/agricultural and the City of Sarnia has confirmed that there are no plans to change the zoning or to develop this area for other uses. The horizontal paths for wells Airport 1, Airport 3 and Airport 4 were designed to maximize intersection with porosity/permeability targets. The proposed surface locations and well paths are described in the MNR Applications for a Well License.

All wells will be drilled and constructed to comply with Standard CAN/CSA Z341.1-06, the OGSRA and its regulations, the Provincial Operating Standards and the *Occupational Health and Safety Act.* For wells Airport 1, Airport 3 and Airport 4, a drilling program filed with the application contains detailed drilling procedures and casing specifications. For well Bluewater True, a well completion and workover program filed as part of the application contains detailed drilling procedures and casing specifications. The drilling programs include the geological prognosis, reporting, the safety procedures required by the *Occupational Health and Safety Act* and the OGSRA, its regulations and the Provincial Operating Standards, and is specifically designed to protect groundwater resources. Following the set up of the drill rig, and prior to drilling, measurements and calculations will be completed to confirm that the MNR and Transport Canada setback requirements are being met.

#### **Landowner Matters**

The proposed locations for the wells, the permanent access roads and well pads, have been discussed with and accepted by the property owners as evidenced by the signed Letters of Acknowledgement. The Applicants, or their affiliates, hold 100% of the active Gas Storage Leases and P&NG Leases for the properties in the production unit area, which provide the surface rights needed to drill the proposed wells and construct facilities on the property. Prior to construction, a representative will meet with each property owner impacted by the well drilling to discuss any site specific requirements. The Applicants plan to secure permanent easement rights for the well pads and access roads following construction in accordance with the Letters of Acknowledgement.

# **Environmental Matters**

The Environmental and Socio-Economic Impact Assessment Report ("ER") prepared by Stantec Consulting Ltd. addressed potential impacts of well drilling and mitigation of any impacts. The ER concluded that there will be no significant impacts after implementation of the mitigation measures recommended in the ER. The Applicants have provided the ER to Ontario Pipeline Coordinating Committee (the "OPCC")

members and addressed their comments. The Applicants have committed to implementing an environmental inspection program to monitor construction activities. This program includes a water well monitoring that would sample appropriate water wells prior to drilling, following drilling and following the first storage cycle, and as recommended by the project hydrogeologist. In addition the Applicants will complete, a post-construction review of the construction area in the year of construction and the year following construction.

The Applicants' evidence was that the well paths, determined on the basis of data from all existing wells within the proposed DSA and the seismic interpretation, are properly engineered and are technically feasible.

#### Recommendation

The Board's review of the application for well licences found that the proposed drilling is in the public interest with respect to the integrity of the gas storage reservoir, the safety of drilling operations, the environmental impacts of drilling and construction, and impacts on directly affected landowners. The Board found the Applicants to be technically competent to undertake the planned drilling program and the proposed well completion activities.

In accordance with the Decision with Reasons of July 28, 2008 the Board recommends approval of the Applications for drilling licences for the wells:

- Bluewater True, Sarnia 2-11-VIII
- Airport No. 1 (Horizontal 1). Sarnia 8-32-FLH
- Airport No. 3 (Horizontal 1). Sarnia 2-11-VIII
- Airport No. 4 (Horizontal 1). Sarnia 2-11-VIII

The recommendation is subject to the conditions of approval attached in Schedule 2 to this Report. During the proceeding the Applicants and intervenors had the opportunity to comment on draft conditions of drilling licences approval proposed by Board Staff. The Board-approved Conditions deal with potential adverse impacts and effects of the drilling of the wells. According to the Conditions, the Applicants should adhere to the evidence and all the undertakings given at the hearing and to comply with all applicable laws, regulations and codes during construction of the wells.

Furthermore, the Conditions call for land restoration and for minimizing adverse impacts on agricultural land and farming operations. The Conditions require monitoring and reporting to the Board of impacts and their mitigation during and after construction, and the recording of landowner's concerns and reporting on the resolution of these concerns.

The Conditions also set a twelve month term from the date of the Report for the MNR to issue the well licences.

# Schedule 1

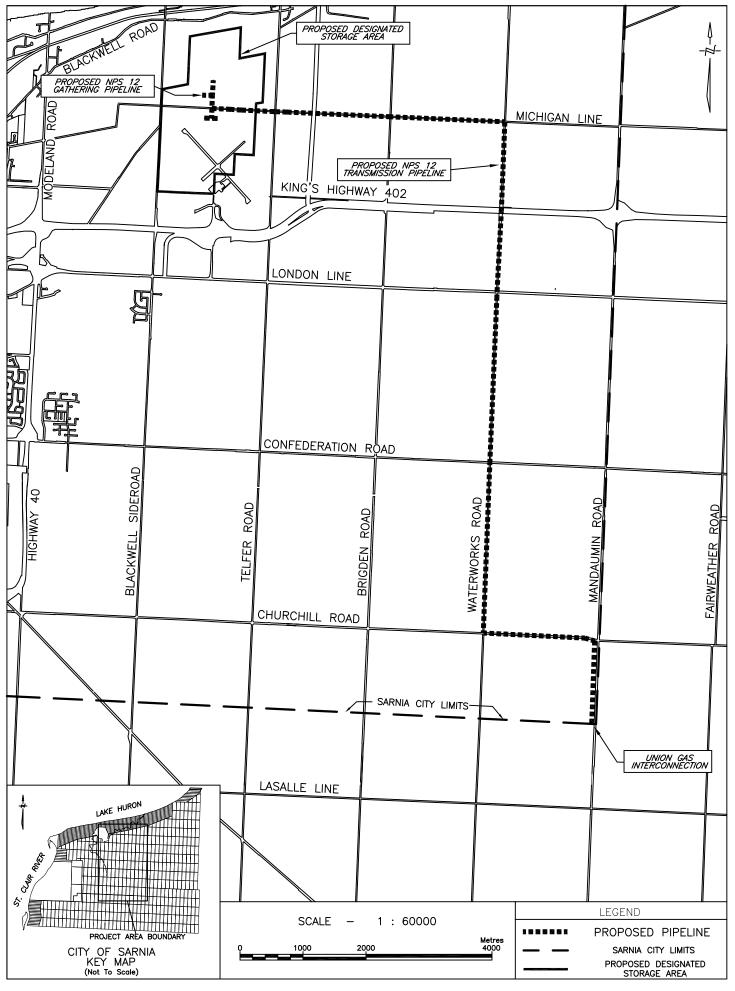
Market Hub Partners Management Inc. and AltaGas Ltd.

# **Application for Wells Licences**

EB-2008-0002

**Map Showing Location of the Proposed Wells** 

# SARNIA AIRPORT GAS STORAGE PROJECT



#### Schedule 2

# Market Hub Partners Management Inc. and AltaGas Ltd.

# **Application for Wells Licences**

#### EB-2008-0002

## **Conditions of Approval**

Sarnia Airport Pool Development Project
Market Hub Partners Management Inc. and AltaGas Ltd.

#### EB-2008-0002

## **Conditions of Approval**

# Wells Drilling Licences Application

# 1. **General Requirements**

- 1.1. Market Hub Partners Management Inc. and AltaGas Ltd. ("MHP and AltaGas) shall adhere to the evidence as filed with the Board in EB-2008-0002 and comply with applicable laws, regulations and codes pertaining to the construction of the proposed wells.
- 1.2 Authorization for the issuance of the drilling licences is limited to twelve months from the date of the Board's Report to the Ministry of Natural Resources.
- 1.3 The authority granted under this Order to MHP and AltaGas is not transferable to another party without leave of the Board. For the purpose of this condition another party is any party except Sarnia Airport Storage Pool Limited Partnership.

# 2. Just and Equitable Compensation

2.1 MHP and AltaGas shall offer to pay landowners and/or tenants just and equitable

compensation for any damages, including present and future crop damage arising from: drilling of injection/withdrawal wells; installation of gathering pipelines; access road construction.

# 3. Construction Requirements

- 3.1 MHP and AltaGas shall construct the facilities and restore the land in accordance with its Application and evidence and the undertakings given to the Board, except as modified by this Order and these Conditions of Approval.
- 3.2 MHP and AltaGas shall ensure that the movement of equipment is carried out in compliance with all procedures filed with the Board, and as follows:

- i) MHP and AltaGas shall make reasonable efforts to keep the affected landowner as well as adjacent landowners and their respective tenant farmers, or their designated representatives, informed of its plans and construction activities; and
- ii) the installation of facilities and construction shall be coordinated so as to minimize disruption of agricultural land and agricultural activities.
- 3.3 MHP and AltaGas shall, subject to the recommendation by an independent tile contractor and subject to the landowners approval, construct upstream and downstream drainage headers adjacent to the drilling area and access roads that cross existing systematic drainage tiles, prior to the delivery of heavy equipment, so that continual drainage will be maintained.
- 3.4 MHP and AltaGas, shall implement all the recommendations of the Storage Pool Environmental Management Plan filed as part of Schedule 8-1 of the pre-filed evidence.

# 4. Monitoring and Reporting Requirements

- 4.1 Both during and after construction, MHP and AltaGas shall monitor the impacts of construction, and shall file four copies of both an interim and a final monitoring report with the Board. The interim monitoring report shall be filed within six months of the in-service date, and the final monitoring report shall be filed within fifteen months of the in-service date. MHP and AltaGas shall attach a log of all complaints to the interim and final monitoring reports. The log shall record the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying such actions.
- 4.2. The interim monitoring report shall confirm MHP and AltaGas adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the longterm effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.
- 4.3 The final monitoring report shall describe the condition of the rehabilitated land and the effectiveness of the mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of

Approval shall be explained.

# 5. **Project and Communication Requirements**

- 5.1 For the purposes of these conditions, conformity of the Applicant with CSA Z341.1-06, shall be to the satisfaction of the Ministry of Natural Resources.
- 5.2 MHP and AltaGas shall designate one of its employees as project manager who will be responsible for the fulfilment of these conditions, and shall provide the employee's name to the Ministry of Natural Resources, the Board and to all appropriate landowners.
- 5.3 The Board's designated representative for the purpose of these Conditions of Approval shall be the Manager, Facilities Applications.

# **APPENDIX F**

TO

# **DECISION OF THE BOARD**

Market Hub Partners Management Inc. and AltaGas Ltd.

EB-2008-0002

LEAVE TO CONSTRUCT ORDER

**Dated July 28, 2008** 



EB-2008-0002

**IN THE MATTER OF** the *Ontario Energy Board Act,* S.O. 1998, c. 15, Sched. B;

**AND IN THE MATTER OF** an application by Market Hub Partners Management Inc. and AltaGas Ltd. for an Order granting leave to construct natural gas pipelines in the City of Sarnia in the County of Lambton.

**BEFORE:** Paul Vlahos

**Presiding Member** 

Paul Sommerville

Member

Cathy Spoel Member

#### ORDER

#### LEAVE TO CONSTRUCT NATURAL GAS PIPELINES

Market Hub Partners Management Inc. and AltaGas Ltd., on behalf of Sarnia Airport Storage Pool Limited Partnership (the "Applicants") have filed applications with the Ontario Energy Board, (the "Board") dated December 28, 2007, under sections 36.1(1), 38(1), 40(1) and 90(1) of the *Ontario Energy Board Act*, 1998, S.O. 1998, c.15, Schedule B that would, if granted, allow the Applicants to develop Sarnia Airport Gas Storage Pool in the geographic area of the City of Sarnia, County of Lambton, Ontario ("Sarnia Airport Pool Project").

The Board has assigned File No. EB-2008-0002 to this Application.

The Applicants applied to the Board for orders designating a gas storage area, authorizing the injection of gas into, storage of gas within, and withdrawal of gas from a storage reservoir; leave to construct natural gas pipelines; and a favorable report of the

Board to the Minister of Natural Resources with respect to the Application for licences to re-enter and complete one (1) existing well and to drill three (3) injection/withdrawal wells in the proposed Sarnia Airport Gas Storage Pool. Collectively, the orders and report sought by the Applicants will support the conversion of the existing Sarnia Airport Pool from production to storage.

The Notice of Application was issued on February 14, 2008. The Applicants served and published the Notice of Application as directed by the Board. The Board proceeded by a written hearing.

On July 28, 2008 the Board issued a Decision with Reasons approving all the applications sought under Board File No. EB-2008-0002. This leave to construct order is issued in accordance with the Board's July 28, 2008 Decision with Reasons.

#### THE BOARD ORDERS THAT:

Market Hub Partners Management Inc. and AltaGas Ltd. are granted leave to construct approximately 2 kilometres of 12 inch Nominal Size Pipe ("NPS") gathering pipeline connecting the wells to the transmission pipeline system and approximately 16 kilometres of NPS 12 transmission pipeline connecting the storage gathering system to the interconnection to the Ontario pipeline network through the Union Gas Limited system all in the City of Sarnia in Lambton County, pursuant to subsection 90 (1) of the Act, subject to the Conditions of Approval set forth in Schedule 1 to this Order.

**DATED** at Toronto, July 28, 2008

#### **ONTARIO ENERGY BOARD**

Original Signed By

Kirsten Walli Board Secretary

# Schedule 1

Market Hub Partners Management Inc. and AltaGas Ltd.

**Leave to Construct Order** 

EB-2008-0002

**Conditions of Approval** 

# Market Hub Partners Management Inc. and AltaGas Ltd.

# Sarnia Airport Pool Development Project EB-2008-0002 Conditions of Approval Leave to Construct

# 1. General Requirements

- 1.1 Market Hub Partners Management Inc. and AltaGas Ltd. ("MHP and AltaGas") shall construct the facilities and restore the land in accordance with its application and evidence filed in EB-2008-0002, except as modified by this Order and these Conditions of Approval.
- 1.2 Unless otherwise ordered by the Board, authorization for Leave to Construct shall terminate December 31, 2009, unless construction has commenced prior to then.
- 1.3 Except as modified by this Order, MHP and AltaGas shall implement all the recommendations of the Environmental Study Report filed in the pre-filed evidence, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee ("OPCC") review.
- 1.4 MHP and AltaGas shall advise the Board's designated representative of any proposed material change in construction or restoration procedures and, except in an emergency, MHP and AltaGas shall not make such change without prior approval of the Board or its designated representative. In the event of an emergency, the Board shall be informed immediately after the fact.

# 2 Project and Communications Requirements

- 2.1 The Board's designated representative for the purpose of these Conditions of Approval shall be the Manager, Facilities.
- 2.2 MHP and AltaGas shall designate a person as project engineer and shall provide the name of the individual to the Board's designated representative. The project engineer will be responsible for the fulfillment of the Conditions of Approval on the construction site. MHP and AltaGas shall provide a copy of the Order and Conditions of Approval to the project engineer, within seven days of the Board's Order being issued.
- 2.3 MHP and AltaGas shall give the Board's designated representative and the Chair of the OPCC ten days written notice in advance of the commencement of the construction.
- 2.4 MHP and AltaGas shall furnish the Board's designated representative with all reasonable assistance for ascertaining whether the work is being or has been performed in accordance with the Board's Order.

- 2.5 MHP and AltaGas shall file with the Board's designated representative notice of the date on which the installed pipelines were tested, within one month after the final test date.
- 2.6 MHP and AltaGas shall furnish the Board's designated representative with five copies of written confirmation of the completion of construction. A copy of the confirmation shall be provided to the Chair of the OPCC.

# 3 Monitoring and Reporting Requirements

- 3.1 Both during and after construction, MHP and AltaGas shall monitor the impacts of construction, and shall file four copies of both an interim and a final monitoring report with the Board. The interim monitoring report shall be filed within six months of the in-service date, and the final monitoring report shall be filed within fifteen months of the in-service date. MHP and AltaGas shall attach a log of all complaints that have been received to the interim and final monitoring reports. The log shall record the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying such actions.
- 3.2 The interim monitoring report shall confirm MHP and AltaGas' adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.
- 3.3 The final monitoring report shall describe the condition of any rehabilitated land and the effectiveness of any mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained.

# 4 Easement Agreements

4.1 MHP and AltaGas shall offer the form of agreement approved by the Board to each landowner, as may be required, along the route of the proposed work.

## 5 Other Approvals

5.1 MHP and AltaGas shall obtain all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project, shall provide a list thereof, and shall provide copies of all such written approvals, permits, licences, and certificates upon the Board's request.