

**Ontario Energy  
Board**

**Commission de l'Énergie  
de l'Ontario**



**RP-2003-0253  
EB-2003-0314  
EB-2003-0315  
EB-2003-0316  
EB-2003-0317**

**IN THE MATTER OF APPLICATIONS BY**

**TRIBUTE RESOURCES INC. AND TIPPERARY GAS CORP.**

**TIPPERARY POOL PROJECT**

**PARTIAL DECISION WITH REASONS**

**2004 OCTOBER 25**

## Executive Summary

Tribute Resources Inc. (“Tribute”) and Tipperary Gas Corp. (“Tipperary”), collectively (the “Applicants”) filed an Application requesting the following Orders:

- Designating the Tipperary North pool in the Township of Central Huron areas as gas storage areas under s. 36.1 of the *Ontario Energy Board Act, 1998* (the “Act”) (the “Designation Order”);
- Authorizing Tipperary to inject, store and withdraw gas under s. 38(1) of the *Act* (the “Injection and Withdrawal Order”);
- Setting compensation for landowners in the proposed designated area under s.38 (3) of the *Act* (the “Compensation Order”); and
- Fixing rates for the sale of gas storage services under s.36 of the *Act* (the “Rate Order”)

In addition, the Applicants requested that the Board provide a report to the Minister of Natural Resources (the “MNR”) recommending approval of the Applicants’ applications to drill wells under s. 40 of the *Act* (the “Report”).

The Board will grant the Designation Order and provide the requested Report to the MNR, subject to the conditions of approval identified in the Report. A copy of the Designation Order is attached as Schedule A. A copy of the Report including the Conditions of Approval is attached as Schedule B.

The Board will not grant the other Orders requested at this time.

With respect to the Injection and Withdrawal Order, the Applicants have failed to demonstrate that they have the financial and operational ability to carry out a viable storage operation. However, based upon the fact that very few applications of this nature have come before the Board and the expectations of the Board may not have been clearly established, the Board will provide the Applicants with the opportunity to complete the record, prior to the Board rendering its Decision. The Board will leave this proceeding open so that the Applicants may file further

evidence in this regard. The specific content of evidence and the scheduling of the proceeding going forward will be set out in the Procedural Order No. 5 attached to this Decision as Schedule C. The Board will not allow this matter to be left unsettled and will make its decision on or before January 28, 2005, based upon the evidentiary record available at that time. The Board will also address the Rate Order at the same time.

With respect to the Compensation Order, the Board is not satisfied that the landowners and the Applicants have exhausted their negotiations. If they do not reach an agreement by the time that the Board makes a final determination on the Injection and Withdrawal Order, the Board will make a Compensation Order based upon the evidence available at that time. The Board directs the Applicants to file evidence on the status of compensation arrangements in accordance with the Procedural Order No. 5.

PARTIAL DECISION WITH REASONS

**RP-2003-0253**  
**EB-2003-0314**  
**EB-2003-0315**  
**EB-2003-0316**  
**EB-2003-0317**

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

**AND IN THE MATTER OF** an application by Tribute Resources Inc. and Tipperary Gas Corp. for an order designating a gas storage area;

**AND IN THE MATTER OF** an application by Tribute Resources Inc. and Tipperary Gas Corp. for an order authorizing the injection of gas into, storage of gas in, and removal of gas from a gas storage area;

**AND IN THE MATTER OF** an application by Tribute Resources Inc. and Tipperary Gas Corp. for an order granting leave to drill three wells in the proposed designated storage area;

**AND IN THE MATTER OF** an application by Tribute Resources Inc. and Tipperary Gas Corp. for an order approving or fixing just and reasonable rates for the storage of gas.

**BEFORE:**                      Bob Betts  
   Presiding Member

   Pamela Nowina  
   Member

   Paul Sommerville  
   Member

**PARTIAL DECISION WITH REASONS**

October 25, 2004

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## **Chapter 1 - The Application and the Proceeding**

### ***1.1 The Applications***

Tribute Resources Inc. (“Tribute”) and Tipperary Gas Corp. (“Tipperary”), collectively referred to as the “Applicant” or the “Applicants”, filed the Application, dated December 24, 2003 and amended February 5, 2004 and further amended August 10, 2004, with the Ontario Energy Board pursuant to sections 36, 36.1, 38 and 40 of the Ontario Energy Board Act, 1998, S.O. c.15, Schedule B (the “Act” or “OEB Act”). The Board assigned the Application Board File Nos. RP-2003-0253/EB-2003-0314/EB-2003-0315/EB-2003-0316/EB-2003-0317. 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; and approving rates. The Applicants also sought a favorable report of the Board to the Minister of Natural Resources with respect to applications for licenses to drill three wells in the proposed storage area. If these Orders and this Report are issued, they collectively will support the conversion of the existing Tipperary North pool in the Township of Central Huron from gas production to gas storage. The planned in service date is Summer 2005.

### ***1.2 The Proceeding***

The Board issued a Notice of Application on February 25, 2004. The Application was served and published according to the Board's Letter of Direction.

The Board issued Amended Procedural Order No. 1 on March 25, 2004 setting out dates for the filing of interrogatories and responses. It issued Procedural Order No. 2 on May 20, 2004 setting out dates for filing supplemental interrogatories, responses and intervenor evidence. The Board issued Procedural Order No. 3 on July 16, 2004 setting out dates for Board staff and Intervenor evidence and interrogatories and responses on this evidence. The Board's Notice of Hearing was issued July 21, 2004; it set August 9, 2004 for the commencement of the oral hearing.

On July 29, 2004, a motion was filed by the Applicants seeking an order of the Board striking the July 21, 2004 prefiled evidence of Northern Cross Energy Limited on the grounds that it was irrelevant to the issues in the Application. The Board issued Procedural Order No. 4, with a draft issues list attached, on August 5, 2004. The procedural order set the date for the hearing of the Motion.

The Applicant also moved to amend the Application by requesting the Board to determine compensation levels to the landowners. This amendment was based on subsection 38(3) of the Act, which requires the Board to set compensation if the parties fail to reach an agreement. After hearing the Motions the Board settled the Issues List, ruled that the evidence of Northern Cross was admissible, and further ruled that the issues of compensation would be addressed in a separate phase of this proceeding.

The Application was heard at the Ontario Energy Board from August 9, 2004 to August 17, 2004. The Board heard evidence from August 9 to 13, oral argument-in-chief on August 16, and Board staff's summary of the issues and intervenors oral arguments on August 17. Written reply argument was filed with the Board on August 20, 2004.

Representatives of the following parties appeared at the hearing:

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| Name              | Organization  |
|-------------------|---|
| Christopher Lewis | Counsel to Tribute Resources Inc. and Tipperary Gas Corp.         |
| Jed Chinneck      | Counsel to Tipperary Storage Landowners' Association (the "TSLA") |
| Joni Paulus       | Counsel to Northern Cross Energy Limited ("Northern Cross")       |
| Frank Thibault    | Market Hub Partners Canada L.P.                                   |
| Marilyn Broadfoot | Huron County Federation of Agriculture and a Landowner            |
| Glen Leslie       | Counsel to Union Gas Limited ("Union")                            |
| Jugmohan Manocha  | Ministry of Natural Resources                                     |
| George Vegh       | Counsel to the Ontario Energy Board                               |

Tipperary and Tribute called the following witnesses:

| Name              | Title      |
|-------------------|------------|
| Dr. Phillip Walsh | Consultant |
| Kathy McConnell   | Consultant |
| Joe Gorman        | Consultant |
| James Fisher      | Consultant |
| Jane Lowrie       | President  |
| Howard Jordan     | Consultant |
| Dereck Francis    | Consultant |

The Huron County Federation of Agriculture called the following witness:

| Name         | Title     |
|--------------|-----------|
| Neil Vincent | President |

The Tipperary Storage Landowners' Association called the following witnesses:

| Name              | Title                         |
|-------------------|-------------------------------|
| Al Feddes         | Member and Executive Director |
| Fred Dutot        | Member and Executive Director |
| Carol Lynne Dutot | Member                        |

Northern Cross Energy Limited called the following witness:

| Name        | Title     |
|-------------|-----------|
| D. Thompson | President |

Mr. Jugmohan Manocha testified on the proposed project from the perspective of the Ministry of Natural Resources.

### ***1.3 Submissions and Exhibits***

Copies of the evidence, exhibits, arguments and a transcript of the proceeding are available for review at the Board's offices. The Board has considered the evidence, submissions and arguments in this proceeding but has only referenced them to the extent necessary to provide context for its findings.

## **Chapter 2 - Background**

### ***2.1 Legislation and Jurisdiction***

The Ontario Energy Board Act, 1998 provides a number of objectives that guide the Board in carrying out its responsibilities, including, in s. 2.4 of that Act, facilitating the “rational development and safe operation of gas storage.” With respect to the Board’s specific statutory responsibilities in respect of storage, Part III of the Act provides that the Board is responsible for:

- Designating areas as gas storage areas (s. 36.1);
- Authorizing a person to inject, store and withdraw gas (s. 38(1));
- Setting compensation for landowners in the absence of agreement for same with storage operators (s.38(3));
- Providing binding reports on applications to drill wells to the Minister of Natural Resources (s.40);
- Making just and reasonable rates for the sale of gas and for the transmission, distribution and storage of gas by storage companies (s.36).

In 1962 the Ontario government adopted the findings and recommendations of the Langford Commission on Underground Natural Gas Storage. Since that time underground natural gas storage has been accorded the status of a provincial asset and this Board has regulated it accordingly.

### ***2.2 Storage***

Ontario has 29 designated gas storage areas and one liquefied natural gas storage facility. Collectively, they provide 260 Bcf of gas storage. They are all owned and operated by either Union or Enbridge Gas Distribution Inc. (“Enbridge”), the rate-regulated monopoly

distribution service providers in the province. They both use storage assets to provide transmission and distribution services to in-franchise customers pursuant to Board approved rates, and to provide storage services in the competitive market. Each of the 29 gas storage pools was developed and is operated pursuant to Board orders.

When a production pool is to be converted to a storage asset, the owner/operator must undertake both technical activities (e.g., a geological assessment, a reservoir engineering assessment) and business related activities (e.g., resourcing the enterprise). The Board's understanding of the technical and commercial issues associated with storage operations has been informed by its adjudication of applications filed by Union and Enbridge. The Board's consideration of the issues, and its scrutiny of them, is in support of its duty to act in the public interest. The Board endeavors to ensure that:

- Storage is developed and operated in a safe manner so that the public is protected and the provincial asset is not harmed;
- All technical codes, standards, guidelines etc. are adhered to and respected;
- There is a need for the project;
- The proposed project is an economically viable means of satisfying that need;
- Rates for storage services are just and reasonable; and,
- The storage operators have the financial and operational ability to carry out a viable storage operation.

Prior to 2002, the only applicant, other than Enbridge and Union, to come before the Board requesting orders to develop and operate storage, was CanEnerco Limited ("CanEnerco"). In 1997, CanEnerco applied for the orders necessary to develop and operate the Chatham D storage pool. CanEnerco was a gas marketer and intended to use the storage pool to support its gas marketing activities. In adjudicating these applications the Board applied a standard of scrutiny considered appropriate in light of the fact that the applicant was not a traditional utility. While the technical issues were no different

from those raised in storage applications of traditional utilities, the business issues were different. For example, there was a heightened need to understand CanEnerco's capitalization and access to capital to ensure that storage development and operations were funded to sustain long-term operations. The Board granted CanEnerco's applications on certain conditions. CanEnerco failed commercially in 2001, and the pool was subsequently acquired by Enbridge.

### ***2.3 The Applicant***

Tipperary is a newly formed corporate entity, established to store gas. It is one of several companies owned, controlled or managed by Jane Lowrie. Tribute is one such company. Tribute is an established gas producer, and it has produced gas from the Tipperary North Pool and Tipperary South Pool in Huron County since 1998. These pools are nearing depletion and a business decision has been taken to convert the North Pool from production to storage. A limited partnership, Huron Tipperary Limited Partnership 1, has been established to raise funds for the storage pool project. Tipperary is the general partner and Tribute is a limited partner. The monies raised will fund investment in the pool, pipeline and compressor construction, the acquisition of authorizations and related activities.

### ***2.4 The Orders requested and the Project***

Tipperary seeks key project authorizations of this Board; they are:

- An order designating a gas storage area;
- An order authorizing injection/withdrawal of gas;
- An order approving rates; and,

- A favourable report to the Minister of Natural Resources on a gas well drilling licence.

If these orders are granted and a favourable report is issued, Tipperary will be able to offer up to 1.8 Bcf of storage capacity in the summer of 2005. Tipperary intends to store gas for third parties. It will enter into contracts to receive gas at Dawn and to redeliver to Dawn at a future date. Operationally, Tipperary will take possession of the gas at Dawn and Union will transport it along its Dawn-Trafalgar pipeline to the Stratford takeoff, and then along its Stratford-Goderich pipeline to the point of interconnection with Tipperary's pipeline. The gas will then travel on Tipperary's pipeline, be compressed and injected into the Tipperary pool. It will be stored in the pool until it is withdrawn on behalf of a customer. Tipperary will physically withdraw the gas from the pool and deliver it to Union at the point where Tipperary's pipeline interconnects with Union's Stratford-Goderich pipeline. Union will then distribute the gas locally to satisfy local area demand. Simultaneously at Dawn, Union will redirect an amount of gas that would have otherwise flowed to the local area to Tipperary's storage customer.

The subject Applications were filed jointly by Tipperary and Tribute. The Board issues Orders to single entities. This provides public protection and it clarifies the person empowered by, and bound to a Board Order. Tipperary is proposed as the storage operator, to hold the well licences and to be the lessee to the Petroleum and Natural Gas Leases and the Gas Storage Leases. Accordingly, any Orders issued by this Board in response to these applications will be issued to Tipperary.

## **Chapter 3**

### ***3.1 Designation as a Gas Storage Area***

#### **3.1.1 Introduction**

Section 37 of the OEB Act requires that an area be designated as a gas storage area before gas storage operations commence. When dealing with a designation application, the Board considers whether the underlying geological formation is appropriate for storage operations, and whether the tract of land to be designated is appropriately sized. For example, whether it is sufficiently large that no one, by drilling outside the Designated Storage Area, may penetrate the reservoir. For the purposes of this section of the Decision, all references to the "Pool" are to the Tipperary North Pool, to the "Pools" are to the Tipperary North Pool and the Tipperary South Pool.

#### **3.1.2 The Evidence**

The geology of the Pool, and its physical size and location, has been determined through examination of well bore cuttings, analysis of data collected from well logs, 2 dimensional and 3 dimensional seismic testing, examination of gas production and well records. Mr. Welychka, a geologist retained by the Applicant originally interpreted the geological data. This data was re-interpreted by Dr. Walsh. Mr. Welychka was not called as a witness in the hearing.

Dr. Walsh testified that his interpretation of the geologic data indicates that the Pool is suitable for gas storage. In this aspect Dr. Walsh's interpretation is consistent with the prefiled evidence of Mr. Welychka. Their evidence states that the Pools are classified as

pinnacle reefs and consist of carbonate, with porosity characteristics suitable for gas storage. The Pools are overlain with A-1 carbonate and sealed by an A-2 Anhydrite cap rock that is 1.2 m to 4.6 m thick. A-1 anhydrite also provides the lateral seal; there is no evidence that the Salina formation close to the reef's edges is sucrosic. The evidence indicated that the secondary reservoir development is non-existent. The top of the reef is about 550 m below ground level; the reef itself is approximately 150 m thick. The Pool originally held an estimated 24,200  $10^3\text{m}^3$  of gas.

Based on the Pools' interpreted boundaries according to Dr. Walsh, Tipperary proposes that 402 hectares be designated as a gas storage area. The proposed designated storage area includes both Pools and a buffer zone (an area between the boundary of either pool and the edge of the designated area) ranging from 296.3m to 553.6m. Dr. Walsh's assessment of the boundaries of the Pool did not agree with that of Mr. Welychka. The boundaries impact both the MNR spacing units and issues related to the compensation of landowners.

The northern boundary of the proposed designated storage area was contested by the MNR. In its opinion, it should be situated further north to coincide with the edge of the Ministry's spacing units. Tipperary opposes this position on the grounds that it is not supported by geological evidence. Tipperary also stated that the Ministry of Natural Resources has the ability to amend the bounds of its spacing units to effect the desired alignment of bounds.

### **3.1.3 Findings – Storage Area Designation**

The Board finds that the Tipperary North Pool is suitable for natural gas storage and accepts the proposed boundary of the designated storage area.

The Board accepts the geological evidence presented by the Applicant and finds that the tract of land proposed provides appropriate protection against inadvertent penetration into the storage area. With respect to MNR's interest in extending the northern boundary to conform to its revised spacing practices, the Board declines to so extend the Designated Area. From the Board's perspective, the designation of the storage area is, and should remain for our purposes, a purely technical determination. The area applied for meets the technical criteria for designation and we are not prepared to change the boundary for other reasons. The Board notes that the MNR has other mechanisms available to amend the area.

## **3.2 *Drilling***

### **3.2.1 Introduction**

The approval of an application for a licence to drill a gas well in a designated storage area in Ontario is considered pursuant to section 40 of the Act, which reads as follows:

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. 1998, c. 15, Sched. B, s. 40 (1).*
- (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. 1998, c. 15, Sched. B, s. 40 (2).*

- (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. 1998, c. 15, Sched. B, s. 40 (3).*
- (4) *The Minister of Natural Resources shall grant or refuse to grant the licence in accordance with the report. 1998, c. 15, Sched. B, s. 40 (4).*

Upon review of the referred application and related evidence, the Board prepares a report to the Minister of Natural Resources (the “Report”). The Report is binding on the Minister. Typically, the Board’s review of a reference under s. 40 of the Act considers 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.

### **3.2.2 The Evidence**

The Applicants provided copies of their applications for well drilling licences and a Drilling Program for each of three horizontal wells.

The vertical well Tribute et al # 22, Goderich 2-39-IX was drilled in the spring and summer of 2004. The purpose of this vertical well is to test the geology and to obtain a caprock sample for testing. Also, this well will provide kick-off points for the three horizontal injection/withdrawal wells proposed to be drilled in the designated storage area. The surface location of this vertical well is on Tract 2, lot 39, concession IX on the property of Mr. Elwin McCulloch.

The Drilling Programs concern geological prognosis, casing and cementing summary, drilling procedures, and the reporting and safety procedures required by the *Occupational Health and Safety Act* and the *Oil, Gas and Salt Resources Act*.

The proposed drilling method for all three wells is by a rotary directional drill rig utilizing nitrogen foam. The gas zone will be encountered between 560 and 580 metres depth. The horizontal well and two laterals will all be drilled through the permeable, gas bearing section as defined by the existing vertical wells. The main horizontal well will be drilled from 483 meters of Total Vertical Depth (mTVD) at a 55 degree angle and will reach an 89 degree angle at 561 mTVD. It will be drilled horizontally for about 528 m to a total depth of 579 mTVD. Drilling is planned to take 10 days. The two lateral wells will be drilled from the wellbore of the horizontal well, from a depth of about 564 mTVD to a depth 579 mTVD. The laterals will be drilled in a sequence. Drilling of the each lateral is planned to take 5 days.

The Applicants explained that the horizontal wells are proposed to realize higher deliverability performance. This is because a horizontal well is in communication with a greater amount of reservoir. The Applicant submitted that the well path, determined on the basis of its interpretation of the reservoir geology, is engineered properly and is technically achievable.

In the hearing, Ms. McConnell testified that the cemented casings of the proposed wells would protect the freshwater zone and the integrity of the storage pool. Ms. McConnell confirmed that the well casing design and testing would be in full compliance with a standard CSA Z341 “Storage of Hydrocarbons in Underground Formations”.

Stantec Consulting Ltd. was retained by the Applicants to prepare an environmental assessment report (the “Stantec Report”). It was completed in December 2003. It follows the Board’s Guidelines for Locating, Constructing and Operating Hydrocarbon Pipelines in Ontario (the “OEB Guidelines”). The Stantec Report presents a Storage Pool Environmental Management Plan dealing with well drilling and all surface facilities required to operate the pool. It identifies potential issues related to well drilling and land restoration and recommends protective measures for underground water, soils, drainage and agricultural operations. It also identifies the advantages of the rotary directional drilling and proposed horizontal wells, proposing that a single drilling pad may be able to be used and the need for additional access roads may be eliminated.

In the course of the proceeding the Applicants and intervenors had the opportunity to comment on the conditions of drilling licences approval proposed by Board staff. As a result of these comments, a set of agreed upon conditions was developed (the “Conditions”). The Conditions address general requirements such as term and transferability, compensation to landowners for damages, construction, monitoring, reporting and communication requirements.

### **3.2.3 Submission and Arguments**

In final submission, Board staff pointed out that the Applicants agreed to comply with the Storage Pool Environmental Management Plan in the pre-filed evidence, and to the requirements of the CSA and Provincial Operating Standards under the Oil, Gas and Salt Resources Act.

The TSLA expressed concern that the Applicants did not appear to be following the recommendations of the Stantec Report. Counsel to Northern Cross expressed concern

over the proposed schedule of the project and suggested that the construction schedule and project timing submitted in the evidence should be revised to reflect a more realistic schedule.

In its reply argument, the Applicants maintained that the proposed injection/withdrawal wells will not pose any risk of groundwater contamination, that the drilling program and casing will be in compliance with the CSA requirements and that they will follow the Stantec Report recommendations.

### **3.2.4 Findings - Drilling**

The purpose of the Board's review of the referred well licence applications is to establish 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 any impacts on directly affected landowners. The Board finds the Applicant to be technically competent to undertake the planned directional drilling program and the proposed well completion activities. The Applicant has considerable experience as an operator of gas production facilities, and this experience has direct relevance on its ability to conduct the kind of drilling operation applied for. It is noteworthy that the Applicant is currently authorized to perform the vertical portion of the drilling program, and is conducting the same. The Board has a reasonable expectation that the Applicant is able to responsibly conduct these activities over the longer term, to the level required by the relevant codes and standards, and consistent with the Conditions of Approval developed in connection with this Application.

The Board finds that the Conditions are sufficiently comprehensive and specific to deal with potential adverse impacts and effects of the drilling of the wells. First, the

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

The Board finds that the Stantec Report has been prepared in accordance with the OEB Guidelines and that it makes appropriate recommendations for environmental protection within the context of drilling licence applications. The Board expects the Applicant to adhere to recommendations of the Stantec Report.

The Board will issue a Report recommending the approval of the applications to drill three horizontal wells subject to the Conditions set out in the Report. The Report is attached to this Decision as Schedule B. The Board reminds the Applicants that, in the event that the Tipperary storage pool is not operated, the well licences approved herein are not transferable without the approval of the Board and that the Conditions limit the term of the authorization granted to twelve months from the date of the Report, which the Board considers to be a reasonable period for the Applicant to commence storage operations.

### ***3.3 Injection and Withdrawal of Gas***

#### **3.3.1 Introduction**

Subsection 38(1) of the Act empowers the Board to authorize the injection of gas into, storage of gas in, and withdrawal of gas from a natural gas storage reservoir. When dealing with such applications the Board considers:

- Whether injection/withdrawal activities will be conducted safely;
- Whether the well(s) to be used for such purposes has been appropriately designed, constructed and maintained;
- Whether all relevant codes and standards will be followed;
- Whether the maximum operating pressure is safe and prudent;
- The impacts of injection/withdrawal activities and the effectiveness of any proposed mitigation; and,
- The technical and financial capabilities and preparedness of the Applicant to develop and operate the storage facilities described in the Application, and to be appropriately accountable for losses or damages occasioned by its activities.

### **3.3.2 The Evidence**

Among the requirements of CSA Z669-99 “Oil and Gas Pipeline Systems” is that a risk assessment be conducted prior to the commencement of storage operations and that a gas storage operator prepare and maintain an Operating Procedures Manual and an Emergency Shut Down Manual. Seven gas production wells have been drilled into the Tipperary North Pool over the years; the status and management of two of these wells were considered at length in the hearing. The Imperial 369 and Imperial 397 wells were drilled and plugged in the 1950's. The closure or decommissioning standard at that time required wooden block and lead plugs. Ms. McConnell testified that she had no reason to anticipate that these plugs would not be competent under the storage conditions anticipated in the Application. Dr. Walsh pointed out that the Imperial 397 well was, in fact, drilled off-reef and that neither well penetrated the reservoir.

Tipperary has determined the maximum operating pressure to be 1,096 psia, which is consistent with CSA Z669 requirements, assuming favourable results from the cap rock strength test. Tipperary has acquired a cored sample of the cap rock and has submitted it for scientific testing. These tests are critical for the determination of the storage area's

suitability for the storage operation contemplated by the Applicant. Tipperary proposed a two-step initial pressurization program. It plans to monitor the Pool and the pressure gradient during initial pressurization and subsequently. Tipperary testified that it would shut down operations and make the site safe if an unacceptable situation is detected.

The landowners of the TSLA contested the safety of the proposed maximum operating pressure. They expressed concern that the integrity of the reservoir against leaks was not proven at pressures greater than discovery and that if the reservoir failed and gas was released in an uncontrolled fashion that it could migrate into the water table and hence contaminate it. Mr. Chinneck suggested that a risk of faulting or fracturing exists. The landowners expressed concern about potential impact to the quality of the native water supply, and emphasized its importance to the commercial farming operations carried out in the area.

At the time of the hearing, Tipperary was investigating the required form and amount of insurance coverage; Ms. Lowrie testified that the insurance acquired would be consistent with that of other storage operators in the province.

The Applicant has contracted the technical skills required for the development of the storage pool. Both Dr. Walsh and Mr. Gorman were formerly associated with the CanEnerco gas storage operation.

### **3.3.3 Arguments and Submissions**

Board counsel noted the following:

- That the storage rights were held by Tribute (with approximately \$1 million in assets) while the storage operator will be Tipperary (with approximately \$10 in assets);
- That there was a dispute over the appropriate amount and type of insurance required; and
- That operational safety requirements, including the requirement for a risk assessment of the capped wells, were addressed in relevant CSA standards.

Mrs. Broadfoot indicated that it was imperative that the project be developed safely, with due regard for the environment, particularly the groundwater.

Mr. Chinneck emphasized that the quality and supply of water to the local area farming operations was critical to their commercial success and hence, protection of the water table was crucial. He argued that the Applicant and its affiliate's financial resources are not well defined and characterized Tipperary as underfunded. Mr. Chinneck expressed concern over the risk of catastrophe and provided a list of conditions to be satisfied before injection ought to be permitted to commence, including a requirement that Tipperary conduct studies on water and health risks, develop an emergency plan, and procure an independent assessment of the insurance requirements. He noted that the MNR well bond requirements were minimal and that, if the bond was liquidated and found to be inadequate, liability for well plugging falls to the landowners. Finally, he suggested that any order authorizing the operation of the gas storage business be effective only after the issue of landowner compensation had been resolved.

Ms. Paulus, counsel to Northern Cross, suggested that the project was premature and, accordingly, that the Board was not in a position to decide it. She suggested that there were too many uncertainties associated with the proposed operation to enable the Board to approve it.

In reply, Mr. Lewis indicated that order should be issued to Tipperary Gas Corp., general partner for the Huron Tipperary Limiter Partnership 1. He indicated that the TSLA's requirements would be met or were unnecessary. He challenged Ms. Paulus' assertion that the evidence was inadequate.

### **3.3.4 Findings – Injection and Withdrawal**

The Board will not grant an order authorizing injection and withdrawal at this time as the supporting evidence is not sufficient. The Board is prepared to consider additional evidence before deciding on this matter. The specific content of evidence and the schedule of the proceeding going forward are set out in Procedural Order No. 5 attached as Schedule C.

The Board's designation of a storage area creates a significant provincial asset. The role of storage areas in augmenting the overall integrity and buoyancy of gas supply and distribution in the province has been noted as early as 1962 in the Langford Report. Stewardship of this asset is important to realizing these benefits. The Board is not prepared to grant exclusive rights to exploit a valuable provincial asset unless the Applicant can demonstrate that it has a reasonable probability to successfully manage those assets in a commercially responsible manner. While the Board does not expect any applicant to be able to demonstrate that its technical and financial viability and preparedness guarantees the success of the proposed operation, it is important that applicants are able to present thoughtful, detailed and adequately supported operational and business plans, which address the key elements of the operation.

The Applicant acknowledged that operating a storage pool is a markedly different undertaking, both financially and operationally when compared to operating a of a gas

production business. As previously indicated, the Board is comfortable with the Applicant's ability to drill wells. It has been doing that successfully in Ontario for some time. The storage business involves different operational challenges given the pressurization involved, and the injection and withdrawal of gas. If the Board does grant authorization requested, that approval will be subject to minimum operating conditions.

Tipperary did not present sufficient business or financial information relevant to the development and operation of the proposed project. The Applicants have limited financial resources. Furthermore, the Applicant did not provide persuasive or convincing evidence respecting the contribution of additional capital, certainty of access to capital or alternate sources of capital adequate to support the development of the intended commercial gas storage operation. The Board acknowledges that Tipperary did file a letter from a financial institution indicating that a prospective investor has access to significant capital. However, there was no evidence of capital specifically committed to this project.

The Applicants therefore do not have the financial depth to fund an unprofitable operation. This places even greater importance upon the successful implementation of a business plan to support the viability of the project. The Board does not seek to create barriers to entrepreneurial storage operators by imposing onerous capital requirements or proof of fail-safe commercial success. However, even non-utility storage operators must demonstrate that they have a realistic plan for the commercial operation of a storage pool.

Board requires the Applicants to file additional evidence supporting the viability of the gas storage business. At a minimum, this should include a five-year business plan detailing:

- Sources of capital;
- A marketing analysis;

- A revenue and earnings forecast;
- Pro-forma cash flows; and
- Pro-forma balance sheets.

Based upon the fact that very few applications of this nature have come before the Board, and therefore the expectations of the Board may not have been clearly established, the Board will provide the Applicants with the opportunity to complete the record, prior to the Board rendering its Decision.

The Board will leave this proceeding open so that the Applicants may file further evidence in this regard. The specific content of evidence and the scheduling of the proceeding going forward will be set out in the Procedural Order No. 5 attached as Schedule C.

### ***3.4 Compensation to Landowners***

#### **3.4.1 Introduction**

Subsections 38(2) and 38(3) of the Act deal with the compensation to be paid by an authorized storage operator to landowners affected by storage operations in a designated storage area (DSA):

38. (2) *Subject to any agreement with respect thereto, the person authorized by an order under subsection (1),*
- (a) *Shall make to the owners of any gas or oil rights or of any right to store gas in the area just and equitable compensation in respect of the gas or oil rights or the right to store gas; and*

*(b) Shall make to the owner of any land in the area just and equitable compensation for any damage necessarily resulting from the exercise of the authority given by the order.*

38. (3) *No action or other proceeding lies in respect of compensation payable under this section and, failing agreement, the amount shall be determined by the Board.*

On August 9, 2004, the first day of oral hearing, the Applicant requested to amend the application by asking the Board to determine compensation levels to the landowners. This amendment was based on subsection 38(3) of the Act, which allows that the Board set the compensation if the parties fail to reach an agreement. On September 10, 2004, the second day of the hearing, the Board issued an oral decision on this matter.

While the Board approved the Applicant's request for an amendment respecting landowner compensation, the Board indicated that did not wish to decide compensation at this time. Instead, the Board decided that it would establish a separate phase of the proceeding to deal with landowner compensation. The Board stated that it is not satisfied with the efforts to achieve settlement and the Board encouraged the parties to continue negotiating. The Board stated that the separate phase to set compensation would commence following reasonable negotiations and settlement efforts, and notice to all affected parties.

### **3.4.2 The Evidence**

The proposed DSA encompasses the North and South Tipperary Units and additional land to provide protection for the proposed storage operations. There are 21 landowners in the proposed DSA. In 1998, Tribute acquired, through assignments, Petroleum and Natural Gas (PNG) Leases, Gas Storage Leases, and Unit Operating Agreements with 18 landowners. Tribute does not have Unit Operating Agreements or Storage Rights Agreements with landowners Feddes (parcel # 11) and Vermue (parcel # 3).

Tribute does not hold storage rights for the Sloane property (parcel # 18) as a result of administrative error. This is in the process of being rectified. Tribute is negotiating for storage rights leases with landowners Vermue and Feddes.

The TSLA has been formed to represent the interests of the affected landowners. All landowners in the proposed DSA except Mr. Goff Brand and Mr. Adrian Brand belong to the TSLA. Mr. Goff Brand and Mr. Adrian Brand reached an agreement with Tribute by accepting the offer set in the Amending Agreement on August 9, 2004.

At the time of the hearing, the latest formal offer by Tribute to all the landowners within the DSA was specified in the unexecuted Amending Agreement dated August 10, 2004. This Amending Agreement sets all the components of storage related compensation. The quantum of the offer in the Amending Agreement is the same as compensation determined to be just and equitable in Board's Union Gas Decision and Order RP-2000-0005, dated March 23, 2004. This decision was submitted as an exhibit in the hearing. At this time, there is no agreement between the affected landowners and the Applicant.

The compensation components and quantum offered by the Applicant to the landowners in the Amending Agreement are as follows:

- Compensation for residual gas in the Tipperary Unit Area is for gas in place down to reservoir pressure of 50 psi to be calculated as follows: 12.5% by Unit Participation Percentage by GIP (Gas in Place) mcf by wellhead price. The purchase price includes any applicable GST and is payable within 30 days of the date of initial injection in the pool;
- Gas Storage Rights and PNG Rights Compensation at \$ 92.50 per acre;
- Outside Acreage Compensation for Gas Storage Rights and PNG Rights outside of the DSA at \$27.79 per acre;
- Gas Storage Wells Compensation in the amount of \$1,050.00 per well, covering the lease of land for facilities, and damages including disturbance, loss of opportunity and crop loss; and
- Surface Rights Compensation - permanent all weather roads \$ 825.00 per acre.

An approval of a well drilling license application has implications on the compensation for surface rights and construction related damages to the directly affected landowners. In this case, the only affected landowner by drilling activities is Mr. McCulloch who is a member of the TSLA.

The Applicant has an active gas storage lease for Mr. McCulloch's property. This lease provides the surface rights needed to drill the proposed wells and construct facilities on Mr. McCulloch's property.

### **3.4.3 Submissions**

The Applicant and landowners confirmed that the structure and quantum of compensation are in line with the compensation determined by the Board to be just and equitable in the Board's decision and order RP-2000-0005, dated March 23, 2004.

In addition, the quantum of compensation and the components of compensation are confirmed by the TSLA in the hearing to be acceptable to the landowners represented by TSLA.

Two issues related to the Amending Agreement seem to be outstanding and remain to be negotiated. They are the allocation method of residual gas payments to the landowners and wording of the clause that deals with future adjustments of the compensation.

Regarding compensation for the surface rights required for well drilling on Mr. McCulloch's property, the Applicant testified that Mr. McCulloch, in principle, agreed upon the quantum of compensation for surface rights. The TSLA is still willing to negotiate with Tribute on behalf of all its members, including Mr. McCulloch.

#### **3.4.4 Findings - Compensation**

Under subsection 38(3) of the Act, the Board sets compensation where the parties have failed to come to an agreement. The Board is not satisfied that the landowners and the Applicants have exhausted their negotiations. If they do not reach an agreement by the time that the Board makes a final determination on the Injection and Withdrawal Order, the Board will make a Compensation Order based upon the evidence available at that time. The Board directs the Applicants to file evidence on the status of compensation arrangements in accordance with the Procedural Order No. 5.

### **3.5 *Storage Rates***

#### **3.5.1 Introduction**

Section 36 of the OEB Act requires that storage services be provided pursuant to Board approved rates. The Board's key concern with the storage rates applied for by Tipperary is the relationship between these rates and the revenues to support the financial viability of the enterprise as discussed in s. 3.3.2 of this decision.

### **3.5.2 The Evidence**

Tipperary proposes that the Board allow it to use Union's Board-approved C1 range rate, the rate Union charges its "ex-franchise" customers. The ex-franchise storage services market has been evolving for several years. At this point in time, very desirable returns are potentially available. It is clear that Tipperary seeks to take advantage of this premium.

### **3.5.3 Findings - Rates**

Given Tipperary's minor role in the Ontario storage market, and the fact that it does not control transmission and is not affiliated with a transmission company, it is difficult to conclude that Tipperary may be in a position to exercise market power or that its intention to charge Union's C1 rates may harm customers.

While the Board is content with the use of Union's C1 range rate in this Application, it is primarily concerned about the way in which the anticipated revenue stream relates to the Applicant's business plan and therefore requires Tipperary to identify the revenues it expects to receive in rates in support of its business plan.

With respect to the use of "market rates" generally under the C1 rates schedule, the Board notes that this was originally put in place to discourage third parties from reselling cost of

service storage at a market premium. The use of this rate for merchant storage (as proposed by the Applicant) has not been thoroughly addressed by the Board. Specifically, there was no evidence as to whether the premiums available in the ex-franchise storage market result from market failure, the exercise of market power, or some other source. Further, no evidence was filed with respect to competition in the market place, market power, market concentration or market share. These are the types of issues that the Board would want to address before making a more general determination that the storage market is sufficiently competitive to support market rates for merchant storage.

Due to Tipperary's minor role in the Ontario storage market, the absence of intervenor concern and other specifics of this case, the Board has not required Tipperary to file additional evidence on these issues in this proceeding.

## **Chapter 4 – Cost Awards**

The Board received applications for cost awards from Tipperary Storage Landowners' Association and Huron County Federation of Agriculture.

The Board allowed the Applicant until October 25, 2004 to file submissions in response to Intervenor applications for costs awards. The Applicant filed its submissions at the Board office on October 22, 2004.

The Board will allow Intervenors to file reply submissions, if any, on or before November 8, 2004.

The Board will issue its decision of cost awards after considering all submissions.

**DATED** at Toronto October 25, 2004.

*Original signed by*

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Bob Betts  
Presiding Member

*Original signed by*

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Pamela Nowina  
Member

*Original signed by*

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Paul Sommerville  
Member

**RP-2003-0253**  
**EB-2003-0314**

**Schedule A**

**Order to Designate a Gas Storage Area**

**DATED October 25, 2004**



**RP-2003-0253**  
**EB-2003-0314**

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

**AND IN THE MATTER OF** an application by Tribute Resources Inc. and Tipperary Gas Corp. for an order designating an area known as the Tipperary Pool in the geographic Township of Goderich, Municipality of Central Huron, Province of Ontario as a gas storage area.

**BEFORE:** Bob Betts  
Presiding Member

Pamela Nowina  
Member

Paul Sommerville  
Member

## **ORDER**

Tribute Resources Inc. and Tipperary Gas Corp. ("Applicants") filed an application, dated December 24, 2003 and amended February 5, 2004 and further amended August 10, 2004, with the Ontario Energy Board under sections 36, 36.1, 38 and 40 of the *Ontario Energy Board Act, 1998*, S.O. c.15, Schedule B (the "Act").

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; and approving rates. The Applicants also sought a favorable report of the Board to the Minister of Natural Resources with respect to the Applications for licences to drill three wells in the proposed designated storage area. Collectively, the orders and report sought by the applicants to be granted by the Board will support the conversion of the existing Tipperary North pool in the Township of Central Huron from production to storage. The planned in-service date is Summer 2005. The Board assigned the Application for an order to designate gas storage area File No. RP-2003-0253/EB-2003-0314.

The Board issued a Notice of Application dated February 25, 2004. The applicants served and published this Notice according to the Board's Letter of Direction. The Board has issued four Procedural Orders in connection with the Application. The Board issued Notice of Hearing on July 21, 2004. The oral hearing commenced August 9, 2004. Argument was completed on August 20, 2004.

The Board has considered the evidence adduced at the hearing and the arguments made. The Board has issued its Partial Decision with Reasons, dated October 25, 2004. In the Partial Decision the Board found that there is sufficient evidence to approve the Application for an order designating a gas storage area and to report favourably to the Minister of Natural Resources on the need to drill three horizontal wells within designated storage area. At the same time the Board has found that there is insufficient evidence to render a decision on the Application for an order authorizing injection into and withdrawal of gas from the Tipperary Pool.

The Board finds that the Tipperary North Pool is suitable for natural gas storage and accepts the proposed boundary of the designated storage area.

**THEREFORE THE BOARD ORDERS THAT:**

1. The area described by the Metes and Bounds description attached as Appendix A to this order is designated as a gas storage area.

**DATED** at Toronto October 25, 2004

ONTARIO ENERGY BOARD

*Original signed by*

John Zych  
Board Secretary

**RP-2003-0253  
EB-2003-0314**

**Appendix "A"**

**METES AND BOUNDS DESCRIPTION  
OF THE BOUNDARY OF THE  
TIPPERARY DESIGNATED STORAGE AREA**

**Dated October 25, 2004**

**METES AND BOUNDS DESCRIPTION**  
**OF THE BOUNDARY OF THE**  
**TIPPERARY DESIGNATED STORAGE AREA**

ALL AND SINGULAR those certain parcels or tracts of land and premises, situate, lying and being in the Township of Goderich, Municipality of Central Huron, County of Huron, Province of Ontario and being more particularly described as follows:

All and singular that certain parcel or tract of land and premises situate, lying and being in the Municipality of Central Huron, geographic Township of Goderich, in the County of Huron being composed of part of lots 38, 39, 40 and 41 Concession 8, part of lot 36 and all of lots 37, 38, 39, 40 and 41, Concession 9, part of lot 36 and all of lots 37, 38, 39 and part of lots 40 and 41, Concession 10, part of the road allowance between Concession 9 and 10 and part of the road allowance between lots 40 and 41 more particularly described as follows:

All and singular that certain parcel or tract of land and premises situate, lying and being in the Municipality of Central Huron, geographic Township of Goderich, in the County of Huron being composed of part of lots 38, 39 40 and 41 Concession 8, part of lot 36 and all of lots 37, 38, 39, 40 and 41, Concession 9, part of lot 36 and all of lots 37, 38, 39 and part of lots 40 and 41, Concession 10, part of the road allowance between Concession 9 and 10 and part of the road allowance between lots 40 and 41 more particularly described as follows:

Commencing at the northeast angle of the South half of lot 36, Concession 10

Thence: Southerly along the easterly limit of lots 36, 37, 38 and 39 to the southeast angle of lot 39, Concession 10

Thence: Westerly along the southerly limit of lot 39, Concession 10 to a point marking the division between the easterly one-third and the westerly two-thirds of lot 40, Concession 10

Thence: Southerly along said dividing line and parallel to the easterly limit of lot 40, Concession 10 to the southerly limit of lot 40, Concession 10

Thence: Westerly along the southerly limit of lot 40, Concession 10 to a point marking the division line between the westerly one-third and the easterly two-thirds of lot 40, Concession 10

Thence: Southerly along said dividing line and its extension southerly and parallel to the easterly limit of lot 41, Concession 10 to the southerly limit of lot 41, Concession 10

Thence: Westerly along the southerly limit of lot 41, Concession 10, lot 41, Concession 9 and lot 41, Concession 8 to a point marking the division line between the easterly two-thirds and the westerly one-third of lot 41, Concession 8

Thence: Northerly along the dividing line and its extension northerly and parallel to the easterly limit of lots 41, 40 and 39, Concession 8 to a point in the southerly limit of lot 38, Concession 8

Thence: Easterly along the southerly limit of lot 38, Concession 8 to a point marking the limit between the westerly two-thirds and the easterly one-third of lot 38, Concession 8

Thence: Northerly along the said dividing line and parallel to the easterly limit of lot 38, Concession 8 to the northerly limit of lot 38, Concession 8

Thence: Easterly along the northerly limit of lot 38, Concession 8 to the northeast angle of lot 38, Concession 8

Thence: Northerly along the westerly limit of lot 37 and 36, Concession 9 to a point marking the northwest angle of the south half of lot 36, Concession 9

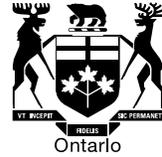
Thence: Easterly along the dividing line between the north and south half of lot 36, Concession 9 and the dividing line between the north and south half of lot 36, Concession 10 to the point of commencement.

**RP-2003-0253**  
**EB-2003-0316**

**Schedule B**

**Board Staff Report**

**DATED October 25, 2004**



**RP-2003-0253**  
**EB-2003-0316**

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

**AND IN THE MATTER OF** a Reference to the  
Ontario Energy Board from the Ministry of  
Natural Resources of an Application by Tribute  
Resources Inc. and Tipperary Gas Corp. for  
licences to drill three horizontal  
injection/withdrawal wells within the boundary  
of the Tipperary Pool designated gas storage  
area in the Municipality of Central Huron,  
geographic Township of Goderich, in the  
County of Huron.

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**REPORT OF BOARD STAFF**

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October 25, 2004

## Introduction

Tribute Resources Inc. and Tipperary Gas Corp. (“Applicant” or “Applicants”) filed an Application, dated December 24, 2003 and amended February 5, 2004 and further amended August 10, 2004, with the Ontario Energy Board under sections 36, 36.1, 38 and 40 of the *Ontario Energy Board Act, 1998*, S.O. c.15, Schedule B (the Act). The Board assigned the Application Board File Nos. RP-2003-0253/EB-2003-0314/EB-2003-0315/EB-2003-0316/EB-2003-0317.

The Applicants applied for orders designating a gas storage area (ss. 36.1 of the Act); authorizing the injection of gas into, storage of gas within, and withdrawal of gas from a storage reservoir (s. 38 of the Act); and approving rates (s. 36 of the Act). The Applicants also sought a favorable report of the Board to the Minister of Natural Resources with respect to Applications for licences to drill three wells in the proposed designated storage area (s. 40 of the Act). Collectively, the orders and report sought by the applicants to be granted by the Board will support the conversion of the existing Tipperary North pool in the Township of Central Huron from production to storage. The planned in-service date is Summer 2005.

On June 9, 2004, the Board received a reference from the Ministry of Natural Resources (MNR), Petroleum Resources Centre, to report on three Applications by Clearwood Resources Inc., on behalf of the Applicants, for licences to drill three horizontal injection/withdrawal wells within the Tipperary Pool designated storage area. Subsection 40 (2) of the Act provides that the Board may hold a hearing before reporting to the Minister of Natural Resources if the applicant does not have authority to store gas in the area or if, in the Board’s opinion, special circumstances of the case require a hearing. The Board’s report to the Minister is binding under section 40(4) of the Act.

The Board issued a Notice of Application dated February 25, 2004. The Applicants served and published this Notice according to the Board’s Letter of Direction. The Board has issued four Procedural Orders in connection with the Application. The Board issued Notice of Hearing on July 21, 2004. The Application was heard at the Ontario Energy Board from August 9, 2004 to August 17, 2004. The Board heard evidence from August 9 to 13; oral argument-in-chief on August 16 and, on August 17, Board staff’s summary of the issues and intervenors oral arguments. Written reply argument was filed by the Applicants with the Board on August 20, 2004.

On October 25, 2004, upon consideration of evidence adduced at the hearing and the arguments, the Board issued a Partial Decision with Reasons (Partial Decision). In the Partial Decision the Board found that there is sufficient evidence to approve the Application for an order designating a storage area and to report favorably to the Minister of Natural Resources (Report) on the need to drill three horizontal wells within Tipperary Pool designated storage area. At the same time, the Board has found that there is insufficient evidence to render a decision on the Application for an order authorizing injection into and withdrawal of gas from the Tipperary Pool. The Board will address the Application for an order authorizing injection into and withdrawal of gas and the rate order at the same time and in accordance with the time line set in the Procedural Order No. 5.

On October 25, 2004, the Board issued an order (RP-2003-0253/EB-2003-0314) designating the area containing a gas reservoir located in parts of Lots 38, 39, 40 and 41, Concession 8; part of Lot 36 and all of Lots 37, 38, 39, 40 and 41, Concession 9; part of lot 36, all of Lots 37, 38, 39 and part of Lots 40 and 41, Concession 10; part of the road allowance between Concession 9 and 10 and part of the road allowance between Lots 40 and 41 all in the geographic Township of Goderich, Municipality of Central Huron in the County of Huron as a gas storage area.

This Report, prepared and issued pursuant to s. 40 of the Act, has been assigned the Board File No. RP-2003-0253/EB-2003-0316.

### **Board's Review**

Typically, the Board's review of an application under s. 40 of the Act considers the geological evidence related to the well location and proposed drilling program, technical capability of an applicant to conduct the drilling in accordance with applicable standards and codes, environmental and landowner matters, the need for the proposed wells, the cost and the economics. The Board's past consideration of the need, the cost estimates and economic feasibility was premised on a rate regulated monopolist applicant (regulated utility). This is not a case with this applicant who is a private un-regulated firm that is proposing to develop the Tipperary Pool as a storage asset to be able to participate in the storage market. Therefore, the need, the costs and the economic feasibility of the proposed drilling are not within the scope of the Board's review of the licence to drill applications.

The Board's review is, in this case, focused mostly on the technical expertise and capability of the applicants to safely drill the wells, to maintain geological integrity of the designated storage pool, to ensure environmental protection of affected lands, and to minimize adverse impact on affected landowners.

### **Proposed Facilities and Drilling Programs**

The Applicant seeks a licence to drill three horizontal wells, namely:

- Tribute et al # 22 (Horiz. #1), Goderich 2-39-IX; this is the main horizontal;
- Tribute et al # 22 (Horiz. #1-Lat.#1), Goderich 2-39-IX; this is the first horizontal lateral;
- Tribute et al # 22 (Horiz. #1-Lat.#2), Goderich 2-39-IX; this is the second horizontal lateral.

A kick-off point for the three horizontal wells is a vertical well (Tribute et al # 22, Goderich 2-39-IX) which was successfully drilled by the Applicant earlier this year. The purpose of this vertical well was to test the geology and obtain a caprock sample.

The Drilling Programs, submitted in support of the drilling licence applications, cover the geological prognosis, casing and cementing summary, drilling procedures, reporting and safety procedures required by the *Occupational Health and Safety Act* and the *Oil, Gas and Salt Resources Act*.

The proposed drilling method for all three wells is by a rotary directional drill rig utilizing nitrogen foam. The gas zone is between 560 and 580 metres deep. The horizontal well and two laterals will be drilled through permeable, gas bearing section as defined by the existing vertical wells. The main horizontal well will be drilled from 483 meters of Total Vertical Depth (mTVD) at a 55 degree angle and will reach a 89 degree angle at 561 mTVD. It will be drilled horizontally for about 528 metres to a total depth of 579 mTVD. This drilling is planned to take 10 days. The two lateral wells will be drilled from the wellbore of the horizontal well, from a depth of about 564 mTVD to a depth 579 mTVD. The laterals will be drilled in a sequence. Drilling of the each lateral is planned to take 5 days.

Horizontal wells are proposed to realize higher deliverability performance comparing to

a vertical well due to communications with a greater amount of gas holding reservoir.

The Applicant submitted that the well path, determined on the basis of interpretation of the reservoir geology, is engineered properly and is technically achievable. In the hearing, the Applicant testified that the cemented casings of the proposed wells would protect the freshwater zone and the integrity of the storage pool. Also, the Applicant confirmed that the well casing design and testing will be in full compliance with a standard CSA Z341.1.

### **Environmental Impacts of Drilling and Construction**

An environmental assessment report by Stantec Consulting Ltd. was completed for the Applicants in December 2003 (the Stantec Report) and filed with the Board. It follows the "OEB Guidelines for Locating, Constructing and Operating Hydrocarbon Pipelines in Ontario (OEB Guidelines)". The Stantec Report contains a "Storage Pool Environmental Management Plan" for well drilling and construction of related surface facilities required to operate the pool.

The Stantec Report makes appropriate recommendations for environmental protection within the context of drilling licence applications. It addresses potential issues related to well drilling and land restoration and recommends mitigative and protective measures for underground water, soils, drainage and agricultural operations. The Stantec Report points to the advantages of the rotary directional drilling method and the location of the proposed horizontal and lateral wells which facilitates use of a single drilling pad and eliminates the need for additional access roads.

In the hearing, the Applicants testified that the cemented casings of the proposed wells would provide protect the freshwater zone and the integrity of the storage pool. The applicants also confirmed that the well casing design and testing will be in full compliance with standard CSA Z341.1.

Related to the well drilling operations, the Applicants agreed to comply with the "Storage Pool Environmental Management Plan" and with the requirements of the CSA and Provincial Operating Standards under the *Oil, Gas and Salt Resources Act*.

### **Landowner Matters**

The surface location of the three proposed horizontal wells is on Tract 2, lot 39, concession IX on the property of Mr. Elwin McCulloch. Consequently, Mr. McCulloch is the only landowner directly affected by the approval of well drilling licences. The Applicant has an active gas storage lease for Mr. McCulloch's property. This lease provides the surface rights needed to drill the proposed wells and construct facilities on Mr. McCulloch's property.

A compensation offer to all the landowners affected by the Tipperary Pool development, including Mr. McCulloch, was given in the form of an Amending Agreement. Drilling three proposed horizontal wells on Mr. McCulloch's property will entitle him to surface rights compensation for a well-head, access roads, disturbances, loss of opportunity and crop loss. The compensation offer to Mr. McCulloch matches the level of compensation determined to be just and equitable in the Board's Decision and Order RP-2000-0005, dated March 23, 2004. The Applicants testified that Mr. McCulloch, in principle, agreed upon the amount of compensation offered, subject to signing the Amending Agreement.

### **The Conditions of Approval**

The Applicants and Intervenors, including the affected landowners, agreed on the conditions of drilling licences approval found in the Appendix "A" of this Report. The conditions address general requirements such as term and transferability, compensation to landowners for damages, as well as construction, monitoring, reporting and communication requirements.

The conditions deal with potential adverse impacts and effects of the drilling of the wells. First, the conditions oblige the applicant to 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. The conditions specify construction requirements for land restoration and minimizing impacts on agricultural land and farming operations. Furthermore, the conditions require monitoring and reporting to the Board of impacts and mitigation during and after construction, as well as the recording of landowners concerns and reporting on the resolution of these concerns. The conditions also provide

that, in the event that they do not operate the Tipperary Pool, the well licences are not transferable without prior approval of the Board.

### **Recommendation**

The Applicant is considered technically competent to undertake the planned directional drilling programs and the proposed wells completion activities. It is expected that the Applicant is able to conduct these activities responsibly and safely at the level required by the relevant codes and standards. The Board staff recommends approval of the Applications for the three drilling licences subject to the proposed conditions of approval attached in the Appendix "A" to this Report.

**RP-2003-0253  
EB-2003-0316**

**Appendix "A"**

**Conditions of Approval**

**Dated October 25, 2004**

**RP-2003-0253/EB-2003-0316**

**Tipperary Gas Corp.  
Tipperary Pool Development Project**

**Conditions of Approval**

Application to Drill a Well

1. General Requirements

- 1.1 Tipperary Gas Corp. ("Tipperary") shall adhere to the evidence and the undertakings and comply with applicable laws, regulations and codes pertaining to the construction of the proposed wells.
- 1.2 The cost of each well shall be reported to the Board confidentially within six months of the completion of all wells, showing a breakdown of the costs. A cost variance analysis shall be submitted.
- 1.3 Authorization for the issuance of the drilling licence is limited to twelve months from the date of the Board's Report to the Ministry of Natural Resources.
- 1.4 The authority granted under this Order to Tipperary is not transferrable to another party without leave of the Board.

2. Just and Equitable Compensation

- 2.1 Tipperary 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 Tipperary 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 Tipperary shall ensure that the movement of equipment is carried out in compliance with all procedures filed with the Board, and as follows:

- i) Tipperary 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 Tipperary 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 Tipperary shall implement all the recommendations of the Storage Pool Environmental Management Plan filed at the Tab 6 of the pre-filed evidence.

#### 4. Monitoring and Reporting Requirements

4.1 Both during and after construction, Tipperary 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. Tipperary 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 Tipperary's 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.
- 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 Tipperary 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.
- 5.2 The Board's designated representative for the purpose of these Conditions of Approval shall be the Manager, Facilities and Licensing.

**RP-2003-0253**  
**EB-2003-0314**

**Schedule C**

**Procedural Order No. 5**

**DATED October 25, 2004**



**RP-2003-0253**  
**EB-2003-0314**  
**EB-2003-0315**  
**EB-2003-0316**  
**EB-2003-0317**

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

**AND IN THE MATTER OF** an application by Tribute Resources Inc. and Tipperary Gas Corp. for an order designating a gas storage area;

**AND IN THE MATTER OF** an application by Tribute Resources Inc. and Tipperary Gas Corp. for an order authorizing the injection of gas into, storage of gas in, and removal of gas from a gas storage area;

**AND IN THE MATTER OF** an application by Tribute Resources Inc. and Tipperary Gas Corp. for an order granting leave to drill three wells in the proposed designated storage area;

**AND IN THE MATTER OF** an application by Tribute Resources Inc. and Tipperary Gas Corp. for an order approving or fixing just and reasonable rates for the storage of gas.

### **PROCEDURAL ORDER NO. 5**

Tribute Resources Inc. ("Tribute") and Tipperary Gas Corp. ("Tipperary"), collectively referred to as the "Applicant" or the "Applicants", filed the Application, dated December 24, 2003 and amended February 5, 2004 and further amended August 10, 2004, with the Ontario Energy Board pursuant to sections 36, 36.1, 38 and 40 of the *Ontario Energy Board Act, 1998*, S.O. c.15, Schedule B (the "Act"). The Board assigned the Application Board File Nos. RP-2003-0253/EB-2003-0314/EB-2003-0315/EB-2003-0316/EB-2003-0317. 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; and approving rates. The Applicants also sought a favorable report of the Board to the Minister of Natural Resources with respect to applications for licences to drill three wells in the proposed storage area. If these orders and this report are issued they collectively will support the conversion of the existing Tipperary North pool in the Township of Central Huron from production to storage. The planned in-service date is Summer 2005.

The Application was heard at the Ontario Energy Board from August 9, 2004 to August 17, 2004. The Board heard evidence from August 9 to 13, oral argument-in-chief on August 16 and the Board staff's summary of the issues and Intervenors' oral arguments on August 17. Written reply argument was filed with the Board on August 20, 2004.

On October 25, 2004 the Board issued a Partial Decision with Reasons ("Partial Decision"). This Procedural Order is issued coincident with the Partial Decision.

In the Partial Decision, the Board granted the Designation Order and provided the requested Report to the Minister of Natural Resources, subject to conditions of approval identified in the Report. The Board decided not to grant the other Orders requested at this time. With respect to the Injection and Withdrawal Order, the Board stated in its Partial Decision that the Applicants have failed to demonstrate that they have the financial and operational ability to carry out a viable storage operation. The Board stated that it is prepared to consider additional evidence before deciding on this matter. The specific content of the evidence and the schedule of the proceeding going forward are set out in this Procedural Order. The Board will not allow this matter to be left unsettled and will make its decision on or before January 28, 2005, based upon the evidentiary record available at that time.

With respect to the Compensation Order, the Board has stated in its Partial

Decision that it is not satisfied that the landowners and the Applicants have exhausted their negotiations. If they do not reach an agreement by the time that the Board makes a final determination on the Injection and Withdrawal Order, the Board will make a Compensation Order based upon the evidence available at that time. The Board directs the Applicants to file evidence on the latest status of compensation negotiations.

The Board received applications for cost awards from Tipperary Storage Landowners' Association and Huron County Federation of Agriculture. The Board allowed the Applicant until October 25, 2004 to file submissions in response to Intervenor applications for cost awards, and received those submissions at the Board office on October 22, 2004. The Board will allow Intervenors to file reply submissions on or before November 8, 2004.

The Board intends to proceed by the way of written hearing unless any party satisfies the Board that there is a good reason for not proceeding by way of a written hearing.

The Board may issue further procedural orders from time to time.

The Board considers it necessary to make provision for the following items related to the Application.

**THE BOARD ORDERS THAT:**

1. This Application will continue by way of a written hearing unless a party can satisfy the Board that there is a good reason to proceed on a different basis. Any submissions objecting to a written proceeding must be received by the Board by Monday, November 1, 2004.

2. The Intervenors who applied for cost awards and who wish to reply to submissions by the Applicants, shall file reply submissions, if any, on or before Monday, November 8, 2004.
  
3. The Applicants shall file additional evidence with the Board, as specified below, and deliver it to all Intervenors no later than Wednesday, November 24, 2004. The content of the additional evidence to be filed is as follows:
  - A) Regarding business and financial information, the additional evidence shall include a five-year business plan for the storage operation with the following items:
    - i) a marketing analysis;
    - ii) a revenue and earning forecast;
    - iii) pro-forma cash flows; and
    - iv) pro-forma balance sheets.
  - B) Regarding financial viability of the Applicants, the additional evidence shall include:
    - i) evidence of the committed capital for the development and operation of the storage.
  - C) Regarding Compensation to the landowners, the additional evidence shall include:
    - i) Copies of executed agreements that are not already included in the evidence;
    - ii) Status of negotiations with those landowners where parties failed to reach agreement;
    - iii) Amount and all components of the final offer made by the Applicants to those landowners with whom agreement failed to be reached.

4. Parties wishing to obtain information and clarification regarding the additional evidence filed by the Applicants shall file written interrogatories with the Board and deliver them to the Applicant and all Intervenors no later than Wednesday, December 1, 2004. All interrogatories must include a reference to the section which identifies the specific evidence on which the interrogatory is based.
5. The Applicants shall file responses to the interrogatories with the Board and deliver them to all Intervenors no later than Wednesday, December 8, 2004.
6. Based upon continuing by way of a written proceeding, the Applicants shall file argument in-chief with the Board and deliver copies to all Intervenors no later than Monday, December 13, 2004.
7. Parties wishing to reply to the Applicants' argument in-chief shall file submissions with the Board and deliver them to the Applicants and all Intervenors no later than Monday, December 20, 2004.
8. The Applicants shall file a closing argument with the Board and deliver it to all Intervenors no later than Thursday, December 30, 2004.
9. All filings to the Board noted in this Order must be in the form of **9 hard copies and must be received by the Board by 4:45 p.m.** on the stated dates. The Board requests that all parties make every effort to include a copy of their filings on disk, in WordPerfect format, along with the hard copies that are filed.

**ISSUED** at Toronto, October 25, 2004.

ONTARIO ENERGY BOARD

*Original signed by*

John Zych  
Board Secretary