



# Ontario Energy Board Commission de l'énergie de l'Ontario

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## DECISION AND ORDER

**EB-2020-0074**

### **Enbridge Gas Inc.**

**Application for approval to increase the maximum operating pressures of the Black Creek, Coveny and Wilkesport natural gas storage pools located near Sarnia, Ontario**

**BEFORE:** **Cathy Spoel**  
Presiding Member

**Emad Elsayed**  
Member

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**June 25, 2020**

## 1 INTRODUCTION AND SUMMARY

Enbridge Gas Inc. (Enbridge Gas) filed an application (Application) with the Ontario Energy Board (OEB) on February 7, 2020 under section 38(1) of the *Ontario Energy Board Act, 1998*<sup>1</sup> for approval to increase the maximum operating pressures (MOPs) of the Black Creek, Coveny and Wilkesport natural gas storage pools (Pools) to MOPs that correspond to a pressure gradient of 17.2 kPa/m of depth.

The Pools are located near the City of Sarnia, in Lambton County. The Wilkesport pool has been used for gas storage since 1978, and the Black Creek and Coveny pools have been used for gas storage since 1997. A map with the general location of the Pools is attached as Schedule A to this Decision and Order.

The current MOPs for the Black Creek and Coveny pools were approved by the OEB in EBLO 258, EBRM 108, and EBO 196/197/198. Through a condition of approval, the pressure gradient of these pools was limited to 15.8 kPa/m (0.70 psi/ft) of depth. The Wilkesport pool does not have a condition of approval limiting the pressure gradient. However, the OEB's decision in EBRM 91 established a guideline that limits all pools to a pressure gradient of 15.8 kPa/m (0.70 psi/ft) of depth.

Enbridge Gas is proposing to operate the Black Creek, Coveny, and Wilkesport pools at MOPs that correspond to a pressure gradient of 17.2 KPa/m (0.76 psi/ft) of depth. The request would result in an average increase in MOPs of approximately 770 kPa for Black Creek, 690 kPa for Coveny and 700 kPa for Wilkesport. Enbridge Gas states that these increases are within the limits as prescribed by Canadian Standards Association Standard Z341 *Storage of Hydrocarbons in Underground Formations* (CSA Z341). A summary of current and proposed operating conditions is provided in Table 1.

Table 1: Summary of Current and Proposed Operating Conditions

Pool	Current MOP	Proposed MOP	Current Gradient	Proposed Gradient
<b>Black Creek</b>	9,090 kPaa	9,860 kPaa	15.8 kPa/m	17.2 kPa/m
<b>Coveny</b>	8,140 kPaa	8,830 kPaa	15.8 kPa/m	17.2 kPa/m
<b>Wilkesport</b>	8,230 kPaa	8,930 kPaa	15.8 kPa/m	17.2 kPa/m

<sup>1</sup> Section 38(1) is the statutory basis for the OEB to grant authorization to inject, store and withdraw gas from a storage pool.

To facilitate the increase in MOPs, Enbridge Gas proposes to upgrade a series of existing wellheads and to install a number of new emergency shutdown (ESD) valves. The pressure increase together with the wellhead and ESD work is collectively called the Project.

The purpose of the Project is to increase the capacity of the Pools. The additional capacity would be sold at non-utility, market-based prices to Enbridge Gas' storage service customers as part of its unregulated storage operations.

The OEB issued a Notice of Hearing on March 12, 2020. The Ministry of Natural Resources and Forestry (MNRF) and Pollution Probe applied for intervenor status. MNRF was approved as an intervenor. The OEB proceeded by a written process which included written interrogatories and responses, written submissions and a reply submission by Enbridge Gas.

The OEB approves Enbridge Gas' request, subject to certain conditions.

## 2 EVIDENCE

### 2.1 Project Need

The purpose of the Project is to increase the capacity of the Pools in order to meet growing market demand for incremental storage space. The proposed MOP increases in the Pools will create an additional working capacity of 46,800,000 m<sup>3</sup>. The additional capacity will be sold at non-utility, market-based prices to Enbridge Gas' storage service customers as part of its unregulated storage operations.

The Project is the first phase of a larger project to increase deliverability and storage capacity at Enbridge Gas' storage facilities. Over time, Enbridge Gas intends to increase pool pressures in a total of eight Designated Storage Areas – Black Creek Storage Pool, Coveny Storage Pool, Corunna Storage Pool, Dow Moore Storage Pool, Ladysmith Storage Pool, Payne Storage Pool, Seckerton Storage Pool and Wilkesport Storage Pool<sup>2</sup>. In accordance with the OEB's decision in the Natural Gas Electricity Interface Review proceeding (NGEIR)<sup>3</sup>, Enbridge Gas intends to allocate the additional capacity to its unregulated storage operations. Enbridge Gas states that completing the work in phases minimizes the impact on its operations as it can only complete upgrades on a limited number of storage pools in a single year and maintain injectability<sup>4</sup>.

OEB staff submitted that the Project is needed to increase the capacity of the Pools in order to meet growing market demand for incremental storage space.

### 2.2 Technical Matters

The OEB expects applicants to comply with the relevant requirements of CSA Z341 to the satisfaction of the MNRF. In its submission, the MNRF stated that it has no objection to the OEB approving the Application as proposed.

Enbridge Gas advised that it met with the MNRF on January 7, 2020, to discuss the Project. At the meeting, Enbridge Gas provided the MNRF with details of the Project and copies of the engineering reports (Engineering Reports) which were prepared for the Project as required by CSA Z341:

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<sup>2</sup> Enbridge Gas' response to OEB staff interrogatory No. 3

<sup>3</sup> EB-2005-0551

<sup>4</sup> Enbridge Gas' response to OEB staff interrogatory No. 3

1. Three engineering studies (one for each of the Pools) completed by Geofirma Engineering Ltd. (Geofirma). The studies confirm that the maximum safe operating pressure exceeds 17.2 kPa/m (0.76 psi/ft) of depth for the Black Creek, Coveny, and Wilkesport Pools. Enbridge Gas states that the approach used by Geofirma is consistent with previous studies completed for the storage pools currently operated at the elevated pressure gradient of 17.2 kPa/m (0.76 psi/ft) of depth.
2. A review of neighbouring activities for each pool:
  - a. Wells within one kilometre
  - b. Operations within five kilometres
  - c. The integrity of all wells penetrating the storage zone

The conclusion of the Assessment of the Neighbouring Activities is that the risk of migration of natural gas between any abandoned or working wells within one kilometre and within five kilometres of the Pools is minimal, and that the proposed MOPs would not compromise the integrity of the Pools or any associated facilities.

3. A “What If” Analysis of Hazards and Operability Issues for the Pools (“What If” Analysis)

The “What If” Analysis of the Project included an assessment and ranking of a number of risk factors related to safety, operability and technical integrity within the scope of the CSA Z341. The analysis concluded that the Project has an “Acceptable Risk”.

Enbridge Gas has committed to reviewing and updating its operating procedures and emergency response plans prior to operating the Pools at the increased pressure levels.

In its submission, the MNRF stated that, while it had not reviewed the Engineering Reports, it was satisfied that Enbridge Gas provided complete responses to its interrogatories, and that it has no objection to the OEB approving the Application as proposed. The MNRF reminded Enbridge Gas that, as the operator, Enbridge Gas bears the responsibility for ensuring that all safety and environmental issues are addressed and to ensure compliance with the *Oil, Gas and Salt Resources Act*, O.Reg. 245/97 and the CSA Z341.

## 2.3 Proposed Facilities

The Project facilities include:

1. New master valves on ten wells
2. New wellheads on seven wells
3. The installation of ESD valves on eight natural gas storage wells within the Pools

The ESD valves are capable of isolating the storage facility from the transmission pipelines currently in place at each pool station and are remotely operable from the Tecumseh and Dawn Operations Centres in accordance with CSA Z341. Enbridge Gas also proposes to install ESD valves on each natural gas storage well in the Pools.

The Project does not trigger the statutory requirements for leave to construct<sup>5</sup>. The project does not involve drilling new wells.

In its submission, OEB staff stated it has no issues or concerns with the proposed facilities.

## 2.4 Project Economics

In the Application, Enbridge Gas notes that since the OEB's Decision and Order in the NGIER proceeding, applicants have not been required to disclose costs and economics of unregulated storage operations. Enbridge Gas' shareholders will fund the costs of the Project, and as a result, the Project will not have an impact on Enbridge Gas' utility ratepayers.

## 2.5 Project Schedule

Enbridge Gas proposes to begin operating the Pools at higher pressure gradients during the 2020 injection season. Enbridge Gas requested the OEB's approval by June 2020 so that it can begin construction of the temporary access roads, enlarged drill pads, and the wellhead and ESD work in April 2020 and meet the planned in-service date of November 2020. If Enbridge Gas is not able to complete the work within this timeframe, the Project will need to be deferred to the following year.

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<sup>5</sup> OEB Act, s. 90

## 2.6 Land Matters

All wells will be accessed using existing gravel laneways except two that are part of the Wilkesport pool (called TW1 and TW7). Work on these two wells will require the installation of a temporary laneway and working area constructed of steel plating laid on top of the existing agricultural field. Enbridge Gas has contacted the landowner who has not expressed any concerns to date.

Enbridge Gas says that construction of the Project may impact one landowner at the Payne pool, and if so the landowner will be compensated accordingly.

In its submission, OEB staff stated that it believes Enbridge Gas is appropriately managing land related matters and that it has no issues or concerns with land matters related to the Project.

## 2.7 Environmental Matters

Enbridge Gas engaged Stantec Consulting Ltd. (Stantec) to complete the necessary Environmental Screenings. The screening results are documented in three Environmental Screening Reports (ESRs) – one for each pool. Enbridge Gas says the ESRs conform to the OEB's *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario* (7th Edition, 2016) and the *Environmental Screening Principles for Distribution System Expansion Projects by Ontario Natural Gas Utilities*, as outlined in E.B.O. 188.

The Environmental Screening process was completed in October 2019. The Environmental Screening process did not identify any significant environmental or socio-economic features other than the potential occurrence of two Species at Risk (SAR) and their habitat: Butler's Gartersnake and Eastern Foxsnake. Enbridge Gas is consulting the Ministry of Environment, Conservation and Parks (MECP) to confirm recommended mitigation measures, but as of May 7, 2020, the matter remains unresolved<sup>6</sup>.

Based on the results of a previous stage 1 Archaeological Assessment for the areas in question, and given that the Project has no ground disturbance, Enbridge Gas says no additional archaeological work is required.

Stantec concluded that, with the implementation of the mitigation measures recommended in the ESRs and adherence to permit, regulatory and / or legislative

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<sup>6</sup> Enbridge Gas' response to OEB staff interrogatory No. 4

requirements, the potential environmental and / or socio-economic impacts of the Project are not anticipated to be significant.

In its submission, OEB staff stated that it has no environmental related issues or concerns, provided that Enbridge Gas complies with recommended environmental mitigation measures and permit, regulatory and/or legislative requirements.

## **2.8 Indigenous Consultation**

On September 23, 2019, Enbridge Gas received a letter from the Ministry of Energy, Northern Development and Mines (MENDM) indicating that it did not anticipate any appreciable adverse impact on the asserted or established rights of First Nation or Métis communities. Based on this determination, no duty to consult is triggered and the MENDM will not be providing a letter of opinion regarding the adequacy of consultation. Should new information on the Project become available that indicates a potential to affect Aboriginal and treaty rights, Enbridge Gas says it will notify the MENDM.

Enbridge Gas did not receive any communications from indigenous communities after the Notice of Hearing was published on March 12, 2020<sup>7</sup>.

In its submission, OEB staff stated that it has no issues or concerns related to Indigenous consultations.

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<sup>7</sup> Enbridge Gas' response to OEB staff interrogatory No. 6



### 3 FINDINGS

The OEB approves the Application as filed. The OEB finds that the Project is needed and that the proposed facilities are appropriate.

The OEB finds that the Project will have no lasting environmental impacts provided that Enbridge Gas complies with recommended environmental mitigation measures and all applicable permit, regulatory and/or legislative requirements. The OEB notes that Enbridge Gas is still in consultations with the MECP to confirm recommended mitigation measures in respect of the two SARs.

#### 3.1 Conditions of Approval

The OEB Act permits the OEB, when making an order, to “impose such conditions as it considers proper.”<sup>8</sup>

In their submissions, both the MNRF and OEB staff supported Enbridge Gas’ proposed condition that, “Enbridge Gas Inc. shall not operate the Black Creek, Coveny and Wilkesport natural gas storage pools above operating pressures representing a pressure gradient of 17.2 kPa/m (0.76 psi/f) of depth without leave of the OEB.”<sup>9</sup> The OEB accepts this proposed condition.

The OEB’s approval of the Application is also conditional on Enbridge Gas filing a letter with the OEB notifying it once the matter of mitigation measures in respect of the two SARs has been resolved to the satisfaction of the MECP.

#### THE BOARD ORDERS THAT:

1. Enbridge Gas may increase the MOPs of the Black Creek, Coveny and Wilkesport natural gas storage pools to pressures representing a pressure gradient of 17.2 kPa/m (0.76 psi/f) of depth.
2. Enbridge Gas Inc. shall not operate the Black Creek, Coveny and Wilkesport natural gas storage pools above operating pressures representing a pressure gradient of 17.2 kPa/m (0.76 psi/f) of depth without leave of the OEB.
3. Enbridge Gas shall continue to adhere to the applicable requirements of CSA Z341 to the satisfaction of the MNRF.

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<sup>8</sup> OEB Act, s. 23

<sup>9</sup> Enbridge Gas’ response to OEB staff interrogatory No. 2

4. Enbridge Gas shall not proceed with the Project until after it files a letter with the OEB notifying it that the SAR matter has been resolved to the satisfaction of the MECP.
5. Enbridge Gas shall comply with recommended environmental mitigation measures and all applicable permit, regulatory and/or legislative requirements.
6. Enbridge Gas Inc. shall pay the OEB's costs incidental to this proceeding upon receipt of the OEB's invoice.

**DATED** at Toronto June 25, 2020

**ONTARIO ENERGY BOARD**

*Original Signed By*

Christine E. Long  
Registrar and Board Secretary

**SCHEDULE A**

**DECISION AND ORDER**

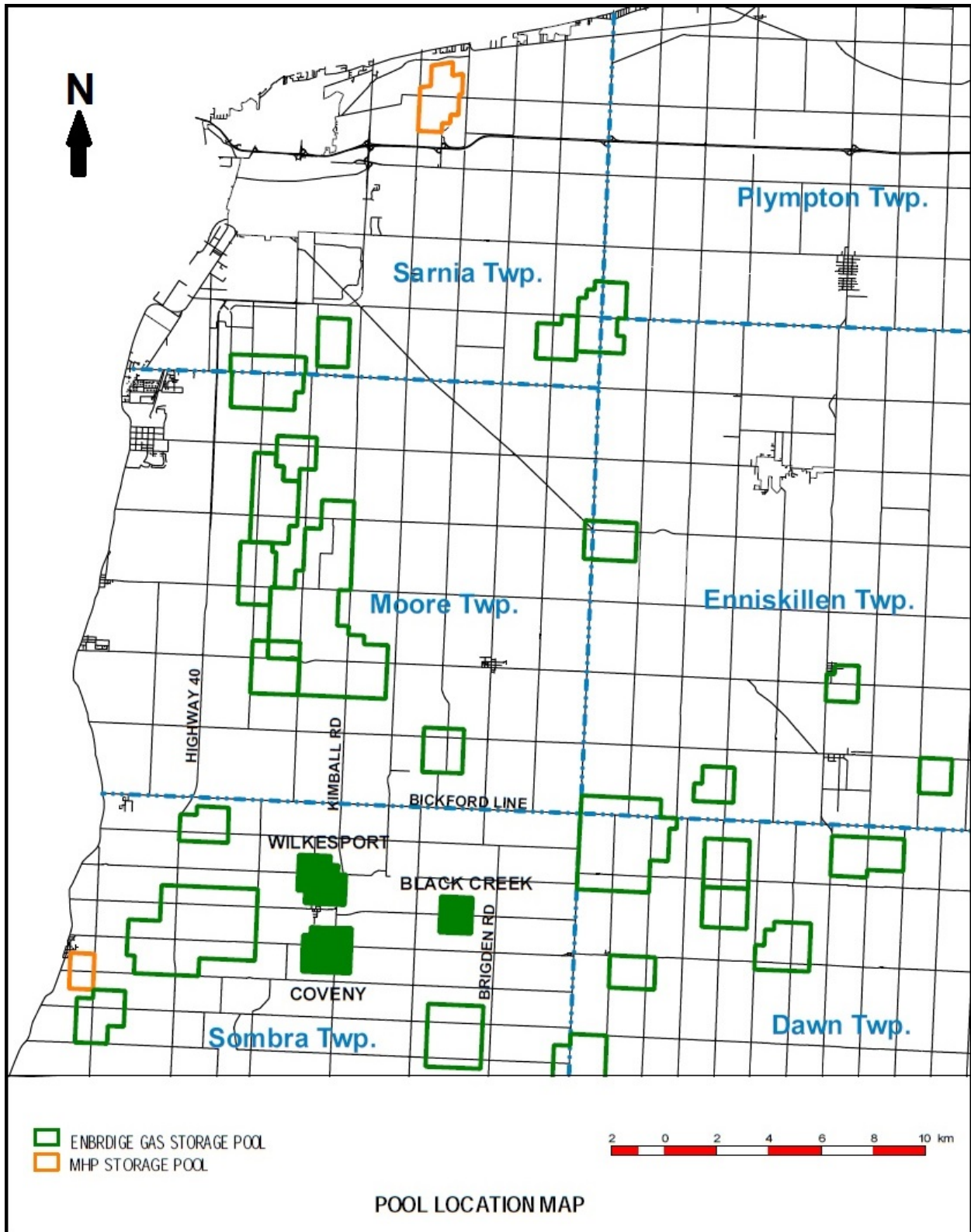
**2020 STORAGE ENHANCEMENT PROJECT**

**MAP OF THE GENERAL LOCATION OF THE BLACK CREEK, COVENY  
AND WILKESPORT NATURAL GAS STORAGE POOLS**

**EB-2020-0074**

**JUNE 25, 2020**

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POOL LOCATION MAP