

July 26, 2024

What's Happening – CO₂ Storage in Southwestern Ontario

The Ontario Ministry of Natural Resources (MNR) is seeking feedback on the design of a regulatory framework for commercial-scale geologic carbon storage projects in Ontario that would enable the development of technology-ready commercial-scale projects and the continued testing and demonstration of newer carbon storage technologies. Permanent Geologic Carbon Storage of Carbon Dioxide (CO₂) in deep underground rock formations, at depths greater than 800 metres, and under high temperature and pressure, allows CO₂ to flow like a gas but with a density of a liquid.

What is Geologic Carbon Storage?

Large quantities of carbon dioxide (CO₂) are generated through industrial processes such as the production of cement, steel and fertilizer, from power generation, during oil and gas refining, and as a by-product of creating hydrogen from methane.

One way of reducing the impact of CO₂ emissions from these large emission sources is to take captured CO₂ that would have otherwise been emitted into the atmosphere and to permanently store (sequester) it in deep underground rock formations (storage formations). This process is termed 'geologic carbon storage,' and is one tool being considered to manage Ontario's emissions.

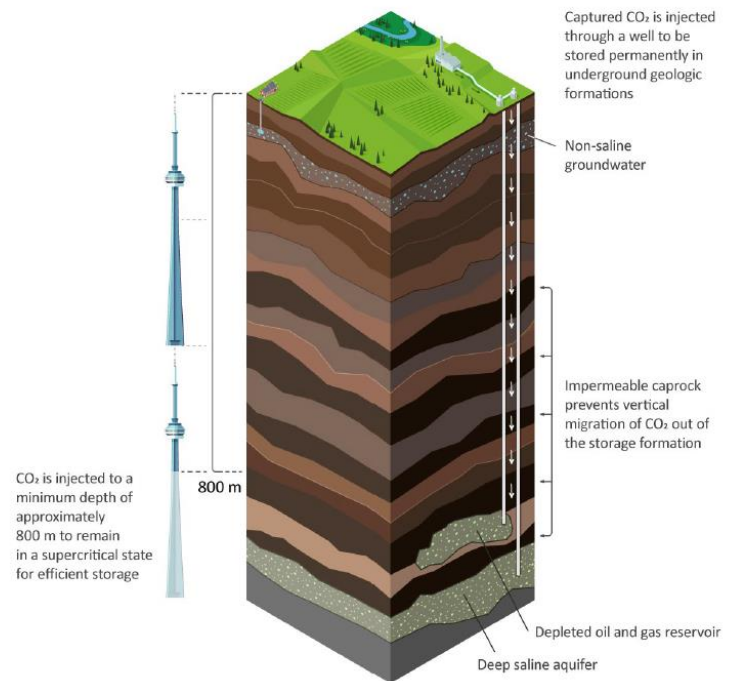


Figure 1: Schematic diagram of geologic carbon storage in a depleted oil and gas reservoir and a deep saline aquifer. This diagram is for illustrative purposes only. Objects shown are not drawn to scale.

Affected Areas:

Beneath the beds of Lake Huron and Lake Erie and the surrounding onshore areas are considered to be the most geological suitable areas for this project.

Timeline of events:

- **January 2022** – Ontario Government released the [Ontario's Roadmap to Regulating Geologic Carbon Storage](#).

- First step was consultation on a January 2022 [Discussion Paper](#).
- **March 22, 2023** – Bill 46, *Less Red Tape, Stronger Ontario Act, 2023*, receives Royal Assent and enables certain carbon storage activities.
- **March 2023** – Prohibition on carbon storage removed from the *Oil, Gas and Salt Resources Act*.
- **May 18, 2023** – [OFA submission](#) related to [proposed changes](#) to *The Oil, Gas and Salt Resources Act*.
- **October 10, 2023** – [OFA submission](#) related to [proposed regulatory provisions](#) under *The Oil, Gas and Salt Resources Act*.
- **Public Consultations** – MNR will be hosting public consultations on the [Discussion Paper: Regulating Commercial-Scale Geologic Carbon Storage Projects in Ontario](#):
 - **IN-PERSON** on Wednesday, **July 31, 2024**, from 6:00 p.m. – 7:30 p.m., in London [Register Here](#)
 - **VIRTUAL** on Wednesday, **August 14, 2024**, from 6:00 p.m. – 7:30 p.m. [Register Here](#)

MNR is accepting written submissions by mail or online through the Environmental Registry of Ontario ([ERO # 019-8767](#)). The comment period closes August 23, 2024.

If you would like more information or have any questions, please contact the Resources Development Section at MNR at resources.development@ontario.ca.

OFA Resources and Position Statements:

OFA intends to submit comments regarding the Regulating Commercial-Scale Geologic Carbon Storage Project in Ontario Discussion Paper (ERO # 019-8767) before the August 23, 2024 submission deadline.

OFA has already engaged and presented its position to the MNR through the following past submissions:

1. [Submission to MNR on proposed changes to the *Oil, Gas and Salt Resources Act*](#)
 - For decades, landowners in southwestern Ontario, where the majority of salt solution-mining, oil wells, and gas wells are located, have struggled to have closed wells decommissioned, and dealt with multiple company changes and bankruptcies of original

lease signees. Repurposing leases for other uses risks contravening the intent of the underlying agreement to permit one identified activity.

- OFA recommends MNR work to ensure landowners concerns are considered during processes that will increase activities under existing lease arrangements.
- OFA recommends that MNR collaborate with landowners to better understand the long-term impacts of ceding land rights or Crown property rights to better protect people.
- **OFA supports stronger oversight towards preventing impacts to public safety and the environment, and the intention to create or amend future regulations to establish a clear framework for special projects to identify, assess and mitigate potential impacts.**

2. [Submission to MNR on proposed regulatory provision under the *Oil, Gas and Salt Resources Act*.](#)

- OFA supports the proposed requirement for Special Projects pursuing authorization to establish full-cost, project-based financial security, prior to any site preparation; and the proposal to eliminate any cap or combined cap to the maximum amount of security that operators must set aside going forward and eliminate any exemptions to security caps for all other well types in addition to Special Projects.
- **OFA recommended that:**
 - the government direct efforts towards addressing the larger safety and environmental risks of onshore and offshore commercial orphan wells;
 - the ministry considers methods to help assist private well operators to access financial security to responsibly manage the end of life for all private wells; and
 - any conversion, change or transfer of a well licence provide the opportunity for landowners to update easement or lease contract arrangements.
- OFA supports eliminating all well type exemptions to security caps. We recommend the government direct efforts towards addressing the larger safety and environmental risks of commercial orphan wells.
- The proposal to eliminate private well financial security exemptions for newly drilled, deepened, or converted wells, or when a well licence is transferred to the operator. We recommend that the ministry consider methods to help assist private well operators access financial security to responsibly manage the end of life for private wells.

**Figure 1 image credited to and authored by the Ontario Ministry of Natural Resources*