

March 14, 2022

Ministry of Northern Development, Mines, Natural Resources and Forestry

Geologic Carbon Storage in Ontario

ERO number: 019-4770

Submitted Via the Environmental Registry of Ontario

Sarnia-Lambton Economic Partnership (SLEP) is pleased to be able to have the opportunity to share feedback on potential regulation changes to remove barriers to the storage and use of technologies for geologic carbon storage in Ontario. Ontario is the only jurisdiction in Canada, and one of the only jurisdictions worldwide that bans carbon storage. We thank the Government of Ontario for eliciting feedback on the proposed amendments. In relation to the following amendments, our recommendations are as follows:

Amendment #1 - narrow the prohibitions on the injection of carbon dioxide so that going forward, the prohibition would only apply to the injection of carbon dioxide for the purpose of carbon sequestration, when used in association with a project to enhance the recovery of oil or gas

Carbon Capture Storage (CCS) is the most immediate solution existing for large point source emitters of CO₂, and the International Energy Agency, and the UN International Panel on Climate Change (IPCC) recognizes that much of the world cannot meet their emission reduction targets without large-scale CCS.

It is SLEP's opinion that the injection of CO₂ into deep geological formations for permanent storage using specially constructed wells - typically in saline aquifers, depleted oil and gas reservoirs, or other geological formations - with CO₂ at supercritical state is a beneficial way to support the reduction of greenhouse gas (GHG) emissions targets and support the growing low-carbon and hydrogen economy. This action would also align Ontario with Canada's Net Zero Future.

CCS is a safe and proven clean energy technology, available now at commercial scale, that offers a significant pathway to achieve GHG reductions for hard-to-abate, carbon-intensive, trade exposed industries such as those in Sarnia-Lambton's Petrochemical & Refining Complex and we appreciate the Ministry recognizing that positive changes made will support Ontario's economy.

Large emitters in Sarnia-Lambton will face long-term issues with economic competitiveness as rival facilities in other locations in Canada and internationally are able to avoid or mitigate the cost of carbon taxation by accessing carbon sequestration opportunities. Canada's carbon pricing imposes a tax of \$50/tonne (2022), forecast to rise to \$170/tonne (2030). This means the 17 largest emitters in Sarnia-Lambton are currently exposed to \$395 million (2022) and potentially \$1.697 billion (2030) in carbon taxation. Jobs and the long-term viability of facilities are at risk.

The business case for Sarnia-Lambton to attract large-emitting industrial facilities is impacted by the cost competitiveness of the impacts of carbon taxation and the ability of facilities to offset these impacts. Additionally, companies that could be attracted to locate new facilities in Ontario associated with the low-carbon hydrogen and sustainable chemistry economies are disadvantaged, as their products are often sold based on their low-carbon production and properties. Both the large emitter and low-carbon/sustainable chemistry company attraction becomes uncompetitive if processes utilized to produce their products results in higher carbon footprints than processes that can access a less restrictive carbon sequestration policy.

Based on the 730 million tonnes of CO₂ sequestration potential in Southwestern Ontario (Sarnia and Lake Erie area) identified in the 2007 MNR report, assuming \$50/tonne carbon pricing, an economic value of \$36.5 billion may be achieved.

Of the CO₂ sequestration potential in Southwestern Ontario, it is estimated the Sarnia-Lambton area contributes about 290 million tonnes of storage capacity. This represents the economic opportunity to sustain local industry for decades, or to achieve economic value of \$14.5 billion at \$50/tonne. If the Government of Ontario makes the proposed amendments inline with input from industry and interested stakeholders, the province would be in a much more enviable position to benefit economically from the low-carbon economy while addressing climate change targets.

Injection bans in relation to oil and gas reservoirs may still constitute a barrier and need to be further addressed. Currently, many historical reservoirs have small amounts of legacy hydrocarbons in them due to the old technology used to initially remove the hydrocarbon reserves. If the prohibition is a blanket statement such as proposed, it will limit the number of reservoirs that could be accessed for CCS. This could lead to a barrier unintentionally being created to further restrict Ontario's ability to be competitive in the low-carbon economy. Most of these reservoirs are in the Sarnia-Lambton geographic area.

Other jurisdictions (e.g., Alberta, Saskatchewan) are already advancing CCUS technologies and the Government of Canada is also developing and delivering a suite of CCUS support programs, including funding and indirect tax opportunities for successful initiatives across the country. Some of the federal measures include the Strategic Innovation Fund's Net-Zero Accelerator, the Canada Infrastructure Bank, the Clean Fuels Fund, the Climate Change Action Fund and recently proposed CCUS tax incentives, but current Ontario legislation precludes our ability to leverage these opportunities for Ontario-based operations. We support the changes the Province of Ontario is considering, which would bring Ontario in step with these other jurisdictions.

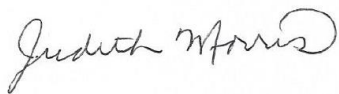
Amendment #2- add the ability for us to enter into agreements with companies that want to use wells to explore, test, pilot or demonstrate new technologies (such as carbon storage) in relation to wells used for oil, gas, solution-mined salt as well as underground storage resources. This would provide the ability to bring new types of projects that are associated with the same subsurface spaces where oil, gas, salt, or underground storage occur, under the scope of the *Oil, Gas and Salt Resources Act*

Canada is a world leader in CCS with longstanding projects in western Canada. Meanwhile Southwestern Ontario is ranked 3rd of 11 basins in Canada for best geology for CCS. Ontario should be a viable alternative or complement for investment in related projects. For Ontario to be competitive each application should be evaluated on its technical merits and not defined by the salt cavern or reservoir they may choose to access.

It would be an economic and regulatory benefit for the Government of Ontario to help facilitate the development and longer-term cost effectiveness and scalability of carbon storage projects. This recommendation does not need to include monetary incentives and should not duplicate support already available from the federal government.

In conjunction with the Sarnia-Lambton Petrochemical & Refining Complex and Hybrid Chemistry Cluster, Sarnia-Lambton has positioned itself as Ontario's Hydrogen Hub. We believe that the opportunities available to our region, as well as other areas in southwestern Ontario, will benefit from the amendments proposed. We thank all those involved in the due diligence it has taken to determine what amendments should be considered. Ontario can be a leader, so let's not be a passenger, as we, as a province and nation drive towards a net-zero future.

Respectfully submitted by,



Judith Morris,
Interim CEO
Sarnia-Lambton Economic Partnership