

August 21, 2024

TO: Environmental Registry of Ontario
FROM: Haldimand County
RE: Comments on Geological Carbon Capture Regulatory Framework

Haldimand County is included on the map of potential carbon storage areas, along the shore of Lake Erie. As a result, the municipality has a number of questions and comments related to the provincial government's consideration of legislation and regulations for carbon sequestration in Ontario.

What is the province's plan with respect to alternative forms of carbon sequestration methods other than geological, such as reforestation, ensuring protection of prime agricultural/farm lands, direct air capture, etc.? Are there plans to prioritize geological sequestration over biological or technological methods? Will the proposed regulatory framework also include provisions related to technological methods and incentivize those to key stakeholders or will the legislation focus solely on geological carbon capture? It would seem that there is an opportunity in Northern Ontario for mass reforestation of areas that have been the subject of fires to aid in reducing carbon levels over the long term. There may also be opportunities to implement long term protection plans for prime agricultural land to ensure food security within the province for the foreseeable future and beyond. Additionally, perhaps requiring technological methods to be used by certain large scale industries would be beneficial over the longer term. These methods and efforts should be first on the priority list – before further consideration is given to carbon capture - given the relative expediency in which they can be implemented, the demonstrated benefits / impacts (i.e. certainty around these methods), and the greater cost effectiveness both in implementation and maintenance. The purpose of a concentrated focus on geologic carbon sequestration should not be solely because it is industry's least expensive form of avoiding carbon related penalties, especially considering the unknown future financial impact on the province which is shouldered by future taxpayers.

As we now know, Norway who has been a leader in Carbon Capture Sequestration (CCS) has recently discovered that the Sleipner and Snøhvit subsea fields have encountered unpredictable subsurface conditions demonstrating that even with the most advanced data and monitoring, subsurface unknowns can arise at any moment causing material risks that were unforeseen at the approval stage of these projects. According to the Institute for Energy Economics and Financial Analysis, in the case of Sleipner, CO₂ moved into an area previously unidentified by engineers despite extensive study of the subsurface geology. What measures will the province build into new legislation and regulations, to ensure these types of changes are *prevented* before project approvals can be obtained? At minimum, it is critical that any legislative or regulatory framework decisions are made with the foresight to include requirements (financial, ongoing risk assessments, routine scientific studies, etc.) related to addressing future unexpected issues of each CCS project.

How will potential leakage be addressed over the long term? Will there be requirements to update formation testing at set intervals over the life of various projects to ensure the impacts of unexpected geological shifts and other material risks are adequately addressed? Will contingency plans be a

regulated requirement to assist in reducing and managing these risks adequately? Will risk assessments for proposed projects be required to be made public during any consultation phase (as opposed to after approval)? CCS requires a multi-decade commitment of capital and resources to keep CO₂ adequately sequestered on a permanent basis. These questions are in mind due to the proximity of Lake Erie to Haldimand County, which is a primary source of drinking water for our municipality and many surrounding areas.

How will financial securities related to long term risks like leakage, safety issues, unforeseen damages, drinking water quality, etc. be addressed to ensure appropriate securities are in place for events occurring later in the life of the project or post-activity? Will the responsibility to handle issues such as these be transferred to the Crown to avoid similar problems that have historically occurred with abandoned gas wells or closed landfills? What will be the provisions related to an owner of a carbon storage project becoming insolvent, to allow an assignment of responsibility elsewhere rather than leave the project abandoned?

Is there a requirement for municipal consultation and if so what is the municipal role considering it seems as though the focus will be on private or Crown land only; will there be requirements that need to be satisfied in municipal Official Plan's and zoning bylaws to allow carbon capture projects? Will there be differences in consultation and approval processes for standalone projects versus hub projects? Will hub projects be regulated to take into account restrictions on accepting carbon from outside of the province? Will a municipality have any authority over accepting a hub project where carbon is being piped into the municipality from other areas?

What degree of public consultation will the province be doing with the general public with respect to ownership rights of pore space? The Government of Alberta passed legislation to clarify that government controls pore space for the purposes of carbon sequestration. If this is being considered by the Province of Ontario, what form of public consultation to potentially affected property owners along the Lake Erie shoreline will be completed by the Province?

It is important that land use provisions and setback requirements are appropriate for carbon sequestration projects. What is the province considering in terms of setbacks from active agricultural lands, residential areas and institutional uses such as schools and hospitals? What exactly will be the role of municipalities in the approval process for geologic carbon sequestration projects that are not on municipally owned property?

Haldimand County has the highest number of gas wells in the Province of Ontario, many of which are suspected to be abandoned and/or uncapped. It is critical that the Province of Ontario continues to fund municipal and property owner programs to address this situation and have a full understanding of the magnitude of wells and potential problems they pose, both short term and long term, to geologic carbon sequestration projects. To date, what information is the province considering before allowing CCS and gas wells to co-exist in close proximity?

Similarly, it is critical that any regulatory framework does not restrict future economic development opportunities for municipalities who wish to attract energy production facilities such as nuclear power plants or renewable energy infrastructure. Consideration should be given to whether geological CCS can safely and efficiently co-exist with these types of energy production projects.

Generation of property tax revenue is the primary source of municipal revenues. It is important that the Province recognizes the property taxation benefit that can be realized and provide adequate tax rate policy surrounding such subsurface pore space despite ownership rights.

Lastly, there should be provisions allowing municipalities to receive community benefit directly from proponents and partners of CCS projects within a municipal boundary, despite the ownership of the

subsurface pore space. This should be in the form of an annual financial commitment beyond property taxation, fees or charges, to help support general community needs and establish a positive relationship as a community partner.

As you can see, there are numerous questions and concerns related to CCS projects in Ontario along the shore of Lake Erie and within Haldimand County borders. Although Haldimand understands the benefit of reducing the carbon footprint, it is important to ensure that any legislative framework is all encompassing and forward thinking. It is also important for municipalities to understand their role in the decision making process for CCS projects within municipal boundaries. To that end, direct communication from the province to its municipal partners is necessary and appreciated.

Thank you for the opportunity to provide comments and questions.

Best regards,

A handwritten signature in black ink that reads "Cathy Case". The signature is written in a cursive style with a large, stylized "C" at the beginning.

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