



Carbon Dioxide Storage Application Guide – Oil and Gas Industry Emissions

VERSION 1.1: August, 2022

About the Commission

The BC Oil and Gas Commission (Commission) is the single-window regulatory agency with responsibilities for regulating oil and gas activities in British Columbia, including exploration, development, pipeline transportation and reclamation.



The Commission’s core roles include reviewing and assessing applications for industry activity, consulting with First Nations, ensuring industry complies with provincial legislation and cooperating with partner agencies. The public interest is protected by ensuring public safety, protecting the environment, conserving petroleum resources and ensuring equitable participation in production.

VISION

Safe and responsible energy resource development for British Columbia.

MISSION

We provide British Columbia with regulatory excellence in responsible energy resource development by protecting public safety, safeguarding the environment and respecting those individuals and communities who are affected.

VALUES

Transparency

Is our commitment to be open and provide clear information on decisions, operations and actions.

Innovation

Is our commitment to learn, adapt, act and grow.

Integrity

Is our commitment to the principles of fairness, trust and accountability.

Respect

Is our commitment to listen, accept and value diverse perspectives.

Responsiveness

Is our commitment to listening and timely and meaningful action.



Manual Revisions

The Commission is committed to the continuous improvement of its documentation. Revisions to the documentation are highlighted in this section and are posted to the [Energy Professionals](#) section of the Commission’s website. Stakeholders are invited to provide input or feedback on Commission documentation to OGC.Systems@bcogc.ca or submit feedback using the [feedback form](#).

Version Number	Posted Date	Effective Date	Chapter Section	Summary of Revision(s)
1.0	July 27, 2021	July 27, 2021	Various	This is a new document. Users are encouraged to review in full.
1.1	Aug. 17, 2022	Aug. 17, 2022	Pg.4	New updated contact info last paragraph

Carbon Capture and Storage

Carbon capture and storage (CCS) is an internationally recognized greenhouse gas emissions mitigation strategy in the upstream petroleum and natural gas industry.

The Oil and Gas Commission regulates oil and gas processing facilities, with potential to capture CO₂ from oil and gas activities and store the CO₂ in subsurface reservoirs.

Two Oil and Gas Activity Act (OGAA) regulated sources of CO₂ are:

- 1) formation CO₂ which is a by-product of raw natural gas, removed to meet natural gas sales specifications, and
- 2) flue gas CO₂ generated from the combustion of fuel for power and process heat at oil and gas facilities.

The carbon capture process may target either, or both, sources.

Storage of the captured CO₂ requires use of a disposal well and a suitable storage reservoir (formation). As such, permitting of CO₂ storage projects will be treated similarly to acid gas disposal wells. These wells utilize either formations saturated with saline water or depleted oil and gas pools, for storage in similar conditions to those which had originally trapped hydrocarbon deposits for millions of years. A total of 19 wells have been approved, as of June 2021, for acid gas disposal. Acid gas is waste fluid by-products of natural gas production consisting of H₂S and CO₂. Oversight of these wells has provided significant experience for the regulation of CCS.

Subsurface storage of carbon dioxide would be approved as a Section 75 Special Project under OGAA. Since the application requirements align with the those for acid gas disposal, [that guide](#) may be used.

Note also that Section 80 Storage Reservoirs in the Drilling and Production Regulation states

(3) A well permit holder of a well that is part of a special project for carbon dioxide storage designated under section 75 of the Act must construct and operate the well in accordance with CSA Standard Z741.

The approval process must ensure the integrity of both the well(s) and the reservoir in which the fluid is contained in the deep subsurface. A specific concern to be addressed in the application is the program to mitigate risks from potential future wells drilling through or conducting hydraulic fracture stimulations in proximity when accessing other resources. A Section 75 order contains specific conditions for initial inspection, ongoing operation, monitoring, testing and reporting. The [Summary Document for acid gas disposal](#) supports an understanding of both the application and operation requirements.

A condition of CO₂ storage is the submission to the Commission of Progress Reports at regular intervals. The content of the report will closely align those listed in the [Acid Gas Disposal Progress Report Requirements](#) document, with changes that are appropriate for the specific project.

Amendments to facilities approvals, for equipment to accommodate carbon dioxide capture and transportation, are made to the Commission Facilities & Pipelines department.

For further information on project approval, please contact Reservoir@BCOGC.ca.

For guidance on government policy and regulatory developments related to CCS as well as information on existing, and anticipated economic incentives, aimed at promoting CCS deployment in the province, please contact Genevieve St. Denis - A/Director, – Director, Regulatory Policy, Oil and Gas Division, Ministry of Energy, Mines and Low Carbon Innovation. She can be reached at genevieve.st.denis@gov.bc.ca or (778) 974-4840