November 7th, 2008

Comments on the Interim Report of the Alberta Carbon Capture and Storage Development Council, Accelerating Carbon Capture and Storage in Alberta

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Considered:

Accelerating Carbon Capture and Storage in Alberta, dated September 30, 2008, released October 22, 2008

In these comments we focus on three aspects of the interim report: (1) the treatment of the ownership of pore space, (2) the design of a provincial tenure system for geological sequestration, and (3) the treatment of liability issues. In each case we provide our understanding of what it is that the Council proposes and then we provide our comments. While we welcome the report and agree with the need to accelerate the adoption of Carbon Capture and Storage (CCS) in Alberta, we think that these sections of the report require further clarification before the Council issues its final report. In particular, we think that the report needs to do a much better job of, identifying the problems and providing reasoned arguments for the solutions that it advances.

(1) Ownership of pore space

As we understand it, the Council is proceeding on the basis that the current legislation (the *Mines and Minerals Act*, R.S.A. 2000, c. M-17 (*MMA*)) relates "mainly to oil and gas production and related activities" but that: (1) this "framework is often suitable for CCS", and (2) clarity is needed to ensure that:

- Storage rights include disposal rights
- Freehold owners can grant disposal rights to others by way of contract
- Water rights belong to the Crown and disposal rights in saline formations can be granted by the Crown.

It is important to note that these bulleted statements are framed as both an assertion of what is, but also, in each case, as something that should be clarified by legislation. It is also important to note that the text gives us no arguments whatsoever to support the claim that the present framework is suitable or why it is only suitable "often"; which begs the question, when is it not suitable?

1. We support the idea that legislative action\clarification is needed. We cannot wait for the courts to sort out pore space ownership problems. Experience with similar types of issues (coal bed methane (CBM) ownership, gas over bitumen, and phase ownership issues) suggest that it will take far too long if we leave these issues to the courts.
2. But we need to be sure that the proposed legislation will solve the problem. The first step in solving the problem is to identify the problem(s) with some clarity. A second step is to identify options for dealing with the problem and the strengths and weaknesses of those options. And the third is to make a reasoned case for a preferred option. The report fails to take any of these steps and as such it is impossible to assess whether the legislative proposals are adequate. In particular we wonder: (1) how the proposal will deal with the full range of split title problems, (2) how the proposal will deal with the problem of holdouts, (3) how the proposal will deal with disposal in a water leg of a hydrocarbon-bearing reservoir, and (4) how large will be the area of property rights that a disposal operator will need to acquire.
3. Overall, we think that the proposal is too timid and that the government should legislate to vest all disposal rights in the Crown, subject only to gas storage rights as clarified by the current section 57 of the *MMA*.

(2) A Crown disposition system

As we understand it, the Council proposes that in the early going the Crown should grant publicly owned disposal rights by way of *ad hoc* Crown agreements under s.9 of the *MMA* (presumably subject to clarifying that the specific paragraph can be used to grant disposal rights as well as storage rights). At a later stage the Council suggests that the government might consider a more formal disposition system based either on a cash or work bidding scheme. We have the following reactions to this proposal:

1. We are pleased to see that the Council does not propose that the Crown use the current system of letters of consent (used for acid gas disposal (AGD) schemes) for geological sequestration projects.
2. While we think that transparency and accountability militate in favour of a standard disposition scheme from the outset, we understand the virtues of using ad hoc Crown agreements to facilitate learning by doing.
3. Should the Council continue to champion the Crown agreements approach we think that it is absolutely critical that the legislation provide that all Crown agreements should be published in the gazette or in some other readily accessible manner. We also think that it will be necessary to develop guidelines for applications for Crown agreements, and that the need to develop such guidelines (to ensure a level playing field and a minimum level of transparency) may limit the advantages associated with the Crown agreement approach rather than developing a disposition scheme from the outset. At a minimum the guidelines will need to deal with the area to be held under the tenure, rules on relinquishments, and the nexus between the tenure form and the regulatory approval by the ERCB of a site plan.

(3) Liability

As we understand it, the Council suggests that Alberta's existing regulatory system adequately covers liability surrounding CO2 storage during the project life and decommissioning phases but that a gap exists for long-term post-closure liability. The long-term liability framework provides a list of "liability points" and includes the recommendation that the Government of Alberta may need to assume further liability for "any aspects of the projects where the government takes on the liability post-closure (e.g. monitoring of wells)" with regard to remediation and damages to third parties. The Council suggests that two funds be developed to provide for liability associated with "Managing Incidences" and "Monitoring, Measurement and Verification" (MMV). The entire section is based on a set of core principles which it suggests should guide the long-term management framework.

Keeping these in mind our reactions are as follows:

1. We agree that it is important to consider the long-term fate of the CO2 throughout the project life process. The Intergovernmental Panel on Climate Change (IPCC) and others have emphasised that the risks associated with CCS schemes can be reduced if there is careful site selection and regulatory oversight. In sum the principal goal should be to avoid harm. We agree that project approvals should be based on satisfactory plans for site selection, monitoring and decommissioning.
2. We agree that there should be some effort to develop a set of principles to guide the development of a long-term management framework but we do not think that the current principles are adequate. It seems to us that while they protect the interests of industry they are not responsive to broader public interests. We also think that the principles are not adequately grounded in principles that inform other regulatory regimes. One such list of principles is found in s. 2 of the *Environmental Protection and Enhancement Act*, R.S.A. 2000, c. E-12. Specific principles that might be added include the precautionary principle, the polluter pays principle and the principle that suggests that persons who suffer harm should be adequately compensated.
3. The report recommends that there should be "no shift in the existing liability structure" until closure. Most readers would not have a clue what that existing liability structure was. It is also implicit in this statement that the existing liability structure (presumably for oil and gas wells) is adequate. The report does not provide any reasons to support that claim.
4. The Report uses the term "liability points". We do not understand what the term "liability point" means. It is not a term of art and it is not self-explanatory. We think that it would be much clearer if the report addressed two questions: the what and the who, i.e. what are the forms of liability that might arise, and who should bear that liability. Liability is primarily a legal question of who should pay for any harm or damage arising from an activity. The report would be much clearer if it contained a statement of the default liability rules that would currently apply to a CCS project and then described how the Council believes that those existing rules need to be changed and why.

5. The “liability points” that the report identifies represent a curious mixture (selection of a monitoring well; monitoring of CO2 plume behaviour; providing for additional monitoring wells; and CO2 leaks). For example, the discussion of CO2 plume behaviour really deals with the point at which liability might be transferred (rather than liability for the plume); and the discussion of injection and monitoring wells and monitoring activity really address the same point - which is, how can we ensure that these activities occur and who should pay for them.
6. It is not clear that the scheme for post-closure liability covers all sources of liability that may arise in a CCS scheme. Even if the Government takes on the responsibility for the activities (and any resulting liability) under the liability points, it does not necessarily take on the liability for all possible harms that may arise. The proposed fund for “Managing Incidences” does not appear on its face to encompass all sources of liability. It is unclear whether an ‘incident’ includes liability for harms other than a leak of CO2. It is also not clear what sources of liability are covered in an incident (e.g. remediation, property damage, personal injury).

There are many potential sources of liability associated with CCS operations. They include legal liability for harms caused to others (e.g. for damage to persons directly and to persons (including the Crown) for property damaged by leaks through injection wells, abandoned wells, factures or fissures); liability for purely economic loss (e.g. for interference with the ability to produce hydrocarbons); liability for MMV operations; liability for any necessary remedial work, liability for damage to the environment itself (e.g. liability for loss of biodiversity); and liability for emissions under climate change agreements in the event storage is not permanent. This list of liabilities is much larger than what is described by the Council.

It would be preferable for the final report to deal with these issues more directly and to include a specific legal analysis of the subject.