

TO: C-NLOPB (information@cnlopb.nl.ca)

FROM: Dr. A.R.Berger

RE: Draft SEA report Western Newfoundland and Labrador Offshore Area

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As an earth scientist and long-time resident of Bonne Bay, I am greatly concerned over the prospect of onshore to offshore drilling in Western Newfoundland, and the proposed use of fracking techniques. Some of these concerns were outlined in my letter to Mr. Tessier on March 21, 2013. I support wholly the questions and critical comments sent to Mr Tessier by the Gros Morne Coastal Alliance on March 22, 2013.

The Draft SEA contains enough information to raise many concerns (e.g. as summarized in Appendix 3) about oil and gas activities here. The lack of any concluding recommendations in the report is strange and calls into doubt the integrity of the report.

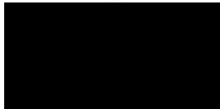
I urge the C-NLOPB not to issue any exploration licences here and not to authorize projects already submitted for exploration and production in the Gulf of St. Lawrence, at least not until the necessary background conditions and trends have been established and the company involved demonstrates to the public its ability to handle both technical and social impacts, both during and after any exploration and production activities. For example, there may well be leakage from wells long after production has ceased: it is essential that provisions be made to identify, finance and deal with such events.

If oil and gas activities are to be permitted in the near future, there is much preliminary work that should be underway already in order to establish background ecological and physical conditions. Without this information, it will be very difficult to link environmental changes drilling and production activities. For example, the Draft report does not appear to deal with the question of potential changes to water chemistry (quality) that could result from drilling and pumping. It is here that detailed background data on surface and groundwater chemistry must be collected well before these activities begin. If this is not done, any impacts on drinking water resources that might ensue will remain arguable – as has happened in many cases of drilling and fracking in the USA and Western Canada. It is simply not acceptable to wait until exploration activities begin to determine these parameters.

Section 4.1.1.3 on seismicity indicates correctly that the seismic hazard along the east side of the Gulf of St. Lawrence is low. However, it is well established that pumping fluids into or out of buried rock formations can induce seismic events, especially minor ones that are hard to detect by distant seismometers. There is a real possibility that drilling and pumping along the west coast of Newfoundland could trigger slope failures along steep coastal cliffs and terraces, and even major rock falls along the Long Range escarpment and the fresh-water fjords that indent it. For some years now I have been monitoring rock falls along the steep slopes of Western Brook Pond, a favourite tourist attraction, and am concerned that even small ground shaking might loosen joint-bounded rock slabs that form the Pond's vertical cliffs. For a thorough review of induced ground shaking I refer the Board to the recent National Academies Press report "Induced Seismicity Potential in Energy Technologies."

Finally, I question whether the various "mitigation measures" outlined in the report will be enforced, or even enforceable, without strong policies and regulations, and the resources to back them up. The Draft SEA should outline how the monitoring work needed in and around Gros Morne National Park would actually be accomplished at a time when federal scientific and technical personnel, programs and services are being severely curtailed.

Yours truly



Antony R. Berger, Ph.D.