Elizabeth Young
Environmental Assessment Officer
Canada-Newfoundland and Labrador Offshore Petroleum Board
Fifth Floor, TD Place
140 Water St.
St. John's, NL A1C 6H6

Dear Ms. Young:

Thank you for sending me a copy of the draft Western Newfoundland and Labrador Offshore Area Strategic Environmental Assessment (SEA) Update report and inviting me to provide comments. I found the report to be informative and extensive. These are my comments:

Consultation report:

Throughout the draft report, references to feedback from the consultation sessions refer to wide-ranging and diverse comments, but do not indicate that comments urging protection of the Gulf of St. Lawrence from oil and gas exploration and development were much more frequent than those promoting such activity. Of 81 written submissions included on the C-NLOPB website, only seven were in favour of exploration and development. In addition, I counted 516 comments from the consultation sessions in the draft Consultation Report (Appendix A). Only eight of these comments were in support of oil and gas exploration and development in the Gulf and two of those eight comments included caveats regarding environmental issues. If one were to read the draft report without reading the detailed consultation results, one would be led to believe pro-development comments were as frequent as cautionary comments. That is simply not the case. The final report should more accurately reflect the fact that the great preponderance of comments opposed oil and gas exploration and development in the Gulf.

Oil spills:

The draft report repeatedly states that accidental oil spills and blowouts are "unlikely" or "rare". This repetition serves to downplay the eventuality of spills.

One of the studies noted in the draft report (p. 57) estimated blowout frequency during exploration drilling at 1 in 267 wells, based on US data from 1980-2010. A second estimate (1 in 6,250), also mentioned on page 57, is said to be "based on more recent data", but it covers 1988-2009 so it is not based on more recent data, just a shorter time period. Also, it is clear that the 1 in 267 wells estimate is based on approximately 12,000 US offshore exploration wells, but no information is provided about the number, type or location of wells included in the lower estimate.

The above-noted estimates are for blowouts only. Spills not constituting blowouts are much more common.

In the NL Offshore Area, using C-NLOPB data, the draft report (pp. 58-59) indicates there were 238 spills greater than one liter in sixteen years with a total spill volume (including smaller spills) of 469,144 liters and an average of 29,322 liters of oil spilled per year. Spills have occurred in every year. Clearly,

spills are not "unlikely". The statistical probability of catastrophic blowouts might be low, but minor spills are apparently inevitable.

Given the much longer history of oil and gas exploration and development off the east coast of Newfoundland, one would assume that the spill data is from that area, although that is not explicitly stated in the draft report. The cumulative effects over time of minor spills in the sensitive, semi-enclosed Gulf of St. Lawrence ecosystem would be much more serious than in the Atlantic Ocean and the effect of even one large spill or blowout could be devastating. The final report should avoid minimizing the serious risks posed by oil spills in the Gulf by removing the frequently repeated statements that they are unlikely.

Use of Dispersants:

In Table 2.2 (p. 19) it is stated that the topic of "use of oil dispersants and their potential effects" is addressed in Sections 3.1, 3.2, 5.1, 5.2, 5.3, 5.4, and 5.5, but in fact this issue is not addressed at all. I could find no information in the draft report about the use of dispersants, in particular Corexit, to clean up oil spills. Recent research from the Georgia Institute of Technology and Universidad Autonoma de Aguascalientes (UAA), Mexico, found that mixing Corexit with oil increased toxicity of the mixture up to 52-fold over the oil alone. See http://phys.org/news/2012-11-gulf-mexico-clean-up-times-toxic.html and http://www.huffingtonpost.com/2013/04/23/corexit-oil-spill-gulf_n_3134963.html, as well as the video link in the next paragraph. The final report should indicate whether dispersants are being used in the NL Offshore and, if so, should discuss the potential harm caused by dispersants and recommend alternative methods for dealing with oil spills.

Long-term Impact of the 2010 Gulf of Mexico Blowout:

Table 5.1 on page 392 includes the following statement regarding the Gulf of Mexico blowout: "There is no clear picture yet concerning short-and-long-term effects on habitats and marine organisms." This 37 minute video documents some of the short-term and long-term impacts:

https://www.youtube.com/watch?feature=player_embedded&v=yduv3APYawA .

Hydraulic Fracturing:

On pp. 429-430, the draft report mentions some research on the possible contamination of drinking water arising from hydraulic fracturing. The following article discusses a study which found contamination of drinking water with methane, ethane and propane near shale gas wells in Pennsylvania: http://phys.org/news/2013-06-stray-gases-wells-shale-gas.html.

Fall 2012 Report of the Commissioner of the Environment and Sustainable Development:

The Commissioner's report is mentioned in passing on page 70. In addition, several references throughout the draft SEA update report are made to C-NLOPB's commitment to follow up on one of the Commissioner's recommendations by completing a review of the spill response capability of operators under its jurisdiction. The Commissioner's report ought to be taken very seriously. All of the recommendations and C-NLOPB's response to each should be set out more fully in the final SEA update report.

Use of Acronyms:

Acronyms are used throughout the draft report and it is difficult for the reader to always remember what they represent. All acronyms used and the full titles they represent should be listed at the front of the final report for reference. This is a minor point, but it would make the report easier to read.

Summary:

As stated on page 5 of the draft report, "The specific 'strategic decision' that the SEA Update is intended to inform is therefore whether to issue further exploration licenses in the Western NL Offshore Area, and if so, to identify any environmental components and issues which should be considered in taking these future decisions and actions."

The draft report delineates the potential harmful effects of various components of oil and gas exploration in the Gulf, including seismic surveys, traffic, structures, lights, routine discharges, drill muds, other disturbances, well abandonment, and accidental spills. It discusses the risks to fish and fish habitat, plankton, shell fish, water birds, marine mammals, turtles, endangered species and species at risk, protected and sensitive areas, fisheries, and tourism, as well as noting important data gaps. The draft report also discusses the dynamic and complex Gulf ecosystem and the effects of factors such as climate change and aquatic invasive species, and includes statements such as "it is generally agreed that there has been a trophic shift over the last 30 years that may not yet be stabilized, and consequently, the ecosystem may have somewhat less of a buffering capacity to potential stressors" (page 399).

The logical conclusion, based on the information in the draft report, is that the possible benefits of additional exploration licences and, potentially, production licences are outweighed by the known risks. Unfortunately, the solid and well-documented information about risks and impacts is undermined by weak suggested mitigations, repeated assertions that the identified issues will be dealt with by project-specific environmental assessments, and a tendency to minimize potential impacts. Some examples of this tendency to minimize are noted in this letter.

I sincerely hope the final SEA Update report will recommend, and C-NLOPB will make, strategic decisions to:

- cancel the current Call for Bids;
- put a moratorium on issuing any further licences; and
- be extremely diligent, using a precautionary approach and rigorous project-specific environmental assessments, before approving any further activities under current licences in the Western Newfoundland and Labrador Offshore Area.

Thank you for the opportunity to respond.

Sincerely,

Ellie Reddin

cc Steve Bonnell, AMEC Environment and Infrastructure Greg Wilson, Manager of Environmental Land Management