



PO Box 5667  
St. John's NL A1C 5X1

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**BAB 3990-30**

Dec. 22, 2008

Ms. Kim Coady  
Environmental Assessment Officer  
Canada-Newfoundland and Labrador Offshore Petroleum Board  
5<sup>th</sup> Floor, TD Place  
140 Water Street  
St. John's NL A1C 6H6

Dear Ms. Coady:

**Subject: Amendment of Environmental Assessment of Exploration Seismic Surveys for Exploration Licences 1097, 1098, 1103 and 1104 Western Newfoundland**

As requested, Fisheries and Oceans Canada (DFO) has reviewed the document entitled, '*Amendment of Environmental Assessment of Exploration Seismic Surveys for Exploration Licences 1097, 1098, 1103 and 1104 Western Newfoundland*', dated November 2008. The following comments are provided for your review and consideration.

***General Comments***

DFO is unaware of any recent studies on biological effects on finfish and shellfish, which have produced results of such a nature as to hamper the present program - considering area, water depth, species and time of year. The recent studies on monkfish larvae carried out by DFO, in conjunction with the FFAW, have also been beneficial in relation to assessing "acute" exposures to larvae in general.

This document only deals with older literature and viewpoints in formulating a generalized perspective regarding risks. Assessments such as this should involve an adequate review of current literature and points of view. Actually, as previously noted and recognized by others, little is known about the acute sub lethal effects of seismic activities and potential ensuing consequences on marine organisms. In fact, recent studies indicate that seismic activities have the potential to produce a variety of effects, which require elucidation. Also, as

pointed out by others, there is presently no literature available on potential chronic effects of seismic activities which may be important under low level chronic exposures and may last for a number of weeks.

### ***Specific Comments***

Page 4, Para. 4. There was insufficient time to review the potential impacts that could occur as a result of increasing the volume of the source array from 2620 to 2940 cubic inches. It is hoped that experts at the C-NLOPB have reviewed this change to the proposed program as well as the proponent's statement that the pressure emitted will be unchanged from the original planned program.

Page 42, Para. 3. The statement here and the response provided on page 18 of the *Addendum to Environmental Assessment of Geophysical Surveys for Exploration Licences 1097, 1098, 1103 and 1104 Western Newfoundland*, July 2008, suggest that the Fisheries Liaison Observer (FLO) also performs the duties of the Environmental Observer (i.e. the same person). However, the mitigations provided in Table 6.6 (page 49) contradicts this as it states that a dedicated Environmental Observer will be onboard the seismic vessel. Further, DFO has maintained for some time that having a single FLO perform the duties of marine mammal, sea turtle, and seabird observer is unlikely to be effective in providing adequate sightings data or ensuring that shut-down procedures are implemented appropriately. A key mitigation measure for any seismic program in the Newfoundland and Labrador offshore area should be the requirement of a dedicated and trained marine mammal observer.

Thank you for providing DFO the opportunity to comment on this document. Should you have any questions or comments regarding the above, please contact James Meade by phone at 772-3521 or by e-mail ([james.meade@dfo-mpo.gc.ca](mailto:james.meade@dfo-mpo.gc.ca)).

Yours truly,

*original signed by C. Grant*

Carole Grant  
Section Head – Habitat Evaluation  
Marine Environment and Habitat Management  
Oceans and Habitat Management Branch

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