



PO Box 1006
Dartmouth, Nova Scotia
B2Y 4A2

JUL 04 2014

Ms. Christine Bonnell-Eisnor
Director, Rights Management and Finance
Canada-Nova Scotia Offshore Petroleum Board
8th Floor, TD Centre
1791 Barrington Street
Halifax, NS
B3J 3K9

Dear Ms. Bonnell-Eisnor:

**RE: DFO Maritimes Region Comments on Canada-Nova Scotia
Offshore Petroleum Board Call for Bids NS 14-1**

This letter provides the comments of Fisheries and Oceans Canada (DFO), Maritimes Region, regarding the Canada-Nova Scotia Offshore Petroleum Board (CNSOPB) Call for Bids NS 14-1. In a letter to the CNSOPB dated March 8, 2013, DFO provided comments on the Strategic Environmental Assessments (SEA) for Misaine and Banquereau (Area 2A) and the Eastern Scotian Slope and Laurentian Fan (Area 2B). In that letter, DFO identified the need for enhanced mitigation for special areas and species, and additional data needs for project-specific environmental assessments. DFO noted that the area covered by the SEA reports, including the current Call for Bids area, is among the most ecologically important, complex and sensitive marine regions in Atlantic Canada. It is DFO's view that additional mitigation measures, particularly related to species at risk, are warranted for activities in this area.

DFO's main concern centers on the possible impacts on the Scotian Shelf population of Northern Bottlenose Whale, an Endangered species protected under the *Species at Risk Act* (SARA). There are also concerns about potential impacts on other species at risk that use this area, including Blue Whales (Endangered), Sowerby's Beaked Whales (Special Concern), Fin Whales (Special Concern), and Leatherback Turtle (Endangered). SARA prohibits the killing, harming, harassing, capture or take of an individual and the destruction of identified critical habitat.

The critical habitat for Northern Bottlenose Whale has been identified in the Recovery Strategy as Zone 1 of the Gully Marine Protected Area (MPA), and in Shortland and Haldimand Canyons. Northern Bottlenose Whales also occur between these canyons in areas of water depths greater than 500 metres (m). The current Call for Bids area includes portions of Shortland and Haldimand canyons and is adjacent to Zone 1 of the Gully Marine Protected Area.

DFO thanks the Board for clearly identifying in the materials associated with the Call for Bids that Endangered Northern Bottlenose Whales and their critical habitat can be found within the parcels and that any approved activity may require enhanced mitigation and may include certain limitations to protect individuals and/or their critical habitat.

Based on the year-round residency of Northern Bottlenose Whales in the canyons and adjacent areas with water depths greater than 500 m, it is highly likely that they will be present during a seismic survey in this area. However, Northern Bottlenose Whales are difficult to detect visually and acoustically as they spend limited time at the surface and are known to dive for up to 70 minutes. As such, operating in areas greater than 500 m depth known to be frequented by these whales will be difficult given the likely requirement for multiple shut-downs and observation periods.

Consultation with DFO is recommended prior to any seismic surveys in this area to identify enhanced mitigation measures beyond the *Statement of Canadian Practice with Respect to the Mitigation of Seismic Sound in the Marine Environment* (SOCP) and to ensure that the most relevant scientific advice is incorporated. Enhanced mitigation measures for aquatic species at risk that require further discussion include, but are not limited to, the following:

- Determination of appropriate methods for detecting species at risk prior to ramp up, and during operations, including using a combination of marine mammal observers and passive acoustic monitoring that provides an acceptable probability of detection and the ability to effectively monitor the safety zone.
- Determination of appropriate shut-down/re-start requirements should specified species (e.g., SARA listed) be encountered.
- The requirement for acoustic modelling to predict transmission and received levels of sound in critical habitat and associated areas of Northern Bottlenose Whale presence (i.e., areas between critical habitat with depths greater than 500 m).
- The requirement for appropriately designed environmental effects monitoring (EEM) to ensure received levels do not exceed modelled predictions and are within acceptable levels.

Acoustic disturbance and changes to food supply have also been identified as threats to individual Northern Bottlenose Whales and to their critical habitat. The quantity and quality of prey (squid, *Gonatus* spp.) is a feature of this critical habitat. Squid have a low frequency hearing range that overlaps with seismic pulses. There is evidence that squid respond to seismic sound and there is potential for both lethal and sub-lethal behavioural

impacts. Disruptions to this important food supply could affect the Northern Bottlenose Whales that rely on it. The potential for impacts on squid should be considered through project-specific environmental assessments for any proposed activities in the vicinity of Northern Bottlenose Whale critical habitat.

Portions of the Call for Bids area contain known concentrations of sensitive coral species, including the *Lophelia* Coral Conservation Area. Any future exploratory and production drilling activities will require mitigation to avoid impacts to these sensitive benthic habitats. Similarly, special consideration of the adjacent Gully Marine Protected Area will be required.

DFO also notes that the Call for Bids area is important for a number of commercial and Aboriginal fisheries, such as snow crab, large pelagics and groundfish. A number of fishing interests have raised concerns around the potential impacts of seismic and exploratory drilling activities in this area. As such, DFO recommends dedicated and comprehensive efforts for consultation and information sharing with fishing interests during planning and operational phases of any future exploratory work. Effective consultation and cooperation with fishing interests is essential to avoid conflict and negative interactions during future exploration activities.

In closing, DFO would like to thank the Board for the opportunity to provide comments on the Call for Bids NS14-1. DFO would like to continue to work collaboratively with the Board to implement an appropriate set of protection, mitigation and monitoring measures, in addition to those currently in place under the SOCP, for the area and special status species covered by the Call for Bids NS14-1. This collaborative work is consistent with the intent of our shared Memorandum of Understanding and associated annual workplan activities. DFO believes that this work will both serve to improve clarity around expectations for future exploration activities, as well as to enhance environmental safeguards for this important marine area.

If you have any questions or concerns regarding DFO's review and comments, please do not hesitate to contact Glen Herbert at a time convenient to you by telephone, 902-426-9900, or by email, glen.herbert@dfo-mpo.gc.ca.

Yours sincerely,



David Millar
Regional Director
Ecosystem Management
Maritimes Region

cc: P. Gentile
F. Scattolon