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ExxonMobil

April 21, 2010 No: L-HE-CNO-100421-01

Ms. Elizabeth Young
Environmental Assessment Officer
Canada-Newfoundland and Labrador Offshore Petroleum Board
140 Water Street
5th Floor TD Place
St. John's NL A1C 6H6

Dear Ms. Young:

Re: Hebron 2010 Geohazard Survey Environmental Assessment – Update

ExxonMobil Canada Properties (EMCP) is pleased to provide an update with regard to the *Hebron 2010 Geohazard Survey Environmental Assessment* presently under review.

As details of the planned survey program have been refined, it has been determined that the survey vessel's turning radius for nine of the lines will extend beyond the Hebron SDLs into the adjacent SDL1042, hence slightly extending the Site Survey Project Area. The encroachment is approximately 1.5 km.

The geographic area needed for turning the vessel has been included in the Environmental Assessment as per Section 3.1 of the Scoping Document issued for the proposed survey's assessment. The environmental assessment is based on two areas, the smaller Site Survey Project Area, i.e. the four Hebron SDLs where data will be collected, and the larger Regional Area, which includes the Grand Banks.

The primary interaction between the survey vessel and the environment while turning will be the presence of the vessel and its associated routine discharges. The mitigation measures identified in the *Hebron 2010 Geohazard Survey Environmental Assessment* provided to C-NLOPB on March 17, 2010 (Table 6.2 provided below), and consistent with those in the C-NLOPB *Geophysical, Geological, Environmental and Geotechnical Guidelines* (2008), including the *Statement of Canadian Practice with Respect to The Mitigation of Sound in the Marine Environment* will be implemented for the vessel during execution of turns outside the Hebron SDLs. Data will not be acquired while turning.

Table 6.2 Project-Specific Mitigation Measures

Potential Effect	Mitigation Measures
Noise	EMCP will use the lowest sound source in the airgun array that gives the best data The vessel will follow the ramp up procedures as outlined in the *Geophysical, Geological, Environmental and Geotechnical Program Guidelines* (C-NLOPB 2008) Mitigation measures will follow those outlined in the *Statement of Canadian Practice with respect to the Mitigation of Seismic Sound in the Marine Environment* (the Statement") (DFO 2007a) and include: • Ramp-up of the airgun array over a minimum of 20 minutes • Monitoring by a dedicated environmental / MMO during daylight hours that the airgun array is active • Shutdown of the airgun array when an endangered or threatened marine mammal or sea turtle is sighted within the 500 m safety zone and • Delay of ramp-up if any marine mammal or sea turtle is sighted within the 500 m safety zone • Using ramp-up procedures outside daylight hours, or in periods of low visibility, when visual observations may not be practicable
Light Attraction	The survey vessel crew will conduct routine checks for stranded birds and implement appropriate procedures for release that will minimize the effects of vessel lighting on birds (meeting bird salvage permit requirements, including release of stranded birds and reporting such information to the Canadian Wildlife Service) The ramping up process will also allow birds to move away from the noise source before it reaches maximum volume (MMOs will also record bird sightings during the survey)
Vessel Presence / Routine Discharges	The survey vessel will conform to the *Canada Shipping Act* and MARPOL 73/78 *International Convention for the Prevention of Pollution* from ships, which dictates the handling and disposal of wastes EMCP has a detailed Waste Management System (detailing standard pollution prevention policies and procedures) and requires all contractors to apply it to their operations Vessel will have an Automated Identification System EMCP will publish a Canadian Coast Guard "Notice to Shipping" and a "Notice to Fishers" via the CBC Radio program Fisheries Broadcast EMCP will request a 1 nautical mile (nm) Closest Point of Approach from all vessels
Accidental Events	
Loss of Hydrocarbon	No fuel transfer at sea Any accidental spills will be immediately reported to the C-NLOPB as per C-NLOPB (2009b)
Loss of Isopar-M from Streamer	During streamer maintenance, and/or repair (which take place on deck), there will be one full spill kit on available and a second spill kit on standby; a crew member will be dedicated to monitor for on-deck spill events The streamers are inspected upon deployment and recovery The streams are constantly monitored for loss of ballast / balance, which is an indirect streamer monitoring procedure (there is no direct monitoring for loss of fluid) Use of solid streamers if possible
Entanglement	Streamers are only 600 m long, with a radar reflector on the tail buoy of the streamer EMCP will have a Fisheries Damage Compensation Program in place for

Potential Effect	Mitigation Measures
	damaged gear attributable to the geohazard survey EMCP will have three MMOs on board; including a Fisheries Liaison Officer (FLO) trained as an MMO EMCP will have a Single Point of Contact EMCP will publish a Canadian Coast Guard "Notice to Shipping" and a "Notice to Fishers" via the CBC Radio program Fisheries Broadcast EMCP will request a 1 nautical mile (nm) Closest Point of Approach from all vessels

The assessment has found that, with mitigations implemented, the residual effects of the presence of the survey vessel are not significant for any of the VECs (Species at Risk, marine fish and fish habitat, commercial fisheries, marine birds and Sensitive Areas).

The assessment of effects of an accidental event during the survey is based on loss of fluid from the streamer (a worst case approach) and has also been found to be not significant. As a result of further detailed survey planning, EMCP is able to confirm in this update, that the streamer will be gel-filled, which further reduces potential effects of an accidental event.

If you have any questions regarding the update, please contact Ms. Kim Coady (709-752- 6441, Kimberly.Coady@esso.ca) or Ms. Leslie Grattan (709-752-6445, leslie.grattan@exxonmobil.com).

Regards,

E. F. (Ted) O'Keefe
Regulatory Lead
Hebron Project

cc: J. E. O'Reilly