

From: EC
Sent: Friday, February 21, 2014 11:10 AM
To: C-NLOPB
Cc: EC
Subject: RE: Suncor Eastern NL 2D/3D/4D Seismic 2014-2024 EA Report

As requested in your letter of 9 January 2014, Environment Canada (EC) has reviewed the environmental assessment (EA) report for Suncor Eastern NL seismic program, 2014-2024 (Environmental Assessment of Suncor Energy's Eastern Newfoundland Offshore Area 2D/3D/4D Seismic Program, 2014-2024, [LGL December 2013]).

EC's previous comments on the scoping document and project description (submitted to you on 29 October 2013; attached) are still applicable to the EA report. In addition, the Canadian Wildlife Service of Environment Canada (EC-CWS) offers the following comments:

EC-01: 2.3.8 Seismic Streamers

We recommend that solid streamers be used, in order to eliminate risk of fluids leaking into the environment.

EC-02: 2.3.9.2 Helicopter

Helicopters and other aircraft should keep well away from breeding colonies, as aircraft can cause severe disturbance to seabird and waterbird colonies, and there is a serious risk of collision with flying birds. In general, maintain a distance of at least 300 m from seabird and waterbird colonies. See Environment Canada's guidelines to avoid disturbance to seabird and waterbird colonies in Canada for further information, found at <http://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=E3167D46-1>.

EC-03: 4.4.3 Breeding Seabirds in Eastern Newfoundland

The Terra Nova National Park Important Bird Area (NF017) should be added to this section and to Figure 4.39. See <http://ibacanada.com/site.jsp?siteID=NF017&lang=EN> for further details.

EC-04: 4.4.4 Seasonal Occurrence and Abundance

The latest seabird data cited in this document are from 2009. EC-CWS has data that is more recent than 2009. Please contact EC-CWS Biologist Carina Gjerdrum at carina.gjerdrum@ec.gc.ca for updated information.

EC-05: 5.6.3 Seabird VEC

The potential interaction of seabirds with light during times of poor visibility should be discussed in this section. Additionally, the potential for migratory birds to strand on the ship should be discussed.

EC-06: 5.6.3.2 Effects of Aircraft Overflights

See EC-02.

EC-07: 5.6.3.3 Effects of Accidental Releases

Even a small spill could have significant impacts on migratory bird populations if the spill happened to coincide with a particularly large flock of seabirds or sea ducks during a peak migratory period. The report should include references and a discussion of at least the two following relevant studies:

* O'Hara and Morandin (2010) Effects of sheens associated with offshore oil and gas development on the feather microstructure of pelagic seabirds. *Marine Oil Pollution* 60: 672-678. This study investigates the effects of very low concentrations of oil-forming sheens affecting the microstructure of feather in seabirds.

* Burger, A. (1993) Estimating the mortality of seabirds following oil spills: effects of spill volume. *Marine Pollution Bulletin* 26:140-143. This study shows that spill size does not necessarily correlate with mortality estimates.

EC-08: 5.6.3.4 Effects summary

See EC-05.

EC-09: 5.8 Mitigations

The seabird data collection protocols are properly cited as:

Gjerdrum, C., D.A. Fifield, and S.I. Wilhelm. 2012. Eastern Canada Seabirds at Sea (ECSAS) standardized protocol for pelagic seabird surveys from moving and stationary platforms. Canadian Wildlife Service Technical Report Series No. 515. Atlantic Region. vi + 37 pp.

Please do not hesitate to contact me if you have any questions regarding our comments.

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