

From: EC

Sent: Wednesday, April 16, 2014 10:24 AM

To: Hicks, Darren

Cc: C-NLOPB

Subject: EC Response 2013-130: Multi Klient Invest AS Southern Grand Banks Seismic Program, 2014 to 2018 (EA Report)

Attachments: Protocol for Collecting Dead Birds from Platforms.pdf; Birds and Oil – CWS response plan guidance updated June 2012.pdf; O'Hara and Morandin.pdf; Stranded Bird Encounters Datasheet.xls; Oiled Birds Protocol.pdf

Darren,

As requested in your letter of 11 March 2014, Environment Canada (EC) has reviewed the environmental assessment (EA) report "Environmental Assessment MKI Southern Grand Banks Seismic Program, 2014-2018" (LGL March 2014). The report describes proposed 2D/3D seismic surveys for the Southern Grand Banks area of the Newfoundland and Labrador Offshore Area from 2014 until 2018.

Please note that EC's previous comments on the scoping document and project description (submitted to you on 15 January 2014) are still applicable to the project as described in the EA report. In addition, the Canadian Wildlife Service of Environment Canada (EC-CWS) offers the following additional comments:

EC-01: Section 2.2.10 Logistics and Support

Aircraft, particularly helicopters, have been known to cause significant negative impacts to migratory birds during various life stages (i.e. chick rearing, moulting). Mitigation measures such as timing and adjusting the altitude and pattern of helicopter flight lines can minimize disturbance. Helicopter use near seabird breeding colonies should be avoided from May 1st - August 31st (with an end-date of September 30th for Northern Gannet Colonies).

EC-02: Section 4.4.2 Information Sources

It should be noted in this section that the ECSAS program is ongoing. Updated information in the region that have been collected since the publication of Fifield et al. 2009 can be obtained by contacting Carina Gjerdrum, EC-CWS pelagic seabird biologist, at [Carina.gjerdrum@ec.gc.ca](mailto:Carina.gjerdrum@ec.gc.ca)

EC-03: Section 4.4.2 Information Sources

Quote: "Some seabird nesting colonies have been re-surveyed since the SEA and that information has been incorporated here."

Population numbers for seabird colonies in this report are in large part from dated sources, and should be updated through the use of the most recent information available. Seabird colony

numbers are routinely assessed and updated by EC-CWS and its partners, and data are compiled and stored in the CWS Atlantic Region Colonial Waterbird Database. These data can be obtained by contacting Sabina Wilhelm, EC-CWS colonial seabird biologist, at [Sabina.wilhelm@ec.gc.ca](mailto:Sabina.wilhelm@ec.gc.ca).

EC-04: Section 4.4.3.1 Overall Pelagic Seabird Distribution and Abundance  
See EC-02.

EC-05: Table 4.7 Monthly Relative Abundance of Seabird Species with Reasonable Likelihood of Occurrence in the Study Area.  
See EC-02.

EC-06: Table 4.8 Estimated Numbers of Pairs of Colonial Seabirds Nesting at Important Bird Areas (IBAs) and other Important Sites (not designated IBAs) along Newfoundland's South Coast.  
See EC-03

EC-07: Section 5.6.5.3 Ramp-Up/Soft Start  
We recommend to always perform a ramp-up/soft start of the airgun prior to use. This beneficial management practice will help deter migratory birds from diving in the area.

EC-08: Section 5.6.5.7 Seabird Strandings  
A protocol for handling non-oiled but dead birds found on the vessel is attached.

EC-09: Section 5.6.5.7 Seabird Strandings  
Quote: "MKI will request the ships to minimize lighting on board to the extent that it does not affect safety."

In Atlantic Canada, nocturnal migrants and night-flying seabirds (e.g. storm-petrels) are the migratory birds most at risk of attraction to lights and flares. Attraction to lights at night or in poor visibility conditions during the day may result in collision with lit structures or their support structures, or with other migratory birds. Disoriented migratory birds are prone to circling light sources and may deplete their energy reserves and either die of exhaustion or be forced to land where they are at risk of depredation.

To minimize risk of incidental take of migratory birds due to human-induced light, Environment Canada recommends at minimum the following beneficial management practices:

- \* The minimum amount of pilot warning and obstruction avoidance lighting should be used on tall structures.

- \* The use of only strobe lights at night, at the minimum intensity and minimum number of flashes per minute (longest duration between flashes) allowable by Transport Canada, is recommended.

- \* Using the minimum number of lights possible is recommended.

EC-10: Table 5.2 Summary of Mitigations Measures by Potential Effect.

Quote: "Temporary or permanent hearing damage/disturbance to marine mammals."

EC recommends adding migratory seabirds to this category in addition to marine mammals. Ramp-up of airguns should be listed as a potential mitigation used to deter migratory birds from the location.

EC-11: Table 5.2 Summary of Mitigations Measures by Potential Effect.

Strategies to minimize or prevent accidental or chronic releases must be emphasized in a mitigation program. Proponents are required to demonstrate response preparedness and to identify provisions for ensuring measures are implemented to eliminate or minimize resulting sheens or slicks in the event of accidents and malfunctions involving the release of oil. The following considerations are requested to be factored into the development of a response plan that would help reduce impacts on seabirds:

- \* Measures for containing and cleaning up spills (of various sizes) either at the drill site or during transport.

- \* Equipment that would be available to contain spills.

- \* Specific measures for the management of large and small spills (e.g., breaking up sheens).

- \* Mitigation measures to deter migratory birds from coming into contact with the oil.

- \* Mitigation measures to be undertaken if migratory birds and/or sensitive habitat becomes contaminated with the oil.

- \* The type and extent of monitoring that would be conducted in relation to various spill events.

In order to assist proponents in preparing a plan for dealing with an oil spill which would potentially threaten birds, EC-CWS has prepared a guidance document (attached), as well as a sample protocol document used for oiled birds on beaches (attached).

EC-12: Section 5.8.6.3 Vessel Lights

Change from "migratory bird salvage permit" to "live seabird handling permit".

EC-13: Section 5.8.6.4 Helicopter Presence

See EC-01

EC-14: Section 5.8.6.7 Accidental Releases

Quote: "It is expected that solid streamers also will be used during the subsequent 2D and 3D seismic surveys (2015-2018), but details have not been finalized yet."

We recommend a commitment to using solid streamers instead of liquid streamers. If liquid streamers are used, a contingency plan for mitigating potential leaks in the streamers must be made. Please consult O'Hara and Morandin (2010; attached) for information regarding the effects that even very small quantities of oil can have on thermoregulatory ability in migratory birds.

Quote: "The illegal discharge of oily bilge water off the southeast coast of Newfoundland is a chronic problem (Wiese and Ryan 1999, 2003)."

With regard to the above statement, EC advises the proponent that although chronic ship-source oil pollution continues to threaten wildlife in eastern Canadian waters, Wilhelm et al. (2009) have documented a decline in oiled bird occurrences and oil pollution detections in recent years.

Please refer to the following article:

Sabina I. Wilhelm, Gregory J. Robertson, Pierre C. Ryan, Stan F. Tobin, Richard D. Elliot, 2009. Re-evaluating the use of beached bird oiling rates to assess long-term trends in chronic oil pollution. Mar. Poll. Bull. 58(2): 249-55.

EC-15: Table 5.20 Summary of Mitigations Measures  
See EC-10.

EC-16: Section 5.10 Mitigations and Follow-up

"It is understood by MKI that a CWS Migratory Bird Handling Permit will be required and that it will be secured as it has been in the past."

The permit should be referred to as a Migratory Birds Convention Act (MBCA) permit, not a Canadian Wildlife Service (CWS) permit.

Please note that documents mentioned in the above comments are as follows:

<<Protocol for Collecting Dead Birds from Platforms.pdf>> <<Birds and Oil - CWS response plan guidance updated June 2012.pdf>> <<O'Hara and Morandin.pdf>> <<Stranded Bird Encounters Datasheet.xls>> <<Oiled Birds Protocol.pdf>>

I trust that this information will be of assistance in your review of this proposal. If you wish to discuss these comments or have further questions, please do not hesitate to contact me at your convenience.

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