

GENERAL COMMENTS

Seabird Data Collection

This survey provides a good opportunity to collect additional seabird data from the area, as committed to by the proponent in the EA Report.

In an effort to expedite the process of data exchange, the Canadian Wildlife Service (CWS) would appreciate that the data (as it relates to migratory birds at risk) collected from these surveys be forwarded in digital format to the CWS office following completion of the study. These data will be centralized for the internal use of CWS to help ensure that the best possible natural resource management decisions are made for those species in Newfoundland and Labrador. Metadata will be retained to identify source of data and will not be used for the purpose of publication. The CWS will not copy, distribute, loan, lease, sell or use this data as part of a value added product or otherwise make the data available to any other party without prior express written consent.

Marine Navigation

The proponent should promulgate actual work locations as per Navigation to Ship notices (NOTSHIPS) and check potential Department of National Defence activity each season through the Staff Officer for Environmental Assessment.

Based on the information that Marine Forces Atlantic, also known as MARLANT, currently holds, the following sites have potential for the presence of Unexploded Ordnances (UXOs):

- Disposed Naval Mines - 47.25N, 059.66W
- UXO and Mines - 46.17N, 059.44W
- United States patrol boat – 46.41N, 060.33W
- Disposal Area – (potential mustard gas) 46.30, 058.65W.

Commercial Fisheries

The commercial fishery is very important to many communities on the south coast of Newfoundland. Fishing activity occurs throughout most of the year (April to November) on the south coast and a variety of marine species is commercially harvested. The Burgeo Bank, in particular, is an important fishing ground for many local harvesters. The fishery is being actively prosecuted at the time that Husky Energy is proposing to conduct its program in 2010. It is therefore important that Husky maintain regular communication with the FFAW to keep apprised of ongoing developments with this, and other fisheries in the area.

There is some inconsistency in the fisheries information noted in the document with respect to Atlantic Cod that requires clarification. Atlantic Cod spawn from April to June in the project area and migration of the stock is still occurring up until the end of May. June is not an ideal time to conduct seismic activity during both of these sensitive periods in the life history of the species but it is better than

April or May. August would be a preferred time if the company is considering timing requests of the fishing industry to conduct their seismic program. It is also noteworthy that while some cod may be caught in the project area as by-catch from the redfish fishery there is a directed fishery for cod in the region that occurs from May to November.

Some fisheries comments in the report are a little dated, although referenced accordingly, with 2007 information being the most recent. The fisheries data in the report is dated as well. As noted in the document however fisheries data with respect to catch is sporadic for midshore fisheries and incomplete for 2008 and 2009 offshore data. Therefore, the deployment of an FLO onboard the seismic vessel will be important in this seismic program. Additionally, the eastern portion of the project area may require some additional mitigative measures, such as the use of a fisheries guide vessel to scout for fishing gear prior to and/or during seismic activities, if necessary.

One of the industry's concerns with a multi-year seismic program being proposed is the need for frequent communication between the industry and the oil and gas company. Harvesters are spread out over a wide geographic area and communication is vital to the safety of all involved. There is a need for good planning and further consultation directly with the fishing industry several months prior to the start of various components of the seismic program to avoid potential conflict at sea. This should be coordinated with the FFAW and may include the need for consultations in communities such as Port aux Basques and Burgeo. Fishing activity can change from year to year and during the season. Fishing activity/plans after 2010 should be investigated prior to work being conducted in subsequent years of the seismic program outlined for 2010-2018.

The unknown long-term effects of seismic activities continue to concern harvesters as well. There have been reports, some of which have been noted in the document, from harvesters that fish behaviour and catch rates have been affected following seismic blasts. While the research has not determined any direct mortality of fish or shellfish attributable to seismic activity on the individual level, as the document describes, there may be behavioural changes that could affect migration and/or reproductive and spawning activities as well as movement of the exploitable biomass in an area. This could have impacts on the population as a whole and therefore fishing opportunities in the years to come. The statement that "none of the proposed seismic surveys will result in population effects on fish" seems contradictory (Page 6-57). Perhaps the word unlikely should be added to the sentence.

SPECIFIC COMMENTS

§1.0 Introduction, pg 1-1 – Reference to the CNSOPB as an RA is missing.

§1.2 Relevant Legislation and Approvals, pg 1-3 – An authorization to conduct a geophysical program is also required from the CNSOPB and should be included in this section.

§1.2 Canada-Newfoundland and Labrador Benefits, pg 1-3 - Reference to the CNSOPB as an RA is missing.

§3.3 Project Overview, pg 3-5 – This is the first time that VSP surveys and CSEM has been mentioned. They were not included in the Project Description or in Section 2.1 C-NLOPB Scoping Requirements. It appears that VSP surveys have been assessed (please confirm) however this is the only time CSEM has been mentioned.

§3.3.3 Project Components 3-D Surveys, 2nd para., line 6, pg 3-7 – “It is estimated that the survey vessel will require a turning radius of 10 to 15 kilometres outside the identified Study Area”. Section 3.2 states that the Study Area includes the turning radius for streamer deployment. All activities, including the area normally defined for line changes, should be included in the Study Area and assessed.

§3.3.3 Project Components Helicopters, 2nd para., lines 2-5, pg 3-10 – “For the duration...on their helideck”. What is proposed if helicopters are not available?

§3.3.3 Project Components Support Vessels, lines 2, pg 3-10 – It has been previously stated that a chase or picket vessel “will” be used.

§3.3.4 Emissions and Waste Discharges, pg 3-12 - Which program was used to produce the acoustic modeling predictions presented here, and referenced in section 6.3? Was the output produced, or reviewed, by a specialist in acoustics? It is expected that acoustic modeling presented in EAs be completed by qualified acoustic specialists to ensure accuracy.

§3.3.9 Potential Accidental Events, pg 3-21 - The CNSOPB must also be notified immediately of any accidental spills within CNSOPB jurisdiction.

§3.3.9 Potential Accidental Events, pg 3-21 – It is important that any assessment of effects in this section are also discussed in “Section 6.0 Effects Assessment of Project Activities”. This also applies to mitigative measures.

§3.3.9 Potential Accidental Events, 4th para., line 3, pg 3-21 – “Such occurrences are rare ... assessment”. Where in the environmental assessment?

§4.2.3 Temporal and Spatial Boundaries and Study Area, 2nd bullet, last line, pg 4-4 – “There is concern for cumulative effects on this stock”. This statement is not appropriate in this section of the report.

§5.5.2 Benthos – Deep Sea Corals, pg 5-46 – Have there been any identified in the Study Area?

§5.5.3 Marine and Migratory Birds, Figures 5-41 to 5-44, pgs 5-49 -5-52 - These figures show the distribution of vulnerable pelagic seabirds over the year. The figures have grouped all “pelagic birds” together and do not indicate specifically which species have been included. It would be more useful to present separate maps for individual species (or species groups) showing distribution during different seasons. This would better indicate which species could be expected in the study area during a given season.

Also, there is no source listed for these figures. Environment Canada's Eastern Canadian Seabirds at Sea (ECSAS) program has conducted over 4,000 surveys consisting of 7,800 km of ocean track in the Newfoundland and Labrador offshore area since 2006. The most up-to-date data for the Sydney Basin should be included in the EA Report. This information is available by contacting Carina Gjerdrum at carina.gjerdrum@ec.gc.ca or (902) 426-9641.

§5.5.3 Marine and Migratory Birds, Figure 5-45;pg 5-53 - The title of this figure indicates wintering locations, but it appears that only breeding colonies are shown. This should be clarified. It would be useful if the Important Bird Areas were identified on the map as well.

§5.5.3 Marine and Migratory Birds, Table 5.9, pg 5-54 - It appears that the total number of nesting pairs for Basque Island and Michaud Point does not correspond with the information presented in the table.

§5.5.3 Marine and Migratory Birds, 4th para., pg 5-54 – It should be noted that the Ivory Gull has been uplisted and is now listed as Endangered on SARA's Schedule 1. The prohibitions of SARA now apply for the Ivory Gull.

§5.5.6 Sea Turtles – Leatherback Turtle, Figure 5-54, pg 5-82 – A reference should be provided for this figure.

§5.5.8.1 Important Bird Areas (IBA), last para., line 2, pg 5-90 – The full address for the IBA website should be provided.

§5.5.8.3 Ecologically and Biologically Significant Area (EBSA), 2nd para., pg 5-93 – Should Figure 5-55 be Figure 5-56?

§5.5.8.6 National Marine Conservation Areas, pg 5-94 – Potential NMCA's are not identified on Figure 5-56.

§6.1.2 Potential Issues, 1st sentence, pg 6-1 – This section should discuss potential issues. It is out of place to make this kind of statement at this point in the discussion.

§6.1.4.2 Noise Emissions, last para., last sentence, pg 6-4 – “Thus behavioural changes...in the Study Area”. SARA species should be discussed in Section 6.5.

§6.2.4 Effects Assessment and Mitigation, pg 6-14 – The CNSOPB has adopted mitigation measures listed within the *Statement*; it is therefore expected that known fish spawning areas during peak spawning times be avoided throughout the life of the seismic program.

§6.2.4 Effects Assessment and Mitigation, pg 6-19 - A commitment to adhere to the *Statement* should be stated in the mitigation section.

§6.2.7 Summary, Table 6.5, pg 6-22 - The mitigation listed is not consistent with that provided on page 6-19. The additional mitigation listed on page 6-19 should be added to Table 6.5.

§6.3.4.1 Vessel Presence, 1st para. & last para., pg 6-25 - SARA species should be discussed in Section 6.5.

§6.3.4.2 Noise Emissions, last para., pg 6-27 – Insert “some of” between “outline” and “the mitigation measures”. The correct guidelines reference is “Geophysical, Geological, Environmental and Geotechnical Program Guidelines (C-NLOPB 2008).”

§6.3.4.2 Noise Emissions, 1st para., 1st line, pg 6-28 – Husky should conduct a marine mammal monitoring program for all marine mammals and not just species at risk.

§6.3.4.2 Noise Emissions, 1st para., line 4, pg 6-28 – The Guidelines should be correctly referenced (ESRF # 156).

§6.3.4.2 Noise Emissions, 1st para., line 12, pg 6-28 – The project activities should be included in the Study Area.

§6.3.4.3 Behavioural Effects, last para., last sentence, pg 6-30 – SARA species should be discussed in Section 6.5.

§6.3.5 Cumulative Effects, 1st para., last line, pg 6-33 – SARA species should be discussed in Section 6.5.

§6.3.6 Monitoring and Follow-up, 1st para., 1st line, pg 6-33 – “If a concentration of marine mammals is observed in a particular area, it is possible for the survey to shift to another part of the Study Area until the concentration

has moved away”. Could more detail be provided on how exactly this would work. This statement is also made in Table 6.8, pg 6-47.

§6.3.6 Monitoring and Follow-up, 1st para., pg 6-33 – SARA species should be discussed in Section 6.5.

§6.3.6 Monitoring and Follow-up, 2nd para., pg 6-33 – This commitment should be in Section 6.5.

§6.3.7 Summary, Table 6.6, Mitigation, 3rd bullet, pg 6-34 – Replace “whales” with “marine mammals”.

§6.4.6 Monitoring and Follow-up, 1st para., pg 6-38 – SARA species should be discussed in Section 6.5.

§6.5 Species at Risk, pg 6-39 - It would be useful to add the SARA status and schedules to the list of Species at Risk.

§6.5 Species at Risk, pg 6-39 – The Leatherback sea turtle should be included on the list.

§6.5.1 Boundaries, 3rd para., pg 6-40 – The temporal scope is defined in Section 4.2.3 as March to November for the period 2010 to 2018. Section 1.0 states any time of year. This section states any time of year. Please review report to ensure consistency.

§6.5.4 Effects Assessment, pg 6-41 - The EA should include a discussion of potential impacts to marine mammal and sea turtle Species at Risk within 500m of the vessel at night and during periods of low visibility (i.e. fog).

§6.5.6 Cumulative Effects, 1st para., line 3, pg 6-41 – “coast of Labrador”. What about the Sydney Basin area?

§6.6.4.2 Noise Emissions, pg 6-50- This section refers to St. Anns Bank as an AOI. At the present time, this area is a candidate AOI only and has not been officially named as an AOI by the Minister of Fisheries and Oceans.

§7.0 Effects of the Environment on the Project, 2nd para., pg 7-1- It has been stated throughout the report that activities are planned for April, the first of March, and June. Please review report for consistency.

§7.1 MET-Ocean, 4th para., line 2, pg 7-1- Replace “contract” with “contrast” if applicable.

§7.1 MET-Ocean, 1st para., last sentence, pg 7-2- “A review of the seasonal range and variation in these conditions would be appropriate for contingency planning”. Will Husky Energy be conducting a review and at what point?

§7.2 Ice, 1st para., last sentence, pg 7-2- “Certainly a review and confirmation...”. Will Husky Energy be conducting a review?