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Your file Votre référence

April 28, 2017

Our file Notre référence
PATH #16-HNFL-00560

Darren Hicks
Canada-Newfoundland and Labrador Offshore Petroleum Board
140 Water St., 4th Floor
St. John's, NL A1C 6H6

Dear Mr. Hicks:

Re: Review of Environmental Assessment of MultiKlient Invest AS Newfoundland and Labrador Offshore Seismic Program 2017-2026

I am writing further to your March 13, 2017 letter requesting review of the March 2017 Environmental Assessment (EA) Report prepared in relation to the above noted offshore seismic program proposed by MultiKlient Invest AS.

Based on review of the above noted EA Report the following comments are offered for your review and consideration.

- Section 2.2.7 Seismic Streamers (page 10) – the maximum spacing between streamers should be noted.
- Section 2.2.9 Waste Management (page 11) – does “garbage” include liquid waste discharges if so the second sentence should note as such.
- Section 3.2 Climatology (page 20) – it is assumed that the noted data reports provided in the first paragraph of page 20 (e.g. CNLOPB 2008, CNLOPB 2014, Oceans 2014) are the most recent / up to date datasets for the hind cast data; this should be confirmed and noted accordingly in this paragraph.
- Section 3.2.4 Weather Variables (page 23) – the first sentence notes the use of ICOADS data set, a reference for ICOADS should be provided within Section 6 Literature Cited.
- Section 4.3.1 Information Sources (page 64) – it is felt that this section could benefit from addition of a table showing / describing the source (i.e. DFO and NAFO), time period and geographic location represented by the DFO and NAFO data.
- Section 4.3.3.2 Study Area Catch Analysis 2010-2015, Fishing Gear Used in the Study Area (page 78) – the second sentence page 78 “...pots (snow crab, Greenland halibut, redfish, American plaice, Atlantic cod and Atlantic halibut)...” suggests that pot gear is used to capture Greenland halibut, plaice, redfish, cod and halibut. Pot gear is used exclusively to capture snow crab rather than the other noted species unless the catch of the other species is by catch. Either way this sentence needs to be clarified and corrected accordingly.



- Section 4.3.5 Recreational Fisheries (page 99) – the first sentence of the second paragraph could be amended to reflect that the noted recreational groundfish fishery has occurred and has been concluded for 2016.
- Section 4.5.1 Marine Mammals (page 133-135) - Regarding Table 4.17 appropriate population names should be included for those species noted as being listed under SARA or by COSEWIC. This section should also note that based on work completed in 2016 by researchers at Dalhousie University in the southern Grand Banks/Flemish Pass/Flemish Cap areas and which has been reported in various media sources (e.g. CBC News online) it would appear that northern bottlenose whales from both the North Atlantic and Scotian Shelf populations frequented the noted areas studies in 2016. This is also supported by information presented in Table 4.18 on marine mammal sightings. As such it is felt that the representation in Table 4.17 and various sections of the EA that describe northern bottlenose whales as “rare” is not accurate and should be reconsidered and amended to reflect the reasonable likelihood of occurrence within the study area to be something other than rare.
- Section 4.5.1.3 Toothed Whales (Odontocetes) – the first sentence of this section should be amended to also include reference to Table 4.18.
- Section 4.5.3 Marine mammal and Sea Turtle Data Gaps (page 149) – the last sentence of this section notes that “..opportunistic efforts are being made during seismic surveys to collect more distribution and abundance data for marine mammal and sea turtles”. It should be described or noted how this data is being compiled and reported.
- Section 4.6.2.3 Marine Mammals and Sea Turtles – Northern Bottlenose whales (page 156) – see above comment on Section 4.5.1 the description of northern bottlenose whales provided on page 156 should also factor this comment into the description accordingly.
- Section 4.6.3 Data Gaps associated with the Species at Risk VEC (page 157) – the second paragraph mentions the “sensitive areas VEC” it is assumed that this is an error and the noted sentences should refer to the “Species at Risk VEC” rather than the sensitive areas VEC. This should be clarified and corrected accordingly.
- Section 4.7.1 Sensitive Areas within the study area (page 158 and 159) – please combine bullets 3 and 4 as they all fall under the Newfoundland and Labrador Shelves Bioregion the Oceans Program no longer references the Placentia Bay Grand Banks Large Ocean Management Area vis a vis EBSAs. As such there are 18 EBSAs in total. Bullet 6 please add the acronym (AOI) following “Area of Interest”. Bullet 8 the area described is known as the Hatton Basin and Bullet 8 should be amended accordingly. Bullet 10 and 11 can be combined as both are identified as Fishery Exclusion Areas. Bullet 15 should make the distinction that the Gilbert Bay is designated as an MPA under Canada’s Oceans Act and the Milne Seamount Complex is designated internationally as a component of the OSPAR Network of Marine Protected Areas.
- Section 4.7.1 Sensitive Areas within the study area Figure 4.40 (page 160) – this figure depicts the Bonavista Cod Box as a DFO area, it should be noted that is an area that fishers recognize as an important cod spawning area however it is currently not under any protective measures by DFO.
- Section 4.7.1 Sensitive Areas within the study area (2nd paragraph page 161) - The information presented in the first sentence is incorrect and should be omitted; the Southeast



Shoal of the Grand Bank has not been recommended and proposed for MPA designation. Currently, the Laurentian Channel AOI is being proposed as an MPA. This paragraph should be amended accordingly. It is felt that if the purpose of this paragraph is to follow up on areas that are legislated then a short description of all such areas could be / should be provided including (from an Oceans Management perspective) Gilbert Bay MPA, the Fishery Exclusion Areas (Hawke Channel and Funk Island Deep), NAFO coral/sponge and seamount fishery closures, and the 30 Coral Protection Zone.

- Section 4.7.2 Data gaps associated with Sensitive Area VEC (page 162) – Bullet 1 it should be noted that there was new and updated distribution data presented in 2016 in the CSAS report 'Delineation of Coral and Sponge Significant Benthic Areas in Eastern Canada Using Kernel Density Analyses and Species Distribution Models' (CSAS, Research Document 2016/093) which if not already should be included within the appropriate sections of the EA report. Also with respect to Bullet 3 it should be noted that Ecological Risk Assessment (ERA) to evaluate the risk posed by bottom contact fisheries on significant coral and sponge communities has been carried out on three areas identified in the 2016 CSAS (mentioned above) including areas in the Hatton Basin, Hopedale Saddle, and Tobin's Point. These areas are being proposed as fisheries closures and extensive consultations on each area are currently underway.
- Section 5.4 Effects Assessment Procedures (page 169) – it is felt that there should be a very short summary of the effects assessment procedures presented in this section of the EA, rather than referring readers to previous EA Reports.
- Section 5.5 Mitigation Measures (page 170) - the listed bullets should also include reference to the *Species at Risk Act* and the *Marine Mammal Regulations* which are undergoing amendment. It should be noted that Schedule 11 of the proposed amended *MMR* provide approach distances for marine mammals based on species, vehicle (vessel, aircraft, etc), area and timing. Given that the proposed seismic survey(s) are scheduled to run from 2017 to 2026 it is recommended that the proponent be aware of any potential implications that may arise if any proposed amendments to *MMR* are accepted during the timeframe covered by the proposed survey program.
- Section 5.5 Mitigation Measures Table 5.1 (page 171) – as noted in later comments based on this table it is not clear what mitigations will be employed to monitor marine mammal presence within the 500 m exclusion radius during periods of darkness and/or low visibility. This will require clarification in accordance with similar comments to follow.
- Section 5.5 Mitigation Measures (page 172) – similar to comment on Section 5.4 above it is felt that there should be a very short summary of the 7 mitigation categories noted on page 172 presented in this section of the EA rather than referring readers to previous EA Reports.
- Section 5.6 Effects of the environment on the Project first sentence last paragraph (page 172) – as a small point it is also likely that poor visibility will affect the ability of marine mammal observers to observe marine mammals within the 500 m radius around the air gun array perhaps the first sentence in the last paragraph should also include this effect of the environment on the project.
- Section 5.7 4.1 Sound - \physical and Physiological Effects (last sentence last paragraph page 177) – this sentence notes that "Effects of exposure to <500 Hz sound and marine



vessel sound appear to be primarily behavioural and somewhat temporary” please define or clarify what is meant by “somewhat temporary” and provide an appropriate reference.

- Section 5.7.4.1 Sound Table 5.4 (page 182) – the text provided on page 181(see last sentence assessment of effects of sound) gives a level of confidence as medium, however the information presented in Table 5.4 provides level of confidence as 2-3 (medium to high). One of either the wordings on page 180 or the rankings in table 5.4 need to be amended.
- Section 5.7.8.3 marine Mammal and Sea Turtles Species at Risk (page 216) – the first sentence indicates that among others “northern bottlenose whales are not expected to occur regularly in the project area” based on information presented in earlier comments (see Section 4.5.1 above) it is felt that this is not an accurate reflection on the potential occurrence of northern bottlenose whales in the study area in particular the southern most part as well as areas of the Flemish Pass and Flemish Cap. This sentence should be amended accordingly.
- Section 5.9 Mitigation Measures and Follow up (page 225) – the first paragraph on page 225 notes that “...observers will watch for marine mammals and sea turtles during daylight periods”. Building on earlier comments it is not clear what measures will be employed to monitor for SARA listed endangered and/or threatened mammals (e.g. Scotian Shelf population northern bottlenose whales) and sea turtles during periods of darkness and/or low visibility. Based on information presented in Tables 3.11, 3.12 and 3.13 during the May to October timeframe (i.e. planned survey timeframe) survey the frequency of poor visibility (<500 m) ranges from 4%, 5.4% and 7.3% (October) and from 26%, 40.3%, 33 % (July) respectively for the Flemish Cap, Grand Banks and Laurentian Basin respectively. Given this likelihood and the precautionary possibility of encountering northern bottlenose whales it is not clear why there is no acknowledgement that other more precautionary mitigation measures may be needed / used during periods of low visibility / darkness especially within the southern most parts of the study/project area. This should be clarified.

Thank you for providing the opportunity to review and provide comment on this project EA Report. If you have any questions or comments with respect to the above or if you require anything further please contact me by phone (709.772.3521) or email (darrin.sooley@dfo-mpo.gc.ca.).

Sincerely,

Original signed by

Darrin R. Sooley
Senior Fisheries Protection Biologist – Marine, Coastal, Oil and Gas Development
Fisheries Protection and Regulatory Reviews
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