Environment Canada Environnement Canada

Environmental Stewardship Branch
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29 May 2012

Mr. Darren Hicks
Canada Newfoundland Offshore Petroleum Board
Fifth Floor, TD Place
140 Water Street
St. John's, NF A1C 6H6

Dear Mr. Hicks:

RE: Northeast Newfoundland Slope 2-D Geophysical Survey Project **EAS 2011-355**

As requested in your memorandum of 24 April 2012, Environment Canada (EC) has reviewed the report - *Environmental Assessment of MKI AS Northeast Newfoundland Slope 2-D Seismic Survey Program, 2012-2017* [April 2012] prepared by YOLO Environmental Inc.

On 4 January 2012, EC provided comments for a proposed Multi Klient Invest AS Northeast Newfoundland Slope 2D Seismic Program (as per *Project Description for 2-D Marine Regional Seismic Survey Northeast Newfoundland Slope* prepared by RPS Energy (Halifax) & YOLO Environmental Inc. [December 1, 2011]). Those comments remain applicable along with the following comments as indicated by excerpts (indented) from the April 2012 report.

2.4.1.1 Shipboard Oil Pollution Emergency Plan (SOPEP)
Page 10, paragraph 4

> The purpose of the Plan is a guidance to the Sanco Spirit Masters and of officers on board the ship with respect to the steps to be taken when an oil pollution incident has occurred, or is likely to occur. Used correctly in a given situation, you and we as ship operator will, avoid any claims and responsibility from official authorities.

It is understood that the purpose of the Shipboard Oil Pollution Emergency Plan is to provide guidance with regard to oil spills. However, the intent with regard to the statement highlighted above is unclear. Has Transport Canada been provided with this document for commentary?

Page 10, last paragraph, Page 11, paragraph 1.

> Further, the purpose of the Plan is to provide the Master, officers and crewmembers with a practical guide to the presentation of oil spills and in carrying out the responsibilities associated with regulation 26 of Annex I to MARPOL 73/78. reporting procedures to report an oil pollution incident, Coastal State contacts to be contacted in the event of an oil pollution incident, response actions or reduce or control the discharge of oil following an incident, - co-ordination with national and local Authorities in combating oil pollution.

Putting this passage into the appropriate local context would be helpful. EC understands the "Coastal State" to be contacted in the event of an oil spill for off-shore Newfoundland) is the Marine Safety Branch, Transport Canada (709 772 5166). This should be confirmed and put in the plan.

2.6 Potential Malfunctions and Accidental Events
Paragraph 1

> There are unplanned situations that may be encountered during seismic operations. Potential hazards are addressed during site-specific planning as part of emergency response planning. Procedures are developed by MKI to ensure that such events are managed in a safe and environmentally sound manner. MKI have policies, plans, and procedures to prevent or mitigate effects of malfunctions and accidents. These policies, plans, and procedures will be located on the seismic vessel, and in MKI St. John's (shore office). During seismic surveys, there will be limited amounts of marine fuel and lube oil onboard that could potentially be spilled to the ocean. All of the vessels involved in the survey will use diesel fuel. The fuel capacity of seismic ships can range up to 1,550 t for large 3-D vessel. Any accidental spill will be reported to the CNLOPB immediately.

The first part of the statement highlighted above should be quantified as "limited amounts" is subjective. The second part appears to be out of context from the earlier statements as a release of these volumes would be expected to be a result of a much more significant event.

6.1.4.3 Vessel Discharge and Accidental Events
Page 182, paragraph 5

> MKI will be using a solid streamer, therefore there will be no release of hydrocarbon in the event of hydrophone cable damage. Potential impacts are expected to be limited due to the high volatility and relatively small volume of spilled diesel or lubricant. If a spill occurred and marine birds were impacted, the Williams and Chardine protocol (entitled "The Leach's Storm Petrel: General Information and Handling Instruction") or protocols recommended by the C-NLOPB for handling oiled or standard birds would be followed. No significant adverse effects are likely to occur as a result of an accidental event associated with this Project.

As diesel fuel is extremely toxic, any amount spilled in the marine environment may negatively impact marine wildlife – not only birds, but mammals and fish. Depending on the timing and location of a release, significant adverse effects cold occur. In order to support EA conclusions associated with the final statement highlighted above, alternative wording should be considered. For example, the passage could state "…the implementation of the protocols and response measures identified in the SOPEP will minimize the likelihood of significant adverse effects occurring as a result of an accidental event associated with this project" in order to support the final statement highlighted above.

Page 182, paragraph 6

> The impacts of oil on birds have been well documented (e.g., Hartung 1995); however, no oil from seismic vessel discharge is expected to occur and thus, should not have any severe adverse effects of avifauna. Coastal and marine birds could also be affected by a spill from any vessel (fishing, commercial and DFO research) at sea. The single seismic vessel does not increase the risk to coastal and seabird populations.

The sentences highlighted do not add anything relevant to the EA of the project. In EC's view they should be removed.

Page 182, paragraph 6

> Potential oil spillage may occur from ballast and bilge water discharge, however, if oil is suspected to be in the water, it will be tested and if necessary, treated using an oil/water separator to ensure that oil concentrations in the discharge do not exceed 15 mg/L as required by the MARPOL 73/78 (International Convention for the Prevention of Pollution from Ships 1972, and the Protocol of 1978 related thereto), International Maritime Organization and OWTG. There will be limited amounts of marine fuel and lube oil onboard that could potentially be spilled into the ocean. The potential for an oil pollution incident is low for this Project.

How is oil suspected to be in the water? It should be detected.

Page 183, paragraph 2

> Effects due to accidental spills associated with the proposed operation therefore are considered, overall, to be detectable if they occur, negligible, but neither significant nor likely.

The concluding statement in this section is unclear.

Section 6.1.4.5.
Page 183, Table 6.1

Mitigation

- A dedicated observer will be on board the seismic vessel to record marine birds and incidents of collisions, oiling and stranding.
- Vessel compliant with audit prior to survey.
- Maintenance of equipment and responsible management of such equipment.
- Compliance with OWTG (NEB et al. 2010) and MARPOL for all discharges.

It is not clear how all of the above measures list can be considered mitigation. For example, observing and recording incidents is not considered mitigation. In the second bullet there should be some reference to specific audit protocols, and in the third there should be some reference maintenance and management protocols, plans and standards.

Section 6.2.4.2.5
Page 201, paragraph 4

Mitigation measures to minimize the impact of seismic operations on fish spawning include:

- To minimize sudden changes in noise levels, a ramp up procedure will be implemented;
- All discharges will comply with Offshore Waste Treatment Guidelines;
- A Spill Prevention Program will be implemented; and
- An Emergency Spill Response Plan will be developed and implemented when required.

Concerning the last item in the above list, an Emergency Spill Response Plan should be developed, tested and in place before it is required.

Section 6.3.4.1 Vessel Presence
Page 205, paragraph 3.

> Collision with an endangered species would be considered significant; however, since there are no records of collision between the listed species at risk and seismic vessels, the probability of occurrence is low.

The fact that there are no past records of collisions with listed species at risk should not be used to support this conclusion. There may have been collisions that were not recorded or collisions may have occurred involving species that were not listed at the time.

Please note that comments from the Canadian Wildlife Service of Environment Canada (EC-CWS) will be forthcoming.

If you wish to discuss these comments or have further questions, please do not hesitate to contact me at 709-772-2126 or via email at jerry.pulchan@ec.gc.ca.

Yours truly,

[redacted]

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Attachment

Cc: J. Corkum
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