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Your File Votre référence

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BAB 3970-175

July 5, 2011

Ms. Elizabeth Young  
Environmental Assessment Officer  
Canada-Newfoundland and Labrador Offshore Petroleum Board  
5th Floor TD Place 140 Water St.  
St. John's NL A1C 6H6

Dear Ms. Young:

Re: ExxonMobil Canada Properties Ltd. – Hebron Project Comprehensive Study Report:  
EMCP Response to April 20, 2011 Review Comments

In response to your request dated June 20<sup>th</sup>, 2011, Fisheries and Oceans Canada (DFO) has reviewed the “*ExxonMobil Canada Properties Ltd. – Hebron Project Comprehensive Study Report: EMCP Response to April 20, 2011 Review Comments*”.

Please be advised that DFO has concluded that all the responses provided by ExxonMobil are adequate, provided the comments below are taken into consideration.

**Comment 75: DFO 13**

This response is considered adequate, provided the following comments are addressed:

The following revisions should be made to the updated Section 7.5 provided by ECMP's:

Section 7.5.1.1

- As previously requested, the following text “...will be quantified and detailed within the *Habitat Compensation Strategy report for the Hebron Project*.” in the first paragraph in the Nearshore section, should be revised as, “...will be quantified and detailed within the **HADD Quantification Report for the Hebron Project**” as HADD quantification will be detailed in a report separate from the Habitat Compensation Strategy.
- Text contained within the second paragraph of the Nearshore section leads the reader to believe that the upgrades to the Back Cove ferry terminal (pier) will be temporary in nature. It is our understanding that this will not be a temporary

structure (i.e., less than 1 year duration). Please correct the text or provide clarification.

- The words “*to a small degree*” should be removed from the first sentence in the second paragraph of the Nearshore section as it misrepresents the effect the project footprint will have on habitat quantity.
- Text contained within the second paragraph of the Offshore section should be rearranged to clarify the relationship between the positive and negative effects of the project infrastructure on fish habitat. The paragraph should be revised as follows:

*“There is currently no plan to trench the OLS, but to protect the line with rock cover and or concrete mattresses. The footprint of the OLS on the seafloor will restrict access by fish and shellfish to some habitat and may be declared a HADD of fish habitat by DFO and likely require a Section 35(2) Fisheries Act Authorization, requiring any loss of fish habitat to be compensated with the objective to achieve no net loss of productive capacity of fish habitat. However, the presence of unburied material over the OLS (i.e., concrete mattresses and rock cover) is expected to create habitat by increasing the amount of available hard substrate habitat that could be colonized by local flora and fauna, creating a reef effect for fish populations in otherwise barren sandy or soft bottom areas. Where flowlines and equipment are buried, the overlying sediments will provide habitat upon which benthic communities will recover.”*

- Text contained within the third paragraph of the Offshore section should be rearranged to clarify the relationship between the positive and negative effects of the project infrastructure on fish habitat. The paragraph should be revised as follows:

*“Installation of the GBS will have a similar effect in that access to habitat under the GBS will be lost to fish and shellfish and may be declared a HADD of fish habitat by DFO and likely require a Section 35(2) Fisheries Act Authorization, requiring any loss of fish habitat to be compensated with the objective to achieve no net loss of productive capacity of fish habitat. However, colonization by invertebrates on the concrete GBS is expected.”*

- Text contained within the fifth and a portion of the sixth paragraph of the Potential Expansion Opportunities section should be rearranged to clarify the relationship between the positive and negative effects of the project infrastructure on fish habitat. The paragraph should be revised as follows:

*“As with the nearshore, any offshore activities including excavated drill centre(s) and spoils disposal, the OLS or installations of pipeline(s) / flowline(s) (including related infrastructure such as concrete mattresses, rock cover or other flowline insulation) and testing from excavated drill centre(s) to the Hebron Platform may be declared to cause a HADD by DFO and require a Section 35(2) Fisheries Act*

*Authorization and any loss of fish habitat will be fully compensated with the objective to achieve no net loss of productive capacity of fish habitat. The concrete mattresses, rock cover and other flowline insulations have the potential to provide new hard substrate habitat to be colonized and function as an artificial reef and would likely be colonized by sponges, anemones, brittlestars and seastars.”*

- Section 7.5.1.3 states that, “*Drydock dewatering and the re-establishment of moorings at the Bull Arm deepwater site may affect habitat use as there will be a loss of habitat quantity in these areas*”. The effect of re-establishment of Moorings at the Bull Arm Deepwater Site on habitat quantity should be discussed in this section and noted in Table 7-11.

#### Section 7.5.1.2

- The effects of Upgrades to the Ferry Terminal at Back Cove on habitat quality should be discussed in this section as well as indicated in Table 7-11.

#### Section 7.5.1.3

- The reference to Section 7.5.1.2 made in the first paragraph of the Nearshore section should be Section 7.5.1.1.
- Reference to Upgrades to Ferry Terminal in Back Cove should be made in this section as its effect on habitat use is indicated in Table 7-11.
- As previously requested, please include “*Implement chemical selection management system*” and “*Adherence to regulatory limits with respect to discharges in to marine waters*” as mitigations in this section as they are included in Table 7-11 under Hook-Up, Production Testing and Commissioning of Excavated Drill Centres.

#### Section 7.5.1.4

- While it is noted that Bund Wall Construction could cause fish mortality, it is not explained how this activity could potentially kill fish and invertebrates. As previously requested, please include this explanation.
- The following sentence should be added to the last paragraph of the Offshore section, “*EMCP will consult with DFO prior to water extraction to ensure fish screens are adequately sized.*”
- As the installation of temporary moorings in the offshore may potentially affect habitat quality and use, the first three paragraphs of the Offshore section should be moved to either Section 7.5.1.2 or 7.5.1.3.

#### Table 7-11

- As previously requested, “*Bubble curtains, if required*” should be removed as EMCP has already clarified that blasting would not be required for Bund Wall Removal.
- The effect of Platform Tow-Out/Offshore Installation on habitat quantity has been discussed in Section 7.5.1.2, therefore it should be re-entered as a potential environmental effect in Table 7-11.
- The effect of Excavated Drill Centre Dredging and Spoils Disposal on habitat quality has been discussed in Section 7.5.1.2, therefore it should be re-entered as a potential environmental effect in Table 7-11.

#### Section 7.5.2.2

- As previously requested, the effects of Well Activities on habitat quality should be discussed in this section as it is indicated in Table 7-12.

#### Section 7.5.2.3

- As previously discussed, the effect of the following activities on habitat use should be discussed in this section. It is also noted that “*Habitat Use*” has been removed from Table 7-12 for these activities, please ensure that “Habitat Use” is included as a potential environmental effect for these activities.
  - Wastewater (produced water, cooling water, storage, displacement)
  - Chemical Use/Management/Storage (e.g., corrosion inhibitors, well treatment fluids)
  - Well Activities (well completions, work overs)
  - WMB Cuttings
  - WMB and SMB Cuttings
  - Chemical Use and Management (BOP fluids, well treatment fluids, corrosion inhibitors)
- This section states that the mitigation measures outlined in the *Geophysical, Geological, Environmental and Geotechnical Program Guidelines* (C-NLOPB 2011) will be applied. While this is correct, reference to the *Statement of Canadian Practice on Mitigation of Seismic Noise in the Marine Environment* should also be included. This statement of practice should also be referenced in Table 7-12.

#### Table 7-12

- As previously requested, “*Change in Habitat Quality*” should be removed from the potential environmental effects for Presence of Structures for the proposed project as well as the potential expansion opportunity.

- It is noted that “*Potential Mortality*” has been removed as a potential environmental effect for Surveys for both the proposed project as well as the potential expansion opportunity. As seismic surveys can result in mortality please ensure that “*Potential Mortality*” is included as a potential environmental effect.

#### Section 7.5.3.3

- As previously requested, the effects of Lighting on habitat use should be discussed in this section as it is indicated in Table 7-13.
- As previously requested, reference to Operation of Vessels (supply, support, standby and tow vessels/barges/ROVs) and Surveys (e.g., geophysical, 2D/3D/4D seismic, VSP, geohazard, geological, geotechnical, environmental, ROV, diving) should be made in this section as their effect on habitat use is indicated in Table 7-13.

#### Table 7-13

- “*Change in Habitat Quantity*” should be removed from the potential environmental effects for Operation of Vessels.

#### Section 7.5.4.1

- The following, “*In any case, the quantity of fish habitat affected by an accidental event resulting in a hydrocarbon release would be negligible*” should be removed or reworded to clarify the effect a spill would have on the quantity of fish habitat.

#### **Comment 77: DFO 17**

This response is considered adequate.

#### **Comment 78: DFO 14**

This response is considered adequate, provided the following comments are addressed:

It is incorrect to say, “*compensation may not be required for the Offshore Project Area*”. Although components of the project may create sufficient habitat to offset the HADD, that created habitat is still considered fish habitat compensation which must be detailed and quantified in a Fish Habitat Compensation Plan, committed to in an Authorization and adequately monitored. A portion of EMCP’s response should be reworded as follows:

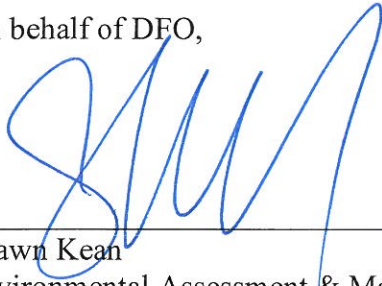
“*Therefore, EMCP submits that **additional HADD** compensation may not be required for the Offshore Project Area based on preliminary design of these elements<sup>1</sup> and current understanding of the existing fish and fish habitat within the Offshore Project Area.*”

**Comment 138: DFO 32**

This response is considered adequate.

Should you have any questions, please do not hesitate to contact Katrina Sullivan at 772-0115 / [Katrina.sullivan@dfo-mpo@gc.ca](mailto:Katrina.sullivan@dfo-mpo@gc.ca) or Shawn Kean at 772-4912 / [shawn.kean@dfo-mpo.gc.ca](mailto:shawn.kean@dfo-mpo.gc.ca)

On behalf of DFO,



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Shawn Kean  
Environmental Assessment & Major Projects

Attachments

cc Jason Kelly  
Annette Tobin