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Your File Votre référence

Our File Notre référence
BAB 3970-175

December 21, 2010

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 – Hebron Project Draft Comprehensive Study Report:
Response to Review Comments, Part 1

In response to your request dated December 2, 2010, DFO has reviewed the “*Comprehensive Study Report: Response to Review Comments, Part 1*” dated November 2010 for the ExxonMobil Canada Properties Hebron Project.

Please be advised that DFO has concluded that most of the responses provided by ExxonMobil are adequate, however, included below for your consideration are DFO comments on responses which may require for additional information/clarification to address deficiencies and inadequacies in order to satisfy the scoping document.

Specific Comments

Comment 12: DFO 1

This response is considered adequate, provided the following comment is addressed:

Information on the original Hibernia bund wall disposal zone should only be incorporated if this area will actually be used for spoils disposal associated with the Hebron project. In either case, the following text provided in the response by the proponent should also be included in the CSR:

“The disposal area in Great Mosquito Cove is unknown at this time. Work is ongoing to identify an area that has the least potential for habitat disturbance and that can accommodate the volume of spoils to be disposed. Based on preliminary review of the bathymetry and fish habitat information for Great Mosquito Cove, a likely candidate area is located at approximately 40 to 45 m water depth on the south side of Great Mosquito

Cove. EMCP will consult with DFO regarding the selection of the spoils disposal area. In addition, Transport Canada requirements regarding navigability of water channels will be included in the selection process.”

Comment 13: DFO 2

This response is considered adequate, provided the following comment is addressed:

“Dredging for tow-out from the deepwater site to the offshore location” should be included as a project activity in Tables 7-9 and 7-11.

Comment 66: DFO 6

This response is considered adequate, provided the following comment is addressed:

The proponent has neglected to address the third bullet. The revised text still claims that, *“The distribution of small crabs is not well documented...”*, however, as indicated in our original comment, distribution of small snow crab (juveniles/adolescents) is documented in the CSAS Research Documents, which are produced in accordance with annual assessments of the species. The reference for the most recent CSAS Research Document is provided below. The CSR should be revised to include information from this document.

E. Dawe, Mullowney, D., Stansbury, D., Hynick, E., Veitch, P., Drew, J., Coffey, W., Colbourne, E., O'Keefe, P., Fiander, D., Skanes, K., Stead, R., Maddock-Parsons, D., Higdon, P., Paddle, T., Noseworthy, B., and Kelland, S. 2010. An Assessment of Newfoundland and Labrador Snow Crab (*Chionoecetes opilio*) in 2008. DFO Can. Sci. Advis. Sec. Res. Doc. 2010/016. iv + 183p.

Comment 69: DFO 7

This response is considered adequate, provided the following comment is addressed:

It should be noted that the scientific name for Snow Crab is incorrect; the correct spelling is *Chionoecetes opilio*. This should be corrected in the next draft of the CSR.

Comment 72: DFO 10

This response is considered adequate, provided the following comment is addressed:

The proponent has neglected to fully address part c) of this comment. The text still indicates that, *“Recently-settled juveniles (<30 mm, carapace width) prefer a mud substrate...”*. As indicated in our original comment, most recently-settled juveniles appear to settle on shallow hard substrates. The text should be revised to reflect this information.

Comment 75: DFO 13

This response is considered inadequate. This comment was intended to elicit a thorough description of the potential environmental effects within the text, based on the information provided in the tables of Section 7 as there are more environmental effects listed in the tables for various project activities than are discussed within the text. For example, although Table 7-11 indicates that a change in habitat use could result from the following 14 nearshore activities: bund wall construction, in-water blasting, drydock dewatering, concrete production, vessel traffic, lighting, re-establishment of moorings at the deep water site, dredging, bund wall removal/disposal, tow-out to deepwater site, completion of GBS construction and mating of topsides, hook-up and commissioning of topsides, surveys and tow-out from deepwater site, the text in Section 7.5.1.3: Change in Habitat Use (Nearshore) only details the following six nearshore activities as causing a change in habitat use: bund wall construction, in-water blasting, vessel traffic, lights, dredging and surveys. It should be noted that text does not need to be duplicated between sections; however, a cross reference should be provided.

Comment 77: DFO 17

This response is considered adequate, provided the following comment is addressed:

The response does not indicate whether the CSR will be revised to reflect the information provided. The text provided by the proponent in the response should be incorporated into the CSR.

Comment 78: DFO 14

This response is considered inadequate. While DFO acknowledges the proponent's commitment to the development of a Fish Habitat Compensation Strategy, it is necessary to include, at the very least, high level details on the potential compensation options to be implemented within the CSR. This is required as fish habitat compensation is considered a mitigation under CEAA (the single most important mitigation from the perspective of the Habitat Provisions of the *Fisheries Act*), which must be applied to ensure that any residual adverse environmental effects are not significant. Until such a time as that information is included in the CSR, DFO will be unable to make a determination of the significance of effects, with respect to the potential impacts on fish and fish habitat, within the context of CEAA. Additionally, DFO has provided further direction for the breadth and depth of information on a fish habitat compensation strategy, to be included in the CSR, to ExxonMobil in separate correspondence.

Comment 90: DFO 22

The response is considered adequate, provided that it is included with the CSR.

Comment 133: DFO 27

As a point of clarification, Schedules 2 and 3 of SARA contain species which had been assessed by COSEWIC prior to their adoption of new criteria in 1999. When SARA was

proclaimed in 2003, the species in Schedule 2 and 3 were to be re-assessed by COSEWIC using the new criteria. Harbour Porpoise has since been re-assessed by COSEWIC in 2006 using the new criteria (as special concern) and is in the SARA listing process. Sowerby's Beaked Whale has also been re-assessed by COSEWIC in 2006 using the new criteria (as special concern) and is in the SARA listing process.

For further information on Schedules 2 and 3 of SARA, please refer to the following link to the SARA Public Registry: http://www.sararegistry.gc.ca/species/default_e.cfm (click "View Schedule 2" or "View Schedule 3" and see the explanatory note at the top of these pages).

Comment 138: DFO 32

The adequacy of this response cannot be assessed until additional oil spill trajectory modelling is received by the department. However, it should be noted that demersal juvenile Atlantic Cod are also likely to be present in eelgrass and should be included in the assessment.

Comment 139: DFO 33

The adequacy of this response cannot be assessed until additional oil spill trajectory modelling is received by the department. However, it should be noted that the last part of the sentence should read, “...*which could result in a potential widespread die-off of meadows as well as individual plants.*”

Additional Deficiencies and Editorial Comments from Fisheries and Oceans Canada

A2) 4.3.3 Step 3 – Definition of Significance: Page 4-10 Fish and Fish Habitat

DFO acknowledges that the definition of “*significant effect*” must address both fish and fish habitat; however, this comment was intended to address the fish habitat portion of the definition which is detailed in the following text, “*For potential environmental effects on marine fish habitat, a significant adverse residual effect would be one that results in an unmitigated or non-compensated net loss of fish habitat as required in a Fisheries Act harmful alteration, disruption or destruction (HADD) authorization.*” This text should be revised as follows, “*For potential environmental effects on marine fish habitat, a significant adverse residual effect would be one that results in a harmful alteration, disruption or destruction of fish habitat that is so large and/or the fish and fish habitat is of such importance that it cannot be adequately compensated.*”

B3) 7.3.1.5 Fish and Shellfish: Page 7-10 (Greenland Halibut)

The revised statement still fails to address the fact that Greenland Halibut can be found at depths greater than 1,500 m and while it is predominantly considered a deepwater species, it can be found at all depths. It is suggested that the statement be reworded as follows, “*Greenland Halibut can be found at depths ranging from less than 100 m to deeper than*

1,500 m. While most are caught near the sea bottom at depths of between 200 to 600 m, they can be found at all depths."

B4) 7.3.2 Offshore: Page 7-16

This response indicates that DFO RV data has been requested by the proponent for 3N, but was not received at the time the response was written. After consulting the DFO Request for Data Transfer records, it was noted that this information was provided to the proponent's consultant (LGL Limited) in March 2010 and September 2010. Please ensure that this information is incorporated into the next draft of the CSR.

B16) Page 7-42

The revision of this statement is acceptable; however, as per DFO's previous comment, the word "*destruction*" should be removed. It should be noted that a change in habitat quality would not constitute a destruction of fish habitat as by definition a "*destruction*" refers to any permanent change of fish habitat which completely eliminates its capacity to support one or more life processes of fish. Therefore a change in habitat quality would more likely result in a "*harmful alteration*", which is any change to fish habitat that indefinitely reduces its capacity to support one or more life processes of fish or a "*disruption*", which is any change to fish habitat occurring for a limited period which reduces its capacity to support one or more life processes of fish.

B23) Page 7-62

While the proponent has acknowledged DFO's comment, there is no indication within the response that the text within the CSR will include the intent to consult with Federal Authorities, including DFO to ensure that the best location is chosen for the disposal area in order to minimize any adverse effects on fish and fish habitat. This text should be added to the CSR.

B24) Table 7-12

Although the changes to Table 7-9 are acceptable, Table 7-12 and the corresponding text in Section 7 should also be revised as per DFO's previous comment.

F5) 12.5.1.1. Near Shore (Accidents, Malfunctions and Unplanned Events): Page 12-16 (Eelgrass Beds)

With respect to part a) of this comment, it should be noted that any compilations or summaries of studies completed by others are not considered source material. As such, neither Fingas (2001) nor Wright (2002) constitute source material. Rather than cite the information contained in these 'compilation documents', the original study upon which a particular statement is based should be consulted and referenced appropriately. This is necessary to ensure that the conclusions of the original study are accurately represented, free from the potential biases of subsequent interpretations of the work. The correct

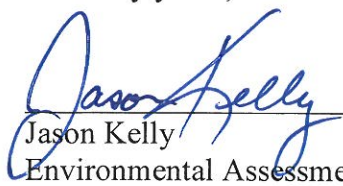
sources for the information in question should be located, and the text updated as necessary.

With regards to part c) of this comment, the reference provided by DFO in our original comment, Warren et al. in press JEMBE, is now published. The complete reference is provided below for your consideration.

Warren, M.A., Gregory, R.S., Laurel, B.J. and Snelgrove, P.V.R. 2010. Increasing density of juvenile Atlantic (*Gadus morhua*) and Greenland cod (*G. ogac*) in association with spatial expansion and recovery of eelgrass (*Zostera marina*) in a coastal nursery habitat. J. Exp. Mar. Biol. Ecol. 394: 154–160.

Should you have any questions, please do not hesitate to contact me at (709) 772-8889 or jason.kelly@dfo-mpo.gc.ca

Sincerely yours,



Jason Kelly
Environmental Assessment & Major Projects

Attachments

cc R. Dickey