EIS - Addendum
White Rose Extension Project
Environment Canada Comments
May 14, 2013

Chapter 2 Project Description

2.3.2.2 Evaluation of Material Disposal Options –
Satisfactory Response

2.6.2 On-Land Construction
Satisfactory Response

2.6.3.1 Excavation
Satisfactory Response

2.6.3.4 Site Dewatering and Disposal
Satisfactory Response

Chapter 3 Summary of White Rose Extension Project Specific Models

General:
Satisfactory Response

3.6 Hydrocarbon Spill Probabilities
Satisfactory Response

3.6.1.1 Blowouts During Drilling
Non-Responsive.

3.6.1.2 Blowouts During Production and Workovers
Satisfactory Response

3.6.1.3 Summary of Extremely Large and Very Large Oil Spills from Blowouts
Satisfactory Response

3.6.2.1 Shallow Gas versus Deep-well Blowout
Satisfactory Response

3.6.3 Large Platform Spills
Satisfactory Response

3.6.6 Summary of Blowout and Spill Frequencies
Satisfactory Response

3.7 Fate and Behavior of Hyrdocarbon Spills in the Nearshore Study Area (Trajectory Modelling) and 3.8 Fate and Behavior of Hyrdocarbon Spills from a Platform or Seafloor Blow-out in the Offshore Study Area (Trajectory Modelling)

Satisfactory Response

3.7.1 Model Inputs and Scenarios
Satisfactory Response

3.8.22 Surface (Platform) Spill
Satisfactory Response

Chapter 4 Socio-Economic Terrestrial and Physical Environment Setting

4.2.1.1 Climate Overview and 4.2.1.3 Wind Climatology
Satisfactory Response

St Lawrence station hourly wind data were added to the analysis to improve the wind climatology for the mouth of Placentia Bay. These were not compared to the MSC50 winds as suggested, however it is possible to do this by comparing the revised Table 4-13 and 4-14, with the original EIS Table 4-8 and 4-9.

In general the MSC50 monthly mean winds were stronger than those of the land stations, which would be expected for open water conditions. However the MSC50 maximum winds were generally lower during the winter and spring by 1 to 8 m/s, compared to the 3 near shore coastal stations. There is insufficient information to determine the point in the wind distribution where the apparent bias switches from positive to negative, or to understand the cause.
EC suggests that future studies include median and higher percentile wind statistics for exposed land stations and open water locations, to better characterize the full range of the wind distribution. (The monthly and seasonal wind roses for the MSC50 data are useful to show frequency of winds for various speed categories and directions. However the scale of a wind rose is insufficient to display information for the highest percentiles, above about 20 m/s (40 kt) in the winter months at these points, for example.)

4.2.1.3 Wind Climatology
Satisfactory Response

4.2.2.2 Waves
Satisfactory Response

4.2.2.5 Tides, Storm Surges
Satisfactory Response.

The extremal analysis of high measured water levels was done. Some explanatory text to clarify that the low value of storm surge estimated from the large scale study for the Atlantic provinces is not applicable at this location in Placentia Bay would be helpful.

4.2.4 Sea Ice and Icebergs
Non-Responsive

4.2.4.1 Sea Ice Conditions in Placentia Bay
Non-Responsive

4.3 Offshore
Non-Responsive

4.3.1.2 Wind Climatology
Non-Responsive

4.3.1.5 Icing
Response not satisfactory.

EC had recommended that the EIS include analysis of observed freezing spray and icing accumulation measured on the platforms. This would augment the modeled potential icing results. Knowledge gained through direct experience and observations of ice accretion (whether formally reported or not) from years of winter operations in this area by station keeping production vessels, mobile drilling platforms, and supply vessels should be used to help characterize this significant environmental hazard.

4.3.4.1 Sea Ice
Non-Responsive

4.3.4.2 Icebergs
Origins and Controlling Factors:

Page 4-217, Paragraph 1, Sentence 4:
Non-Responsive

Page 4-217, Paragraph 4:
Non-Responsive

Page 4-217, Paragraph 5, Sentence 1:
Non-Responsive

Variations in Local and Regional Iceberg Numbers:
Page 4-219, Paragraph 1, Sentence 2:
Satisfactory Response

Page 4-223, Figure 4-137:
Satisfactory Response

Size Distributions:
Page 4-226, Table 4-80:
Non-Responsive

Iceberg Length:
Pages 4-227 to 4-228, Figure 4-140:
Non-Responsive

Page 4-227, Paragraph 3, Last Sentence:
Non-Responsive

Iceberg Draft:
Pages 4-228 to 4-229, Figure 4-141:
Non-Responsive

Page 4-227, Paragraph 4, First Sentence:
Non-Responsive

Iceberg Height:
Page 4-229, Paragraph 2:
Satisfactory Response

4.3.9 Climate Change,
Satisfactory Response.

4.3.9.1 Sea Level Rise
The climate change aspects are sufficient. The proponents may want to expand their discussion to include impacts of vertical land motion on local sea level.

4.3.9.2 Waves
Satisfactory Response.

4.3.9.3 Sea Surface Temperatures
Satisfactory Response.

Chapter 10 Marine Birds

General:
Non-Responsive

10.3.1 Nearshore Overview
Non-Responsive

Figure 10-1 Locations of Seabird Nesting Colonies at Important Bird Areas in Relation to the Study Areas
Satisfactory Response.

Table 10-2 Numbers of Pairs of Marine Birds Nesting at Marine Bird Colonies in Eastern Newfoundland
Satisfactory Response.

10.3.5 Marine Bird Nesting Colonies Along Southeastern Newfoundland
Non-Responsive

10.3.6.8 Alcidae (Atlantic Puffin)
Non-Responsive

Chapter 13 Sensitive Areas

Figure 13-3 Ecological Reserves and Special Places Identified in Placentia Bay
Satisfactory Response.

Table 13-2 Number of Pairs of Marine Birds Characteristic of Placentia Bay Colonies
Satisfactory Response.

Figure 13-4 Areas Identified as Important for Birds and Whales in Placentia Bay

Satisfactory Response.

13.3.1.5 Bird Habitat
Satisfactory Response.

13.5.1 Effects Analysis and Mitigation – Nearshore
Satisfactory Response.

13.5.2.1 Nearshore (Important Bird Areas)
Satisfactory Response.

Chapter 14 Effects of the Environment on the White Rose Extension Project

14.4 Nearshore Potential Marine Effects
Satisfactory Response.

14.4.6 Sea Ice and Iceberg
Non-Responsive

14.5.8 Climate Change (New Comment)

The proponents should also consider and/or provide more information about projected changes in precipitation (what is the source of the projections in section **14.5.8**?) and extremes (e.g. heavy precipitation events). The “annual precipitation increases projected for Atlantic Canada between years 2020 and 2080 range from 18 to 21” (no units here but I assume %). This range is very high.

Chapter 16 Environmental Management

16.8 Emergency Response
Satisfactory Response.

16.11.2 Single vessel Side Sweep System
Satisfactory Response.

16.13.3 Dispersants
Satisfactory Response.

16.14 Offshore Training – Spill Response Operations
Satisfactory Response.

16.17.3 Physical Management
Satisfactory Response.