



Fish and Fish Habitat (Drill Waste) Follow-up Program

Scotian Basin Exploration Project

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Rev 1

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1 Introduction

This document presents BP Canada Energy Group ULC's (BP) plan (the "Plan") for the Fish and Fish Habitat Follow-up Program (the "Follow-up Program") to be conducted for the Scotian Basin Exploration Project. The Follow-up Program is intended to fulfil commitments made by BP in the Environmental Impact Statement (EIS) and conditions established by the Minister of Environment and Climate Change in the Decision Statement issued under Section 54 of the *Canadian Environmental Assessment Act, 2012* (the "Decision Statement").

2 Scope

As per condition 3.12 of the Decision Statement, the objective of the Follow-up Program is to verify the accuracy of the predictions made during the environmental assessment as it pertains to fish and fish habitat, including marine mammals and sea turtles, and determine the effectiveness of mitigation measures.

As part of these follow-up requirements, BP must:

- 3.12.1 measure the concentration of synthetic-based drilling fluids retained on discharged drilling cuttings as described in the Offshore Waste Treatment Guidelines to verify that the discharge meets the limits set out in the Guidelines and in accordance with the requirements of the Fisheries Act and report the results to the Board; and
- 3.12.2 collect drill waste deposition information after drilling of the first well is complete to verify the drill waste deposition modelling predictions and report the information collected to the Board.

This Plan presents the Follow-up Program designed to specifically address conditions 3.12.1 and 3.12.2 presented above and which pertain to drill waste discharges. Compliance with conditions 3.1 through 3.10 is primarily executed through adherence to the Scotian Basin Exploration Project Environmental Protection Plan.

3 EIS Commitments and Predictions

With respect to drill waste discharges, the EIS contained the following commitments:

- Drill cuttings associated with water-based mud (WBM) will be discharged at sea.
- Drill cuttings associated with synthetic-based mud (SBM) will only be discharged at sea when treated to 6.9 g/100 g retained "synthetic on cuttings" (Offshore Waste Treatment Guidelines).

Drill waste deposition modelling (Appendix C of the EIS) predicted the following:

- Thickest drill cuttings deposition (>500 mm deep) would be confined to within 15 metres of discharge point.
- Sediment thickness greater than 10 mm (threshold for burial of benthic species) would extend up to 116 metres from discharge point.
- Deposition at or above 1 mm thickness would extend out to 563 metres from discharge point.

4 Methodology and Reporting

4.1 Drill Waste Concentration Measurement

A summary of the methodology employed for the drill waste concentration measurement component of the Follow-up Program is presented below.

Component	Description
Method	Measurement of synthetic fluid on drill cuttings (SOC) - Sampling protocol follows API specifications
Location	Concentration measurement of drill cuttings
Frequency	Every 12 hours during drilling when utilizing SBM
Duration	During periods in which SBM cuttings are being discharged offshore
Reporting	48-hour mass average SOC reported daily/monthly to the CNSOPB
Trigger for Change in Activity or Mitigation	If 48-hour mass average SOC cannot be achieved, cuttings will be shipped to shore for treatment and disposal

4.2 Drill Waste Deposition (Benthic ROV Survey)

A summary of the methodology employed for the drill waste deposition component of the Follow-up Program is presented below.

Component	Description
Method	Visual survey of the seafloor using a remotely operated vehicle (ROV) to assess the extent of sediment deposition
Location	500-m radius from wellsite in eight leg pattern in 45 degree increments*
Frequency	Two surveys per well (see below)
Timing	<ol style="list-style-type: none"> 1) Post-riserless drilling (after discharges released at seafloor) 2) Post-drilling, after well abandonment
Duration	1 day/survey (estimated)
Reporting	Report results as part of Conditions Closure Report due within 90 days of well suspension/abandonment
Trigger for Change in Activity or Mitigation	If sediment deposition is observed to extend beyond 500-m radius, consultation will occur with the CNSOPB

*Post-riserless drilling survey will be conducted with transects extending a 250-m radius from the wellsite given the predicted localized footprint around the wellhead for riserless drilling.

The survey plan is shown below.

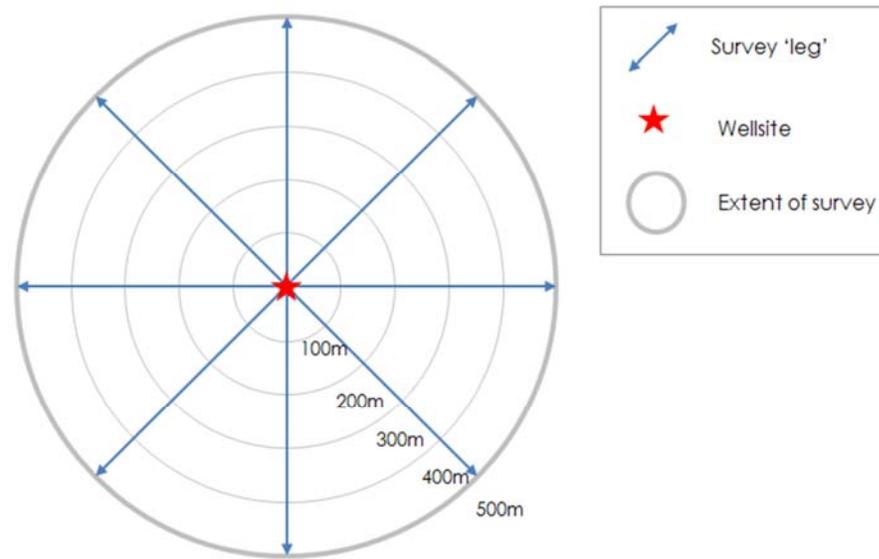


Figure 1 – Drill Waste Deposition Survey Plan

Data from the Follow-up Program will be incorporated into a Conditions Closure Report to be submitted to the Canada-Nova Scotia Offshore Petroleum Board and Canadian Environmental Assessment Agency within 90 days of well suspension/abandonment.

5 Closing

BP will conduct the Follow-up Program as described in this Plan in accordance with the Decision Statement conditions. If monitoring and analysis indicate the need to modify or implement additional mitigation measures, these measures will be implemented in a timely manner and their effectiveness will be monitored as per this Plan.