Impact Assessment Agency of Canada | Agence d'évaluation d'impact du Canada

Newfoundland and Labrador Satellite Office
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301-10 Barter's Hill
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April 28, 2020

Sent by E-mail

Kristy Garnet
Environmental Advisor
Chevron Canada Limited
500 Fifth Avenue SW, Calgary, Alberta T2P 0L7
Tel: (403) 234-5390
Email: Kristy.garnet@chevron.com

Dear Ms. Garnet,

SUBJECT: West Flemish Pass Exploration Drilling Project – Information Requirements

The Impact Assessment Agency of Canada (Agency) has completed its technical review of the Environmental Impact Statement (EIS) and associated EIS Summary for the proposed West Flemish Pass Ridge Exploration Drilling Project. The Agency determined that information is required, as per the information requirements (IRs) attached.

With the issuance of these IRs, the federal timeline within which the Minister of Environment and Climate Change's decision must be made is paused as of April 28, 2020. Once you have submitted responses, the Agency will determine if the information provided is complete and the timeline for the environmental assessment will resume. For further information, please consult the Agency document on Information Requests and Timelines: https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/information-requests-timelines.html.

The responses to IRs may be in a format of your choice; however, the format must be such that the responses to individual IRs can be easily identified. You may wish to discuss certain IRs with the Agency or other government experts, as necessary, to obtain clarification or additional information, prior to submission of the responses. Working directly with government experts in this manner will help to ensure that IRs are responded to satisfactorily. The Agency can assist in arranging meetings with government experts, at your request.

The IRs and your responses will be made public on the Canadian Impact Assessment Registry Internet site: https://iaac-aeic.gc.ca/050/evaluations/proj/80161.

Please confirm receipt of this message and contact me if you require further information.

Sincerely,

<Original signed by>

Brent Keeping
Project Manager – Newfoundland and Labrador Satellite Office
Impact Assessment Agency of Canada

Cc: Elizabeth Young, Canada – Newfoundland Labrador Offshore Petroleum Board
Melissa Moss, Canada – Newfoundland Labrador Offshore Petroleum Board
Ian Murphy, Canada – Newfoundland Labrador Offshore Petroleum Board
Darren Hicks, Canada – Newfoundland Labrador Offshore Petroleum Board
Michael Hingston, Environment and Climate Change Canada
Kimberley Keats, Fisheries and Oceans Canada
Clare Bustin, Indigenous Services Canada
Carla Stevens, Major Projects Management Office
Maximilien Genest, Natural Resources Canada
Lauren Knowles, Natural Resources Canada
Carol Lee Giffin, National Defence
Vanessa Rodrigues, Parks Canada
Jason Flanagan, Transport Canada
Sara Rumbolt, Health Canada

Attachment:

Attachment 1 - Information Requirements for the West Flemish Pass Exploration Drilling Project.

West Flemish Pass Exploration Drilling Project
Information Requirements from Environmental Impact Statement Review:
April 28, 2020

INTRODUCTION

The Impact Assessment Agency of Canada (Agency) has completed its technical review of the Environmental Impact Statement (EIS) and associated EIS Summary for the proposed West Flemish Pass Exploration Drilling Project. The Agency also received submissions from government experts, the public and Indigenous groups and has analyzed their comments. The Agency determined that additional information is required, as per the information requirements (IRs) below.

ACRONYMS

EIS	Environmental Impact Statement
MODU	Mobile Offshore Drilling unit
PNET	Predicted No Effect Threshold
SBM	Synthetic Based Mud
WBM	Water Based Mud
WFPLO	West Flemish Pass Light Oil

ID	Reference to EIS	Context and Rationale	Specific Question/ Information Requirement
IR-01 (DFO and C-NLOPB)	Appendix C and D	Part 1, Section 3.1 of the EIS Guidelines notes that drilling may occur in various water depths under consideration, using Mobile Offshore Drilling Unit(s), and with multiple drilling units operating simultaneously, if applicable.	Clarify if batch drilling or simultaneous drilling is being considered for the Project, and if so, provide information about its frequency and duration.

ID	Reference to EIS	Context and Rationale	Specific Question/ Information Requirement
		Section 2.4.1 of the EIS does not indicate whether batch drilling or simultaneous drilling is being contemplated over the course of the project, and if so, whether the effects analysis in the EIS is applicable. This information is required to assess the potential environmental effects of the Project. It is noted that the Chevron model (Appendix D of the EIS, Acoustic Model) was conducted in relation to operation of a single drilling unit, while two drilling units may be operating simultaneously for the Project. The effects of noise from two drilling units operating simultaneously is not addressed in Appendix D, nor carried through the effects assessment.	Should batch drilling or simultaneous drilling be contemplated, assess the environmental effects of batch drilling and simultaneous drilling on all valued components. This must include an assessment of the effects of noise from operating multiple drilling units simultaneously. Update the modelling in Appendices C and D if applicable.
IR-02	Fish and Fish Habitat Section 8.3.1.3.4 and 8.3.2.1	Section 8.3.1.3.4 of the EIS states that shaped charges, which may be used in well abandonment, will create localized effects. Section 8.3.2.1 states that if shaped charges are used in wellhead severance, there may be temporary disturbance to the area immediately surrounding the well. However, no description and analysis of the effects such as risk of mortality or physical injury to fish or of the potential effects to habitat quality for fish is provided.	Confirm whether shaped charges will be used, or have the potential to be used, during abandonment procedures for the project. If shaped charges will be used, provide an assessment of the environmental effects of the removal of a wellhead using shaped charges. Describe any mitigation measures that would be put in place during wellhead removal if shaped charges are used.
IR-03 (DFO-18, C-NLOPB-14)	Fish and Fish Habitat Section 8.3.1.3.3 Discharges	Section 11.3 of the EIS uses a threshold level of approximately 6.5 millimetres of sediment deposition to cause mortality to benthic macrofauna. Similar exploration drilling projects in the Newfoundland offshore have noted that some species may be more susceptible to shallower burial depths and a more conservative PNET of 1.5 millimetres has been applied.	Update the discussion of potential effects of drill wastes on corals and sponges to include a 1.5 mm threshold or provide a rationale as to why the burial threshold of 6.5 millimeters is sufficient.

ID	Reference to EIS	Context and Rationale	Specific Question/ Information Requirement
	Section 15.5.1.3.3 SBM Spill from the MODU and the Marine Riser	DFO recommends that a more conservative threshold of 1.5 mm be applied when assessing effects of drill wastes on corals and sponges, including an SBM spill.	
IR-04 (DFO-19, C-NLOPB-15 and WNNB-4a)	Fish and Fish Habitat Section 8.3.2.3.3 Discharges Emissions, Discharges and Waste Management Section 2.8.2.1 Appendix C Drill Cuttings Dispersion Modelling Fish and Fish Habitat Section 8.3.1.3.3 Discharges	Section 7.3.1 of the EIS Guidelines requires the proponent to assess the effects of changes to the aquatic environment on fish and their habitat resulting from project activities including drilling waste disposal. The description in the EIS of effects of discharges on change in habitat quality and use is insufficient. For example, there is no description of potential effects from deposition of drill muds, nor is there mention of discharges other than drilling muds and cuttings. The proponent describes and provides figures illustrating the predicted thickness of seabed deposition of total discharged mud and cuttings resulting from all drilling sections for both spring and summer. However, there is no discussion, or figures presented on seabed deposition for each drill section (WBM only and SBM only).	Update the environmental effects of all discharges on fish and fish habitat including WBM, SBM other wastes and toxic substances to more thoroughly discuss effects of discharges. Provide information on seabed deposition for each drill section.
IR-05	Emissions, Discharges	Section 2.7 of the EIS identifies that the initial well is scheduled for 2021 (pending regulatory approval) and that Chevron's	Provide a rationale for modelling only spring and summer timeframes and/or why winter and fall

ID	Reference to EIS	Context and Rationale	Specific Question/ Information Requirement
(C-NLOPB-9 and WNNB-4c)	and Waste Management Section 2.8.2.1 Drill Cuttings Deposition Modelled for the Project Appendix C Drill Cuttings Dispersion Modelling	preference is to conduct drilling between May and September, although the EIS assumes year-round drilling. The drill cutting modelling in Appendix C only examines two scenario (summer and spring), without providing a clear indication on why these are chosen for modelling purposes.	dispersion scenarios would be similar to spring and summer dispersion.
IR-06 (C-NLOPB-12)	Accidental Events Section 15.2.1 Overall Modelling Approach	Oil Spill modelling (stochastic and deterministic) were completed using the physical and chemical properties of West Flemish Pass Light Oil (WFPLO). The properties of the oil selected for input into the spill model may affect modelling results. A rationale was not provided to support the selection and use of WFPLO for the well blow out modelling for this project.	Provide rationale for using West Flemish Pass Light Oil in the models.
IR-07	Accidental Events Section 15.2.1 Overall Modeling Approach	The EIS Guidelines state that results of the fate and behaviour modelling "should include a projection for spills originating at the site and followed until the slick volume is reduced to a negligible amount or until a shoreline is reached." Modelling in the EIS indicates that 90% per cent of the released oil travels outside the model domain. There is no discussion of the limitations associated with the model domain/area.	Provide a discussion of the fate and behaviour of oil that is noted to leave the model domain, and provide an assessment of related potential environmental effects, including the potential for an oil spill to contact shorelines outside the model domain to the east. Include the potential locations of shoreline oiling.
IR-08	Accidental Events	Except for a brief discussion on capping stacks relative to model scenarios in Section 15.2.6.1, there is no discussion of the use, availability (including nearest location), timing (testing	Provide information on the use, availability (including nearest location), timing (testing and mobilizing) and

ID	Reference to EIS	Context and Rationale	Specific Question/ Information Requirement
	Section 15.1.2.2 Well Blowout Incident	and mobilizing) and feasibility of a capping stack to stop a blowout and resultant spills.	feasibility of a capping stack to stop a blowout and resultant spills.