

ANNEX 1: Advice to the Agency

Table 1: Please use the table below to provide advice for the Agency’s consideration in its recommendation to the Minister of Environment and Climate Change and preparation of draft conditions

Questions	Responses/Comments
<ul style="list-style-type: none"> Has the proponent described all project components and activities in sufficient detail to understand all relevant project-environment interactions? If not, identify what additional information is needed. 	Some clarity is requested on pre-drill survey methods.
<ul style="list-style-type: none"> Were the study areas sufficient to predict potential effects from all relevant project-environment interactions, and to consider the effects within a local and regional context? Is the baseline information sufficient to characterize the existing environment, predict potential effects and obtain monitoring objectives? If not, identify what additional information is needed. 	
Alternatives Assessment	
<ul style="list-style-type: none"> Has the proponent adequately described the criteria it used to determine the technically and economically feasible alternative means? Has the proponent listed the potential effects to valued components (VCs) within your mandate that could be affected by the technically and economically feasible alternative means? Has the proponent adequately described why it chose each preferred alternative means? Are there other alternative means that could have been presented? If so, please describe. 	Supplementary information should be provided considering various approaches for cuttings treatment to reduce synthetic on cuttings to the lowest achievable concentration.
Environmental Effects Assessment	
<ul style="list-style-type: none"> Has the proponent clearly described all relevant pathways of effects to be taken into account under section 5 of CEAA 2012? Has the proponent identified all potential effects to VCs, including species at risk, within your mandate? Were all potential receptors considered? 	
<ul style="list-style-type: none"> Were the methodologies used by the proponent appropriate to collect baseline data and predict effects, why or why not? Has the proponent explicitly addressed the degree of scientific uncertainty related to the data and methods used within the assessment? If there are unaccounted for scientific uncertainties, describe them and indicate the options for increasing certainty in the predictions? 	

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<ul style="list-style-type: none"> Are the predicted effects described in objective and reasonable terms (e.g. beneficial or adverse, temporary or permanent, reversible or irreversible)? 	
<ul style="list-style-type: none"> Has the proponent adequately assessed the potential cumulative environmental effects, including using appropriate temporal and spatial boundaries, examining physical activities that have been and will be carried out, and proposing mitigation and follow-up program requirements? Provide rationale. 	
<ul style="list-style-type: none"> Has the proponent adequately described the potential for environmental effects caused by accidents and malfunctions, including the types of accidents and malfunctions, their likelihood and severity and the associated potential environmental effects? If not, identify what additional information is needed. 	
<ul style="list-style-type: none"> Are you satisfied with the proponent's assessment of effects of the environment on the Project? Has the proponent characterized the likelihood and severity appropriately? Provide rationale. 	
<ul style="list-style-type: none"> Has the proponent sufficiently described and characterized the project activities and components as they relate to federal decisions within your mandate? If not, identify what additional information is needed. Are changes to the environment, as they relate to federal decisions within your mandate, sufficiently described? If not, identify what additional information is needed. 	
Mitigation	
<ul style="list-style-type: none"> Has the degree of uncertainty regarding the effectiveness of the proposed mitigation measures been described? If not, identify what information is needed. Is it clear how each proposed mitigation measure links to each potential pathway of effect? 	
<ul style="list-style-type: none"> Would you propose different or additional mitigation measures? If so, provide a description of the mitigation measure(s), with rationale. 	
<ul style="list-style-type: none"> Which of the proposed mitigation measures and/or project design elements do you consider to be necessary to reduce the likelihood of significant adverse environmental effects? Provide rationale. 	
Residual Adverse Environmental Effects	
<ul style="list-style-type: none"> Are the identification and documentation of residual environmental effects described by the proponent adequate? If not, what are the aspects for which there is uncertainty and, where 	

Questions	Responses/Comments
possible, indicate how these residual effects can be best described. If there is uncertainty, what are the options for increasing certainty?	
<ul style="list-style-type: none"> Did the proponent provide a sufficiently precise, ideally quantitative, description of the residual environmental effects related to your mandate? Identify any areas that are insufficient. 	
Determination of Significance	
<ul style="list-style-type: none"> Are the conclusions on significance in the EIS supported by the analysis that is provided? Are the proponent's proposed criteria for assessing significance appropriate? This includes how the criteria were characterized, ranked, and weighted. Provide rationale. Where the proponent has not used one of the Agency's recommended key criteria (magnitude, geographic extent, duration, frequency, reversibility, and social/ecological context), has a rationale been provided? 	
<ul style="list-style-type: none"> Were appropriate methodologies used in developing the conclusions on significance? 	
<ul style="list-style-type: none"> Do you agree with the proponent's analysis and conclusions on significance? Provide rationale. 	
Monitoring and Follow-up	
<ul style="list-style-type: none"> Does the proposed monitoring and follow-up program verify the predictions of the environmental assessment as they relate to section 5? Please explain additional monitoring or follow-up needed to address uncertainty in the effects assessment. 	
<ul style="list-style-type: none"> Does the proposed monitoring and follow-up program verify the effectiveness of proposed mitigations as they relate to section 5? Please explain additional monitoring or follow-up needed to address uncertainty in the proposed mitigation. 	
<ul style="list-style-type: none"> Is the objective of the follow-up program clear and measurable? Does the follow-up program include sufficient detail, and technical merit, for the Agency to achieve the stated objective through a condition (e.g. sufficient baseline dataset, monitoring plans, acceptable thresholds of change, contingency procedures)? 	
<ul style="list-style-type: none"> Are you aware of any federal or provincial authorizations or regulations that will achieve the same follow-up program objective(s)? If so, how do these achieve the objective(s)? 	
Additional comments, views, advice	
<ul style="list-style-type: none"> Provide any other comments. 	

ANNEX 2: Information requirements directed to the proponent

Table 2: Please use the table below to provide your department’s comments and suggestions for information that should be required from the proponent to ensure the information in the EIS is scientifically and technically accurate and is sufficient to make a determination of significance on environmental effects.

ID	Project Effects Link to CEAA 2012	Reference to EIS guidelines	Reference to EIS	Context and Rationale	Specific Question/ Request for Information
C-NLOPB-1	5(2) Linked to Regulatory Permits/Authorizations (specify which legislation) The Accord Acts	Part 1 – Scope of the Environmental Assessment	Section 1.2 Scope of the EIS, last paragraph on page 1-2	The last sentence implies that drilling may occur anytime during the year of the temporal scope of the EL (2016 to 2025).	Proponent to provide additional clarity on temporal scope. It should also be indicated that this would only occur following all regulatory approvals.
C-NLOPB-2	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(ii) Aquatic Species	Part 1 – Scope of the Environmental Assessment Part 2 – Section 3.1 Project Components	Section 2.2, last paragraph on page 2-4.	The description of the wellsite survey included is inconsistent and unclear. Chevron states in Section 2.2 that ‘The survey will encompass an area of 500 m from the proposed well site and be carried out prior to drilling’. However Section 2.4.1 indicates a radius of 200 m survey area directly from the drill rig.	Confirmation on when/how this survey, particularly how it relates to a pre-drill coral survey will be completed.
C-NLOPB-3	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(ii) Aquatic Species	Part 2 – Section 2.2 Alternative means of carrying out the project	Section 2.9 Alternative Means	Compliance or Adherence to the OWTG is not equivalent to “minimization” and the operator should identify opportunities to outperform the OWTG targets if technically feasible.	Supplementary information should be provided considering various approaches for cuttings treatment to reduce synthetic on cuttings to the lowest

				For example, while alternative means of cuttings disposal (i.e. reinjection and ship to shore) have been discussed, the proponent should consider various approaches for cuttings treatment to reduce synthetic on cuttings to the lowest achievable concentration.	achievable concentration.
C-NLOPB-4	5(1)(a)(iii) Migratory Birds	Part 2 – Section 3.1 Project Components	Section 2.4.5.2 Figure 2.8 Helicopter Routes	Title of Figure 2-8 is ‘Potential Vessel and Helicopter Routes’. However the figure only outlines ‘Vessel Traffic Route’.	Figure 2-8 should be updated to include this information through supplementary information.
C-NLOPB-5	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(ii) Aquatic Species 5(1)(a)(iii) Migratory Birds	Section 3.1 Project Components	Section 2.3.3 and 2.4.5	The predicted percentage of increase in vessel traffic, and anchorage locations for supply vessels has not been provided.	Supplementary information should be provided.
C-NLOPB-6	5(1)(a)(i) Fish and Fish Habitat	7.3.1. Fish and Fish Habitat	Appendix C	Chevron states that the scope of the environmental assessment is, in part, ‘...multiple drilling units operating simultaneously, if applicable	Please clarify if Chevron if Chevron intend on drilling wells simultaneously. The modeling only contemplates the presence of one drill ship.
C-NLOPB-7	5(1)(a)(i) Fish and Fish Habitat	7.3.1. Fish and Fish Habitat	Appendix D	Chevron states that the scope of the environmental assessment is, in part, ‘...multiple drilling units operating simultaneously, if applicable	Please clarify if Chevron if Chevron intend on drilling wells simultaneously. The modeling only contemplates the presence of one drill ship.
C-NLOPB-8	5(1)(a)(i) Fish and Fish Habitat	Section 3.1 Project Description	Section 2.8.2.1 Appendix C	Within Section 2 of the EIS, Chevron states that ‘it is anticipated that each well will	Clarification should be provided on the discrepancy.

				take approximately 180 days to drill'. However, the modelling assumes 62-65 days of drilling. Clarification should be provided and the discrepancy between the two should be explained.	
C-NLOPB-9	5(1)(a)(i) Fish and Fish Habitat	Section 3.1 Project Description	Section 2.8.2.1 Appendix C Drill Cuttings Dispersion Modelling	<p>Chevron has chosen two modelling scenarios, spring and summer, however there isn't clear indication on why these are chosen for modelling purposes.</p> <p>Chevron has indicated that drilling may occur year round. Therefore, additional information should be provided to explain why these months are worst case and the most appropriate scenarios for dispersion modelling.</p>	Supplemental information should be provided
C-NLOPB-10	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(ii) Aquatic Species 5(1)(a)(iii) Migratory Birds 5(1)(b) Federal Lands /Transboundary 5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions 5(1)(c)(ii) Aboriginal Physical and Cultural Heritage 5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes 5(1)(c)(iv) any Structure, Site or Thing of Historical, Archaeological, Paleontological or Architectural Significance	6.4 – Mitigation measures	15.4- Contingency Planning and Spill Response	<p>The EIS states that, Eastern Canada Response Corporation (ECRC) has been contracted as Chevron's prime spill response contractor thereby providing a pool of equipment and consistency with all Grand Banks Operators.</p> <p>The C-NLOPB has advised that ECRC may be limited in their ability to respond outside the 200 nm EEZ.</p>	Supplementary information can be provided. Confirm that organizations (such as ECRC) whose equipment and expertise may be used in case of a spill would have the ability to respond outside of the 200 nm EEZ. Update the discussion of responses to accidental events, taking into account any potential situation in which ECRC or

					alternative contractor is not able to respond.
C-NLOPB-11	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(ii) Aquatic Species 5(1)(a)(iii) Migratory Birds 5(1)(b) Federal Lands /Transboundary 5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions 5(1)(c)(ii) Aboriginal Physical and Cultural Heritage 5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes 5(1)(c)(iv) any Structure, Site or Thing of Historical, Archaeological, Paleontological or Architectural Significance	7.6.1 Effects of potential accidents or malfunctions	Section 15.2.1 – Overall Modelling Approach	Table 15.1 Hypothetical Model Scenarios for Effects Assessment Surface Batch Spill information is not correct, the Water Depth of the release is 0 m, Spill Rate is not 1000 L and a volume of 6.3 m ³ is a volume of 6300 L of diesel spilled which is six times the described spill	Update Table to include correct information
C-NLOPB-12	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(ii) Aquatic Species 5(1)(a)(iii) Migratory Birds 5(1)(b) Federal Lands /Transboundary 5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions 5(1)(c)(ii) Aboriginal Physical and Cultural Heritage 5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes 5(1)(c)(iv) any Structure, Site or Thing of Historical, Archaeological, Paleontological or Architectural Significance	7.6.1 Effects of potential accidents or malfunctions	Section 15.2.1 – Overall Modelling Approach	“Stochastic analysis of hypothetical blowouts were modelled using the physical chemical properties of West Flemish Pass Light Oil	Provide rational for using West Flemish Pass Light Oil
C-NLOPB-13	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(ii) Aquatic Species 5(1)(a)(iii) Migratory Birds	7.6.1 Effects of potential accidents or malfunctions	Section 15.2.1 – Overall Modelling Approach	Table 15.1 Hypothetical Model Scenarios for Effects	Update Table to include correct information

	<p>5(1)(b) Federal Lands /Transboundary</p> <p>5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions</p> <p>5(1)(c)(ii) Aboriginal Physical and Cultural Heritage</p> <p>5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes</p> <p>5(1)(c)(iv) any Structure, Site or Thing of Historical, Archaeological, Paleontological or Architectural Significance</p>			<p>Assessment Surface Batch Spill information is not correct, the Water Depth of the release is 0 m, Spill Rate is not 1000 L and a volume of 6.3 m³ is a volume of 6300 L of diesel spilled which is six times the described spill</p>	
C-NLOPB-14	5(1)(a)(i) Fish and Fish Habitat	Section 7.3.1. Fish and Fish Habitat	Section 8.3.1.3.3 Discharges, Page 8-17.	<p>Chevron discusses thresholds for potential effects of discharges on benthic environments. It states that ‘.....that an average burial depth of 9.6 mm or less is unlikely to cause net adverse effects.....(Neff et al. 2004)’ and ‘....some species may experience adverse effects at shallower depths (e.g. Smit et al. 2006 references a threshold of 6.5 mm)’.</p> <p>There appears to be no discussion of the more conservative predicted no effects threshold (PNET) of 1.5 mm for some species within this section.</p>	<p>Provide additional discussion of the more conservative PNET of 1.5 mm and any subsequent impacts on the effects assessment presented in the EIS.</p>
C-NLOPB-15	5(1)(a)(i) Fish and Fish Habitat	Section 3.1 Project Description	<p>Section 2.8.2.1 Appendix C</p> <p>Drill Cuttings Dispersion Modelling</p>	<p>Chevron 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</p>	<p>Please provide additional information on seabed deposition for each drill section (riseless and with riser)</p>

				<p>and summer. However, there is no discussion, or figures presented on seabed deposition for each drill section (WBM only and SBM only).</p> <p>Additionally, there is also no discussion on the percentage of discharge mud (WBM, SBM or total) expected to settle within the accumulating areas of >0.1.</p>	
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Table 3: Additional advice to the proponent, such as guidance or standard advice related to your departmental mandate

ID	Reference to EIS	Context and Rationale	Advice to the Proponent
	N/A		