

Potential conditions under the *Canadian Environmental Assessment Act, 2012*

The Canadian Environmental Assessment Agency is contemplating the following potential conditions in relation to the Scotian Basin Exploration Drilling Project (the Designated Project) located offshore of Nova Scotia for recommendation to the Minister of Environment and Climate Change (the Minister) for inclusion in a Decision Statement issued under the *Canadian Environmental Assessment Act, 2012*. If the Minister decides that the carrying out of the Designated Project is unlikely to cause significant adverse environmental effects as defined under subsections 5(1) and 5(2) of the *Canadian Environmental Assessment Act, 2012*, or if the Minister decides that the carrying out of the Designated Project is likely to cause significant adverse environmental effects and the Governor in Council decides such effects are justified in the circumstances, the Designated Project would be allowed to proceed, and any conditions established by the Minister under the *Canadian Environmental Assessment Act, 2012* would become legally binding.

1 Definitions

- 1.1 *Abandoned* means “abandoned” as defined in subsection 1(1) of the *Nova Scotia Offshore Petroleum Drilling and Production Regulations*.
- 1.2 *Agency* means the Canadian Environmental Assessment Agency.
- 1.3 *Aggregation of habitat-forming corals or sponges* means an aggregation of coral or sponges that are known or observed to support fish.
- 1.4 *Baseline* means the environmental conditions prior to initiating the drilling program.
- 1.5 *Board* means the Canada-Nova Scotia Offshore Petroleum Board as established by the joint operation of section 9 of the *Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act* and section 9 of the *Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation (Nova Scotia) Act*.
- 1.6 *Commercial fisher* means an individual fishing in the regional assessment area and who holds a commercial fishing licence issued under the *Fisheries Act*.
- 1.7 *Days* means calendar days.
- 1.8 *Designated Project* means the Scotian Basin Exploration Drilling Project described in section 2 of the draft environmental assessment report prepared by the Canadian Environmental Assessment Agency (Canadian Environmental Assessment Registry Reference Number 80109).
- 1.9 *Drilling program* means the drilling, testing, and abandonment of offshore exploratory wells.
- 1.10 *Environment and Climate Change Canada* means the Department of the Environment as established under subsection 2(1) of the *Department of the Environment Act*.
- 1.11 *Environmental effects* means “environmental effects” as described in section 5 of the *Canadian Environmental Assessment Act, 2012*.

- 1.12 *Fish* means “fish” as defined in subsection 2(1) of the *Fisheries Act*.
- 1.13 *Fish habitat* means “fish habitat” as defined in subsection 2(1) of the *Fisheries Act*.
- 1.14 *Fisheries and Oceans Canada* means the Department of Fisheries and Oceans as established under subsection 2(1) of the *Department of Fisheries and Oceans Act*.
- 1.15 *Flaring* means the open-air burning of hydrocarbons, which may occur during the testing of oil and gas wells.
- 1.16 *Follow-up program* means “follow-up program” as defined in subsection 2(1) of the *Canadian Environmental Assessment Act, 2012*.
- 1.17 *Indigenous fisher* means Indigenous individual that is fishing for food, social or ceremonial purposes in the regional assessment area, or Indigenous *organization* holding a communal fishing licence under the *Aboriginal Communal Fishing Licences Regulations of the Fisheries Act*.
- 1.18 *Indigenous groups* means the Mi'kmaw First Nations of Nova Scotia represented by the Kwilmu'kw Maw-klusuaqn (Mi'kmaq Rights Initiative) Negotiation Office, the Buctouche, Eel River Bar, Fort Folly, Esgenoopetitj, Indian Island and Pabineau First Nations represented by Mi'gmawe'l Tplu'taqnn Incorporated, the Millbrook and the Sipekne'katik First Nations in Nova Scotia, the Mi'kmaq First Nations of Prince Edward Island represented by the Mi'kmaq Confederacy of Prince Edward Island, the First Nations represented by the Maliseet Nation in New Brunswick and the Woodstock First Nation.
- 1.19 *Listed species at risk* means a species that is listed on the List of Wildlife Species at Risk set out in Schedule 1 of the *Species at Risk Act*.
- 1.20 *Migratory bird* means “migratory bird” as defined in subsection 2(1) of the *Migratory Birds Convention Act, 1994*.
- 1.21 *Mitigation measures* means “mitigation measures” as defined in subsection 2(1) of the *Canadian Environmental Assessment Act, 2012*.
- 1.22 *Night* means all that portion of the day extending from one-half hour after sunset until one-half hour before sunrise.
- 1.23 *Pre-drill survey* means a survey to characterize the seabed and to confirm that no potential surface seabed hazards or sensitivities are present at the drilling location, and that is conducted once the drilling unit is in position.
- 1.24 *Project area* means the project area identified in figure 1 of the draft environmental assessment report prepared by the Canadian Environmental Assessment Agency (Canadian Environmental Assessment Registry Reference Number 80109) and is comprised of Exploration Licences 2431, 2432, 2433 and 2434.
- 1.25 *Proponent* means BP Canada Energy Group ULC and its successors or assigns.

- 1.26 *Qualified individual* means someone who, through education, experience and knowledge relevant to a particular matter, may be relied on by the Proponent to provide advice within his or her area of expertise. Knowledge relevant to a particular matter may include community and Indigenous traditional knowledge.
- 1.27 *Regional assessment area* means the regional assessment area identified in figure 1 of the draft environmental assessment report prepared by the Canadian Environmental Assessment Agency (Canadian Environmental Assessment Registry Reference Number 80109).
- 1.28 *Record* means “record” as defined in subsection 2(1) of the *Canadian Environmental Assessment Act, 2012*.
- 1.29 *Suspended* means in relation to a well, a well or part of a well in which drilling operations have temporarily ceased.
- 1.30 *Testing* means a formation flow test as defined in subsection 1(1) of the *Nova Scotia Offshore Petroleum Drilling and Production Regulations*.
- 1.31 *Vertical seismic survey* means a survey used to calibrate well data to seismic data, giving an accurate depth measure to geological features and is also referred to as vertical seismic profiling survey for the Designated Project.
- 1.32 *Well* means an exploratory well as defined in the *Regulations Designating Physical Activities* under the *Canadian Environmental Assessment Act, 2012*.

Potential Conditions

These conditions may be established for the sole purpose of the Decision Statement issued under the *Canadian Environmental Assessment Act, 2012*. They do not relieve the Proponent from any obligation to comply with other legislative or other legal requirements of the federal, provincial or local governments. Nothing in this document shall be construed as reducing, increasing, or otherwise affecting what may be required of the Proponent to comply with all applicable legislative or legal requirements.

2 General conditions

- 2.1 The Proponent shall ensure that its actions in meeting the conditions set out in this document are considered in a careful and precautionary manner, promote sustainable development, are informed by the best information and knowledge available at the time the Proponent takes action, including community and Indigenous traditional knowledge, are based on methods and models that are recognized by standard-setting bodies, are undertaken by qualified individuals, and have applied the best available economically achievable technologies.
- 2.2 The Proponent shall, where consultation is a requirement of a condition set out in this document:
- 2.2.1 provide a written notice of the opportunity for the party or parties being consulted to present their views and information on the subject of the consultation;

- 2.2.2 provide sufficient information on the scope and the subject matter of the consultation and a reasonable period of time to permit the party or parties being consulted to prepare their views and information;
 - 2.2.3 undertake impartial consideration of all views and information presented by the party or parties being consulted on the subject matter of the consultation; and
 - 2.2.4 advise in a timely manner the party or parties being consulted on how the views and information received have been considered by the Proponent.
- 2.3 The Proponent shall, where consultation with Indigenous groups is a requirement of a condition set out in this document, communicate with each Indigenous group with respect to the manner by which to satisfy the consultation requirements referred to in condition 2.2, including methods of notification, the type of information, the period of time to be provided when seeking input, the process to be used by the Proponent to undertake impartial consideration of all views and information presented on the subject of the consultation, the period of time to advise Indigenous groups on how their views and information were considered by the Proponent and the means by which Indigenous groups will be advised.
- 2.4 The Proponent shall, where a follow-up program is a requirement of a condition set out in this document, determine, as part of the development of the follow-up program and in consultation with Indigenous groups, the following information, for each follow-up program:
- 2.4.1 the methodology, location, frequency, timing and duration of monitoring associated with the follow-up program;
 - 2.4.2 the scope, content and frequency of reporting of the follow-up results;
 - 2.4.3 the levels of environmental change relative to baseline conditions that would require the Proponent to implement modified or additional mitigation measure(s), including instances where the Proponent may require Designated Project activities to be stopped; and
 - 2.4.4 the technically and economically feasible mitigation measures to be implemented by the Proponent if monitoring conducted as part of the follow-up program shows that the levels of environmental change referred to in condition 2.4.3 are reached or exceeded.
- 2.5 The Proponent shall submit the information identified in condition 2.4 to the Board prior to the implementation of each follow-up program. The Proponent shall update that information in consultation with Indigenous groups during the implementation of each follow-up program, and shall provide the updated information to the Board and to Indigenous groups within 30 days of the information being updated.
- 2.6 The Proponent shall, where a follow-up program is a requirement of a condition set out in this document:
- 2.6.1 undertake monitoring and analysis according to the information determined pursuant to condition 2.4 to verify the accuracy of the environmental assessment as it pertains to the particular condition and/or to determine the effectiveness of any mitigation measure(s);

- 2.6.2 determine whether modified or additional mitigation measures are required based on the monitoring and analysis undertaken pursuant to condition 2.6.1; and
 - 2.6.3 if modified or additional mitigation measures are required pursuant to condition 2.6.2, implement these mitigation measures in a timely manner and monitor them pursuant to condition 2.6.1.
- 2.7 Where consultation with Indigenous groups is a requirement of a follow-up program, the Proponent shall discuss with each Indigenous group opportunities for their participation in the analysis of the follow-up results and the selection of any modified or additional mitigation measures, as set out pursuant to condition 2.6.
- 2.8 The Proponent shall, within 90 days after each well is suspended and/or abandoned, submit to the Board and the Agency a report, including an executive summary of the report in both official languages. The Proponent shall document in the report:
- 2.8.1 the activities undertaken by the Proponent to comply with each of the conditions set out in this document;
 - 2.8.2 how the Proponent complied with condition 2.1;
 - 2.8.3 for conditions set out in this document for which consultation is a requirement, how the Proponent considered any views and information that the Proponent received during or as a result of the consultation;
 - 2.8.4 the information referred to in conditions 2.4 and 2.5 for each follow-up program;
 - 2.8.5 the results of the follow-up program requirements identified in conditions 3.11, 3.12 and 4.5; and
 - 2.8.6 any modified or additional mitigation measures implemented or proposed to be implemented by the Proponent, as determined under condition 2.6.
- 2.9 The Proponent shall publish on the Internet the reports and the executive summaries referred to in condition 2.8, the marine mammal observation program referred to in condition 3.7, the Fisheries Communications Plan referred to in condition 5.1, the wellhead abandonment strategy referred to in condition 5.2, the Spill Response Plan and the well control strategies and measures referred to in condition 6.2, the implementation schedule referred to in condition 7.1, and any update(s) or revision(s) to the above documents, upon submission of these documents to the parties referenced in the respective conditions. The Proponent shall keep these documents publicly available for a minimum of five years after completion of the Designated Project. The Proponent shall notify the Board, the Agency and Indigenous groups of the availability of these documents within 48 hours of their publication.
- 2.10 The Proponent shall notify the Agency and Indigenous groups in writing no later than 60 days after the day on which there is a transfer of ownership, care, control or management of the Designated Project in whole or in part.
- 2.11 The Proponent shall consult with Indigenous groups prior to initiating any material change(s) to the Designated Project that may result in adverse environmental effects, and shall notify the Board and the Agency in writing prior to initiating the change(s), to determine an appropriate course of action related to the material change(s).

- 2.12 In notifying the Board and the Agency pursuant to condition 2.11, the Proponent shall provide a description of the potential adverse environmental effects of the change(s) to the Designated Project, the measures proposed to be implemented by the Proponent to mitigate adverse environmental effects, and the results of the consultation with Indigenous groups.

3 Fish (including marine mammals and sea turtles) and fish habitat

- 3.1 The Proponent shall treat all waste material discharged from offshore drilling into the marine environment in compliance with the *Offshore Waste Treatment Guidelines*, issued jointly by the National Energy Board, the Canada-Newfoundland and Labrador Offshore Petroleum Board and the Canada-Nova Scotia Offshore Petroleum Board, and in accordance with the requirements of the *Fisheries Act*, the *Migratory Birds Convention Act, 1994* and any other applicable legislation.
- 3.2 The Proponent shall dispose of spent or excess synthetic-based drilling muds that cannot be re-used at an approved on-shore facility in Canada.
- 3.3 The Proponent shall apply the *Offshore Chemical Selection Guidelines for Drilling & Production Activities on Frontier Lands*, issued jointly by the National Energy Board, the Canada-Newfoundland and Labrador Offshore Petroleum Board and the Canada-Nova Scotia Offshore Petroleum Board, to select lower toxicity chemicals that would be used and discharged into the marine environment, including drilling fluid constituents, and shall submit any necessary risk justification as per Step 10 of the Guidelines to the Board for acceptance prior to use.
- 3.4 The Proponent shall treat all discharges from platform supply vessels into the marine environment in accordance with the *Fisheries Act* and the International Maritime Organization's *International Convention for the Prevention of Pollution from Ships*.
- 3.5 The Proponent shall conduct a pre-drill survey by a qualified individual at each well site to confirm the presence or absence of any aggregations of habitat-forming corals or sponges or any other environmentally sensitive features. The Proponent shall complete the survey prior to commencing each well site drilling and shall report the results of the survey for each well site to the Board within 48 hours of the completion of each survey.
- 3.6 If the survey(s) conducted in accordance with condition 3.5 confirms the presence of aggregations of habitat-forming corals or sponges, or if other environmentally sensitive features are confirmed by a qualified individual, the Proponent shall move the drilling unit to avoid affecting them, unless not technically feasible. If not technically feasible, the Proponent shall consult with the Board prior to commencing drilling to determine an appropriate course of action, including any additional mitigation measures, to the Board's satisfaction.
- 3.7 The Proponent shall apply Fisheries and Oceans Canada's *Statement of Canadian Practice with Respect to the Mitigation of Seismic Sound in the Marine Environment* during the planning and the conduct of vertical seismic surveys. In doing so the Proponent shall:
- 3.7.1 develop a marine mammal observation program to the satisfaction of the Board at least 30 days prior to the commencement of any vertical seismic survey, including the configuration of the passive acoustic monitoring. When implementing the marine mammal observation program, the Proponent shall:

- 3.7.1.1 use passive acoustic monitoring and visual monitoring by marine mammal observers throughout vertical seismic surveys.
- 3.8 The Proponent shall record and report on the activities undertaken as part of the marine mammal observation referred to in condition 3.7 to the Board within 30 days of the completion of all vertical seismic survey activities.
- 3.9 The Proponent shall implement measures to prevent or reduce the risks of collisions between platform supply vessels and marine mammals and sea turtles, including:
 - 3.9.1 requiring platform supply vessels to use established shipping lanes, where they exist;
 - 3.9.2 implementing a speed limit of ten knots for platform supply vessels when operating outside existing shipping lanes within the Designated Project area and to seven knots when marine mammals or sea turtles are observed or reported within 400 metres of a platform supply vessel, except if not feasible for safety reasons;
 - 3.9.3 prohibiting platform supply vessels from entering critical habitat for the North Atlantic Right Whale (*Eubalaena glacialis*) and Northern Bottlenose whale (*Hyperoodon ampullatus*) as defined in Fisheries and Oceans Canada's *Recovery Strategy for the North Atlantic Right Whale (Eubalaena glacialis) in Atlantic Canadian Waters* and Fisheries and Oceans Canada's *Recovery Strategy for the Northern Bottlenose Whale (Hyperoodon ampullatus), Scotian Shelf population, in Atlantic Canadian Waters*, except if not feasible for safety reasons; and
 - 3.9.4 prohibiting platform supply vessels from operating within a radius of two kilometres from Sable Island, except if not feasible for safety reasons.
- 3.10 The Proponent shall report any collisions of a platform supply vessel with marine mammals or sea turtles to the Board and to Fisheries and Oceans Canada via the Canadian Coast Guard Regional Operations Centre, as soon as reasonably practicable but no later than 24 hours following the collision.
- 3.11 The Proponent shall develop and implement a follow-up program for fish and fish habitat, including marine mammals and sea turtles, to verify the accuracy of the environmental assessment and to determine the effectiveness of mitigation measures identified under conditions 3.1 to 3.10. As part of the follow-up program, the Proponent shall:
 - 3.11.1 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
 - 3.11.2 collect drill waste deposition information after drilling is complete to verify the drill waste deposition modeling predictions and report the information collected to the Board.
- 3.12 The Proponent shall develop and implement, in consultation with Fisheries and Oceans Canada, a follow-up program to verify the accuracy of the environmental assessment as it pertains to underwater noise levels. As part of the development of the follow-up program, the Proponent shall determine how underwater noise levels will be monitored through field measurement by the

Proponent during the drilling program and shall provide that information to the Board at least 30 days prior to the start of the drilling program. The follow-up program shall include:

- 3.12.1 monitoring sound levels and adverse environmental effects in Northern Bottlenose Whale (*Hyperoodon ampullatus*) critical habitat caused by the drilling unit between December 1 and March 30.

4 Migratory birds

- 4.1 The Proponent shall carry Designated Project activities in a manner that protects migratory birds and avoids harming, killing or disturbing migratory birds or destroying, disturbing or taking their nests or eggs. In this regard, the Proponent shall take into account Environment and Climate Change Canada's *Avoidance Guidelines*. The Proponent's actions when taking into account the *Avoidance Guidelines* shall be in compliance with the *Migratory Birds Convention Act, 1994* and with the *Species at Risk Act*.
- 4.2 The Proponent shall notify the Board at least 30 days in advance of planned flaring to determine whether the flaring would occur during a period of migratory bird vulnerability and how the Proponent plans to avoid adverse environmental effects on migratory birds.
- 4.3 The Proponent shall implement measures to avoid harming, killing or disturbing migratory birds, including:
 - 4.3.1 restricting flaring to the minimum required to characterize the wells' hydrocarbon potential and as necessary for the safety of the operation;
 - 4.3.2 minimizing flaring during night time and during periods of migratory bird vulnerability; and
 - 4.3.3 operating a water-curtain barrier around the flare during flaring.
- 4.4 The Proponent shall require supply helicopters to fly at altitudes greater than 300 metres above sea level, and at lateral distances greater than two kilometres from active migratory birds colonies and Sable Island, except for approach and landing maneuvers and if not feasible for safety reasons.
- 4.5 The Proponent shall develop, prior to the start of the drilling program and in consultation with Indigenous groups, a follow-up program to determine the effectiveness of the mitigation measures implemented by the Proponent to avoid harm to migratory birds, their eggs and nests, including the mitigation measures used to comply with conditions 4.1 to 4.4. The Proponent shall implement the follow-up program during throughout the drilling program.

5 Indigenous and commercial fisheries

- 5.1 The Proponent shall develop, prior to drilling and in consultation with Indigenous and commercial fishers, a Fisheries Communication Plan to address communications prior to and during drilling, testing and abandonment of each well. The Proponent shall include in the plan procedures to notify Indigenous and commercial fishers a minimum of two weeks prior to starting of drilling

each well, and procedures to communicate with these fishers in the event of an accident or malfunction. The Proponent shall implement the plan throughout the drilling program.

- 5.2 The Proponent shall develop a well abandonment plan, including a wellhead abandonment strategy, and submit it to the Board for acceptance at least 30 days prior to abandonment of each well. If the Proponent proposes that a wellhead be abandoned on the seafloor in a manner that may interfere with Indigenous and commercial fisheries, the Proponent shall consult with Indigenous and commercial fishers on the wellhead abandonment strategy.
- 5.3 The Proponent shall provide the details of its operation, including the safety exclusion zones during drilling and testing, and the locations information of abandoned wellheads if left on the seafloor to the Marine Communications and Traffic Services for broadcasting and publishing in the *Notices to Shipping*, and to the Canadian Hydrographic Services for future nautical charts and planning.

6 Accidents and malfunctions

- 6.1 The Proponent shall take all reasonable measures to prevent accidents and malfunctions that may result in adverse environmental effects and shall implement emergency response procedures and contingency plans developed in relation to the Designated Project.
- 6.2 The Proponent shall prepare a Spill Response Plan and well control strategies and measures, including the drilling of a relief well, in the event that well control cannot be re-established following a sub-sea well blowout. The Proponent shall submit the plan, strategies and measures to the Board for acceptance at least 90 days prior to drilling.
- 6.3 The Spill Response Plan shall include:
 - 6.3.1 procedures to respond to a spill of any substance that may cause adverse environmental effects (e.g. spill containment and recovery); and
 - 6.3.2 measures for wildlife response, protection and rehabilitation (e.g. collection and cleaning of marine mammals, migratory birds, sea turtles and species at risk) and measures for shoreline protection and clean-up.
- 6.4 The Proponent shall conduct an exercise of the Spill Response Plan prior to the commencement of drilling and adjust the plan to the satisfaction of the Board to address any deficiencies identified during the exercise.
- 6.5 The Proponent shall review the Spill Response Plan during drilling of each well and update it as required on an ongoing basis and to the satisfaction of the Board.
- 6.6 The Proponent shall undertake a net environmental benefit analysis to consider use of dispersants against other spill response options to identify those techniques that will provide for the best opportunities to minimize environmental consequences, and provide it to the Board for review at least 90 days prior to drilling.

- 6.7 The Proponent shall consult with Indigenous groups during the development of the Spill Response Plan and well control strategies and measures, and provide the approved versions to Indigenous groups.
- 6.8 In the event of spill or unplanned release of oil or any other substance that may cause adverse environmental effects, the Proponent shall implement its Spill Response Plan, including:
- 6.8.1 monitoring the adverse environmental effects of the spill on components of the marine environment to be accepted by the Board until specific endpoints identified in consultation with expert government departments are achieved. As applicable, monitoring may include:
 - 6.8.1.1 sensory testing of seafood for taint, and chemical analysis for oil concentrations and any other contaminants, as applicable;
 - 6.8.1.2 measuring levels of contamination in recreational and commercial fish species with results integrated into a human health risk assessment to determine the fishing area closure status; and
 - 6.8.1.3 monitoring for marine mammals, sea turtles and birds for visible signs of contamination or oiling and reporting results to the Board.
- 6.9 In the event of a sub-sea well blowout, the Proponent shall, in addition to condition 6.8, begin the immediate mobilization of at least one capping stack and associated equipment to the project area to stop the spill.
- 6.10 In the event of accidents and malfunctions, the Proponent shall comply with the *Compensation Guidelines Respecting Damages Relating to Offshore Petroleum Activity* issued jointly by the Canada-Newfoundland and Labrador Offshore Petroleum Board and the Canada-Nova Scotia Offshore Petroleum Board.

7 Implementation schedule

- 7.1 The Proponent shall submit an implementation schedule for conditions contained in this document to the Board and the Agency at least 15 days prior to the start of drilling. The implementation schedule shall indicate the commencement and completion dates for each activity relating to conditions set out in this document with sufficient detail to allow the Board to plan compliance verification activities.
- 7.2 The Proponent shall notify the Board and the Agency of any changes to the implementation schedule required under condition 7.1 prior to implementation of the changes, if feasible, and shall not implement the changes unless accepted by the Board.

8 Record keeping

- 8.1 The Proponent shall maintain all records relevant to the implementation of the conditions set out in this document, including any records that the Board considers relevant. The Proponent shall provide the aforementioned records to the Board or the Agency upon demand within a timeframe specified by the Board or the Agency.

8.2 The Proponent shall retain all records referred to in condition 8.1 at a facility in Canada. The Proponent shall retain the records and make them available for a minimum of five years after completion of the Designated Project, unless otherwise specified by the Board. The Proponent shall notify the Board and the Agency at least 30 days prior to any change to the location of the facility where the records are retained, and shall provide the address of the new location to the Board and the Agency.