Tilt Cove Exploration Drilling Program

Chapter 1: Introduction

Prepared for:
Suncor Energy

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Stantec

TILT COVE EXPLORATION DRILLING PROGRAM

Suncor Energy (Suncor) gratefully acknowledges the contribution of the various firms that participated in the completion of this Environmental Impact Statement (EIS).

The EIS and its supporting studies were prepared by an integrated team comprised of personnel from Stantec Consulting Ltd., in association with Wood, LGL Limited, RPS, JASCO Applied Sciences, and Environmental Research Consulting.

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1.0 INTRODUCTION

Suncor Energy Offshore Exploration Partnership (Suncor), and its original co-venturers Equinor Canada Ltd. and Husky Oil Operations Limited (Suncor assumed 100% ownership in January 2023), is proposing an exploration drilling program on Exploration Licence (EL) 1161 in the Jeanne d'Arc Basin, referred to as the Tilt Cove Exploration Drilling Project (the Project). The Project proposes the drilling of up to 12 to 16 wells of varying lengths and lasting between 45 to 120 days, starting as early as Q2 2024, or anytime following regulatory approvals being in place.

This Project is a designated project under *Canadian Environmental Assessment Act, 2012* (CEAA 2012). This Environmental Impact Statement (EIS) has been prepared to address the information requirements pursuant to CEAA 2012 and its regulations. Requirements under the *Canada Newfoundland and Labrador Atlantic Accord Implementation Act* and the *Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act* (the Accord Acts) are also addressed. This EIS document is intended to satisfy both the EIS guidelines (Agency 2019) and the Accord Acts EA requirements.

1.1 Project Overview

The Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) has granted exploration rights for EL 1161, located approximately 300 kilometres (km) from St. John's, Newfoundland and Labrador (NL) (Figure 1.1) to Suncor and its original co-venturers Husky Oil Operations Limited and Equinor Canada Ltd. In January 2023, Suncor became the sole "interest owner". (Table 1.1). Located south of Hibernia and west of the Terra Nova and Hebron developments, EL 1161 is approximately 142,448 net hectares (576.5 km^2) (Table 1.1). Sea depth ranges from 61 to 87 m. Suncor is proposing an exploration drilling program to determine the presence, nature, and volume of potential oil and gas resources within EL 1161. Up to 12 to 16 wells of varying lengths, lasting between 45 to 120 days may be drilled over the term of the Project, with drilling beginning in as early as Q2 2024 or any time within the lease period, pending regulatory approval. Additional wells will be considered based on the results of the first well. The proposed drilling program in EL 1611 is consistent with the work expenditure commitments made by Suncor when the licence was issued.

Table 1.1 Licence Size and Interests

EL	Size	Current Interest
1161	142,448 net acres (576.5 km^2)	Suncor Energy Offshore Exploration Partnership (100%)

Wells for the Project will be drilled using a semi-submersible rig, referred to generically as a mobile offshore drilling unit (MODU). Exploration drilling will be carried out in multiple phases, based on initial well results and rig availability.

Supply vessels and helicopters will be used to provide logistical support such as transportation of personnel, equipment, and materials between the MODU and onshore facilities (e.g., supply base - St. John's is one option). Activities at the onshore facilities are not included in the scope of this EIS.

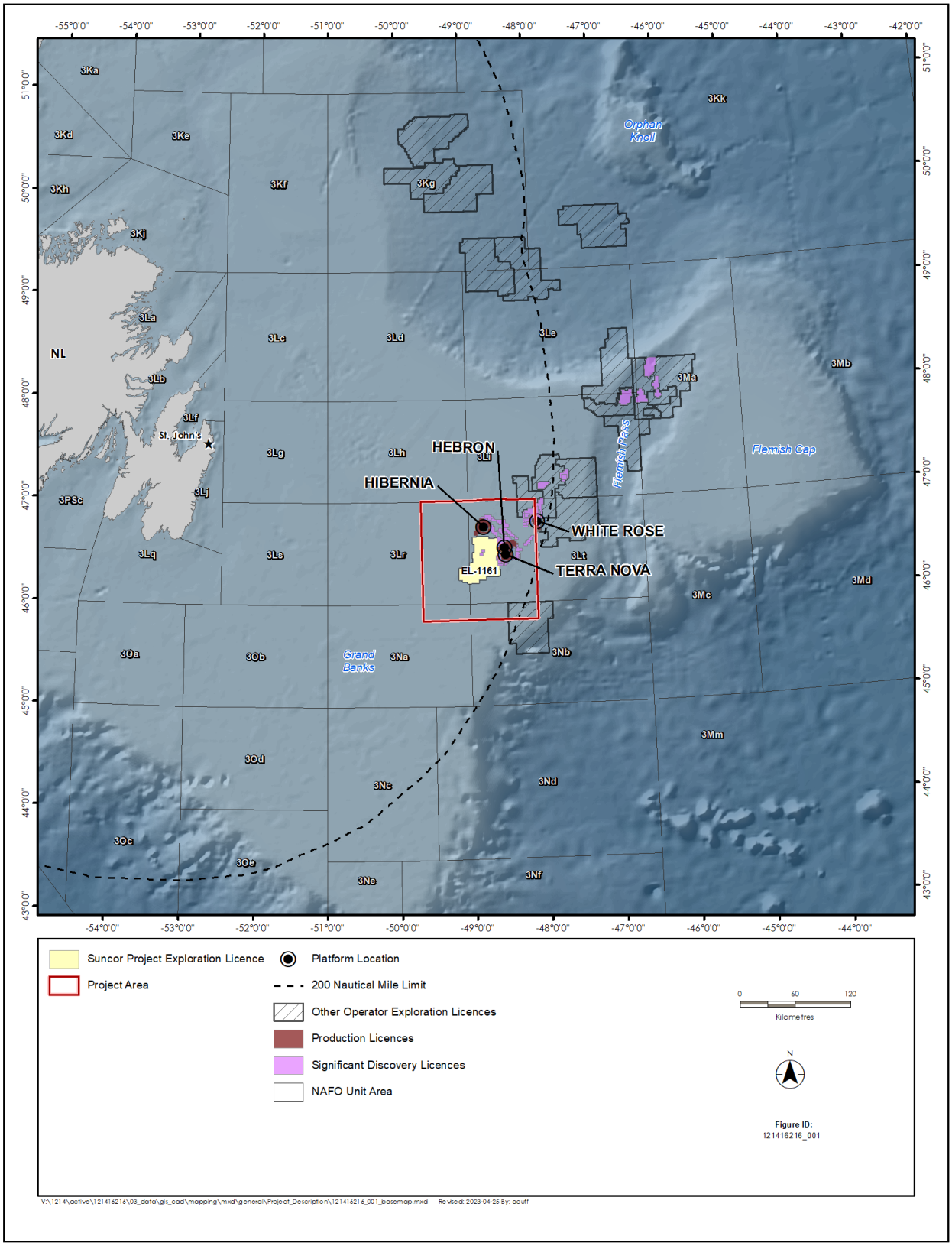

Figure 1.1 Project Location

1.2 Scope of the EIS

The Tilt Cove Drilling Program (the Project) that is assessed within the scope of the EIS, in accordance with the EIS Guidelines (Canadian Environmental Assessment [CEA] Agency 2019) (Appendix A) includes:

- Geophysical, environmental, and geotechnical surveys
- MODU mobilization and drilling
- Mobilization, operation and demobilization of the MODU
- Establishment of a safety exclusion zone
- Light, heat, and sound emissions associated with MODU presence and operation
- Waste and water management, including discharge of drill muds and cuttings and other discharges and air emissions
- Well evaluation and testing
- Well decommissioning, suspension and abandonment
- Supply and servicing
- Loading, refueling and operation of marine support vessels (i.e., for re-supply and transfer of people, materials, fuel and equipment; on-site safety during drilling activities; and transit between the supply base and the MODU)
- Helicopter support (i.e., for crew transport and delivery of light supplies and equipment when metocean conditions allow)

Other components or activities not included within the scope of the EIS Guidelines may be described in the EIS where necessary for broader context. For example, VSP is discussed in the context of geophysical, environmental and geotechnical surveys. Though exact well locations have not yet been finalized, they will be confirmed as part of the regulatory approval process for each well in the program as described in detail in Section 1.5.1.

The EIS will define the spatial boundaries such that potential adverse environmental effects from the Project can be adequately considered. The Project Area includes EL 1161 plus an approximate 40-km buffer (Figure 1.1), which encompasses the immediate area in which Project activities and components may occur, including direct physical disturbance to the benthic environment. A Local Assessment Area (LAA) and 2 Regional Assessment Areas (RAAs) have also been defined to assess potential environmental effects that may occur beyond the Project Area. Section 4 of this EIS provides additional information on spatial boundaries used to evaluate potential environmental effects from the Project.

The temporal scope of the EIS for the Project extends to the end of 2029 to allow for the operator to continue activities covered in the EIS and diligently pursue drilling of a well beyond the nine-year term if a rig is not available in Canada-NL waters in the final year(s) of the Licence term. Project activities (which include assessment, exploration drilling, testing, suspension and potential abandonment, and other associated activities) are to occur starting as early as Q2 2024, or anytime in the lease period, pending regulatory approval. The EIS assumes that planned Project activities may occur year-round and drilling is conducted for 360 days annually.

A more detailed description of the Project, including its overall need, purpose and justification, location, key components and activities, schedule, potential emissions and their management, Project alternatives, and overall environmental planning and management systems, is provided in Chapter 2.

1.3 Proponent Information

At Suncor, our number one purpose is to provide trusted energy that enhances people's lives while caring for each other and the earth. Our values guide us in fulfilling our purpose and represent who we are, and who we aspire to be.

In 1967, Suncor was the first company involved in commercial development of Canada's Athabasca oil sands - one of the world's largest petroleum resource basins. Since then, Suncor has grown to become a globally-competitive, Canadian-based integrated energy company with a balanced portfolio of high quality assets, a strong balance sheet and significant growth prospects.

Headquartered in Calgary, Alberta, Suncor's operations include oil sands development and upgrading, conventional and offshore oil and gas production, petroleum refining, and product marketing under the PetroCanada™ brand. While working to responsibly develop petroleum resources, Suncor is also expanding lines of business in the low emissions power, renewable fuels and hydrogen sectors; and working with our customers, suppliers and other stakeholders on reducing emissions. Our competitive advantage is our ability to leverage our existing experience and expertise across all three avenues (Suncor 2022a).

Suncor is an established active participant in the offshore oil and gas industry in NL. Suncor operates the Terra Nova oil field located on the Grand Banks, 350 km southeast of St. John's. Additionally, Suncor holds working interests in several projects and developments including the Hibernia development (20%), Hibernia Southern Extension development (19.2%), White Rose development (27.5%), West White Rose Project (approximately 26%), and Hebron project (21%). As a joint venture partner, Suncor is in a unique position as the only company on the East Coast with interests in all current producing assets.

Suncor is committed to running safe, reliable, and environmentally responsible operations in the Tilt Cove Exploration Drilling Project, and at the adjacent Terra Nova development, where the management approach to the environment includes a principled set of strategic objectives that are underpinned by our Operational Excellence Management System and our corporate Environment, Health & Safety policy.

1.3.1 Suncor's Strategy Statement

To be Canada's leading energy company by growing our business in low greenhouse gas (GHG) fuels, electricity, and hydrogen while sustaining and optimizing our existing hydrocarbon business and transforming our GHG footprint, all enabled by our expertise, long-life resources, integrated business model, strong connection to customers, and world-class environment, social and governance (ESG) performance. Suncor has set 6 strategic objectives to serve as a road map for our strategy. They are (Suncor 2022b):

- Achieve world-class ESG performance
- Be net-zero by 2050
- Expand our low emissions businesses
- Grow our customer connection
- Optimize our base business
- Grow returns on capital

1.3.2 Suncor's Operational Excellence Management System

The Operational Excellence Management System (OEMS) is Suncor's framework of controls designed to eliminate the causes of unplanned events and incidents. This system ensures the use of standardized processes, data and tools to reduce risk, simplify work and improve performance. It drives how we do work every day so we keep people and the environment safe while delivering reliable and efficient results. The OEMS is applied to identify, avoid, and mitigate operational risks and environmental impacts. This is further described in Section 2.10.1.

1.3.3 Suncor's Environment, Health & Safety Policy

The Environment, Health & Safety (EHS) Policy Statement supports Suncor's mission and strategy. The EH&S Policy Statement is: *Safety above All Else is the foundation for sustainable Environmental Health and safety (EH&S) excellence.*

1.3.4 Proponent Contact Information

Suncor is a Canadian energy company; with its head office located in Calgary, Alberta.

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1.3.5 EIS Project Team

This EIS was written with the support of the following companies:

Stantec Consulting Ltd (Stantec)	Overall Project management; preparation of Commercial Fisheries and Other Ocean Users and Indigenous Groups sections (including existing environment, environmental effects, and accidental events assessment sections); Atmospheric Environment; planning sections; accidental events upfront section; Cumulative Environmental Effects, Conclusions; EIS Summary; graphical support; consultation support
LGL Limited (LGL)	Marine and Migratory Birds and Marine Mammals and Sea Turtles sections (including existing environment, environmental effects, and accidental events assessment sections); graphical support
Wood PLC (Wood)	Marine Fish and Fish Habitat and Special Areas sections (including existing environment, environmental effects, and accidental events assessment sections), Physical Environment; Effects of the Environment on the Project; graphical support
JASCO Applied Sciences (Canada) Ltd. (JASCO)	Underwater Sound Modelling
RPS Group (RPS)	Drill Cuttings Deposition Modelling; Oil Spill Trajectory Modelling; Update of spill statistics analysis
Jay Hartling	Indigenous engagement support

1.4 Benefits of the Project

Suncor has a strong presence in NL. As a producing operator of the Terra Nova Project since 2001, Suncor has consistently fulfilled its Benefits Plan commitments. This is evident in the high number of local residents employed in connection with the Terra Nova Development. There has been a demonstrated level of NL content on expenditures and significant dollars invested in education and training, research and development and community investment.

Suncor is committed to fulfilling its obligations with respect to the statutory requirements outlined in section 45(2) of the *Canada-Newfoundland and Labrador Atlantic Accord Implementation Act*. The Act is a Memorandum of Agreement between the Government of Canada and the Government of Newfoundland and Labrador on Offshore Oil and Gas Resource Management and Revenue Sharing. It promotes the development of petroleum resources in the offshore area of NL “for the benefit of Canada as a whole and Newfoundland and Labrador in particular”. It also recognizes Newfoundland and Labrador as “the principal beneficiary of the oil and gas resources off its shores.” The oil and gas industry provides a significant opportunity for investment in the province and Canada. Exploration activities such as The Project contribute to the prosperity of the province. Projects are required to identify potential for commercial development. The following are specific provisions that are housed in the Benefits Plan:

- Providing manufacturers, consultants, contractors and service companies in the province and other parts of Canada with a full and fair opportunity to participate on a competitive basis in the supply of goods and services used in the Tilt Cove Exploration Drilling Program.

- First consideration is given to services provided from within the province and to goods manufactured locally, where those services and goods are competitive in terms of fair market price, quality and delivery.
- Providing full and fair opportunity for the employment of Canadians and, in particular, members of the labour force of the province of NL.
- Consistent with the Canadian Charter of Rights and Freedoms, individuals residing in the province of NL shall be given first consideration for training and employment.

Over the course of the Project, Suncor will work with governments and industry to improve the domestic supply capability, as well as to support and encourage current suppliers, and the establishment of new suppliers in NL and Canada. Suncor will continue to participate in trade shows and other public forums to provide updates on The Project, as well as to communicate requirements, timing and specifications for goods and services required in upcoming segments of the work.

1.5 Regulatory Framework and the Role of Government

Approvals and authorizations required by the Project under applicable regulatory processes are discussed in the following subsections.

1.5.1 Offshore Regulatory Framework

Petroleum activities in the Newfoundland and Labrador offshore area are regulated by the C-NLOPB, a joint federal-provincial agency reporting to the federal and provincial Ministers of Natural Resources. In 1986, the Government of Canada and the Province of Newfoundland and Labrador signed the Canada-Newfoundland and Labrador Offshore Petroleum Resource Accord to promote social and economic benefits associated with petroleum exploitation. The federal and provincial governments established mirror legislation to implement the Accord.

Under the Accord Acts, the C-NLOPB issues licences for offshore exploration and development and is responsible for the management and conservation of offshore petroleum resources, protection of the environment, and the health and safety of offshore workers, while enhancing employment and industrial benefits for Newfoundland and Labrador residents and Canadians.

Offshore petroleum activities and the C-NLOPB's decision-making processes are governed by a variety of legislation, regulations, guidelines, and memoranda of understanding. Deployment of a drilling rig for exploration drilling programs require an Operations Authorization (OA) under the Accord Acts. Prior to issuing an OA, the C-NLOPB requires the following to be submitted:

- Environmental Assessment Report
- Canada-Newfoundland and Labrador Benefits Plan
- Safety Plan
- Environmental Protection Plan
- Emergency Response and Spill Contingency Plans
- Evidence of financial security
- Certificates of Fitness for the equipment / facilities proposed for use in drilling activities

For each well in the drilling program, a separate Approval to Drill a Well (ADW) is required from the C-NLOPB. This authorization process involves specific details about the drilling program and well design.

There are several regulations and guidelines that govern specific exploration or development activities. There are also various guidelines, some of which have been jointly developed with the C-NLOPB, Canada-Nova Scotia Offshore Petroleum Board (C-NSOPB), and Canada Energy Regulator (CER; formerly the National Energy Board [NEB]), which are intended to address environmental, health, safety, and economic aspects of offshore petroleum exploration and development activities.

Current key relevant regulations and guidelines that fall under the jurisdiction of the C-NLOPB are summarized in Table 1.2. Regulations and guidelines may change over the life of the Project. Suncor is committed to following all regulations and guidelines for the project that are applicable.

1.5.2 Environmental Assessment Requirements

Offshore exploration drilling can be considered a designated physical activity subject to the requirements of the *Canadian Environmental Assessment Act, 2012* (CEAA 2012) if it falls under the definition provided in Section 10 of the *Regulations Designating Physical Activities*, which applies to the drilling, testing, and abandonment of offshore exploratory wells in the first drilling program in an area set out in one or more ELs issued in accordance with the Accord Acts. The CEA Agency (now the Impact Assessment Agency of Canada [IAAC]) determined that the Project required a federal EA under CEAA 2012 and issued EIS Guidelines (CEA Agency 2019) (Appendix A) on June 28, 2019. This EIS has been completed to satisfy the CEAA 2012 requirements as well as the C-NLOPB requirements for an EA Report as part of the Operations Authorization process under the Accord Acts. In addition to the requirements for an EA, an Operations Authorization, one (or more) Approvals to Drill a Well (ADW) will be required from the C-NLOPB.

The Government of Canada announced a new *Impact Assessment Act* (IAA) in February 2018, which came into force August 28, 2019. As Suncor had submitted the Project Description in May 2019 and was issued guidelines in June 2019, the EIS was grandfathered under CEAA 2012. Suncor requested and received an extension to continue under CEAA 2012 beyond the original August 28, 2022 timeline for completion of the EIS. Suncor's formal written request for an extension under CEAA 2012 was approved by IAAC on August 22, 2022.

An EA under the Newfoundland and Labrador *Environmental Protection Act* is not required based on the proposed Project scope. Suncor will not be constructing onshore facilities as part of the Project. Suncor will contract onshore supply base services from an existing facility in St. John's, NL. As such, the third-party facilities will have the necessary permits and approvals to undertake activities related to offshore oil and gas projects. This Project will not require modifications or changes to existing third-party facilities which could result in environmental impacts.

1.5.3 Other Applicable Regulatory Requirements

There is no federal funding involved in this Project, but the Project would be carried out on federal lands under the jurisdiction of the C-NLOPB. CEAA 2012 defines federal lands as those lands that include the Exclusive Economic Zone (EEZ) and continental shelf of Canada. As well, as defined by the Accord Acts, the NL offshore area regulated by the C-NLOPB includes the greater of lands within Canada's 200 nautical mile (NM) EEZ or to the edge of the continental margin. In addition to the OA and ADW from the C-NLOPB pursuant to the Accord Acts, and EA approval under CEAA 2012, the Project is subject to other federal and provincial legislative and regulatory requirements. The current federal and provincial legislative and regulatory requirements at the time of the EIS filing are presented in Table 1.3. These requirements can change over the life of the Project. Suncor will follow all federal and provincial legislative and regulatory requirements throughout the Project as applicable.

In 2018, the Government of Canada announced proposed changes to the *Fisheries Act* and *Navigation Protection Act* in order to modernize the legislation and improve environmental protections. After extensive public and Indigenous consultation and legislative review, Bill C-68, an amended *Fisheries Act* was passed in June 2019. Key changes to help modernize the *Fisheries Act* focus on: returning to comprehensive protection against harming all fish and fish habitat; strengthening the role of Indigenous peoples in project reviews, monitoring and policy development; and clarifying and modernizing enforcement powers to address emerging fisheries issues and to align with current provisions in other legislation. The *Navigation Protection Act* has also been amended, through the passing of Bill C-69 to become the *Canadian Navigable Waters Act.* The updated Act defines all waters as a "navigable" to better protect the right to travel on all navigable waters in Canada, including extra protections for those waterways most important to Canadians and Indigenous peoples (ECCC 2018). These regulatory changes are not likely to affect permitting requirements for the Project.

Table 1.2 Summary of Key Relevant Offshore Legislation and Guidelines / Guidance

Legislation/Guideline	Regulatory Authority	Relevance	Potentially Applicable Permitting Requirement(s)
Canada-Newfoundland Atlantic Accord Implementation Act (S.C. 1987, c. 3) and *the Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act (R.S.N.L. 1990, c. C-2)*	Natural Resources Canada / Newfoundland and Labrador Department of Natural Resources	The Accord Acts gives the C-NLOPB the authority and responsibility for the management and conservation of the petroleum resources offshore Newfoundland and Labrador in a manner that protects health, safety and the environment while maximizing economic benefits. The Accord Acts are the governing legislation under which various regulations are established to govern specific petroleum exploration and development activities.	The regulatory approvals identified below may be required pursuant to section 142 of the *Canada-Newfoundland Offshore Petroleum Resources Accord Implementation Act*, section 135 of the *Canada-Newfoundland Offshore Petroleum Resources Accord Implementation* (Newfoundland and Labrador) *Act,* and the regulations made under the Accord Acts.
Newfoundland Offshore Petroleum Drilling and Production Regulations (and associated Guidelines)	C-NLOPB	These regulations outline the various requirements that must be adhered to when conducting exploratory and/or production drilling for petroleum.	The primary regulatory approvals necessary to conduct an offshore drilling program are an Operations Authorization (Drilling) and a Well Approval (Approval to Drill a Well) pursuant to the Accord Acts and these regulations.
Newfoundland Offshore Certificate of Fitness Regulations	C-NLOPB	These regulations outline the associated requirements for the issuance of a Certificate of Fitness to support an authorization for petroleum exploration and/or production drilling in the Newfoundland offshore area. More specifically, the Regulations are implemented to require that the equipment and/or installation of exploratory or production equipment is fit for the purposes for which it is intended to be used and may be operated safely without posing threat to persons or the environment in a specified location and timeframe.	A Certificate of Fitness will be required in support of the Project.

Table 1.2 Summary of Key Relevant Offshore Legislation and Guidelines / Guidance

Legislation/Guideline	Regulatory Authority	Relevance	Potentially Applicable Permitting Requirement(s)
Offshore Waste Treatment Guidelines (OWTG) (NEB et al. 2010)	NEB / C-NLOPB / CNSOPB	These guidelines outline recommended practices for the management of waste materials from oil and gas drilling and production facilities operating in offshore areas regulated by the C-NLOPB and CNSOPB. The OWTG were prepared in consideration of the offshore waste/effluent management approaches of other jurisdictions, as well as available waste treatment technologies, environmental compliance requirements, and the results of environmental effects monitoring programs in Canada and internationally. The OWTG specify performance expectations for the following types of discharges (NEB et al. 2010): • emissions to air • produced water and sand • drilling muds and solids • storage displacement water • bilge water, ballast water and deck drainage • well treatment fluids • cooling water • desalination brine • sewage and food wastes • water for testing of fire control systems • discharges associated with subsea systems • naturally occurring radioactive material	Compliance with OWTG

Table 1.2 Summary of Key Relevant Offshore Legislation and Guidelines / Guidance

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Offshore Chemical Selection Guidelines (OCSG) (NEB et al. 2009)	NEB / C-NLOPB / CNSOPB	These guidelines provide a framework for chemical selection that minimizes the potential for environmental effects from the discharge of chemicals used in offshore drilling and production operations. The framework incorporates criteria for environmental acceptability that were developed by the Oslo and Paris Commissions for the North Sea. An operator must meet the minimum expectations outlined in the OCSG as part of the authorization for any work or activity related to offshore oil and gas exploration and production. The OCSG includes the following requirements (NEB et al. 2009): • the quantity of each chemical used, its hazard rating, and its ultimate fate (e.g., storage, discharge, onshore disposal, downhole injection, abandonment in the well, or consumption by chemical reaction) must be tracked and reported. • all products to be used as biocides must be registered under the *Pest Control Products Act* and used in accordance with label instructions.all chemicals other than those with small quantity exemptions must be on the Domestic Substances List of approved substances pursuant to the *Canadian Environmental Protection Act, 1999* (CEPA), or must be assessed under the New Substances Notification process to identify any restrictions, controls, or prohibitions. • any chemicals included on the List of Toxic Substances under Schedule 1 of CEPA must be used in accordance with CEPA risk management strategies for the substance and alternatives must be considered for any substances on the CEPA Virtual Elimination List. • any chemicals intended for discharge to the marine environment must: ○ be included on the Oslo and Paris Commissions Pose Little or No Risk (PLONOR) to the Environment List	Compliance with OCSG

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		○ meet certain requirements for hazard classification under the Offshore Chemical Notification Scheme ○ pass a Microtox test (i.e., toxicity bioassay) ○ undergo a chemical-specific hazard assessment in accordance with UK Offshore Chemical Notification Scheme (OCNS) models ○ and/or have the risk of its use justified through demonstration to the C-NLOPB that discharge of the chemical will meet OCSG objectives.	
Compensation Guidelines Respecting Damage Relating to Offshore Petroleum Activity (Compensation Guidelines) (C-NLOPB and CNSOPB 2017b)	C-NLOPB / CNSOPB	These guidelines describe compensation sources available to potential claimants for loss or damage related to petroleum activity offshore Newfoundland and Labrador and Nova Scotia, and outline the regulatory and administrative roles which the Boards exercise respecting compensation payments for actual loss or damage directly attributable to offshore operators.	Compliance with Compensation Guidelines
Environmental Protection Plan Guidelines (NEB et al. 2011)	C-NLOPB / CNSOPB / NEB	These guidelines assist an operator in the development of an environmental protection plan that meets the requirements of the Accord Acts and associated regulations and the objective of protection of the environment from its proposed work or activity.	Compliance with Environmental Protection Plan Guidelines
Geophysical, Geological, Environmental and Geotechnical Program Guidelines (C-NLOPB 2019)	C-NLOPB	These Guidelines have been prepared to assist Applicants who wish to conduct geophysical, geological, geotechnical, or environmental programs within the offshore area.	Compliance with Geophysical, Geological, Environmental and Geotechnical Program Guidelines and associated Geophysical Program Authorization
Canada-Newfoundland and Labrador Exploration Benefits Plan Guidance (Appendix 1 of the Canada-NL Benefits Plan Guidelines [C-NLOPB 2006]). Note that a Draft revised version was published in 2016.	C-NLOPB	This document provides an operator engaged in petroleum exploration activities, including geophysical, geotechnical, and drilling, in the Canada-NL Offshore Area with guidance for the preparation of a Canada-Newfoundland and Labrador Benefits Plan (Benefits Plan) which is required under Section 45 of the Accord Acts. The guidance also addresses related contracting, expenditure, and employment reporting requirements.	Compliance with Canada-Newfoundland and Labrador Exploration Benefits Plan Guidance (Appendix 1 of the Canada-NL Benefits Plan Guidelines)

Table 1.2 Summary of Key Relevant Offshore Legislation and Guidelines / Guidance

Legislation/Guideline	Regulatory Authority	Relevance	Potentially Applicable Permitting Requirement(s)
Statement of Canadian Practice with respect to the Mitigation of Seismic Sound in the Marine Environment (SOCP) (DFO 2007)	Fisheries and Oceans Canada (DFO) / Environment and Climate Change Canada (ECCC) / C-NLOPB / CNSOPB	The SOCP specifies the minimum mitigation requirements that must be met during the planning and conduct of marine seismic surveys, in order to reduce effects on life in the oceans. These mitigation measures can be applied to walk-away vertical seismic profiling operations and wellsite surveys. These mitigation requirements focus on planning and monitoring measures to avoid interactions with marine mammal and sea turtle species at risk where possible and reduce adverse effects on species at risk and marine populations.	Compliance with SOCP
Safety Plan Guidelines (C-NLOPB et al. 2011)	C-NLOPB / CNSOPB / NEB	These Guidelines are intended to provide guidance to Operators in developing a Safety Plan to meet the requirements of the *Drilling and Production Regulations*. In particular, the Safety Plan Guidelines echo the regulatory expectation that an operator take all necessary precautions to reduce risk to a level that is as low as reasonably practicable (ALARP). The Safety Plan Guidelines require the Safety Plan to describe procedures, practices, resources, and sequence of key safety-related activities and monitoring measures necessary to ensure the safety of the proposed work or activity.	A Safety Plan is required as part of the OA.
Incident Reporting and Investigation Guidelines (C-NLOPB and CNSOPB 2018)	C-NLOPB / CNSOPB	These Guidelines are intended to assist operators, employers and others with responsibilities under the Accord Acts with respect to the reporting and investigation of incidents and other events that occur in the offshore area.	Compliance with the Incident Reporting and Investigation Guidelines
Offshore Physical Environmental Guidelines (NEB et al. 2008)	NEB / C-NLOPB / CNSOPB	These Guidelines clarify regulatory requirements for Operators of drilling or production installations concerning the observing, forecasting and reporting of physical environmental data.	Compliance with Physical Environmental Programs Guidelines

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Legislation/Guideline	Regulatory Authority	Relevance	Potentially Applicable Permitting Requirement(s)
Guidelines Respecting Financial Requirements (CER et al. 2021)	C-NLOPB	Operators wishing to conduct work or activity in the Canada-NL Offshore Area are required to provide proof of financial responsibility in a form and amount satisfactory to the C-NLOPB. These regulations and guidelines provide guidance to operators in providing proof of financial requirements regarding authorization being sought for work or activity relating to drilling, development, decommissioning or other operations in the offshore areas.	Compliance with Guidelines Respecting Financial Requirements
Measures to Protect and Monitor Seabirds in Petroleum-Related Activity in the Canada-Newfoundland and Labrador Offshore Area (C-NLOPB undated)	C-NLOPB	This document acknowledges advice from ECCC Canadian Wildlife Service (CWS) on the conservation and protection of seabirds near offshore facilities which is incorporated into C-NLOPB conditions of authorization.	Adherence to Measures to Protect and Monitor Seabirds in Petroleum-Related Activity in the Canada-Newfoundland and Labrador Offshore Area
Guidance for developing systematic stranded bird survey protocols for vessels and platforms (ECCC-CWS 2021)	ECCC-CWS	Guidance for systematic searches for stranded birds: • Appendix 1 – Stranded Bird Encounter Datasheet • Appendix 2 – Infographic and Reference Card – What to do when you find a stranded bird? • Appendix 3 – Seabird Identification Photo Card	Adherence to Guidance for developing systematic stranded bird survey protocols for vessels and platforms
Procedures for Handling and Documenting Stranded Birds Encountered on Infrastructure Offshore Atlantic Canada (ECCC 2017)	ECCC	This document is intended to provide personnel working on offshore infrastructure (i.e., oil and gas platforms, supply vessels, etc.) with safe and effective procedures for dealing with and documenting live, injured and dead stranded birds	Adherence to Procedures for Handling and Documenting Stranded Birds Encountered on Infrastructure Offshore Atlantic Canada
Guidelines for effective Wildlife Response Plans (DRAFT, ECCC 2020a)	ECCC	This document outlines the rationale, objectives, and process for developing, implementing and evaluating the efficacy of Wildlife response planning for pollution and non-pollution incidents.	Adherence to Guidelines for effective Wildlife Response Plans
Guidelines for capture, transport, cleaning, and rehabilitation of oiled wildlife (DRAFT, ECCC 2020b)	ECCC	This document provides guidance concerning the treatment of migratory birds and species at risk captured during a pollution incident and provides direction to organizations and personnel authorized to undertake oiled Wildlife capture, transport, cleaning, and rehabilitation.	Adherence to Guidelines for capture, transport, cleaning, and rehabilitation of oiled wildlife

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Legislation/Guideline	Regulatory Authority	Relevance	Potentially Applicable Permitting Requirement(s)
Guidelines for establishing and operating treatment facilities for oiled wildlife (DRAFT, ECCC 2020c)	ECCC	This document provides guidance on the preparation and training required to set up treatment facilities for oiled wildlife during a pollution incident	Adherence to Guidelines for establishing and operating treatment facilities for oiled wildlife Note that Suncor constructed and maintains a Seabird Cleaning and Rehabilitation Centre, ("Seabird Centre"), in accordance with the guidance. To promote the long-term rehabilitation and release of the birds, Suncor sponsors a Third-Party Wildlife Response Centre that maintains a separate rehabilitation permit.
Technical guidance and protocols for migratory bird surveys for emergency response (DRAFT, ECCC-CSW 2020)	ECCC-CWS	This document outlines the rationale, objectives, and protocols to conduct surveys during pollution and non-pollution incidents	Adherence to Guidance and protocols for wildlife surveys for emergency response
Standard for observers conducting seabird surveys at sea, and for trainers providing instruction on seabird survey methods.	ECCC	Addendum A (ECCC 2020d) to Eastern Canada Seabird's at Sea (ECSAS) standardized protocol for pelagic seabird surveys from moving and stationary platforms. 2012. Canadian Wildlife Service Technical Report Series No. 515.	Adherence to standard for observers conducting seabird surveys at sea, and for trainers providing instruction on seabird survey methods

Source: Modified from BP 2018

Note: This list is current at the time of the EIS filing and may change over time. The current list may not necessarily be inclusive of all applicable regulations.

Table 1.3 Summary of Other Relevant Federal and Provincial Legislation

Legislation	Regulatory Authority	Relevance	Potentially Applicable Permitting Requirement(s)
Canada Shipping Act, 2001	Transport Canada	The *Canada Shipping Act, 2001* is intended to promote safety in marine transportation and protect the marine environment from damage due to navigation and shipping activities.	Supply vessels (and the MODU itself while in transit) are required to comply with the Act and associated regulations.
Canadian Environmental Protection Act, 1999 (CEPA)	ECCC	CEPA pertains to pollution prevention and the protection of the environment and human health to contribute to sustainable development. Among other items, CEPA provides a wide range of tools to manage toxic substances, and other pollution and wastes, including disposal at sea.	Disposal at Sea Permits (under the *Disposal at Sea Regulations* pursuant to CEPA) have not been required in the past for exploration drilling projects. Therefore, such a permit is not anticipated to be required in support of the Project.
Fisheries Act	DFO / ECCC (administers section 36, specifically)	The *Fisheries Act* contains provisions for the protection of fish, shellfish, crustaceans, marine mammals, and their habitats. The Fisheries Act has been amended to return to comprehensive protection against harming all fish and fish habitat, strengthen the role of Indigenous peoples in project reviews, monitoring and policy development, and to clarify and modernize enforcement powers.	Authorization from the Minister of Fisheries and Oceans under section 35(2) of the *Fisheries Act* has not been required in the past for offshore exploration drilling projects. Therefore, such an authorization is not anticipated to be required in support of the Project.
Migratory Birds Convention Act, *1994* (MBCA)	ECCC	Under the MBCA, it is illegal to kill migratory bird species not listed as game birds or destroy their eggs or young. The Act also prohibits the deposit of oil, oil wastes or any other substance harmful to migratory birds in any waters or any area frequented by migratory birds.	The salvage of stranded birds during offshore Project operations may require a handling permit under section 4(1) of the *Migratory Birds Regulations* pursuant to the MBCA.
Canadian Navigable Waters Act (CNWA)	Transport Canada	The CNWA has been updated to define all waters as a “navigable”.	No applicable permitting requirements under the CNWA have been identified for the Project, as the Project Area is located offshore, outside of the Scheduled Waters specified in the CNWA.
Oceans Act	DFO	The *Oceans Act* provides for the integrated planning and management of ocean activities and legislates the marine protected areas program, integrated management program, and marine ecosystem health program. Marine protected areas are designated under the authority of the *Oceans Act*.	No applicable permitting requirements under the *Oceans Act* have been identified for the Project.

Table 1.3 Summary of Other Relevant Federal and Provincial Legislation

Legislation	Regulatory Authority	Relevance	Potentially Applicable Permitting Requirement(s)
Species at Risk Act (SARA)	DFO/ ECCC / Parks Canada	SARA is intended to protect species at risk in Canada and their "critical habitat" (as defined by SARA). All activities must comply with SARA. Section 32 of the Act provides a complete list of prohibitions. Under SARA, proponents are required to complete an assessment of the environment and: • demonstrate that no harm will occur to listed species, their residences or critical habitat • identify adverse effects on specific listed wildlife species and their critical habitat • identify mitigation measures to avoid or minimize effects	Under certain circumstances, the Minister of Fisheries and Oceans may issue a permit under section 73 of SARA authorizing an activity that has potential to affect a listed aquatic species, any part of its critical habitat, or the residences of its individuals. However, such a permit is not anticipated to be required in support of this Project.
Regulations Establishing a List of Spill-treating Agents, SOR/2016-108	ECCC	The Minister of the Environment has determined that certain spill treating agents (as listed in the Regulations) are acceptable for use in Canada's offshore. As a result, the C-NLOPB is able to authorize the use of one or more of the two spill-treating agent products listed in Schedule 1 of the Regulations to respond to an oil spill.	Suncor would receive specific approvals for spill prevention and response, should Suncor request to deploy dispersants in the unlikely event of an oil spill.
Energy Safety and Security Act (S.C. 2015, c. 4)	Natural Resources Canada (NRCan)	The *Energy Safety and Security Act* aims to strengthen the safety and security of offshore oil production through improved oil spill prevention, response, accountability, and transparency and amends the Accord Acts and the *Canadian Oil and Gas Operations Act* with the intent of updating, strengthening, and increasing the level of transparency of the liability regime that is applicable to spills and debris in the offshore areas. The Act also promotes harmonization of the EA process for offshore oil and gas projects and includes provisions to allow the offshore petroleum boards to enable them to conduct EAs under CEAA 2012.	Financial Responsibility and Financial Resources requirements have increased. Specific additional relevance to be determined, but likely to have specific implications for spill prevention and response.
Newfoundland and Labrador *Endangered Species Act* (NL ESA)	NL Department of Fisheries and Land Resources	The NL ESA provides special protection for native plant and animal species considered to be endangered, threatened or vulnerable in the province.	No applicable permitting requirements under the NL ESA have been identified for the Project.
Seabird Ecological Reserve Regulations, NLR 66/97	NL Department of Fisheries and Land Resources	These Regulations prohibit or limit industrial development and certain activities that can cause disturbance to breeding seabirds, including but not limited to boat traffic and low-flying aircraft near the colonies during the breeding season.	Supply vessels and helicopters will comply with regulatory requirements. No applicable permitting requirements under the *Seabird Ecological Reserve Regulations* have been identified for the Project.
Note: This list is current at the time of the EIS filing and may change over time. The current list may not necessarily be inclusive of all applicable regulations.			

1.6 Applicable Guidelines and Resources

The Project may be subject to other applicable guidelines and resources that will be used to inform the EA process, including government guidelines, Indigenous engagement guidelines, and other relevant studies.

1.6.1 Government Guidelines and Resources

In addition to the EIS Guidelines developed for the Project (CEA Agency 2019) (Appendix A), other guidance developed by the CEA Agency and federal government, which has been used to prepare the EIS is listed below.

- The Operational Policy Statement, *Addressing "Purpose of" and "Alternative Means" under the Canadian Environmental Assessment Act, 2012* (CEA Agency 2015a) was consulted with respect to the assessment of Project alternatives (refer to Section 2.9).
- The Operational Policy Statement, *Determining Whether a Designated Project is Likely to Cause Significant Environmental Effects under the Canadian Environmental Assessment Act, 2012* (CEA Agency 2015b) was considered in defining criteria or established thresholds for determining the significance of residual adverse environmental effects.
- The Operational Policy Statement, *Assessing Cumulative Environmental Effects under the Canadian Environmental Assessment Act, 2012* (CEA Agency 2016a) was taken into consideration during the development of the cumulative effects assessment scope and methods.
- CEA Agency's *Technical Guidance for Assessing Physical and Cultural Heritage or any Structure, Site or Thing that is of Historical, Archaeological, Paleontological or Architectural Significance under the Canadian Environmental Assessment Act, 2012* (CEA Agency 2015c) was consulted with respect to the consideration of effects on heritage and culture.
- CEA Agency's *Technical Guidance for Assessing the Current Use of Lands and Resources for Traditional Purposes under the Canadian Environmental Assessment Act, 2012* (CEA Agency 2016b) was consulted with respect to the consideration of effects on Indigenous Peoples.
- Environment and Climate Change Canada's *Procedures for Handling and Documenting Stranded Birds Encountered on Infrastructure Offshore Atlantic Canada* (ECCC 2016) was consulted for appropriate mitigation measures for marine and migratory birds.
- Environment and Climate Change Canada-Canadian Wildlife Service's *Birds and Oil-CWS Response Plan Guidance* (ECCC-CWS 2012) was consulted with respect to the assessment of environmental effects of accidental events on marine and migratory birds.
- Health Canada's *Useful Information for Environmental Assessments* (Health Canada 2010) was consulted with respect to the consideration of effects on quality, noise and Indigenous health.

1.6.2 Indigenous Policies and Guidelines

Guidelines that influenced the EA process with respect to Indigenous engagement include:

- *Aboriginal Consultation and Accommodation-Updated Guidelines for Federal Officials to Fulfill the Duty to Consult* (Aboriginal Affairs and Northern Development Canada 2011)

- *Reference Guide: Considering Aboriginal Traditional Knowledge in Environmental Assessments Conducted Under the Canadian Environmental Assessment Act, 2012* (CEA Agency 2015d)
  The Government of Newfoundland and Labrador's *Aboriginal Consultation Policy on Land and Resource Development Decisions* (Gov NL 2013)

1.6.3 Other Relevant Studies

Research on the environmental impacts the offshore oil and gas activities off Newfoundland has been ongoing for approximately 35 years. Key environmental studies relevant to the EA for the Project include:

- Terra Nova Asset Life Extension Environmental Assessment Validation Report (Stantec 2019)
- BHP Canada Exploration Drilling Project (2019-2028) Environmental Assessment (BHP Petroleum (New Ventures) Corporation 2020)
- West Flemish Pass Exploration Drilling Project 2021-2030: Environmental Assessment (Chevron Canada Limited 2020)
- Newfoundland Orphan Basin Exploration Drilling Program Environmental Assessment (BP 2018)
- Husky Energy Exploration Drilling Project Environmental Assessment (Husky Oil Operations Limited 2018)
- Flemish Pass Exploration Drilling Project Environmental Impact Statement (Statoil 2017)
- Eastern Newfoundland Offshore Exploration Drilling Project Environmental Impact Statement (ExxonMobil Canada Properties [EMCP] 2017)
- Nexen Energy ULC Flemish Pass Exploration Drilling Project Environmental Impact Statement (Nexen Energy ULC 2018)
- White Rose Extension Project Environmental Assessment (Husky Energy 2012)
- Environmental Assessment of StatoilHydro Canada Ltd. Exploration and Appraisal / Delineation Drilling Program for Offshore Newfoundland, 2008-2016 (LGL 2008)
- Husky Delineation / Exploration Drilling Program for Jeanne d'Arc Basin Area, 2008-2017, Environmental Assessment (LGL 2007)
- Hebron Project Comprehensive Study Report (EMCP 2011)
- Equinor Canada Bay du Nord Development Project EIS (Equinor 2020)
- Regional Assessment of Offshore Oil and Gas Exploratory Drilling East of Newfoundland and Labrador - GIS Decision Support Tool (IAAC 2021)

The information from the above reports, other relevant studies, and peer-reviewed literature has been reviewed and referenced as part of the EIS. The Project Area is within the Regional Assessment of Offshore Oil and Gas Exploratory Drilling East of Newfoundland and Labrador (Bangay et al. 2020). The GIS Decision Support Tool (IAAC 2021) was accessed during the preparation of the EIS.

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