

Environmental Protection Operations Directorate
Prairie & Northern Region
5019 52nd Street, 4th Floor
P.O. Box 2310
Yellowknife, NT X1A 2P7

ECCC File: 6300 000 044 / 001
NIRB File: 25XN030



July 25, 2025

via email at: info@nirb.ca

Francis Emingak
Screening Officer
Nunavut Impact Review Board
29 Mitik Street
P.O. Box 1360
Cambridge Bay, NU X0B 0C0

Dear Francis Emingak:

**RE: 25XN030 – Government of Nunavut – Qikiqtarjuaq Marine Infrastructure Project –
Notice of Screening Reviewed**

Environment and Climate Change Canada (ECCC) has reviewed the information submitted to the Nunavut Impact Review Board (NIRB) by the Government of Nunavut regarding the above-mentioned Notice of Screening.

ECCC provides expert information and knowledge to project assessments on subjects within the department's mandate, including climate change, air quality, water quality, biodiversity, environmental emergencies preparedness and responses. This work includes reviewing proponent characterization of environmental effects and proposed mitigation measures. We provide advice to decision-makers regarding a proponent's characterization of environmental effects, the efficacy of their proposed mitigation activities, and may suggest additional mitigation measures. Any comments received from ECCC in this context does not relieve the proponent of its obligations to respect all applicable federal legislation.

The following comments are provided:

1. Topic: Emission standards for construction equipment

Reference

- 25XN030 Qikiqtarjuaq Marine Infrastructure Project, Project Proposal, May 2025
 - Section 7.1 Atmospheric Environment



Comment

Section 7.1.1 outlines mitigation measures proposed for the construction and post-construction phases. There is no indication of emission standards for the equipment that will be used for the construction phase. Some equipment will need to be externally sourced, and thus there is an opportunity to employ equipment that use engines meeting Tier 4 emission requirements which have fewer air quality impacts. Planned construction during the warmer months avoids issues that may affect Tier 4 compliant engines during the colder months.

ECCC Recommendation

ECCC recommends that externally sourced construction equipment be powered by engines meeting Tier 4 emission standards where practical and feasible.

2. Topic: Sensory Disturbance on Birds – Lighting

Reference

- 25XN030 Qikiqtarjuaq Marine Infrastructure Project, Project Proposal, May 2025

Comment

The Proponent indicates that “although increases in ambient light will be mitigated to an extent, navigation lights and lighting around the port and access road will result in a net increase in ambient light during operation of the port. The potential effects of the predicted increase in ambient light on wildlife are expected to be negligible and there will be a significant positive effect on safety and security for the community”.

This project is located near two National Wildlife Areas (NWAs): Qaulluit NWA (~60km) and Akpait NWA (~105km). These NWAs protect key habitat for migratory seabirds and marine mammals.

Lighting can be a major attractant for marine birds and may result in collisions with lit structures or their support structures, vessels, or with other birds, especially during periods of fog, drizzle, and haze. Disoriented birds are prone to circling a light source and may deplete their energy reserves and either die of exhaustion, drop into the ocean, or drop to the ground (or a hard surface) where they are at risk of predation.

Recommendation

ECCC recommends the proponent clarify how light disturbance on sensitive wildlife and birds will be mitigated at the project site(s).

ECCC recommends that during the breeding and migratory periods for migratory birds in this area (late-May to October), the Proponent:

- use the minimum amount of pilot, warning and obstruction lighting needed on tall structures. Warning lights should flash and completely turn off between flashes;
- use the fewest number of site-illuminating lights possible in the project area;
- if strobe lighting is required at night, use only the lowest intensity and the smallest number of flashes per minute allowable by Transport Canada;
- reduce lighting levels during severe weather events that may force birds to land in areas that would cause injury, harm, or death;
- avoid or restrict the time of operation of exterior decorative lights such as spotlights and floodlights whose function is to highlight features of buildings or to illuminate an entire building. These lights, especially on foggy or rainy nights, can attract birds to the project area across large distances.

3. Topic: Species at Risk (SAR) – SAR Missing and/or Effects and Measures Missing

Reference

- 25XN030 Qikiqtarjuaq Marine Infrastructure Project, Project Proposal, May 2025

Comment

Species at risk are assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) or added to Schedule 1 of the Species at Risk Act (SARA) on a regular basis. It is important for proponents to ensure they are aware of what species are present in the project area and take appropriate actions to ensure compliance with the SARA.

Section 79 of SARA requires the assessor and decision body to ensure that where a project is likely to affect a listed species or its critical habitat, all adverse effects of the project are identified and considered in the assessment of the project. Appropriate measures must be taken to avoid or lessen those effects and include monitoring. Measures should be consistent with applicable recovery documents. Section 79 applies to all listed species on Schedule 1 of SARA including those listed as Special Concern, Threatened, Endangered and Extirpated. As a matter of best practice, COSEWIC-assessed species should be assessed similarly to those listed under SARA.

The Proponent has not identified all species at risk that are likely to be present in the Project area, nor has the Proponent identified all adverse effects of the Project on species at risk. The attached table contains a list of the species that are likely to be encountered in the Project area that have been assessed as at risk by COSEWIC or listed on Schedule 1 of SARA. The Project may have adverse effects on listed species including impacts due to noise or other sensory disturbances and could result in wildlife injury or mortality and wildlife attraction.

Recommendation

ECCC recommends the Proponent:

- Identify adverse effects of the Project on the species at risk likely to be affected and their critical habitat;
- Ensure that measures are taken to avoid or lessen those adverse effects and monitor them to inform adaptive management.

If the Proponent encounters species at risk, the primary mitigation measure should be avoidance. ECCC recommends:

- Mitigation and monitoring measures be consistent with applicable species at risk Recovery Strategies and Action Plans or Management Plans.
- At a minimum, monitoring should include recording timing and location of observed species at risk, their behavior when encountered, and actions taken by the Proponent to avoid disturbance to the species, its habitat, and/or its residence.
- The Proponent submit monitoring reports to the appropriate regulators and organizations with management responsibility for that species.

4. Topic: Project Activities Within Migratory Bird Habitat and During Nesting and Migration Season

Reference

- 25XN030 Qikiqtarjuaq Marine Infrastructure Project, Project Proposal, May 2025

Comment

The Migratory Birds Regulations (MBR) prohibit the disturbance or destruction of migratory birds and their nests or eggs. The project occurs during the nesting and migration season for migratory birds which extends from late May to October for this region (Nesting zone N10).

Migratory birds, their nests and their eggs can be inadvertently harmed, killed, disturbed or destroyed because of many activities including, but not limited to, clearing of shoreline, removal of some arctic vegetation, draining or flooding land, or using fishing gear. Harming of individual birds, nests or eggs, can have long-term consequences for migratory bird populations in Canada, especially through the cumulative effects of many different incidences.

Recommendation

ECCC recommends the Proponent carry out all phases of the project in a manner that reduces risk to migratory birds and to avoid harming, killing or disturbing migratory birds or destroying, disturbing or taking their nests and eggs.

ECCC recommends Proponents not conduct potentially destructive or disruptive activities at key locations or during key periods to avoid negative impacts to migratory birds. In this regard, the Proponent should take into account ECCC's [Guidelines to Avoid Harm to Migratory Birds](#) and visit [Fact Sheet Nest Protection Under the Migratory Birds Regulations, 2022](#) and [Frequently Asked Question, Migratory Birds Regulations, 2022](#) for more information on the amended Migratory Bird Regulations and updates to nest protections.

5. Topic: Project Activities (Clearing) Within Migratory Bird Habitat During Nesting and Migration Season

Reference

- 25XN030 Qikiqtarjuaq Marine Infrastructure Project, Project Proposal, May 2025

Comment

The Proponent indicates that habitat alteration and/or disturbance may be required during the general nesting period as part of project activities. The Project is located in Nesting Zone N10. In this area, migratory birds may be found nesting and/or migrating from late May to October. During this period, activities that may disturb or alter nesting habitat may increase the risk of destruction of the nests and eggs of migratory birds. It is important to note that nesting and migration periods may vary from year to year due to climatic conditions and some species may nest outside the dates provided if conditions are favourable.

If there are occupied migratory bird nests where work is planned, activities that could disturb or destroy nests should be avoided, adapted, rescheduled or relocated. The best way to avoid disturbing or destroying active nests is to avoid conducting harmful activities during the breeding season. Determining the presence of nesting migratory birds may help reduce risks, but active nest searches are not recommended as the ability to detect nests is very low while the risk of disturbing and/or damaging active nests is high.

As detailed in [ECCC's Guidelines to Avoid Harm to Migratory Birds](#), nest surveys to determine nest occupancy may only be appropriate when all these conditions are met:

- Conducted by skilled and experienced observers;
- Using appropriate methodology;
- Only a few nesting spots or a small community of migratory birds is expected; and
- The activities will take place in simple habitats.

Proponents are reminded that migratory bird species may nest on the ground, in ground cavities, in grasses, shrubs, cliffs, human-made structures, and other sites, and that nest sites are often cryptic or camouflaged, making them difficult to locate.

Recommendation

ECCC recommends the Proponent avoid habitat disturbance during the general nesting and migration period, which extends from late May to October for this region.

ECCC recommends the Proponent consider options such as avoiding, adapting, rescheduling or relocating activities. If a nest containing a migratory bird or egg is discovered/disturbed, the Proponent must:

- Halt all disruptive activities in the nesting area until nesting is complete and the young have fledged; and
- Establish a protective buffer zone around the nests. The buffer zone must be determined by a setback distance appropriate for the species, the intensity of the disturbance, and the surrounding habitat until the young have naturally and permanently left the vicinity of the nest. Proponents are encouraged to follow the guidance on ECCC's [Guidelines to Avoid Harm to Migratory Birds](#).

6. Topic: Storage of Attractants

Reference

- 25XN030 Qikiqtarjuaq Marine Infrastructure Project, Project Proposal, May 2025

Comment

The Proponent indicates that domestic, non-hazardous waste and/or petroleum-based chemicals may be kept on site. Food, domestic wastes and petroleum-based chemicals (e.g. greases, gasoline, glycol-based antifreeze) can attract predators of migratory birds such as foxes, ravens, gulls and bears. Although these animals may initially be attracted to the novel food sources, they often will also eat eggs and young birds in the area. These predators can have significant negative effects on the local bird populations.

Recommendation

ECCC recommends the Proponent make food, domestic wastes and petroleum-based chemicals (e.g. greases, gasoline, glycol-based antifreeze) inaccessible to wildlife at all times.

7. Topic: Contamination of water bodies

Reference

- 25XN030 Qikiqtarjuaq Marine Infrastructure Project, Project Proposal, May 2025

Comment

The Proponent indicates that fuel and/or other hazardous materials may be stored, handled or transported near a water body that may be used by migratory birds.

ECCC advises the Proponent that section 5.1 of the *Migratory Birds Convention Act* prohibits persons from depositing substances harmful to migratory birds in waters or areas frequented by migratory birds or in a place from which the substance may enter such waters or such an area.

Recommendation

ECCC recommends the Proponent ensure their employees and contractors are made aware of plans and commitments related to storing, handling and transporting of petroleum products and other hazardous substances and take all necessary precautions to prevent spills.

8. Topic: Oil Spills

Reference

- 25XN030 Qikiqtarjuaq Marine Infrastructure Project, Project Proposal, May 2025

Comment

The Proponent indicates that oil (227L), fuel (5,850m³ of diesel, gas, and propane) and petrochemicals (80m³ of acetylene) will be stored/transported near/in marine environments where migratory birds may congregate. Ships docked at a deepwater port can also contain large volumes of petrochemical products. This creates the potential for the release of pollutants into migratory bird habitats.

Migratory birds are particularly vulnerable to pollution incidents (e.g. oil spills, etc.) in their feeding areas. Proponents should determine what steps would be taken to mitigate the impacts of pollution incidents on migratory birds and their important habitats. Having this information outlined and available not only benefits wildlife but also gives clear direction to staff and contractors on what to do during a pollution incident if wildlife are nearby.

Recommendation

ECCC recommends the Proponent incorporate into existing emergency response plans:

- Steps to protect wildlife (including migratory birds) in the event of a pollution incident and keep wildlife out of contaminated areas;
- Equipment and resources available for incident response; and
- Measures to take if wildlife comes in contact with the contaminants.

9. Topic: Transmission Lines

Reference

- 25XN030 Qikiqtarjuaq Marine Infrastructure Project, Project Proposal, May 2025

Comment

The Project involves the construction of new power lines. Transmission lines are a known source of bird mortality due to collisions and electrocution. The most vulnerable bird species for collisions are those with larger wingspans and body mass. Birds with larger body mass, such as waterfowl, may have increased difficulty navigating quickly to avoid difficult to see obstructions such as power lines.

Recommendation

ECCC recommends the Proponent identify measures for avoiding bird collisions and electrocution. Mitigations could include line placement and orientation, marking of lines (e.g., bird flight diverters) to provide visual cues and design of structures.

If you need more information, please contact Jessica Kassar at (867) 222-2036 or Jessica.Kassar@ec.gc.ca.

Sincerely,

Jessica Kassar
Environmental Assessment Officer

cc: Eva Walker, Head, Environmental Assessment North (NT and NU)

Species At Risk Table

The Table below lists species that may be encountered in the Project area that have been designated as at risk by COSEWIC as well as their current listing on Schedule 1 of SARA (and designation if different from that of COSEWIC). This list may not include all species identified as at risk by the territorial government. As species are assessed and listed on a regular basis, consult the Species at Risk registry to maintain the most current information.

Table I: Terrestrial Species at Risk potentially interacting with project components.

Terrestrial Species at Risk ¹	Scientific Name	COSEWIC Designation	SARA Status	Primary Management Responsibility ²	Available Recovery Documents
Ivory Gull	<i>Pagophila eburnea</i>	Endangered (2023)	Endangered (2009)	Environment and Climate Change Canada	Recovery Strategy Critical Habitat Description
Polar Bear	<i>Ursus maritimus</i>	Special Concern (2018)	Special Concern (2011)	Government of Nunavut	
Red Knot (rufa subspecies)	<i>Calidris canutus rufa</i>	Endangered (2020)	Endangered (2012)	Environment and Climate Change Canada	Recovery Strategy Critical Habitat Description
Ross's Gull	<i>Rhodostethia rosea</i>	Endangered (2021)	Threatened (2003)	Environment and Climate Change Canada	Recovery Strategy Residence Description
Wolverine	<i>Gulo gulo</i>	Special Concern (2014)	Special Concern (2018)	Government of Nunavut	

Notes:

¹ Fisheries and Oceans Canada (DFO) has responsibility for aquatic species (not listed here).

² ECCC has a national role to play in the conservation and recovery of Species at Risk in Canada, as well as responsibility for management of birds described in the MBCA. Day-to-day management of terrestrial species not covered in the MBCA is the responsibility of GN. Populations that exist in National Parks are managed under the authority of the Parks Canada Agency (PCA).

* Denotes recovery documents that are in the process of being finalized but where a draft/proposed version is available for use